Monday, February 15, 2010

REQUEST NUMBER: 10-1861

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:10-1861

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/15/2010

TURNAROUND/REPORT DUE: 3/17/2010

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
	SW-846:6020	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	
	SW-846:6850	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	
	SW-846:7470A	1	RE15-10-8087	W	2/10/2010	
	SW-846:7471A	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
	SW-846:8082	1	RE15-10-7903	R	2/10/2010	

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7904	R	2/10/2010	
	SW-846:8321A_MOD	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
	SW-846:9012A	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	

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Monday, February 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1861C

REQUEST NUMBER: 10-1861

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/17/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7904	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7904	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7903	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7903	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7994	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7994	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7997	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7997	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7998	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7998	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8000	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8000	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7999	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7999	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7995	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7995	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7996	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7996	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7993	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7993	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8064	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8087	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8087	1	POLY	SW-846:6850	Ice	W
RE15-10-8087	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8064	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		2/15/10	3:00				
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			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: RE15-10-8087 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	NA	ok
TIME COLLECTED (HH:MM)		1425	SUB-MEDIA:	OTHER	
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	DC	
LOCATION ID:	UNK	15-610769	FIELD QC TYPE:	FR	
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 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	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 RE15-10-8000

SAMPLE COMMENTS: Rinsate

LOCATION DESC: NA

FIELD SCREENING/MEASUREMENT RESULTS: NA

Alpha = ____ dpm 2/10/10
Beta/Gamma = ____ dpm

PID Ambient Reading = ppm 2/10/10

COLLECTED BY (PRINT) T.L. McFarland

REVIEWED BY (PRINT) Rachel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10 08:36	(Printed Name) Sherri Sherwood	2/11/10 0836
(Signature)		(Signature)	
RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8064 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1150	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	UNK	15-610768	FIELD QC TYPE:	FD	↓
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:	R	SED	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 12m 2/10/10	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	~~8082+~~NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1		H3	500 ML POLY	Ice	Y	
1		Met+U+CLO4+CN	1 ~~GAL~~ POLY 1 liter 1.11.10	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-7997

moist brown sand, tuff fragments

SAMPLE COMMENTS:

NA

LOCATION DESC: 8b-18 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 **dpm**
Beta/Gamma ≤ 2060 **dpm**

PID ~~Ambient Reading~~ 12m 2/10/10 = **ppm**

COLLECTED BY (PRINT) TL MacFarlane

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10	(Printed Name) Sherri Sherwood	2/11/10
(Signature) E. Lujan	08:35	(Signature) Sherri Sherwood	0835
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7997 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010 ~~02/20~~ TZM 2/10/10	MEDIA:	OBT3	SED
TIME COLLECTED (HH:MM)		1150	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610768	↓	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	SED	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+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	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: Brown moist sand, tuff fragments

FD RE15-10-8064

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-18 drainage

FIELD SCREENING/MEASUREMENT RESULTS: HE negative

Alpha ≤ 16 dpm
Beta/Gamma ≤ 2060 dpm

TZM 2/10/10
PID ~~Ambient Reading~~ = ppm

COLLECTED BY (PRINT) Thmcfarlang

REVIEWED BY (PRINT) Dante' Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10	(Printed Name) Sherri Sherwood	2/11/10
(Signature)	08:34	(Signature) Sherri Sherwood	0834
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7995 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	OBT3	SED
TIME COLLECTED (HH:MM)		1124	SUB-MEDIA:	TUFF I	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610767	↓	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	SED	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+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ POLY 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 moist sand, pine needles, roots

SAMPLE COMMENTS: wire in bowl, not placed in sample containers

LOCATION DESC: 8b-8 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 22 **dpm**
Beta/Gamma ≤ 2150 **dpm**

HE negative

PID ~~Ambient Reading~~ = ~~ppm~~ TJM 2/10/10

COLLECTED BY (PRINT) TLMcFarlane **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10	(Printed Name) Sherri Sherwood	2/11/10
(Signature) [signature]	08:36	(Signature) Sherri Sherwood	0836
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7994 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	QBT3	Alluv
TIME COLLECTED (HH:MM)		1116	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610766	↓	FIELD QC TYPE:	NA	↑
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↑
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	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+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ POLY 72m 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: Brown silty sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-19 slope bottom

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 **dpm**
Beta/Gamma ≤ 1962 **dpm**

PID ~~Ambient Reading~~ 72m 2/10/10 = **ppm**

COLLECTED BY (PRINT) TL McFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10 08:37	(Printed Name) Sharon Sherwood	2/11/10 0837
(Signature)		(Signature) Sheri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7996 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1135	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610767	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.8	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	SED	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+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	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 moist silty sand, roots, leaves, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-8 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 dpm
Beta/Gamma ≤ 2200 dpm

PID ~~Ambient Reading~~ = ppm TRM 2/10/10

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan	2/11/10	(Printed Name) Sherri Sherwood	2/11/10
(Signature) [signature]	08:33 pm	(Signature) Sherri Sherwood	0833
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7903 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	OBT3	Alih
TIME COLLECTED (HH:MM)		1037	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610721	↓	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	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1L RS 01-11-10	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown silty sand, tuff fragments, few roots

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-7 slope bottom

FIELD SCREENING/MEASUREMENT RESULTS: HE negative

Alpha ≤ 5 **dpm**
Beta/Gamma ≤ 2230 **dpm**

PID ~~Ambient Reading~~ 72 m 2/10/10 = **ppm**

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10 08:36	(Printed Name) Sherri Sherwood	2/11/10 0836
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7904 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	QBT3	Soil
TIME COLLECTED (HH:MM)		1050	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610721	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.9	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	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	~~1 GAL~~ POLY 1L RS 01-11-10	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Brown silty sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-7 slope bottom

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 16 dpm
Beta/Gamma ≤ 2050 dpm

PID ~~Ambient Reading~~ 72m 2/10/10 = ppm

COLLECTED BY (PRINT) TLMcFarland

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan	2/11/10	(Printed Name) Sherri Sherwood	2/11/10
(Signature)	08:36	(Signature) Sherri Sherwood	0836
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-8000 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	QBT3	Alla
TIME COLLECTED (HH:MM)		1245	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610769	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	2.0	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+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	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: Brown silty sand, tuff fragments

FR : RE15-10-8087

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-9

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 33 dpm
Beta/Gamma ≤ 2030 dpm

PID ~~Ambient Reading~~ 73 m 2/10/10 = ppm

COLLECTED BY (PRINT) Th McFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Estevan Lujan (Signature)	2/11/10 08:35	(Printed Name) Sharri Sherwood (Signature)	2/11/10 0835
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: RE15-10-7998 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	QBT3	SED
TIME COLLECTED (HH:MM)		1210	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610768	↓	FIELD QC TYPE:	NA	↓
LOCATION TYPE:	GENERIC	↓	FIELD PREP:	NA	↓
TOP DEPTH:	0	1.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	1.5	SCREEN/PORT DESC:	NA	
FIELD MATRIX:	R	SED	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+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ POLY 1 liter 1/11/10 XC	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 moist sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 8b - 18 drainage

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 11 dpm
Beta/Gamma ≤ 2220 dpm

PID ~~Ambient Reading~~ 13m 2/10/10 = ppm

COLLECTED BY (PRINT) TLMcFarlang

REVIEWED BY (PRINT) Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan	2/11/10 08:34	(Printed Name) Sherri Sherwood	2/11/10 0834
(Signature)		(Signature) Sherri Sherwood	
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name)		(Printed Name)	
(Signature)		(Signature)	

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2499 **EVENT NAME:** 4th Qtr. FY09 - SWMU 15-008(b) - Threemile Canyon

SAMPLE ID: RE15-10-7993 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	OBT3	Allh
TIME COLLECTED (HH:MM)		1107	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	ok	SAMPLE TECH CODE:	HA	ok
LOCATION ID:	15-610766	↓	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	normal	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	1 ~~GAL~~ POLY 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: Light grayish brown silty sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-19 slope bottom

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha ≤ 0 dpm
Beta/Gamma ≤ 2090 dpm

HE negative

PID ~~Ambient Reading~~ = ppm TJM 2/10/10

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan (Signature)	2/11/10 08:36	(Printed Name) Sherri Sherwood (Signature) Sherri Sherwood	2/11/10 0836
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(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: RE15-10-7999 **WORK ORDER:**

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/10/2010	MEDIA:	OBT3	Alih
TIME COLLECTED (HH:MM)		1238	SUB-MEDIA:	TUFF 1	NA
PRS ID:	15-008(b)	OK	SAMPLE TECH CODE:	HA	OK
LOCATION ID:	15-610769	↓	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	normal	AM241+GS+ISOPU+ISOU	1 LITER POLY	None	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Met+U+CLO4+CN	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: Brown silty sand, tuff fragments

SAMPLE COMMENTS: NA

LOCATION DESC: 8b-9

FIELD SCREENING/MEASUREMENT RESULTS: HE negative

Alpha ≤ 16 dpm
Beta/Gamma ≤ 1769 dpm

PID ~~Ambient Reading~~ = ppm 7/m 2/10/10

COLLECTED BY (PRINT) TLMcFarland **REVIEWED BY (PRINT)** Daniel Byers

RELINQUISHED BY	Date/Time	RECEIVED BY	Date/Time
(Printed Name) Esteban Lujan (Signature)	2/11/10 08:34	(Printed Name) Sherri Sherwood (Signature)	2/11/10 0834
RELINQUISHED BY	**Date/Time**	**RECEIVED BY**	**Date/Time**
(Printed Name) (Signature)		(Printed Name) (Signature)	

DATA VALIDATION COVER SHEET

5122-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST 1943

Section I.

REQUEST NUMBER: 10-1861 VALIDATION DATE: 4/8/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☒ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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 MS and MSD %Rs for tetryl were <10%. The associated sample results were NDs and, thus, were qualified R,HE12d. The MS/MSD %RS for 2,4,6-trinitrotoluene; 2-amino-4,6-dinitrotoluene; 2,6-dinitrotoluene; and m-nitrotoluene were < the laboratory LALs but ≥10%. The associated sample results were NDs and, thus, were qualified UJ,HE12e. The MS/MSD RPDs for PETN and Tetryl were > the laboratory acceptance limits. The associated sample results were NDs and, thus, were qualified UJ,HE12g.
2. The ICAL RRF for p-nitrotoluene was <0.05 but ≥0.01. The associated sample results were NDs and, thus, were qualified UJ,HE7b.
3. The ICV/CCV %Ds for HMX and 2,4,6-trinitrotoluene were >20% with positive bias. The associated sample results were NDs and, thus, were not qualified.
4. The LCS %R for tetryl was < the laboratory LAL but ≥10%. The associated sample results were NDs and, thus, were qualified UJ,HE12a. The LCS %R for 2-amino-4,6-dinitrotoluene was > the laboratory UAL. The associated sample results were NDs and, thus, were not qualified.
5. It should be noted that the MS/MSD analyses were performed on a LANL sample from another RN and that the raw data for the parent sample was not included in the data package. No sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 04/09/10

DATA VALIDATION COVER SHEET

5122-1 **Data Validation Cover Sheet**	Records Use only Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: Allison Felix DATE: 4/8/10

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

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The IS retention time has shifted by more than 30 seconds.	R, UJ, HE0	J, HE0
☐	☒	☐	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	7. The surrogate is <10%R. Follow the external laboratory limits.	R, HE3	J-, HE3
☐	☒	☐	8. The surrogate is < the Lower Acceptance Limit but ≥10% recovery. Follow the external laboratory limits.	UJ, HE3a	J-, HE3a
☐	☒	☐	9. The surrogate %R value is > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE3b
☐	☐	☒	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	12. The sample result is ≤5 times the concentration of the related analyte in the method blank.	U, HE4	N/A
☐	☒	☐	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
☐	☐	☒	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
☐	☒	☐	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
☐	☒	☐	16. The absence of sample carry-over must be determined and verified.	N/A	R, N, HE4f
☐	☒	☐	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
☐	☒	☐	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
☒	☐	☐	19. The affected analytes were analyzed with a RRF of <0.05 in the initial calibration and/or CCV.	UJ, R, HE7b	J, HE7b
☒	☐	☐	20. The ICV and/or CCV were recovered outside the method limits.	UJ, R, HE7c	J, HE7c
☐	☒	☐	21. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, HE7d	J, HE7d
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	24. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, HE9	J-, HE9
☐	☒	☐	25. The holding time was >2 times the applicable holding time requirement.	R, HE9a	J-, HE9a
☐	☒	☐	26. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, HE12	J-, HE12
☒	☐	☐	27. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, HE12a	J-, HE12a
☒	☐	☐	28. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, HE12b
☐	☒	☐	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
☒	☐	☐	30. The MS/MSD percent recovery was <10%.	R, HE12d	R, HE12d
☒	☐	☐	31. The MS/MSD percent recovery was >10% but <70%.	UJ, HE12e	J, HE12e
☐	☒	☐	32. The MS/MSD percent recover was >70%.	N/A	J+, HE12f
☒	☐	☐	33. The MS/MSD relative percent difference was >30%.	UJ, HE12g	J, HE12g
☐	☐	☒	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
☐	☐	☒	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 Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	36. The Contract Required Detection Limit Check Standard (CRI) sample did not pass method acceptance criteria.	UJ, R, HE16	J, HE16
☐	☐	☒	37. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, HE16c	R, HE16c
☐	☒	☐	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
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, HE88	J, HE88

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7904

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178001

Sample Amount 2

Moisture: 10.5

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326070a

Date Analyzed: 28-MAR-10 00:38

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7904

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178001

Sample Amount 2

Moisture: 10.5

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050021.wiff

Date Analyzed: 05-MAR-10 22:21

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7903

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178002

Sample Amount 2

Moisture: 19.4

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326071a

Date Analyzed: 28-MAR-10 01:08

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7903

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178002

Sample Amount 2

Moisture: 19.4

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050022.wiff

Date Analyzed: 05-MAR-10 22:37

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7994

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178003

Sample Amount 2

Moisture: 11.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326072a

Date Analyzed: 28-MAR-10 01:37

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7994

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178003

Sample Amount 2

Moisture: 11.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050023.wiff

Date Analyzed: 05-MAR-10 22:53

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7997

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178004

Sample Amount 2

Moisture: 23.0

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326076a

Date Analyzed: 28-MAR-10 03:35

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7997

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178004

Sample Amount 2

Moisture: 23.0

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050027.wiff

Date Analyzed: 05-MAR-10 23:55

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7998

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178005

Sample Amount 2

Moisture: 13.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326077a

Date Analyzed: 28-MAR-10 04:05

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7998

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178005

Sample Amount 2

Moisture: 13.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050028.wiff

Date Analyzed: 06-MAR-10 00:11

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8000

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178006

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326078a

Date Analyzed: 28-MAR-10 04:34

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8000

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178006

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050029.wiff

Date Analyzed: 06-MAR-10 00:27

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7999

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178007

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326079a

Date Analyzed: 28-MAR-10 05:04

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7999

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178007

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050030.wiff

Date Analyzed: 06-MAR-10 00:42

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7995

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178008

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326080a

Date Analyzed: 28-MAR-10 05:33

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7995

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178008

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050031.wiff

Date Analyzed: 06-MAR-10 00:58

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7996

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178009

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326081a

Date Analyzed: 28-MAR-10 06:03

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7996

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178009

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050032.wiff

Date Analyzed: 06-MAR-10 01:14

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7993

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178010

Sample Amount 2

Moisture: 19.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326082a

Date Analyzed: 28-MAR-10 06:32

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7993

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178010

Sample Amount 2

Moisture: 19.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050033.wiff

Date Analyzed: 06-MAR-10 01:30

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8064

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178011

Sample Amount 2

Moisture: 29.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326083a

Date Analyzed: 28-MAR-10 07:02

Units: ug/kg

Cas No.	Compound		Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	UJ,HE12e	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	UJ,HE12e	500	U
479-45-8	Tetryl	R,HE12d	500	U
606-20-2	2,6-Dinitrotoluene	UJ,HE12e	500	U
78-11-5	PETN	UJ,HE12g	1000	U
88-72-2	o-Nitrotoluene		500	U
98-95-3	Nitrobenzene		500	U
99-08-1	m-Nitrotoluene	UJ,HE12e	500	U
99-35-4	1,3,5-Trinitrobenzene		500	U
99-65-0	m-Dinitrobenzene		500	U
99-99-0	p-Nitrotoluene	UJ,HE7b	500	U

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15--10--8064

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178011

Sample Amount 2

Moisture: 29.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050034.wiff

Date Analyzed: 06-MAR-10 01:45

Units: µg/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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

AMF
4/8/10

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1861 VALIDATION DATE: 4/8/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☒ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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. It should be noted that the aqueous MS/MSD analyses were performed on a LANL sample from another RN and that the raw data for the parent sample was not included in the data package. No sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 04/09/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 4/8/10

LC/MS/MS PERCHLORATE ANALYTICAL DATA VALIDATION CHECKLIST

5121-2 LC/MS/MS Perchlorate Analytical Data Validation Checklist	Records Use only Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The Internal Standard (IS) relativer retention time has shifted by more than 0.98 to 1.02 seconds.	R, PERC0	J, PERC0
☐	☒	☐	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
☐	☐	☒	3. The IS are count is <25% of the expected value.	UJ, PERC1a	J, PERC1a
☐	☐	☒	4. The IS area count is <70% but >25% of the average of that obtained from the calibration standards.	UJ, PERC1b	J, PERC1b
☐	☐	☒	5. The IS area count is >130% of the average of that obtained from the calibration standards.	UJ, PERC1c	J, PERC1c
☐	☐	☒	6. Required IS information is missing. Data may not be acceptable for use. Contact the SMO or external laboratory for information.	R, PREC1d	R, PERC1d
☐	☐	☐	7. The sample result is ≤ 5X the concentration of the related analyte in the method blank.	U, PERC4	N/A
☐	☐	☐	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
☐	☒	☐	9. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, and/or equipment blank.	U, PERC4d	N/A
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. The ICV and/or CCV were recovered outside the method limits.	UJ, R, PERC7c	J, PERC7c
☐	☒	☐	14. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, R, PERC7d	J, PERC7d
☐	☒	☐	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
☐	☒	☐	16. The affected analyte is considered not detected because ion abundance ratios did not meet specifications.	N/A	R, PERC8
☐	☒	☐	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
☐	☒	☐	18. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ PERC9	J-, PERC9
☐	☒	☐	19. The holding time was > 2 times the applicable holding time requirement.	R, PERC9a	J-, PERC9a
☐	☒	☐	20. The LCS percent recovery was <10%. Follow the external laboratory limits.	R, PERC12	J-, PERC12
☐	☒	☐	21. The LCS percent recovery was < the Lower Acceptance Limit but >10%. Follow the external laboratory limits.	UJ, PERC12a	J-, PERC12a
☐	☒	☐	22. The LCS percent recovery was > the Upper Acceptance Limit. Follow the external laboratory limits.	N/A	J+, PERC12b
☐	☒	☐	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
☐	☒	☐	24. The MS/MSD percent recovery was <10%	R, PERC12d	R, PERC12d
☐	☒	☐	25. The MS/MSD percent recovery was >10% but <75%	UJ, PERC12e	J, PERC12e
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	27. The MS/MSD relative percent difference was >20%.	UJ, PERC12g	J, PERC12g
☐	☐	☒	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
☐	☐	☒	29. The sample was diluted because target analytes were > the initial verification calibration.	UJ, PERC15a	J, PERC15a
☐	☐	☒	30. The Contract Required Detection Limit check standard (CRI) sample did not pass method-acceptance limits.	UJ, R, PERC16	J, PERC16
☐	☐	☒	31. The Interference Check Sample was not within ±20% of the known value.	UJ, PERC16a	J, PERC16a
☐	☐	☒	32. The required CRI sample information is missing. Contact the SMO or external laboratory for information.	R, PERC16c	R, PERC16c
☐	☒	☐	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
☐	☒	☐	34. Duplicate, dilution, or reanalysis.	UJ, PERC88	J, PERC88

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7904

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178001

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	05-MAR-10 15:51	per0305020a
	Perchlorate Isotope Ratio						1	05-MAR-10 15:51	per0305020a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	05-MAR-10 15:51	per0305020a
	Perchlorate-O(18)			5.34	ug/kg		1	05-MAR-10 15:51	per0305020a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7903

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178002

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	05-MAR-10 16:01	per0305021a
	Perchlorate Isotope Ratio						1	05-MAR-10 16:01	per0305021a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	05-MAR-10 16:01	per0305021a
	Perchlorate-O(18)			5.83	ug/kg		1	05-MAR-10 16:01	per0305021a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7994

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178003

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	05-MAR-10 17:02	per0305027a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:02	per0305027a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	05-MAR-10 17:02	per0305027a
	Perchlorate-O(18)			5.29	ug/kg		1	05-MAR-10 17:02	per0305027a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7997

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178004

Date Filtered: 01-MAR-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	.649	2.6	0.649	ug/kg	U	1	05-MAR-10 17:12	per0305028a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:12	per0305028a
14797-73-0	Perchlorate-101	.649	2.6	0.649	ug/kg	U	1	05-MAR-10 17:12	per0305028a
	Perchlorate-O(18)			6.37	ug/kg		1	05-MAR-10 17:12	per0305028a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7998

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178005

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.58	2.32	0.580	ug/kg	U	1	05-MAR-10 17:22	per0305029a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:22	per0305029a
14797-73-0	Perchlorate-101	.58	2.32	0.580	ug/kg	U	1	05-MAR-10 17:22	per0305029a
	Perchlorate-O(18)			5.78	ug/kg		1	05-MAR-10 17:22	per0305029a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8000

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178006

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.57	2.28	0.589	ug/kg	J	1	05-MAR-10 17:32	per0305030a
	Perchlorate Isotope Ratio			3			1	05-MAR-10 17:32	per0305030a
14797-73-0	Perchlorate-101	.57	2.28	0.639	ug/kg	J	1	05-MAR-10 17:32	per0305030a
	Perchlorate-O(18)			5.43	ug/kg		1	05-MAR-10 17:32	per0305030a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7999

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178007

Date Filtered: 01-MAR-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	.607	2.43	0.607	ug/kg	U	1	05-MAR-10 17:42	per0305031a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:42	per0305031a
14797-73-0	Perchlorate-101	.607	2.43	0.607	ug/kg	U	1	05-MAR-10 17:42	per0305031a
	Perchlorate-O(18)			5.67	ug/kg		1	05-MAR-10 17:42	per0305031a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7995

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178008

Date Filtered: 01-MAR-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	.674	2.69	0.674	ug/kg	U	1	05-MAR-10 17:52	per0305032a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:52	per0305032a
14797-73-0	Perchlorate-101	.674	2.69	0.674	ug/kg	U	1	05-MAR-10 17:52	per0305032a
	Perchlorate-O(18)			6.35	ug/kg		1	05-MAR-10 17:52	per0305032a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7996

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178009

Date Filtered: 01-MAR-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	.591	2.36	0.591	ug/kg	U	1	05-MAR-10 18:02	per0305033a
	Perchlorate Isotope Ratio						1	05-MAR-10 18:02	per0305033a
14797-73-0	Perchlorate-101	.591	2.36	0.602	ug/kg	J	1	05-MAR-10 18:02	per0305033a
	Perchlorate-O(18)			5.54	ug/kg		1	05-MAR-10 18:02	per0305033a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7993

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178010

Date Filtered: 01-MAR-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	.624	2.49	0.624	ug/kg	U	1	05-MAR-10 18:12	per0305034a
	Perchlorate Isotope Ratio						1	05-MAR-10 18:12	per0305034a
14797-73-0	Perchlorate-101	.624	2.49	0.624	ug/kg	U	1	05-MAR-10 18:12	per0305034a
	Perchlorate-O(18)			5.82	ug/kg		1	05-MAR-10 18:12	per0305034a

^ 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 =

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

AMF 4/8/10

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8064

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178011

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 71

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.705	2.82	0.705	ug/kg	U	1	06-MAR-10 16:15	per0306012a
	Perchlorate Isotope Ratio						1	06-MAR-10 16:15	per0306012a
14797-73-0	Perchlorate-101	.705	2.82	0.705	ug/kg	U	1	06-MAR-10 16:15	per0306012a
	Perchlorate-O(18)			6.43	ug/kg		1	06-MAR-10 16:15	per0306012a

^ 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 =

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

AMF 4/8/10

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: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE15-10-8087

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861-1

GEL Sample ID: 247182001

Date Filtered: 02-MAR-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	06-MAR-10 09:02	per0305122a
	Perchlorate Isotope Ratio						1	06-MAR-10 09:02	per0305122a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-MAR-10 09:02	per0305122a
	Perchlorate-O(18)			0.424	ug/L		1	06-MAR-10 09:02	per0305122a

^ 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 =

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

AMF 4/8/10

DATA VALIDATION COVER SHEET

5116-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1861 VALIDATION DATE: 4/8/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☒ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): PCBs

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☒	☐	☐	8. QUANTITATION REPORTS
☒	☐	☐	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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 ICV/CCV %D for aroclor-1260 was >15% on one column only. The associated sample results were NDs and, thus, were not qualified.

Reviewed by: Mary Donivan Level: I Date: 04/09/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 4/8/10

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

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, P9	J-, P9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, P9	J-, P9a
☐	☒	☐	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, P9b	R, P9b
☐	☒	☐	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
☐	☒	☐	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
☒	☐	☐	6. The Initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, P7c	J, P7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, P7d	J, P7d
☐	☐	☒	8. The multicomponent standard was not analyzed within 72 hours of the initial analysis.	R, P7e	J, P7e
☐	☒	☐	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
☐	☐	☒	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☒	☐	13. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, P4	N/A
☐	☒	☐	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
☐	☐	☒	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	UJ, P4b	N/A
☐	☐	☒	16. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	UJ, P4d	N/A
☐	☒	☐	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
☐	☒	☐	18. The analyte RT shifted by more than 0.05 minutes from the mid-level standard of the initial calibration.	R, P0	J, P0
☐	☒	☐	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
☐	☒	☐	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

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	21. The surrogate is < the Lower Acceptance Level (LAL) but ≥10%R. Follow the external laboratory limits located within the associated data package.	UJ, P3a	J-, P3a
☐	☒	☐	22. The surrogate %R value is > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P3b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, P12	J-, P12
☐	☒	☐	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
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, P12b
☐	☒	☐	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
☐	☐	☒	29. The analyte was not confirmed on a second dissimilar column.	N/A	R, P8
☐	☐	☒	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
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	32. The affected analytes have elevated detection limits and may not meet project DQOs because the sample was diluted without any target analytees identified due to matrix interference. Qualify as Reject if the analytical laboratory cannot provide proof for matrix interference.	UJ, R, P15	R, P15
☒	☐	☐	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
☐	☒	☐	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:	10–1861	Date Collected:	02/10/2010 12:00	Matrix:	R
Lab Sample ID:	247178002	Date Received:	02/16/2010 08:50	%Moisture:	19.4
		Client:	LANL010	Project:	LANL01004
Client ID:	RE15–10–7903	Method:	SW846 8082	SOP Ref:	GL–OA–E–040
Batch ID:	955562	Inst:	ECD1A.I	Dilution:	1
Run Date:	02/23/2010 14:45	Analyst:	YS1	Inj. Vol:	1 uL
Prep Date:	02/22/2010 21:35	Aliquot:	30.01 g	Final Volume:	1 mL
Data File:	039f3901.d	Column:	1 CLP1	Level:	LOW
	039b3901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.14	ug/kg	1.38	4.14	1
11104–28–2	Aroclor–1221	U	4.14	ug/kg	1.38	4.14	1
11141–16–5	Aroclor–1232	U	4.14	ug/kg	1.38	4.14	1
53469–21–9	Aroclor–1242	U	4.14	ug/kg	1.38	4.14	1
12672–29–6	Aroclor–1248	U	4.14	ug/kg	1.38	4.14	1
11097–69–1	Aroclor–1254	U	4.14	ug/kg	1.38	4.14	1
11096–82–5	Aroclor–1260	U	4.14	ug/kg	1.38	4.14	1

AMF
4/8/10

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-1861**	**Date Collected:**	**02/10/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**247178001**	**Date Received:**	**02/16/2010 08:50**	**%Moisture:**	**10.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-7904**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**955562**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**02/23/2010 14:20**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**02/22/2010 21:35**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	037b3701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

AMF
4/8/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY

Section I.

REQUEST NUMBER: 10-1861 VALIDATION DATE: 4/8/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☐ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☒ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE):

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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. Pb and Zn were detected in the soil MB. All associated sample results were detects >5X but ≤50X the MB concentrations and, thus, were qualified J,I4a.
2. In the ICB/CCBs associated with the aqueous sample, As, K, and Se were detected. The associated K result was a detect ≤5X the greatest blank concentration and, thus, was qualified U,I4b. The associated As and Se results were NDs and, thus, were not qualified. In the ICB/CCBs associated with the soil samples, Sb was detected. The associated sample results were NDs and, thus, were not qualified.
3. Ca, Na, and Zn were detected in FR blank RE15-10-8087, associated with all soil samples in this RN. All Na results except those for samples -7994, -8000, and -7993 were detects ≤5X the FR blank concentration and, thus, were qualified U,I4d. All other associated sample results were detects >5X the FR blank concentrations and, thus, were not qualified.
4. The soil MS %Rs for Ba and Ca were < the laboratory LALs but ≥10%. The associated sample results were detects and, thus, were qualified J-,I6a. The soil MS %R for K was > the laboratory UAL. The associated sample results were detects and, thus, were qualified J+,I6b. The soil MS %Rs for Al, Fe, and Mn were outside the laboratory acceptance limits, however, the parent sample results were >4X the spike concentrations. Based on professional judgment, the associated sample results were not qualified.
5. It should be noted that all aqueous matrix QC analyses were performed on LANL samples from other RNs and that the raw data for the ICP-AES and ICP-MS parent samples was not included in the data package. No sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 04/09/10

DATA VALIDATION COVER SHEET

5118-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

VALIDATOR'S SIGNATURE: Allison Felix

DATE: 4/8/10

Form 5118-1, Revision 0.0

LOS ALAMOS
Environmental Restoration Project

METALS ANALYTICAL DATA VALIDATION CHECKLIST

5118-2

Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The instrument performance sample did not pass method acceptance criteria.	R, I16	R, I16
☐	☐	☒	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
☐	☐	☒	5. Samples were analyzed outside specific method tune time criteria.	N/A	J, I16b
☐	☐	☒	6. The required instrument performance sample information is missing. Contact the SMO or external laboratory for information.	R, I16c	R, I16c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	9. The initial Calibration Verification (ICV) and/or Continuing Calibration Verification (CCV) were recovered outside the method-specific limits.	UJ, I7c	J, I7c
☐	☒	☐	10. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	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
☐	☒	☐	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

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	13. Metals interference check sample percent recovery value is ≥50% and <80%	UJ, I2a	J-, I2a
☐	☒	☐	14. Metals interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☒	☐	15. Metals interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	16. The sample result is ≤5X the concentration of the related analyte in the method blank.	U, I4	N/A
☒	☐	☐	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
☒	☐	☐	18. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	19. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☒	☐	☐	20. The sample result is ≤5X the concentration of the related analyte in the trip blank, rinsate blank, or equipment blank.	U, I4d	N/A
☐	☒	☐	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
☒	☐	☐	22. The associated matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☒	☐	☐	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
☒	☐	☐	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

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	26. The sample and the duplicate sample results were ≥5X the RL and the duplicate RPD was >20% for water samples and >35% for soil samples.	UJ, I10a	J, I10a
☐	☒	☐	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
☐	☒	☐	28. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	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
☐	☒	☐	30. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	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
☐	☐	☒	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

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Metals Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	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
☐	☐	☒	37. Serial dilution sample was not analyzed with the samples.	UJ, I18a	J, I18
☐	☐	☒	38. The sample result was reported as detected between the IDL and the EDL.	N/A	J, I1
☐	☒	☐	39. Duplicate, dilution, or reanalysis.	UJ, I88	J, I88
☒	☐	☐	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
☐	☒	☐	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
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178001 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7904 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7170000	ug/Kg	*	7200	21200	21200	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-36-0	Antimony	1060	ug/Kg	UN	349	1060	1060	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-38-2	Arsenic	1.74	mg/kg		0.222	1.11	1.11	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-39-3	Barium J-,I6a	83800	ug/Kg	*N	106	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-41-7	Beryllium	0.893	mg/kg		0.0222	0.111	0.111	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-43-9	Cadmium	227	ug/Kg	J	106	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-70-2	Calcium J-,I6a	1370000	ug/Kg	*N	8470	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-47-3	Chromium	26300	ug/Kg		159	529	529	1	P	HSC	03/11/10 01:34	031010-2	954672
7440-48-4	Cobalt	1300	ug/Kg		159	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-50-8	Copper	6670	ug/Kg		318	1060	1060	1	P	HSC	03/11/10 01:34	031010-2	954672
7439-89-6	Iron	13900000	ug/Kg	*	8470	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-92-1	Lead J,I4a	7400	ug/Kg		265	1060	1060	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-95-4	Magnesium	1120000	ug/Kg	*N	9000	31800	31800	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-96-5	Manganese	242000	ug/Kg	*	212	1060	1060	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-97-6	Mercury	11.9	ug/kg	J	4.51	13.3	13.3	1	AV	JXL1	03/04/10 12:04	030410S1-6	958616
7440-02-0	Nickel	4.86	mg/kg		0.111	0.444	0.444	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-09-7	Potassium J+,I6b	774000	ug/Kg	*N	6770	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7782-49-2	Selenium	1.11	mg/kg	UN	0.554	1.11	1.11	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-22-4	Silver	529	ug/Kg	U	106	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-23-5	Sodium U,I4d	83400	ug/Kg		7410	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-28-0	Thallium	0.109	mg/kg	J	0.0652	0.217	0.217	2	MS	SKJ	03/16/10 23:10	100316-4	965482
7440-61-1	Uranium	1.07	mg/kg		0.0146	0.0444	0.0444	2	MS	BAJ	03/14/10 09:57	100313-3	954674
7440-62-2	Vanadium	11900	ug/Kg		106	529	529	1	P	HSC	03/11/10 01:34	031010-2	954672
7440-66-6	Zinc J,I4a	53700	ug/Kg		349	1060	1060	1	P	HSC	03/11/10 01:34	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.528	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.504	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.505	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.514	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178002 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7903 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6620000	ug/Kg	*	8040	23600	23600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-36-0	Antimony	1180	ug/Kg	UN	390	1180	1180	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-38-2	Arsenic	1.93	mg/kg		0.232	1.16	1.16	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-39-3	Barium J-,I6a	76700	ug/Kg	*N	118	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-41-7	Beryllium	0.746	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-43-9	Cadmium	327	ug/Kg	J	118	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-70-2	Calcium J-,I6a	1550000	ug/Kg	*N	9460	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-47-3	Chromium	7470	ug/Kg		177	591	591	1	P	HSC	03/11/10 02:09	031010-2	954672
7440-48-4	Cobalt	2880	ug/Kg		177	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-50-8	Copper	7120	ug/Kg		355	1180	1180	1	P	HSC	03/11/10 02:09	031010-2	954672
7439-89-6	Iron	16500000	ug/Kg	*	9460	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-92-1	Lead J,I4a	15200	ug/Kg		296	1180	1180	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-95-4	Magnesium	1100000	ug/Kg	*N	10000	35500	35500	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-96-5	Manganese	498000	ug/Kg	*	236	1180	1180	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-97-6	Mercury	8.87	ug/kg	J	4.74	13.9	13.9	1	AV	JXL1	03/04/10 12:14	030410S1-6	958616
7440-02-0	Nickel	4.41	mg/kg		0.116	0.463	0.463	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-09-7	Potassium J+,I6b	964000	ug/Kg	*N	7570	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7782-49-2	Selenium	1.16	mg/kg	UN	0.579	1.16	1.16	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-22-4	Silver	591	ug/Kg	U	118	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-23-5	Sodium U,I4d	107000	ug/Kg		8280	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-28-0	Thallium	0.078	mg/kg	J	0.0685	0.228	0.228	2	MS	SKJ	03/16/10 23:31	100316-4	965482
7440-61-1	Uranium	5.11	mg/kg		0.0153	0.0463	0.0463	2	MS	BAJ	03/14/10 10:05	100313-3	954674
7440-62-2	Vanadium	17300	ug/Kg		118	591	591	1	P	HSC	03/11/10 02:09	031010-2	954672
7440-66-6	Zinc J,I4a	65000	ug/Kg		390	1180	1180	1	P	HSC	03/11/10 02:09	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.525	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.536	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.534	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.544	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178003 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7994 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5970000	ug/Kg	*	7300	21500	21500	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-36-0	Antimony	1070	ug/Kg	UN	354	1070	1070	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-38-2	Arsenic	1.57	mg/kg		0.224	1.12	1.12	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-39-3	Barium J-,I6a	52300	ug/Kg	*N	107	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-41-7	Beryllium	0.809	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-43-9	Cadmium	176	ug/Kg	J	107	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-70-2	Calcium J-,I6a	1620000	ug/Kg	*N	8590	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-47-3	Chromium	16800	ug/Kg		161	537	537	1	P	HSC	03/11/10 02:16	031010-2	954672
7440-48-4	Cobalt	1930	ug/Kg		161	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-50-8	Copper	6090	ug/Kg		322	1070	1070	1	P	HSC	03/11/10 02:16	031010-2	954672
7439-89-6	Iron	11700000	ug/Kg	*	8590	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-92-1	Lead J,I4a	8340	ug/Kg		268	1070	1070	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-95-4	Magnesium	1310000	ug/Kg	*N	9130	32200	32200	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-96-5	Manganese	255000	ug/Kg	*	215	1070	1070	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-97-6	Mercury	13.7	ug/kg		4.46	13.1	13.1	1	AV	JXL1	03/04/10 12:16	030410S1-6	958616
7440-02-0	Nickel	5.37	mg/kg		0.112	0.447	0.447	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-09-7	Potassium J+,I6b	1040000	ug/Kg	*N	6870	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7782-49-2	Selenium	1.12	mg/kg	UN	0.559	1.12	1.12	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-22-4	Silver	537	ug/Kg	U	107	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-23-5	Sodium	120000	ug/Kg		7520	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-28-0	Thallium	0.0834	mg/kg	J	0.0647	0.216	0.216	2	MS	SKJ	03/16/10 23:34	100316-4	965482
7440-61-1	Uranium	0.876	mg/kg		0.0148	0.0447	0.0447	2	MS	BAJ	03/14/10 10:07	100313-3	954674
7440-62-2	Vanadium	11300	ug/Kg		107	537	537	1	P	HSC	03/11/10 02:16	031010-2	954672
7440-66-6	Zinc J,I4a	44500	ug/Kg		354	1070	1070	1	P	HSC	03/11/10 02:16	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.524	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.503	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.515	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.522	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178004 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7997 **LEVEL:** Low **DATE RECEIVED** 16-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	4110000	ug/Kg	*	8460	24900	24900	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-36-0	Antimony	1240	ug/Kg	UN	411	1240	1240	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-38-2	Arsenic	1.44	mg/kg		0.237	1.19	1.19	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-39-3	Barium J-,I6a	41300	ug/Kg	*N	124	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-41-7	Beryllium	0.723	mg/kg		0.0237	0.119	0.119	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-43-9	Cadmium	215	ug/Kg	J	124	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-70-2	Calcium J-,I6a	1060000	ug/Kg	*N	9950	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-47-3	Chromium	5120	ug/Kg		187	622	622	1	P	HSC	03/11/10 02:37	031010-2	954672
7440-48-4	Cobalt	1690	ug/Kg		187	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-50-8	Copper	15900	ug/Kg		373	1240	1240	1	P	HSC	03/11/10 02:37	031010-2	954672
7439-89-6	Iron	8390000	ug/Kg	*	9950	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-92-1	Lead J,I4a	11000	ug/Kg		311	1240	1240	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-95-4	Magnesium	754000	ug/Kg	*N	10600	37300	37300	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-96-5	Manganese	232000	ug/Kg	*	249	1240	1240	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-97-6	Mercury	8.18	ug/kg	J	4.79	14.1	14.1	1	AV	JXL1	03/04/10 12:18	030410S1-6	958616
7440-02-0	Nickel	4.01	mg/kg		0.119	0.474	0.474	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-09-7	Potassium J+,I6b	664000	ug/Kg	*N	7960	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7782-49-2	Selenium	1.19	mg/kg	UN	0.593	1.19	1.19	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-22-4	Silver	622	ug/Kg	U	124	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-23-5	Sodium U,I4d	57100	ug/Kg		8710	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-28-0	Thallium	0.0999	mg/kg	J	0.072	0.24	0.24	2	MS	SKJ	03/16/10 23:37	100316-4	965482
7440-61-1	Uranium	27.3	mg/kg		0.0782	0.237	0.237	10	MS	BAJ	03/14/10 10:36	100313-3	954674
7440-62-2	Vanadium	8270	ug/Kg		124	622	622	1	P	HSC	03/11/10 02:37	031010-2	954672
7440-66-6	Zinc J,I4a	35500	ug/Kg		411	1240	1240	1	P	HSC	03/11/10 02:37	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.522	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.548	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.553	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.541	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178005 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7998 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5340000	ug/Kg	*	7520	22100	22100	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-36-0	Antimony	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-38-2	Arsenic	1.53	mg/kg		0.22	1.1	1.1	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-39-3	Barium J-,I6a	59500	ug/Kg	*N	111	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-41-7	Beryllium	0.671	mg/kg		0.022	0.11	0.11	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-43-9	Cadmium	212	ug/Kg	J	111	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-70-2	Calcium J-,I6a	1480000	ug/Kg	*N	8850	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-47-3	Chromium	9860	ug/Kg		166	553	553	1	P	HSC	03/11/10 02:44	031010-2	954672
7440-48-4	Cobalt	2190	ug/Kg		166	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-50-8	Copper	6450	ug/Kg		332	1110	1110	1	P	HSC	03/11/10 02:44	031010-2	954672
7439-89-6	Iron	11900000	ug/Kg	*	8850	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-92-1	Lead J,I4a	12300	ug/Kg		277	1110	1110	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-95-4	Magnesium	1200000	ug/Kg	*N	9400	33200	33200	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-96-5	Manganese	333000	ug/Kg	*	221	1110	1110	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-97-6	Mercury	5.16	ug/kg	J	4.55	13.4	13.4	1	AV	JXL1	03/04/10 12:24	030410S1-6	958616
7440-02-0	Nickel	4.27	mg/kg		0.11	0.44	0.44	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-09-7	Potassium J+,I6b	931000	ug/Kg	*N	7080	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7782-49-2	Selenium	1.1	mg/kg	UN	0.55	1.1	1.1	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-22-4	Silver	553	ug/Kg	U	111	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-23-5	Sodium U,I4d	73600	ug/Kg		7750	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-28-0	Thallium	0.0768	mg/kg	J	0.069	0.23	0.23	2	MS	SKJ	03/16/10 23:40	100316-4	965482
7440-61-1	Uranium	4.02	mg/kg		0.0145	0.044	0.044	2	MS	BAJ	03/14/10 10:14	100313-3	954674
7440-62-2	Vanadium	12700	ug/Kg		111	553	553	1	P	HSC	03/11/10 02:44	031010-2	954672
7440-66-6	Zinc J,I4a	50300	ug/Kg		365	1110	1110	1	P	HSC	03/11/10 02:44	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.524	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.527	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.52	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.504	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178006 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-8000 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9290000	ug/Kg	*	7160	21100	21100	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-36-0	Antimony	1050	ug/Kg	UN	348	1050	1050	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-38-2	Arsenic	2.19	mg/kg		0.228	1.14	1.14	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-39-3	Barium J-,I6a	87300	ug/Kg	*N	105	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-41-7	Beryllium	0.914	mg/kg		0.0228	0.114	0.114	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-43-9	Cadmium	202	ug/Kg	J	105	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-70-2	Calcium J-,I6a	1980000	ug/Kg	*N	8430	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-47-3	Chromium	11100	ug/Kg		158	527	527	1	P	HSC	03/11/10 02:51	031010-2	954672
7440-48-4	Cobalt	3620	ug/Kg		158	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-50-8	Copper	6540	ug/Kg		316	1050	1050	1	P	HSC	03/11/10 02:51	031010-2	954672
7439-89-6	Iron	13500000	ug/Kg	*	8430	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-92-1	Lead J,I4a	9820	ug/Kg		263	1050	1050	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-95-4	Magnesium	1880000	ug/Kg	*N	8960	31600	31600	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-96-5	Manganese	275000	ug/Kg	*	211	1050	1050	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-97-6	Mercury	44.2	ug/kg		4.45	13.1	13.1	1	AV	JXL1	03/04/10 12:26	030410S1-6	958616
7440-02-0	Nickel	8.25	mg/kg		0.114	0.455	0.455	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-09-7	Potassium J+,I6b	1430000	ug/Kg	*N	6740	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7782-49-2	Selenium	1.14	mg/kg	UN	0.569	1.14	1.14	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-22-4	Silver	116	ug/Kg	J	105	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-23-5	Sodium	130000	ug/Kg		7370	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-28-0	Thallium	0.158	mg/kg	J	0.0659	0.22	0.22	2	MS	SKJ	03/16/10 23:43	100316-4	965482
7440-61-1	Uranium	0.844	mg/kg		0.015	0.0455	0.0455	2	MS	BAJ	03/14/10 10:16	100313-3	954674
7440-62-2	Vanadium	17700	ug/Kg		105	527	527	1	P	HSC	03/11/10 02:51	031010-2	954672
7440-66-6	Zinc J,I4a	37600	ug/Kg		348	1050	1050	1	P	HSC	03/11/10 02:51	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.541	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.501	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.523	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.519	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178007 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7999 **LEVEL:** Low **DATE RECEIVED** 16-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	4810000	ug/Kg	*	7010	20600	20600	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-36-0	Antimony	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-38-2	Arsenic	1.51	mg/kg		0.21	1.05	1.05	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-39-3	Barium J-,I6a	61200	ug/Kg	*N	103	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-41-7	Beryllium	0.671	mg/kg		0.021	0.105	0.105	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-43-9	Cadmium	194	ug/Kg	J	103	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-70-2	Calcium J-,I6a	1800000	ug/Kg	*N	8250	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-47-3	Chromium	10700	ug/Kg		155	515	515	1	P	HSC	03/11/10 02:59	031010-2	954672
7440-48-4	Cobalt	2540	ug/Kg		155	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-50-8	Copper	13000	ug/Kg		309	1030	1030	1	P	HSC	03/11/10 02:59	031010-2	954672
7439-89-6	Iron	10200000	ug/Kg	*	8250	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-92-1	Lead J,I4a	20500	ug/Kg		258	1030	1030	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-95-4	Magnesium	1040000	ug/Kg	*N	8760	30900	30900	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-96-5	Manganese	353000	ug/Kg	*	206	1030	1030	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-97-6	Mercury	8.17	ug/kg	J	4.16	12.2	12.2	1	AV	JXL1	03/04/10 12:28	030410S1-6	958616
7440-02-0	Nickel	3.72	mg/kg		0.105	0.42	0.42	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-09-7	Potassium J+,I6b	960000	ug/Kg	*N	6600	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7782-49-2	Selenium	1.05	mg/kg	UN	0.525	1.05	1.05	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-22-4	Silver	515	ug/Kg	U	103	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-23-5	Sodium U,I4d	73800	ug/Kg		7220	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-28-0	Thallium	0.089	mg/kg	J	0.0701	0.234	0.234	2	MS	SKJ	03/16/10 23:52	100316-4	965482
7440-61-1	Uranium	15.5	mg/kg		0.0139	0.042	0.042	2	MS	BAJ	03/14/10 10:17	100313-3	954674
7440-62-2	Vanadium	11600	ug/Kg		103	515	515	1	P	HSC	03/11/10 02:59	031010-2	954672
7440-66-6	Zinc J,I4a	41000	ug/Kg		340	1030	1030	1	P	HSC	03/11/10 02:59	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.589	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.578	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.596	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.52	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178008 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7995 **LEVEL:** Low **DATE RECEIVED** 16-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	3940000	ug/Kg	*	8390	24700	24700	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-36-0	Antimony	1230	ug/Kg	UN	407	1230	1230	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-38-2	Arsenic	1.38	mg/kg		0.267	1.34	1.34	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-39-3	Barium J-,I6a	47000	ug/Kg	*N	123	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-41-7	Beryllium	0.761	mg/kg		0.0267	0.134	0.134	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-43-9	Cadmium	284	ug/Kg	J	123	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-70-2	Calcium J-,I6a	1360000	ug/Kg	*N	9870	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-47-3	Chromium	5270	ug/Kg		185	617	617	1	P	HSC	03/11/10 03:06	031010-2	954672
7440-48-4	Cobalt	1700	ug/Kg		185	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-50-8	Copper	15600	ug/Kg		370	1230	1230	1	P	HSC	03/11/10 03:06	031010-2	954672
7439-89-6	Iron	10300000	ug/Kg	*	9870	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-92-1	Lead J,I4a	15200	ug/Kg		308	1230	1230	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-95-4	Magnesium	694000	ug/Kg	*N	10500	37000	37000	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-96-5	Manganese	296000	ug/Kg	*	247	1230	1230	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-97-6	Mercury	12.6	ug/kg	J	5.41	15.9	15.9	1	AV	JXL1	03/04/10 12:30	030410S1-6	958616
7440-02-0	Nickel	3.39	mg/kg		0.134	0.535	0.535	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-09-7	Potassium J+,I6b	667000	ug/Kg	*N	7900	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7782-49-2	Selenium	1.34	mg/kg	UN	0.668	1.34	1.34	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-22-4	Silver	617	ug/Kg	U	123	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-23-5	Sodium U,I4d	96200	ug/Kg		8640	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-28-0	Thallium	0.260	mg/kg	U	0.0779	0.26	0.26	2	MS	SKJ	03/16/10 23:55	100316-4	965482
7440-61-1	Uranium	19.3	mg/kg		0.0176	0.0535	0.0535	2	MS	BAJ	03/14/10 10:19	100313-3	954674
7440-62-2	Vanadium	8710	ug/Kg		123	617	617	1	P	HSC	03/11/10 03:06	031010-2	954672
7440-66-6	Zinc J,I4a	49400	ug/Kg		407	1230	1230	1	P	HSC	03/11/10 03:06	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.546	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.504	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.508	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.519	g	50	mL	03/16/10	AXG2

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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178009 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7996 **LEVEL:** Low **DATE RECEIVED** 16-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	3970000	ug/Kg	*	7310	21500	21500	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-36-0	Antimony	1080	ug/Kg	UN	355	1080	1080	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-38-2	Arsenic	1.36	mg/kg		0.203	1.02	1.02	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-39-3	Barium J-,I6a	33200	ug/Kg	*N	108	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-41-7	Beryllium	0.624	mg/kg		0.0203	0.102	0.102	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-43-9	Cadmium	151	ug/Kg	J	108	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-70-2	Calcium J-,I6a	1010000	ug/Kg	*N	8610	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-47-3	Chromium	8550	ug/Kg		161	538	538	1	P	HSC	03/11/10 03:13	031010-2	954672
7440-48-4	Cobalt	1370	ug/Kg		161	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-50-8	Copper	7330	ug/Kg		323	1080	1080	1	P	HSC	03/11/10 03:13	031010-2	954672
7439-89-6	Iron	9440000	ug/Kg	*	8610	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-92-1	Lead J,I4a	9260	ug/Kg		269	1080	1080	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-95-4	Magnesium	628000	ug/Kg	*N	9140	32300	32300	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-96-5	Manganese	205000	ug/Kg	*	215	1080	1080	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-97-6	Mercury	12.7	ug/kg		4.13	12.2	12.2	1	AV	JXL1	03/04/10 12:32	030410S1-6	958616
7440-02-0	Nickel	2.52	mg/kg		0.102	0.407	0.407	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-09-7	Potassium J+,I6b	569000	ug/Kg	*N	6880	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7782-49-2	Selenium	1.02	mg/kg	UN	0.508	1.02	1.02	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-22-4	Silver	538	ug/Kg	U	108	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-23-5	Sodium U,I4d	90700	ug/Kg		7530	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-28-0	Thallium	0.228	mg/kg	U	0.0685	0.228	0.228	2	MS	SKJ	03/16/10 23:58	100316-4	965482
7440-61-1	Uranium	6.46	mg/kg		0.0134	0.0407	0.0407	2	MS	BAJ	03/14/10 10:21	100313-3	954674
7440-62-2	Vanadium	7820	ug/Kg		108	538	538	1	P	HSC	03/11/10 03:13	031010-2	954672
7440-66-6	Zinc J,I4a	41800	ug/Kg		355	1080	1080	1	P	HSC	03/11/10 03:13	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.549	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.581	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.583	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.517	g	50	mL	03/16/10	AXG2

AMF
4/8/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178010 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7993 **LEVEL:** Low **DATE RECEIVED** 16-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	3440000	ug/Kg	*	7770	22800	22800	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-36-0	Antimony	1140	ug/Kg	UN	377	1140	1140	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-38-2	Arsenic	1.55	mg/kg		0.241	1.21	1.21	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-39-3	Barium J-,I6a	40700	ug/Kg	*N	114	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-41-7	Beryllium	0.710	mg/kg		0.0241	0.121	0.121	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-43-9	Cadmium	145	ug/Kg	J	114	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-70-2	Calcium J-,I6a	1190000	ug/Kg	*N	9140	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-47-3	Chromium	9210	ug/Kg		171	571	571	1	P	HSC	03/11/10 03:20	031010-2	954672
7440-48-4	Cobalt	1700	ug/Kg		171	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-50-8	Copper	7370	ug/Kg		343	1140	1140	1	P	HSC	03/11/10 03:20	031010-2	954672
7439-89-6	Iron	9580000	ug/Kg	*	9140	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-92-1	Lead J,I4a	10300	ug/Kg		286	1140	1140	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-95-4	Magnesium	740000	ug/Kg	*N	9710	34300	34300	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-96-5	Manganese	252000	ug/Kg	*	228	1140	1140	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-97-6	Mercury	8.79	ug/kg	J	4.78	14.1	14.1	1	AV	JXL1	03/04/10 12:33	030410S1-6	958616
7440-02-0	Nickel	4.95	mg/kg		0.121	0.483	0.483	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-09-7	Potassium J+,I6b	776000	ug/Kg	*N	7310	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7782-49-2	Selenium	1.21	mg/kg	UN	0.603	1.21	1.21	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-22-4	Silver	141	ug/Kg	J	114	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-23-5	Sodium	126000	ug/Kg		8000	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-28-0	Thallium	0.245	mg/kg	U	0.0735	0.245	0.245	2	MS	SKJ	03/17/10 00:02	100316-4	965482
7440-61-1	Uranium	3.08	mg/kg		0.0159	0.0483	0.0483	2	MS	BAJ	03/14/10 10:23	100313-3	954674
7440-62-2	Vanadium	8970	ug/Kg		114	571	571	1	P	HSC	03/11/10 03:20	031010-2	954672
7440-66-6	Zinc J,I4a	48200	ug/Kg		377	1140	1140	1	P	HSC	03/11/10 03:20	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.546	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.517	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.532	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.509	g	50	mL	03/16/10	AXG2

AMF
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METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178011 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-8064 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 71

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6850000	ug/Kg	*	9240	27200	27200	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-36-0	Antimony	1360	ug/Kg	UN	448	1360	1360	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-38-2	Arsenic	2.02	mg/kg		0.282	1.41	1.41	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-39-3	Barium J-,I6a	66700	ug/Kg	*N	136	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-41-7	Beryllium	1.16	mg/kg		0.0282	0.141	0.141	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-43-9	Cadmium	349	ug/Kg	J	136	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-70-2	Calcium J-,I6a	1740000	ug/Kg	*N	10900	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-47-3	Chromium	6580	ug/Kg		204	680	680	1	P	HSC	03/11/10 03:27	031010-2	954672
7440-48-4	Cobalt	2650	ug/Kg		204	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-50-8	Copper	28600	ug/Kg		408	1360	1360	1	P	HSC	03/11/10 03:27	031010-2	954672
7439-89-6	Iron	11800000	ug/Kg	*	10900	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-92-1	Lead J,I4a	21300	ug/Kg		340	1360	1360	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-95-4	Magnesium	1160000	ug/Kg	*N	11600	40800	40800	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-96-5	Manganese	284000	ug/Kg	*	272	1360	1360	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-97-6	Mercury	16.4	ug/kg	U	5.58	16.4	16.4	1	AV	JXL1	03/04/10 12:35	030410S1-6	958616
7440-02-0	Nickel	4.83	mg/kg		0.141	0.564	0.564	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-09-7	Potassium J+,I6b	1070000	ug/Kg	*N	8700	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7782-49-2	Selenium	1.41	mg/kg	UN	0.705	1.41	1.41	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-22-4	Silver	680	ug/Kg	U	136	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-23-5	Sodium U,I4d	61300	ug/Kg		9510	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-28-0	Thallium	0.274	mg/kg	U	0.0822	0.274	0.274	2	MS	SKJ	03/17/10 00:05	100316-4	965482
7440-61-1	Uranium	30.3	mg/kg		0.0931	0.282	0.282	10	MS	BAJ	03/14/10 10:33	100313-3	954674
7440-62-2	Vanadium	14200	ug/Kg		136	680	680	1	P	HSC	03/11/10 03:27	031010-2	954672
7440-66-6	Zinc J,I4a	47500	ug/Kg		448	1360	1360	1	P	HSC	03/11/10 03:27	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.519	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.5	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.516	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.515	g	50	mL	03/16/10	AXG2

AMF
4/8/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247182001 **BASIS:** As Received **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-8087 **LEVEL:** Low **DATE RECEIVED** 16-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	03/10/10 20:19	031010-1	954668
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-70-2	Calcium	580	ug/L		50	200	200	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/10/10 20:19	031010-1	954668
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/10/10 20:19	031010-1	954668
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/10/10 20:19	031010-1	954668
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/14/10 09:50	100313-5	954670
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/25/10 12:46	022510W1-6	957034
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-09-7	Potassium U,I4b	132	ug/L	J	50	150	150	1	P	HSC	03/10/10 20:19	031010-1	954668
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-23-5	Sodium	192	ug/L	J	100	300	300	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-66-6	Zinc	4.74	ug/L	J	3.3	10	10	1	P	HSC	03/10/10 20:19	031010-1	954668

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954668	954667	SW846 3005A	50	mL	50	mL	02/24/10	AXG2
954670	954669	SW846 3005A	50	mL	50	mL	02/24/10	AXG2
957034	957032	SW846 7470A Prep	20	mL	20	mL	02/24/10	TXB3

AMF
4/8/10

DATA VALIDATION COVER SHEET

5120-1

Data Validation Cover Sheet

Records Use only

Los Alamos NATIONAL LABORATORY EST. 1943

Section I.

REQUEST NUMBER: 10-1861 VALIDATION DATE: 4/8/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Allison Felix ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

- ☐ TPH-GRO
- ☐ TPH-DRO
- ☒ GENERAL CHEMISTRY
- ☐ HIGH EXPLOSIVES
- ☐ METALS
- ☐ RADIOCHEMISTRY
- ☐ DIOXIN FURANS
- ☐ PCB CONGENERS
- ☐ LCMSMS HIGH EXPLOSIVES
- ☐ LCMSMS PERCHLORATES
- ☐ ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
- ☐ OTHER (DESCRIBE): total cyanide

Section II. Completeness Check

YES	NO	N/A	(CHECK ONE)	YES	NO	N/A	(CHECK ONE)
☒	☐	☐	1. CHAIN-OF-CUSTODY FORM(S)	☒	☐	☐	6. RAW/BSS DATA
☒	☐	☐	2. CASE NARRATIVE	☒	☐	☐	7. QUALITY CONTROL FORMS
☒	☐	☐	3. SAMPLE RESULT FORMS	☐	☐	☒	8. QUANTITATION REPORTS
☐	☐	☒	4. SAMPLE CHROMATOGRAMS	☐	☐	☒	9. TICS FORMS
☐	☐	☒	5. STANDARD CHROMATOGRAMS	☐	☐	☒	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. It should be noted that the matrix QC analyses were performed on LANL samples from other RNs. No sample results were qualified.

Reviewed by: Mary Donivan Level: I Date: 04/09/10

VALIDATOR'S SIGNATURE: Allison Felix DATE: 4/8/10

GENERAL CHEMISTRY ANALYTICAL DATA VALIDATION CHECKLIST

5120-2

General Chemistry Analytical Data Validation Checklist

Records Use only

Los Alamos NATIONAL LABORATORY

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	1. The holding time was >1 and ≤2 times the applicable holding time requirement.	UJ, I9	J-, I9
☐	☒	☐	2. The holding time was >2 times the applicable holding time requirement.	R, I9a	J-, I9a
☐	☐	☒	3. The affected analytes are regarded as rejected because the analytical holding time was exceeded.	R, I9b	R, I9b
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	6. The ICV and/or CCV were recovered outside the method specific limits.	UJ, I7c	J, I7c
☐	☒	☐	7. The ICV and/or CCV were not analyzed at the appropriate method frequency.	UJ, I7d	J, I7d
☐	☒	☐	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
☐	☐	☒	9. The interference check sample percent recovery value is <50%.	R, I2	J-, I2
☐	☐	☒	10. The interference check sample percent recovery value is ≥50% and <80%.	UJ, I2a	J-, I2a
☐	☐	☒	11. The interference check sample percent recovery value is >120%.	N/A	J+, I2b
☐	☐	☒	12. The interference check sample was not analyzed with the samples.	R, I2c	R, I2c
☐	☒	☐	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

Los Alamos NATIONAL LABORATORY EST. 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	15. The sample result is ≤5X the concentration of the related analyte in the instrument blank and continuing calibration blank.	U, I4b	N/A
☐	☒	☐	16. Continuing calibration blanks were not analyzed at the appropriate method frequency.	UJ, I4c	J, I4c
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	19. The associate matrix spike recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I6	R, I6
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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
☐	☒	☐	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 Los Alamos NATIONAL LABORATORY EST 1943

Yes	No	N/A		Assign Qualifier Listed Below If Criterion = Yes	
(Check One)				Non-detected Analyte	Detected Analyte
☐	☒	☐	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
☐	☒	☐	25. The LCS percent recovery was <10%. Follow the external laboratory limits located within the associated data package.	R, I12	R, I12
☐	☒	☐	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
☐	☒	☐	27. The LCS percent recovery was > the UAL. Follow the external laboratory limits located within the associated data package.	N/A	J+, I12b
☐	☒	☐	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
☐	☒	☐	29. Duplicate, dilution, or reanalysis	UJ, I88	J, I88
☐	☒	☐	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
☒	☐	☐	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)

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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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-8064	Project:	LANL01004
Sample ID:	247178011	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	29.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	95.9	353	ug/kg	1	AXC2 02/23/10	1044	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

AMF
4/8/10

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

Report Date: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7904	Project:	LANL01004
Sample ID:	247178001	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.1	269	ug/kg	1	AXC2 02/23/10	1032	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7903	Project:	LANL01004
Sample ID:	247178002	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	19.4%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.0	272	ug/kg	1	AXC2 02/23/10	1032	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7994	Project:	LANL01004
Sample ID:	247178003	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	11.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.9	260	ug/kg	1	AXC2 02/23/10	1033	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7997	Project:	LANL01004
Sample ID:	247178004	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	23%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	83.3	306	ug/kg	1	AXC2 02/23/10	1034	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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4/8/10

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

Report Date: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7998	Project:	LANL01004
Sample ID:	247178005	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	13.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.4	259	ug/kg	1	AXC2 02/23/10	1035	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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4/8/10

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

Report Date: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-8000	Project:	LANL01004
Sample ID:	247178006	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.5	274	ug/kg	1	AXC2 02/23/10	1036	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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4/8/10

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

Report Date: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7999	Project:	LANL01004
Sample ID:	247178007	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	17.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	82.6	304	ug/kg	1	AXC2 02/23/10	1037	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7995	Project:	LANL01004
Sample ID:	247178008	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	25.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	J	84.2	81.8	301	ug/kg	1	AXC2 02/23/10	1038	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7996	Project:	LANL01004
Sample ID:	247178009	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	15.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.8	279	ug/kg	1	AXC2 02/23/10	1039	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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4/8/10

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

Report Date: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7993	Project:	LANL01004
Sample ID:	247178010	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	19.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	84.8	312	ug/kg	1	AXC2 02/23/10	1039	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

AMF
4/8/10

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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: March 9, 2010

Client SDG: 10-1861-1

Client Sample ID:	RE15-10-8087	Project:	LANL01004
Sample ID:	247182001	Client ID:	LANL010
Matrix:	W		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 02/23/10	1317	954529	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1346	954526

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

AMF
4/8/10

Monday, February 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1861C

REQUEST NUMBER: 10-1861

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/17/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 247178%, 247182%

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7904	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7904	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7903	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7903	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7994	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7994	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7997	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7997	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7998	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7998	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8000	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8000	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7999	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7999	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7995	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7995	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7996	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7996	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7993	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7993	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8064	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8087	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8087	1	POLY	SW-846:6850	Ice	W
RE15-10-8087	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8064	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]	[illegible]	2/15/10	3:00	Greg Tyler	[illegible]	2-16-10	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

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:10-1861
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples
according to the schedule indicated:

SHIP DATE: 2/15/2010
TURNAROUND/REPORT DUE: 3/17/2010
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
	SW-846:6020	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	
	SW-846:6850	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	
	SW-846:7470A	1	RE15-10-8087	W	2/10/2010	
	SW-846:7471A	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
	SW-846:8082	1	RE15-10-7903	R	2/10/2010	

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7904	R	2/10/2010	
	SW-846:8321A_MOD	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
	SW-846:9012A	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	

Final Page of REQUEST NUMBER 10-1861

GEL Laboratories LLC

a member of The GEL Group INC

PO Box 30712 Charleston, SC 29417
2040 Savage Road Charleston, SC 29407

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www.gel.com

February 18, 2010

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: 247178 247182
SDG: 10-1861

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 16, 2010, and analyzed for Explosives by LCMSMS, GC Semivolatile PCB, General Chemistry, Metals and Perchlorates by LCMSMS. 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

Valerie Davis
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1861
Enclosures

problem solved

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 247178 and 247182
SDG: 10-1861

Table of Contents

Case Narrative

Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 247178 and 247182
SDG # : 10-1861

February 18, 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 16, 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:

Laboratory ID	Client ID
247178001	RE15-10-7904
247178002	RE15-10-7903
247178003	RE15-10-7994
247178004	RE15-10-7997
247178005	RE15-10-7998
247178006	RE15-10-8000
247178007	RE15-10-7999
247178008	RE15-10-7995
247178009	RE15-10-7996
247178010	RE15-10-7993
247178011	RE15-10-8064
247182001	RE15-10-8087

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 and Perchlorates by LCMSMS.

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

Valerie Davis

Project Manager

List of current GEL Certifications as of 18 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 15, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1861C

REQUEST NUMBER: 10-1861

LOS ALAMOS

NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, SC.

2040 Savage Rd

Charleston, SC 29407

TURNAROUND/REPORT DUE: 3/17/2010

TURNAROUND REQ'D: 30

LAB REQUEST COMMENTS: 247178%, 247182%.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-7904	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7904	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7903	1	AMBER GLASS	8082+NMED-HEXP	Ice	R
RE15-10-7903	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7994	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7994	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7997	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7997	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7998	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7998	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8000	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8000	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7999	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7999	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7995	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7995	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7996	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7996	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-7993	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-7993	1	AMBER GLASS	NMED Explosives list	Ice	R
RE15-10-8064	1	POLY	Met+U+CLO4+CN	Ice	R
RE15-10-8087	1	POLY	METALS+U-GEL	Nitric Acid	W
RE15-10-8087	1	POLY	SW-846:6850	Ice	W
RE15-10-8087	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8064	1	AMBER GLASS	NMED Explosives list	Ice	R

Relinquished By:		Date	Time	Received By:		Date	Time
[illegible]		2/15/10	3:00	Greg Tyler	[illegible]	2-16-10	0850
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		
Printed Name	Signature			Printed Name	Signature		

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

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:10-1861

Per Agreement Number:126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/15/2010

TURNAROUND/REPORT DUE: 3/17/2010

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
	SW-846:6020	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6020	1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	
	SW-846:6850	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	
	SW-846:7470A	1	RE15-10-8087	W	2/10/2010	
	SW-846:7471A	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
	SW-846:8082	1	RE15-10-7903	R	2/10/2010	

Monday, February 15, 2010

REQUEST NUMBER: 10-1861

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8082	1	RE15-10-7904	R	2/10/2010	
	SW-846:8321A_MOD	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
	SW-846:9012A	1	RE15-10-7903	R	2/10/2010	
		1	RE15-10-7904	R	2/10/2010	
		1	RE15-10-7993	R	2/10/2010	
		1	RE15-10-7994	R	2/10/2010	
		1	RE15-10-7995	R	2/10/2010	
		1	RE15-10-7996	R	2/10/2010	
		1	RE15-10-7997	R	2/10/2010	
		1	RE15-10-7998	R	2/10/2010	
		1	RE15-10-7999	R	2/10/2010	
		1	RE15-10-8000	R	2/10/2010	
		1	RE15-10-8064	R	2/10/2010	
		1	RE15-10-8087	W	2/10/2010	

Final Page of REQUEST NUMBER 10-1861

GEL Laboratories LLC

SAMPLE RECEIPT & REVIEW FORM

Client: LANL	**SDG/ARCOC/Work Order: 10-1861**
Received By: Greg Tyler	**Date Received: 2/16/10**

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*: **60cpm**
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 **1-6** **9-11**
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: **No time on Chain of Custody.**
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:

Fed Ex Tracking Numbers:

7209 7850 0680 1C	**7209 7850 0750 3C**	**7209 7850 0809 6C**
7209 7850 0831 1C	**7209 7850 0706 4C**	**7209 7850 0647 9C**
7209 7850 0783 1C	**7209 7850 0739 4C**	**7209 7850 0636 9C**
7209 7850 0740 2C	**7209 7850 0717 4C**	**7209 7850 0670 10C**
7209 7850 0820 2C	**7209 7850 0728 4C**	**7209 7850 0658 11C**
7209 7850 0794 2C	**7209 7850 0772 5C**	**7209 7850 0669 11C**
7209 7850 0810 2C	**7209 7850 0691 5C**	
7209 7850 0842 3C	**7209 7850 0761 5C**	

PM (or PMA) review: Initials _____ Date 2/17/10

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

1C

FedEx Express

2 of 2
MPS# 0263 7209 7850 0680
Mstr# 7209 7850 0670 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 53.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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1 of 2
TRK# 0201 7209 7850 0831
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

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2 of 2
MPS# 0263 7209 7850 0740
Mstr# 7209 7850 0739 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

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SC-US
CHS

NRIT V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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1 of 3
TRK# 0201 7209 7850 0783
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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2 of 2
MPS# 0263 7209 7850 0820
Mstr# 7209 7850 0810 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

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SC-US
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XX CHSA

ORIGIN ID: SAFA (505) 665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 51.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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2 of 3
MPS# 0263 7209 7850 0794
Mstr# 7209 7850 0783 0201

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PRIORITY OVERNIGH

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XX CHSA

ORIGIN ID: SAFA (505) 665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 62.0 LB MAN
CAD: 0014176/CAFE2449

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VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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2 of 2
MPS# 0263 7209 7850 0842
Mstr# 7209 7850 0831 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

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ORIGIN ID: SAFA (505) 665-9960
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 55.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

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1 of 2
TRK# 0201 7209 7850 0810
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TUE - 16FEB A1
PRIORITY OVERNIGHT

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SC-US
CHS

XX CHSA

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 50.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

4C

FedEx Express

2 of 2
MPS# 0263 7209 7850 0706
Mstr# 7209 7850 0691 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
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CHS

FM 156148434 NRIT V3 09-08

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

3c

FedEx Express

1 of 3
TRK# 0201 7209 7850 0750
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

FM 156148434 NRIT V3 09-08

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 63.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

4c

FedEx Express

1 of 2
TRK# 0201 7209 7850 0739
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

FM V3 09-08

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 57.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

4c

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1 of 2
TRK# 0201 7209 7850 0717
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

FM V3 09-08

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 47.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

°VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

5c

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3 of 3
MPS# 0263 7209 7850 0772
Mstr# 7209 7850 0750 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 61.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

LERIE DAVIS
NERAL ENGINEERING LAB
40 SAVAGE RD

ARLESTON SC 29407
) 556-8171
F: 6B010AMR3A0532VA00

4c

FedEx Express

2 of 2
PS# 263 7209 7850 0728
Mstr# 7209 7850 0717 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

Part # 156148-434 NRIT V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 59.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

°VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

5°

FedEx Express

1 of 2
TRK# 0201 7209 7850 0691
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 39.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

°VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

5°

FedEx Express

2 of 3
MPS# 0263 7209 7850 0761
Mstr# 7209 7850 0750 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 64.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

9c

FedEx Express

3 of 3
MPS# 0263 7209 7850 0647
Mstr# 7209 7850 0625 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

NAIT V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 49.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A05529E00

6

FedEx Express

3 of 3
MPS# 0263 7209 7850 0809
Mstr# 7209 7850 0783 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 182.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

10c

FedEx Express

1 of 2
TRK# 0201 7209 7850 0670
MASTER

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 71.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR2A0515BYD0

9c

FedEx Express

2 of 3
MPS# 0263 7209 7850 0636
Mstr# 7209 7850 0625 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

V3 09-09

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 60.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

°VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

110

FedEx Express

1 of 2

TRK# 0201 7209 7850 0658

TUE - 16FEB A1
PRIORITY OVERNIGHT

MASTER

XX CHSA

29407
SC-US
CHS

JOYLENE VALDEZ
LOS ALAMOS NATL LAB.
TA00 BLDG 1237 DPU 03

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 15FEB10
ACTWGT: 52.0 LB MAN
CAD: 0014176/CAFE2449

BILL SENDER

°VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 556-8171
REF: 6B010AMR3A0532VA00

11C

FedEx Express

2 of 2

MPS# 0203 7209 7850 0669

Mstr# 7209 7850 0658 0201

TUE - 16FEB A1
PRIORITY OVERNIGHT

XX CHSA

29407
SC-US
CHS

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 EXPLOSIVES ANALYSIS

LC/MS/MS Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1861

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:	954321
Prep Batch Number:	954282

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8321A Modified:

Sample ID	Client ID
247178001	RE15-10-7904
247178002	RE15-10-7903
247178003	RE15-10-7994
247178004	RE15-10-7997
247178005	RE15-10-7998
247178006	RE15-10-8000
247178007	RE15-10-7999
247178008	RE15-10-7995
247178009	RE15-10-7996
247178010	RE15-10-7993
247178011	RE15-10-8064
1202045735	Method Blank (MB)
1202045736	Laboratory Control Sample (LCS)
1202045737	247126001(RE16-10-1154) Matrix Spike (MS)
1202045738	247126001(RE16-10-1154) 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 37.4% with limits of 51-112% and 2-Amino-4,6-dinitrotoluene at 136% with limits of 90-130%. Since the samples exceeded twice the hold time, re-extraction was not performed. The data are reported. Please see data exception report 810724.

QC Sample Designation
Client sample 247126001 (RE16-10-1154) from SDG 10-1849 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 did not meet spike recovery limits for multiple target analytes. Please see the Form 3 of the data package for the exact recoveries. Since the samples exceeded twice the hold time, re-extraction was not performed. The data are reported. Please see data exception report 810724.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recovered Tetryl at 2.88%. The recovery limits are 36-124%. Since the samples exceeded twice the hold time, re-extraction was not performed. The data are reported. Please see data exception report 810724.

MS/MSD Relative Percent Difference (RPD) Statement
The MS/MSD RPD for Tetryl was 74.1% and for PETN was 42.9%. The acceptance limits for each are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. The data are reported. Please see data exception report 810724.

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. 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.

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.

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 spike recoveries were within the established acceptance limits.

QC Sample Designation
Client sample 247126001 (RE16-10-1154) from SDG 10-1849 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 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 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 810724 was generated for this SDG.

The LCS recovered Tetryl at 37.4% with limits of 51-112% and 2-Amino-4,6-dinitrotoluene at 136% with limits of 90-130%. Since the samples exceeded twice the hold time, re-extraction was not performed. The data are reported.

The MS did not meet spike recovery limits for multiple target analytes. Please see the Form 3 of the data package for the exact recoveries. Since the samples exceeded twice the hold time, re-extraction was not performed. The data are reported.

The MSD recovered Tetryl at 2.88%. The recovery limits are 36-124%. Since the samples exceeded twice the hold time, re-extraction was not performed. The data are reported.

The MS/MSD RPD for Tetryl was 74.1% and for PETN was 42.9%. The acceptance limits for each are 0-30%. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. 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: Herbert K Mauer **Date:** 03/31/10

SAMPLE DATA SUMMARY

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7904

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178001

Sample Amount 2

Moisture: 10.5

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326070a

Date Analyzed: 28-MAR-10 00:38

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7904

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178001

Sample Amount 2

Moisture: 10.5

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050021.wiff

Date Analyzed: 05-MAR-10 22:21

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7903

Lab Code: GEI

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178002

Sample Amount 2

Moisture: 19.4

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326071a

Date Analyzed: 28-MAR-10 01:08

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7903

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178002

Sample Amount 2

Moisture: 19.4

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050022.wiff

Date Analyzed: 05-MAR-10 22:37

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7994

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178003

Sample Amount 2

Moisture: 11.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326072a

Date Analyzed: 28-MAR-10 01:37

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7994

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178003

Sample Amount 2

Moisture: 11.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050023.wiff

Date Analyzed: 05-MAR-10 22:53

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7997

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178004

Sample Amount 2

Moisture: 23.0

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326076a

Date Analyzed: 28-MAR-10 03:35

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7997

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178004

Sample Amount 2

Moisture: 23.0

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050027.wiff

Date Analyzed: 05-MAR-10 23:55

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7998

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178005

Sample Amount 2

Moisture: 13.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326077a

Date Analyzed: 28-MAR-10 04:05

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7998

Lab Code: GEI

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178005

Sample Amount 2

Moisture: 13.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050028.wiff

Date Analyzed: 06-MAR-10 00:11

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8000

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178006

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326078a

Date Analyzed: 28-MAR-10 04:34

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8000

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178006

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050029.wiff

Date Analyzed: 06-MAR-10 00:27

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7999

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178007

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326079a

Date Analyzed: 28-MAR-10 05:04

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7999

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178007

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050030.wiff

Date Analyzed: 06-MAR-10 00:42

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7995

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178008

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326080a

Date Analyzed: 28-MAR-10 05:33

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7995

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178008

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050031.wiff

Date Analyzed: 06-MAR-10 00:58

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

I

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7996

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178009

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326081a

Date Analyzed: 28-MAR-10 06:03

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7996

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178009

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050032.wiff

Date Analyzed: 06-MAR-10 01:14

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7993

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178010

Sample Amount 2

Moisture: 19.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326082a

Date Analyzed: 28-MAR-10 06:32

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7993

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178010

Sample Amount 2

Moisture: 19.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050033.wiff

Date Analyzed: 06-MAR-10 01:30

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8064

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178011

Sample Amount 2

Moisture: 29.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326083a

Date Analyzed: 28-MAR-10 07:02

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8064

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178011

Sample Amount 2

Moisture: 29.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050034.wiff

Date Analyzed: 06-MAR-10 01:45

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

QUALITY CONTROL SUMMARY

2

High Explosives Surrogate Recovery Summary

Lab Name: GEL Laboratories LLC **GEL Job No (SDG):** 10-1861

Lab Code: GEL **HPLC Column:** Phenomenex Ultracarb 5u ODS(20)

Lab Sample ID	Client Sample ID	DNT	QC Limits	Flg
247178001	RE15-10-7904	87.2	70 – 144	
247178001	RE15-10-7904	105	70 – 144	
247178002	RE15-10-7903	101	70 – 144	
247178002	RE15-10-7903	104	70 – 144	
247178003	RE15-10-7994	77.5	70 – 144	
247178003	RE15-10-7994	106	70 – 144	
247178004	RE15-10-7997	91.8	70 – 144	
247178004	RE15-10-7997	105	70 – 144	
247178005	RE15-10-7998	104	70 – 144	
247178005	RE15-10-7998	108	70 – 144	
247178006	RE15-10-8000	104	70 – 144	
247178006	RE15-10-8000	106	70 – 144	
247178007	RE15-10-7999	120	70 – 144	
247178007	RE15-10-7999	107	70 – 144	
247178008	RE15-10-7995	104	70 – 144	
247178008	RE15-10-7995	108	70 – 144	
247178009	RE15-10-7996	96.1	70 – 144	
247178009	RE15-10-7996	106	70 – 144	
247178010	RE15-10-7993	100	70 – 144	
247178010	RE15-10-7993	106	70 – 144	
247178011	RE15-10-8064	102	70 – 144	
247178011	RE15-10-8064	114	70 – 144	
1202045735	MB for batch 954282	89.5	70 – 144	
1202045735	MB for batch 954282	96.4	70 – 144	
1202045736	LCS for batch 954282	101	70 – 144	
1202045736	LCS for batch 954282	98.8	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) 10-1861

Extract Batch Code: 954282

Date Extracted: 23-FEB-10

GEL LCS ID: 1202045736

GEL LCSDUP ID:

Analysis Date/Time: 27-MAR-10 21:41

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	5320	106								69 – 126
2,4,6-Trinitrotoluene	5000	6100	122								73 – 149
2,4-Dinitrotoluene	5000	5190	104								87 – 137
2,6-Dinitrotoluene	5000	4720	94.4								89 – 120
2-Amino-4,6-dinitrotoluene	5000	6820	136	*							90 – 130
4-Amino-2,6-dinitrotoluene	5000	6150	123								84 – 130
HMX	5000	5270	105								58 – 138
Nitrobenzene	5000	3880	77.5								71 – 122
PETN	5000	4580	91.6								64 – 137
RDX	5000	5250	105								81 – 137
Tetryl	5000	1870	37.4	*							51 – 112
m-Dinitrobenzene	5000	4540	90.7								83 – 122
m-Nitrotoluene	5000	5170	103								73 – 118
o-Nitrotoluene	5000	4710	94.1								72 – 119
p-Nitrotoluene	5000	4580	91.6								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) 10-1861

Extract Batch Code: 954282

Date Extracted: 23-FEB-10

GEL LCS ID: 1202045736

GEL LCSDUP ID:

Analysis Date/Time: 05-MAR-10 20:47

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	4820	96.4					52 - 114
2,6-Diamino-4-nitrotoluene	5000	5060	101					64 - 122
3,5-Dinitroaniline	5000	5140	103					70 - 127
tris(o-cresyl) phosphate	5000	5300	106					84 - 119
TATB	5000	5550	111					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: RE16-10-1154

Lab Code: GEL

GEL Job No (SDG) 10-1861

Extract Batch Code: 954282

Date Extracted: 23-FEB-10

GEL Spike ID: 1202045737

GEL SpikeDup ID: 1202045738

Analysis Date/Time: 27-MAR-10 22:40

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
1,3,5-Trinitrobenzene	5000	0	3720	74.4		3230	64.7		14.1		30	50 – 140
2,4,6-Trinitrotoluene	5000	0	3520	70.5	*	4400	88		22.1		30	76 – 144
2,4-Dinitrotoluene	5000	0	4750	95		5480	110		14.3		30	86 – 135
2,6-Dinitrotoluene	5000	0	4470	89.3	*	4800	96		7.22		30	90 – 118
2-Amino-4,6-dinitrotoluene	5000	0	4090	81.8	*	5020	100		20.5		30	85 – 137
4-Amino-2,6-dinitrotoluene	5000	0	3870	77.5		4940	98.7		24.1		30	72 – 143
HMX	5000	0	5200	104		4300	86		18.9		30	51 – 144
Nitrobenzene	5000	0	4260	85.2		4360	87.1		2.26		30	70 – 122
PETN	5000	0	3490	69.9		5400	108		42.9	*	30	60 – 140
RDX	5000	0	5050	101		4170	83.4		19.1		30	59 – 152
Tetryl	5000	0	313	6.27	*	144	2.88	*	74.1	*	30	36 – 124
m-Dinitrobenzene	5000	0	4540	90.8		4550	91		.263		30	85 – 118
m-Nitrotoluene	5000	0	3370	67.4	*	4390	87.7		26.2		30	70 – 120
o-Nitrotoluene	5000	0	3880	77.7		4700	94		19.1		30	69 – 123
p-Nitrotoluene	5000	0	3580	71.6		4520	90.4		23.2		30	65 – 133

#Column to be used to flag recovery and RPD values with an asterisk

3

High Explosives MS/MSD Summary

Lab Name: GEL Laboratories LLC

Client ID: RE16-10-1154

Lab Code: GEL

GEL Job No (SDG) 10-1861

Extract Batch Code: 954282

Date Extracted: 23-FEB-10

GEL Spike ID: 1202045737

GEL SpikeDup ID: 1202045738

Analysis Date/Time: 05-MAR-10 21:18

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	4850	97	4990	99.8	2.85	26	34 – 135
2,6-Diamino-4-nitrotoluene	5000	0	5060	101	5140	103	1.57	30	55 – 130
3,5-Dinitroaniline	5000	0	5130	103	5160	103	.583	30	73 – 129
tris(o-cresyl) phosphate	5000	0	5010	100	5140	103	2.56	30	72 – 127
TATB	5000	0	5500	110	6010	120	8.86	30	29 – 155

#Column to be used to flag recovery and RPD values with an asterisk

4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–1861

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 26–MAR–10 14:43

GEL Data File: EXP0326001a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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
Nitrobenzene	0	0
3,4–Dinitrotoluene	0	0
1,3,5–Trinitrobenzene	0	0
1,3–Dinitrobenzene–d4	500	518.168
2,4,6–Trinitrotoluene	0	0
2,4–Dinitrotoluene	0	0
2,6–Dinitrotoluene	0	0
2,6–Dinitrotoluene–d3	500	529.324
2–Amino–4,6–dinitrotoluene	0	0
4–Amino–2,6–dinitrotoluene	0	0
HMX	0	0

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

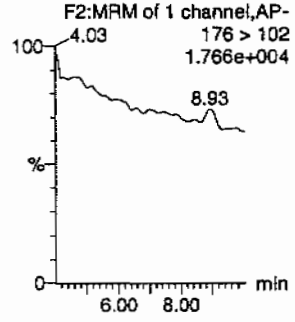
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032610expa.mdb, Time: Sat Mar 27 11:54:14 2010
Calibration: Untitled, Time: Sat Mar 27 12:12:14 2010

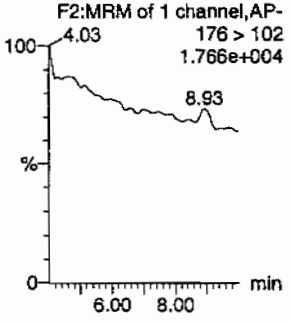
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326001a
Date: 26-Mar-2010
Time: 14:43:25
ID: XIBLK01
Vial: 1:1,A

HMM 3/27/10

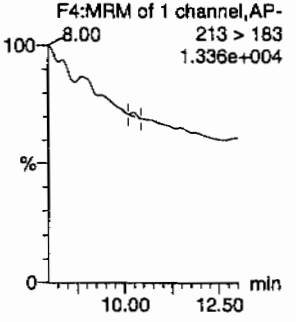
HMX



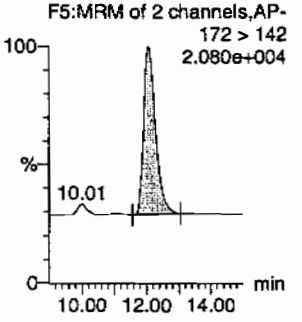
RDX



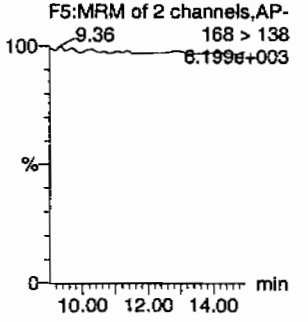
135-Trinitrobenzene



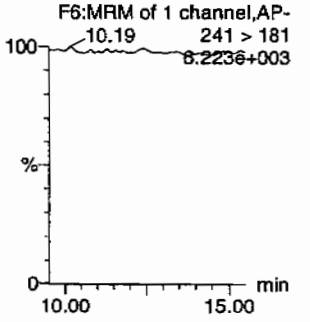
13-Dinitrobenzene-d4



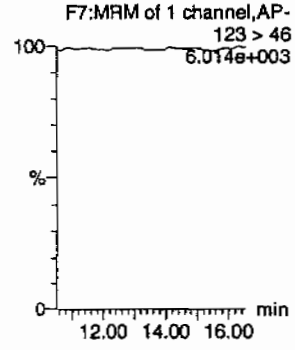
13-Dinitrobenzene



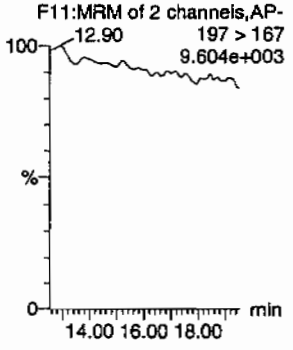
Tetryl



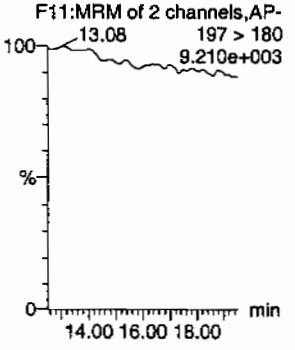
Nitrobenzene



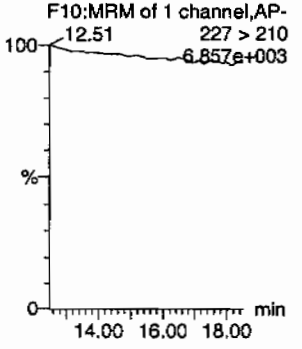
4-Amino-26-dinitrotoluene



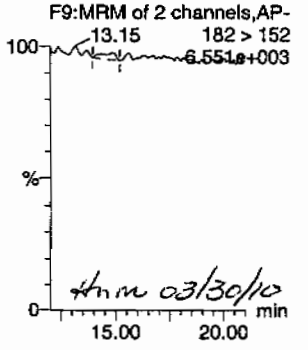
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

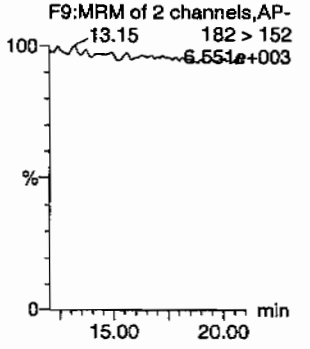


34-dinitrotoluene



HMM 03/30/10

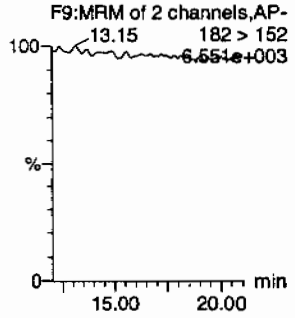
26-dinitrotoluene



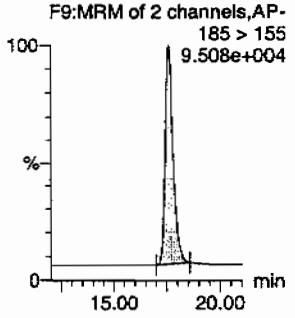
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

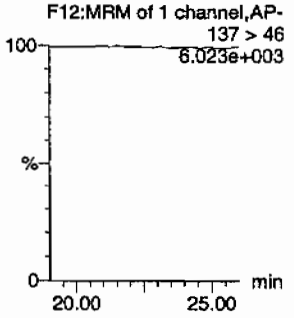
24-dinitrotoluene



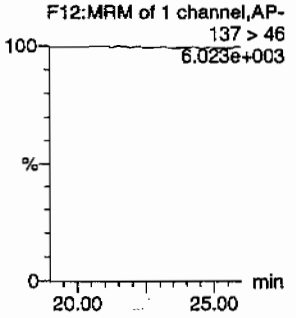
26-dinitrotoluene-d3



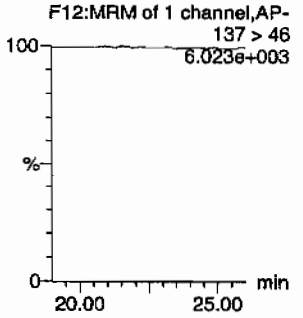
2-Nitrotoluene



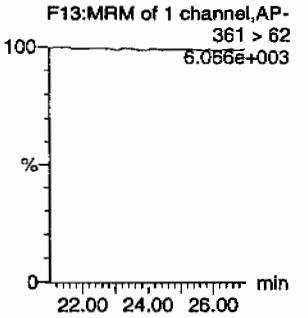
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			6339.675									
XIBLK01	RDX	176 > 102			6339.675									
XIBLK01	135-Trinitrobenzene	213 > 183			6339.675			MM-	27-Mar-10	11:57:31				
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.07	6339.675		6339.675	6339.675	bb			518.1683	103.6	3.6	558.5
XIBLK01	13-Dinitrobenzene	168 > 138			6339.675									
XIBLK01	Tetryl	241 > 181			6339.675									
XIBLK01	Nitrobenzene	123 > 46			6339.675									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			38863.164									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			38863.164									
XIBLK01	246-Trinitrotoluene	227 > 210			38863.164									
XIBLK01	34-dinitrotoluene	182 > 152			38863.164			MM-	27-Mar-10	12:02:48				
XIBLK01	26-dinitrotoluene	182 > 152			38863.164									
XIBLK01	24-dinitrotoluene	182 > 152			38863.164									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.60	38863.164		38863.164	38863.164	bb			529.3244	105.9	5.9	2184.2
XIBLK01	2-Nitrotoluene	137 > 46			38863.164									
XIBLK01	4-Nitrotoluene	137 > 46			38863.164									
XIBLK01	3-Nitrotoluene	137 > 46			38863.164									
XIBLK01	PETN	361 > 62			38863.164									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 26-MAR-10 15:12

GEL Data File: EXP0326002a

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	506.797
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	650.438
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

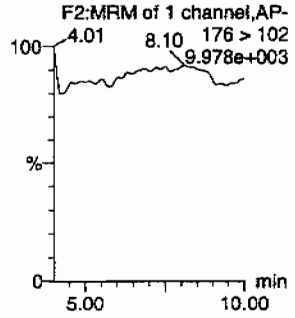
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

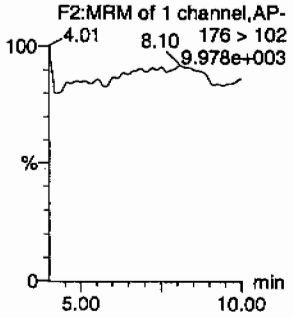
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326002a
Date: 26-Mar-2010
Time: 15:12:54
ID: XIBLK01
Vial: 1:1,A

HMM 3/27/10

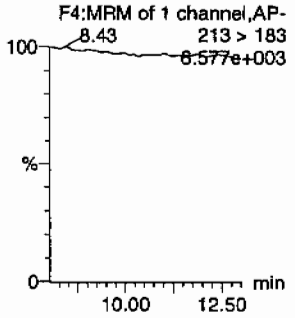
HMX



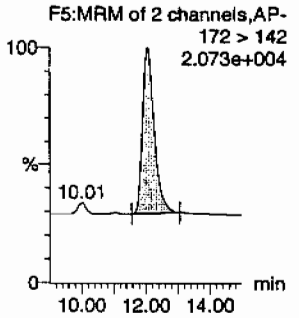
RDX



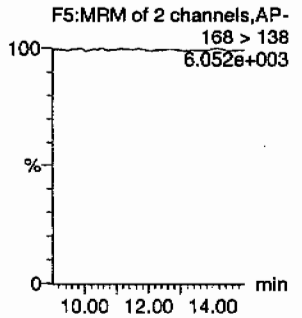
135-Trinitrobenzene



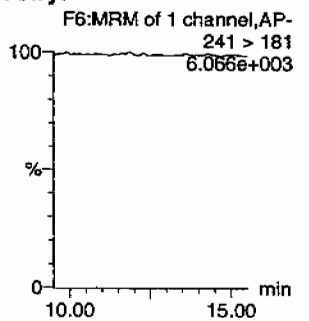
13-Dinitrobenzene-d4



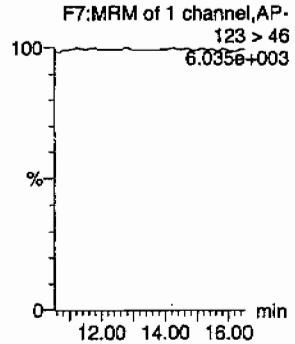
13-Dinitrobenzene



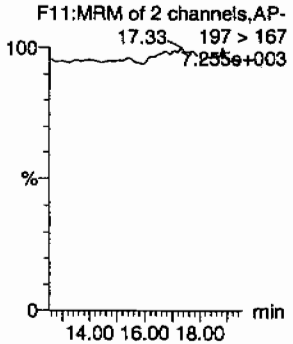
Tetryl



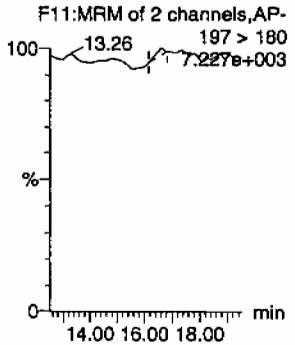
Nitrobenzene



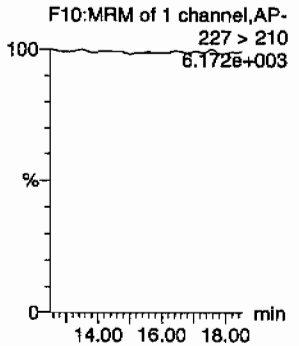
4-Amino-26-dinitrotoluene



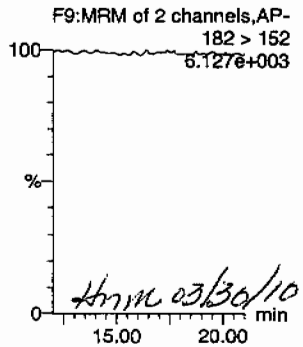
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

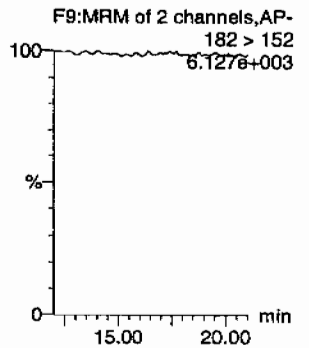


34-dinitrotoluene



HMM 03/30/10

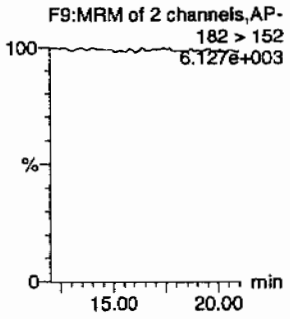
26-dinitrotoluene



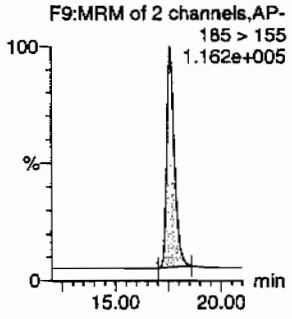
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

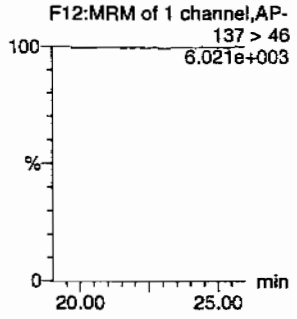
24-dinitrotoluene



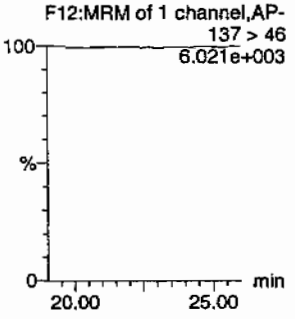
26-dinitrotoluene-d3



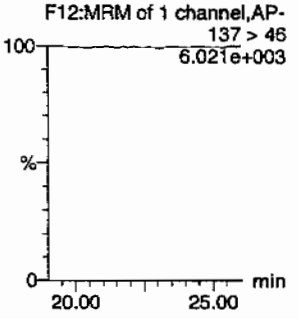
2-Nitrotoluene



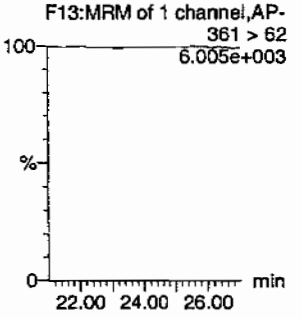
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK01	HMX	176 > 102			6200.550									
XIBLK01	RDX	176 > 102			6200.550									
XIBLK01	135-Trinitrobenzene	213 > 183			6200.550									
XIBLK01	13-Dinitrobenzene-d4	172 > 142	12.07	6200.550		6200.550	6200.550	bb			506.7970	101.4	1.4	531.5
XIBLK01	13-Dinitrobenzene	168 > 138			6200.550									
XIBLK01	Tetryl	241 > 181			6200.550									
XIBLK01	Nitrobenzene	123 > 46			6200.550									
XIBLK01	4-Amino-26-dinitrotoluene	197 > 167			47755.359									
XIBLK01	2-Amino-46-dinitrotoluene	197 > 180			47755.359			MM-	27-Mar-10	12:02:27				
XIBLK01	246-Trinitrotoluene	227 > 210			47755.359									
XIBLK01	34-dinitrotoluene	182 > 152			47755.359									
XIBLK01	26-dinitrotoluene	182 > 152			47755.359									
XIBLK01	24-dinitrotoluene	182 > 152			47755.359									
XIBLK01	26-dinitrotoluene-d3	185 > 155	17.60	47755.359		47755.359	47755.359	bb			650.4380	130.1	30.1	4617.4
XIBLK01	2-Nitrotoluene	137 > 46			47755.359									
XIBLK01	4-Nitrotoluene	137 > 46			47755.359									
XIBLK01	3-Nitrotoluene	137 > 46			47755.359									
XIBLK01	PETN	361 > 62			47755.359									

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–1861

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 05–MAR–10 17:07

GEL Data File: EXS03050001.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

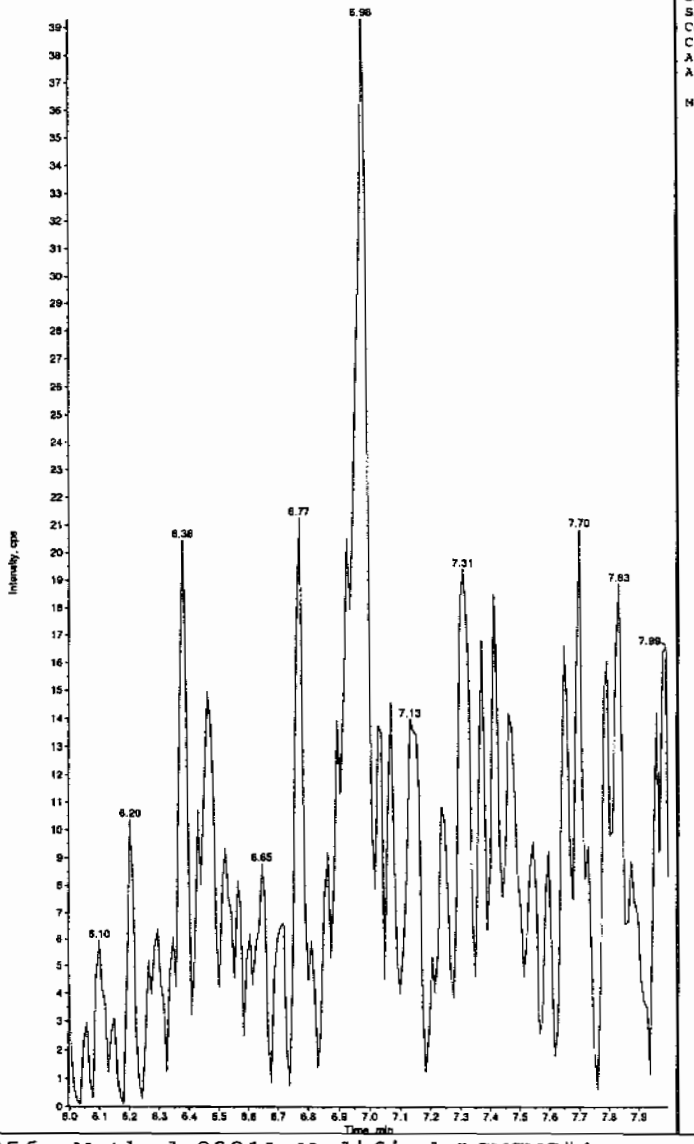
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	0
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Jan 3/9/10

Sample Name: "XIBLK01" Sample ID: "1[1]LER" File: "EXS03050001.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.8 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:07:39 PM

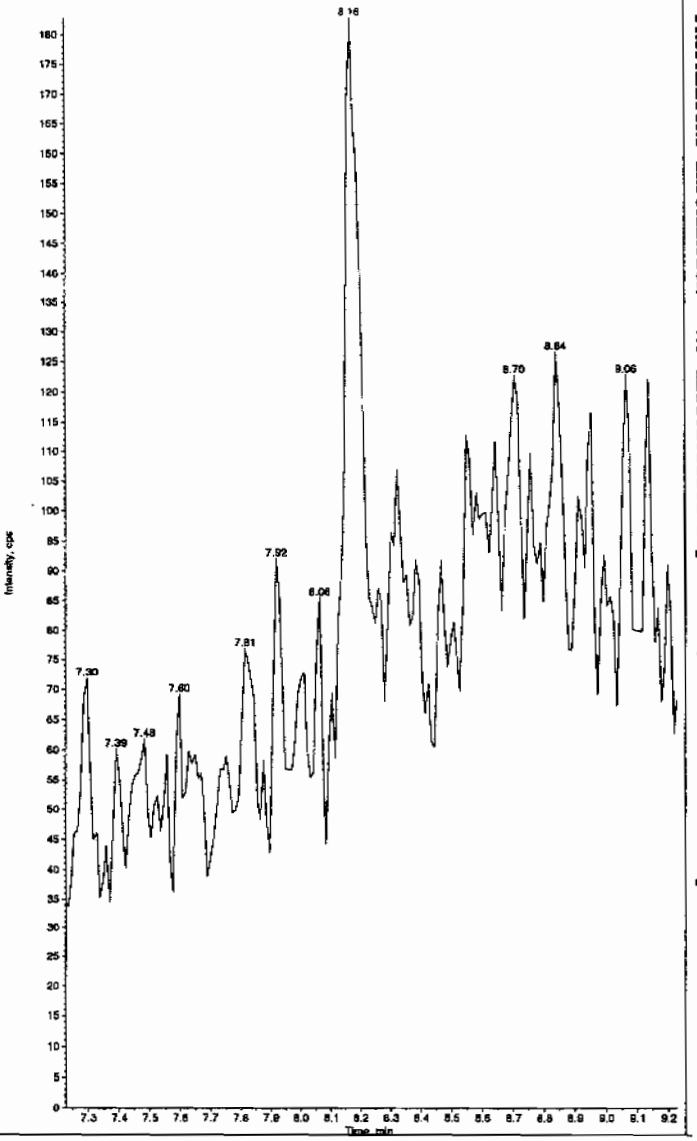
Modified: No



Sample Name: "XIBLK01" Sample ID: "1[1]LER" File: "EXS03050001.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:07:39 PM

Modified: No



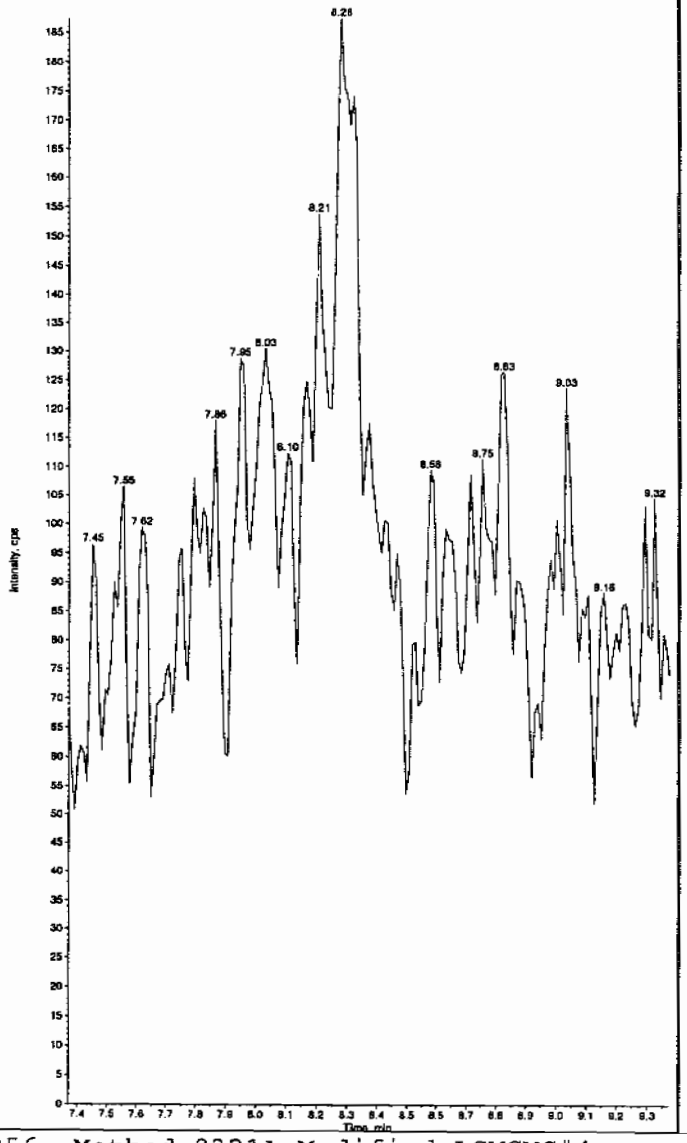
Hmm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03050001.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:07:39 PM

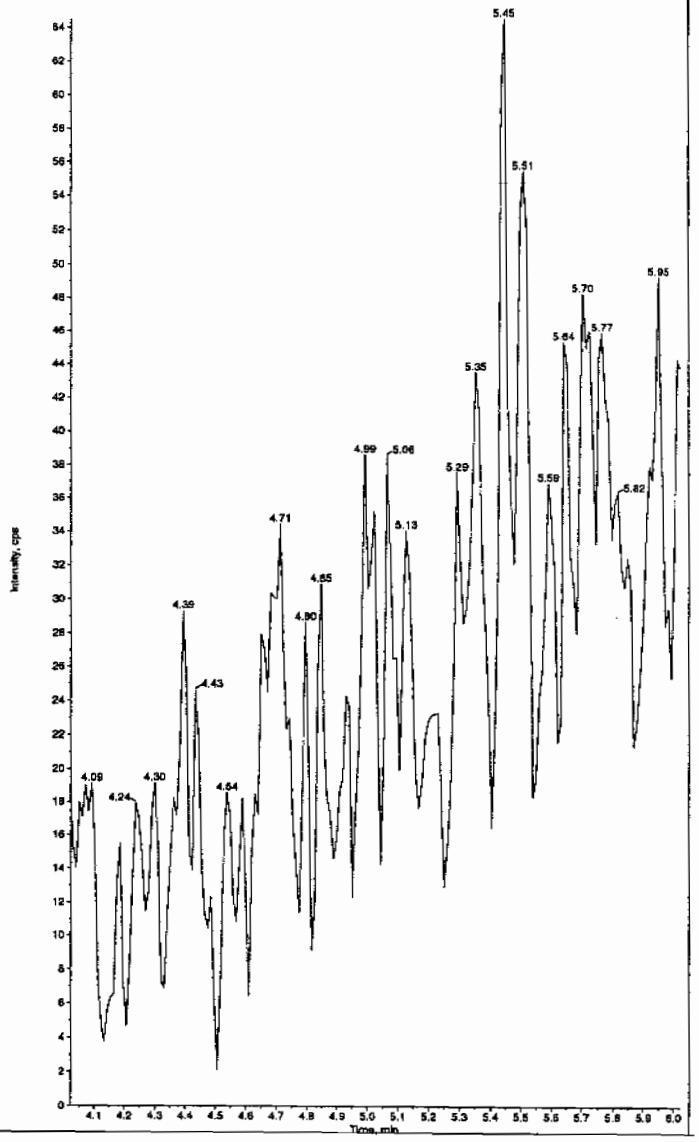
Modified: No



Sample Name: "XIBLK01" Sample ID: "[1]LER" File: "EXS03050001.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:07:39 PM

Modified: No

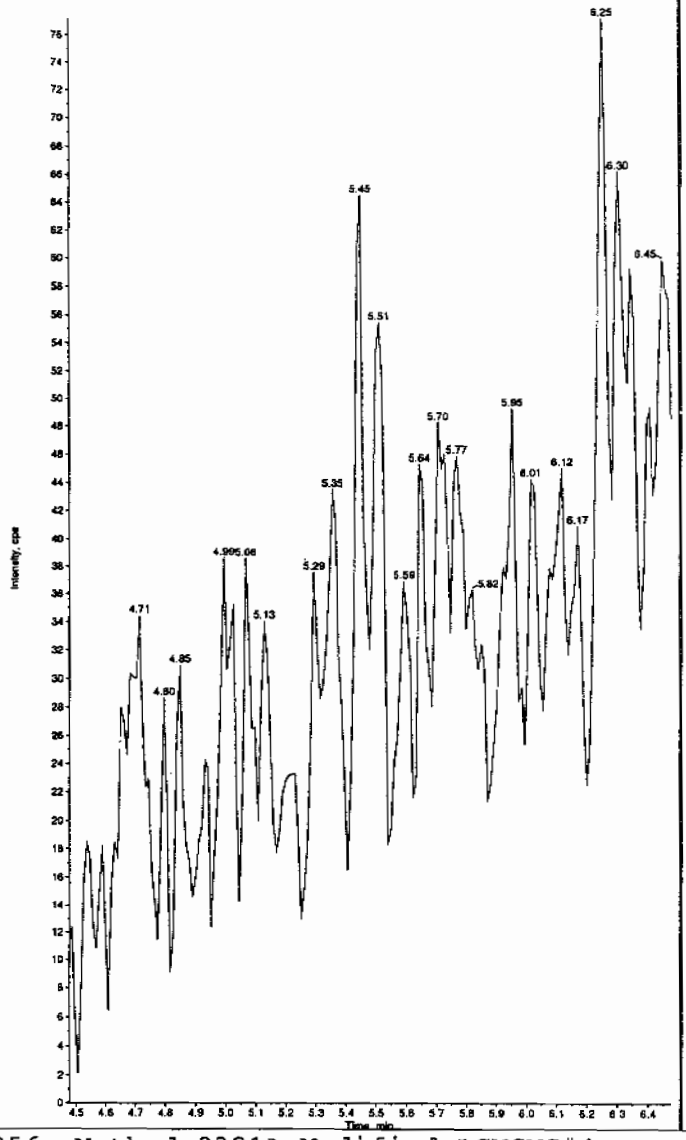


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050001.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:07:39 PM

Modified: No

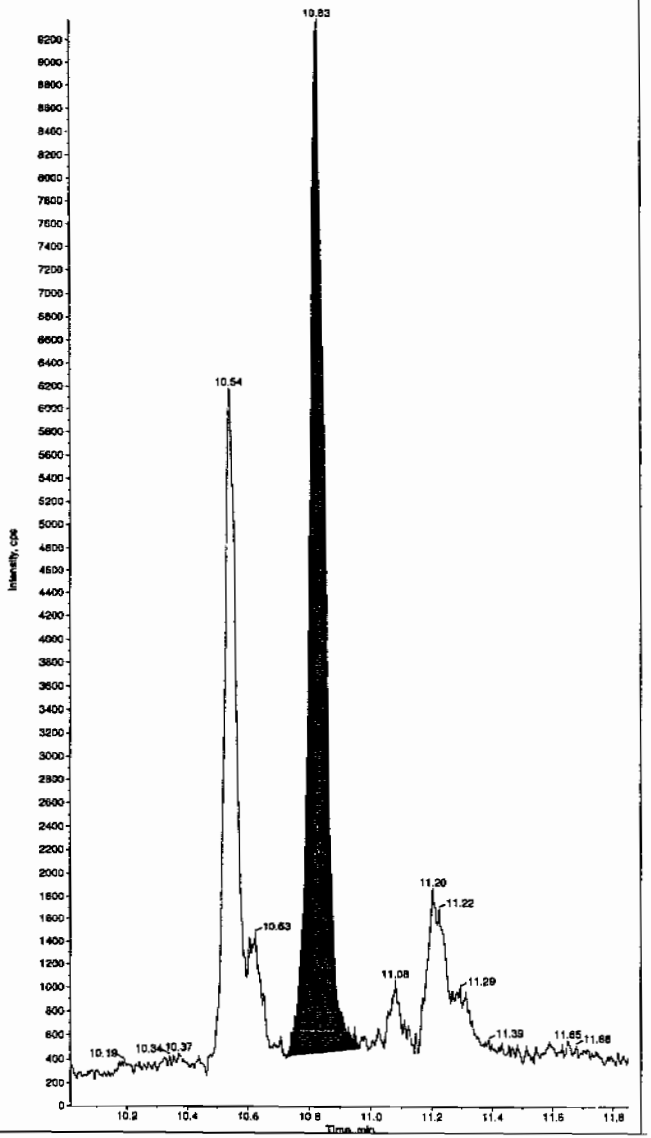


Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050001.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/5/2010
Acq. Time: 5:07:39 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: 10.8 min
Area: 3.19e+004 counts
Height: 8918.386 cps
Start Time: 10.7 min
End Time: 11.0 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

4

Explosives Initial Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK01

Analysis Date: 05-MAR-10 17:23

GEL Data File: EXS03050002.wiff

Instrument ID: LCMSMS

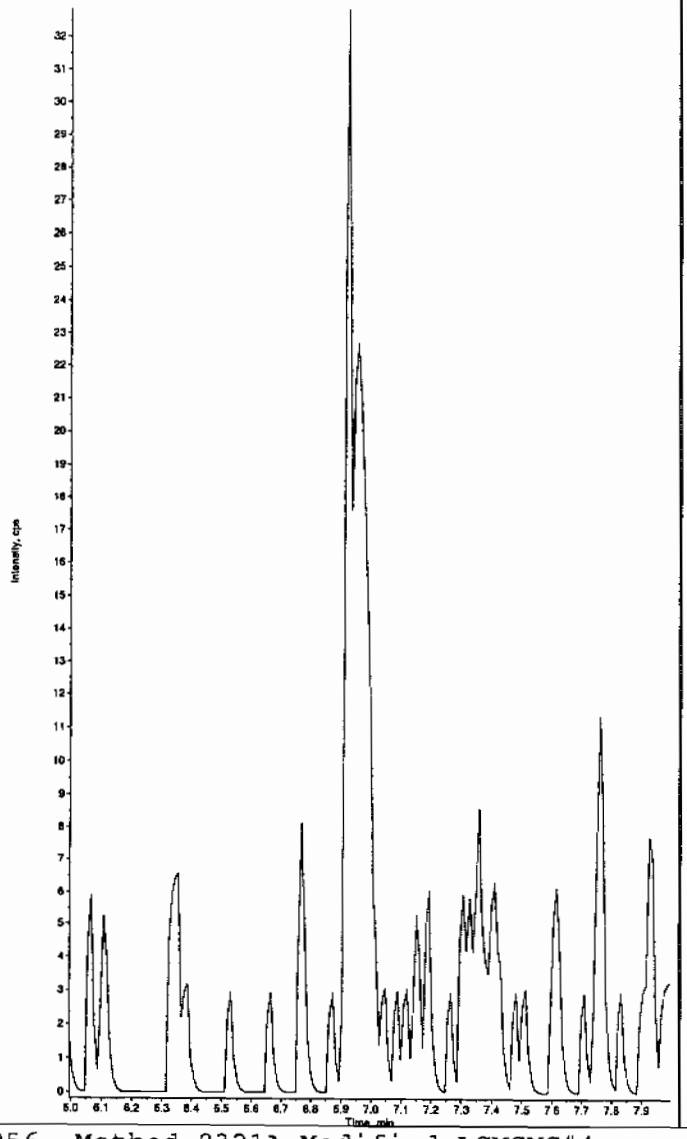
Column: Phenomenex Ultracarb 5u ODS(20)

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

Lan 3/9/10

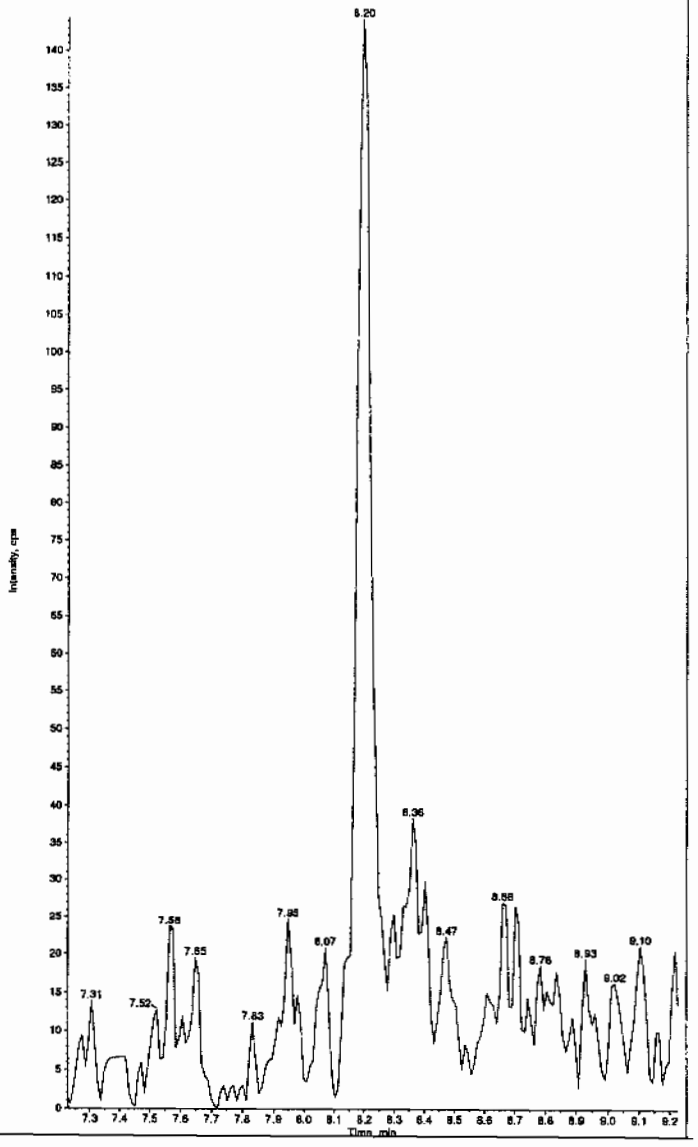
Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050002.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:23:26 PM

Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050002.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:23:26 PM

Modified: No



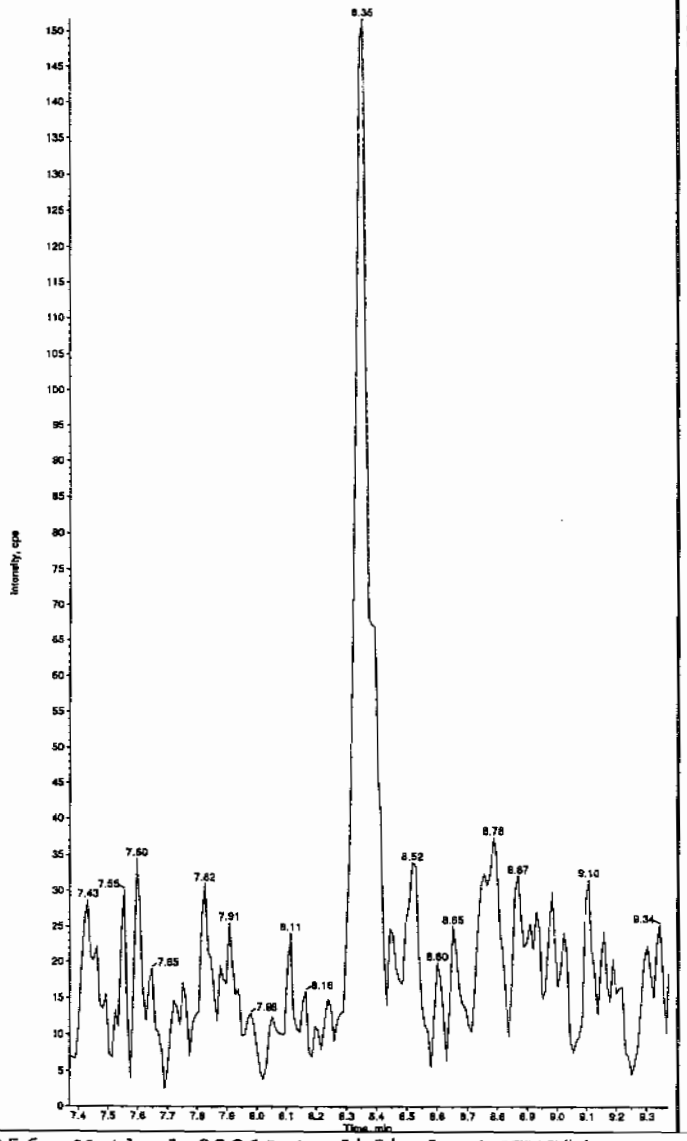
Hmm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050002.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:23:26 PM

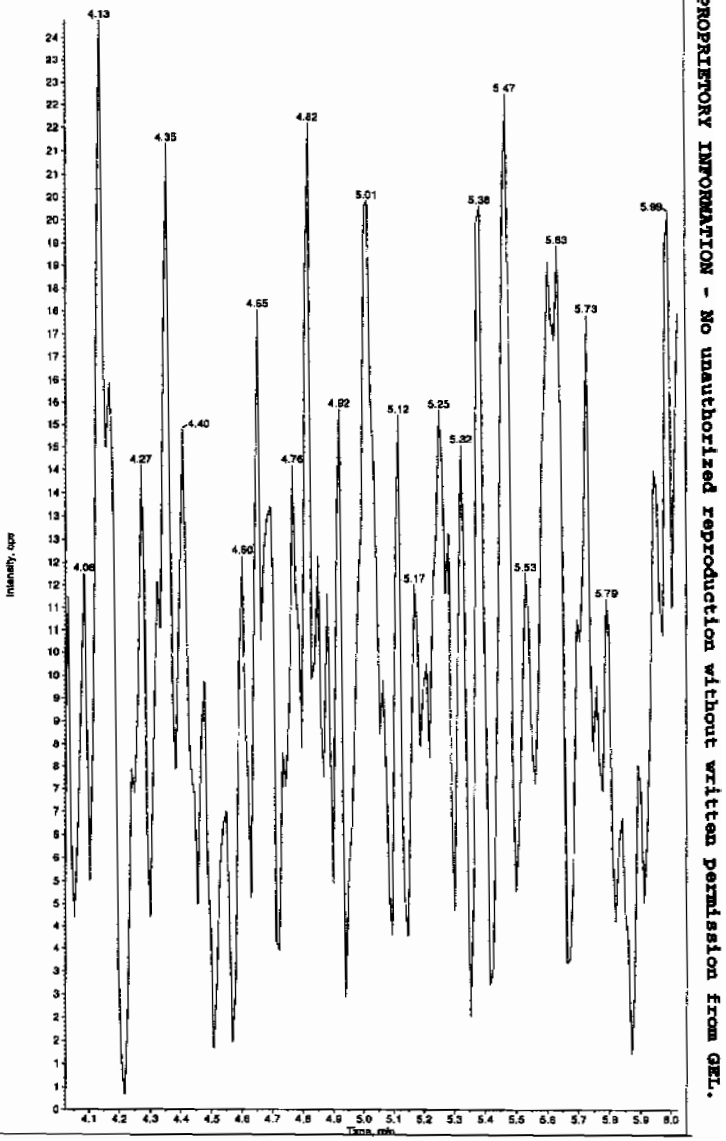
Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050002.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:23:26 PM

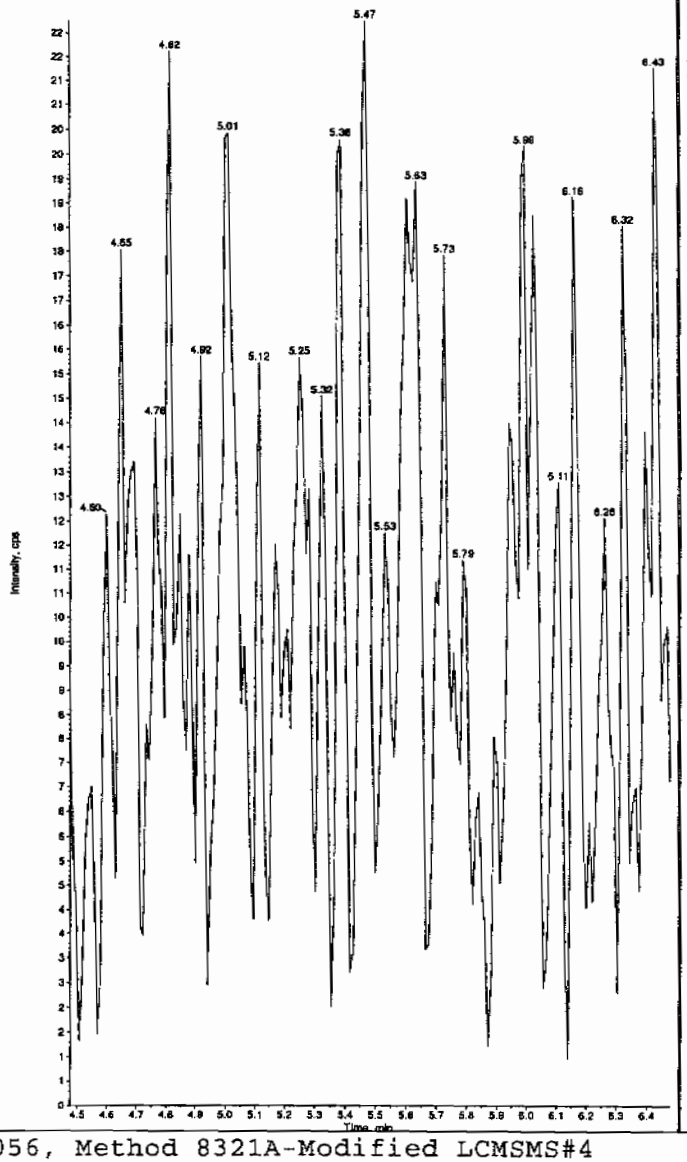
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

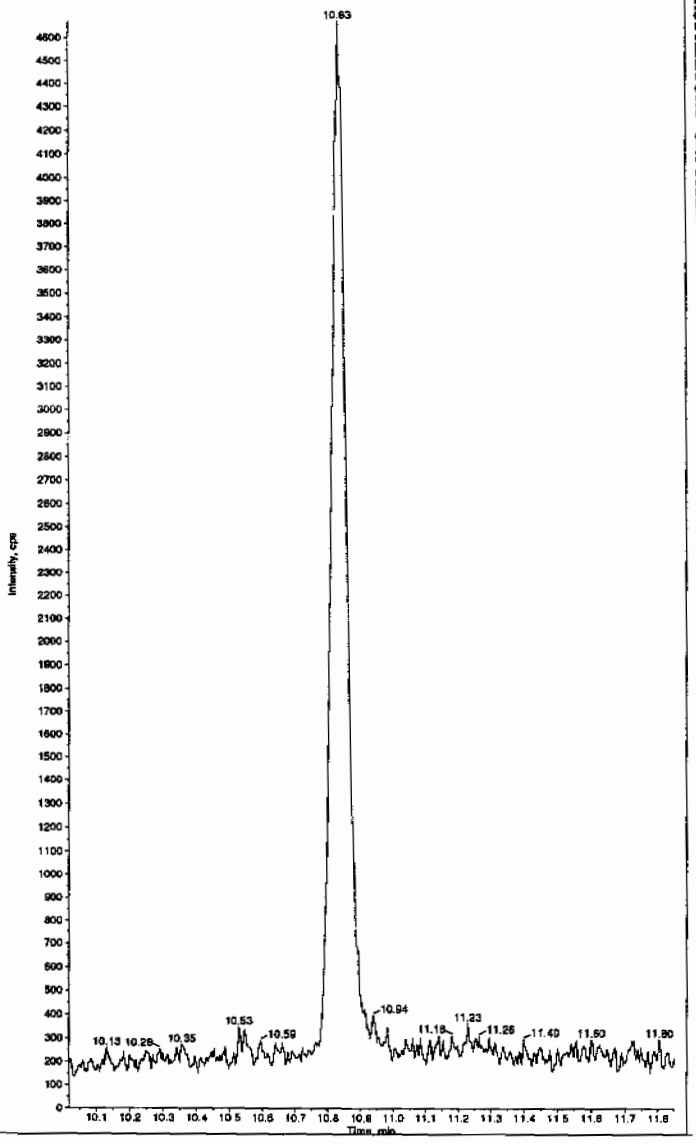
Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050002.wiff"
Peak Name: "24-Diamino-5-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: "*"
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:23:26 PM

Modified: No



Sample Name: "XIBLK01" Sample ID: "|1|LER" File: "EXS03050002.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: "*"
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 5:23:26 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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 26-MAR-10 18:39

GEL Data File: EXP0326009a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	515.868
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	517.205
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

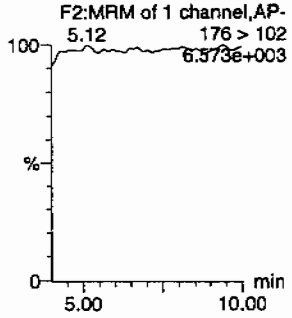
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

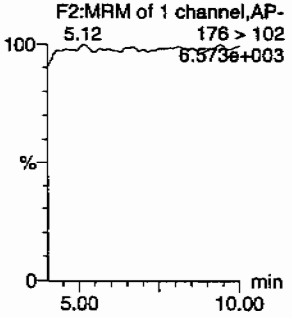
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326009a
Date: 26-Mar-2010
Time: 18:39:13
ID: XIBLK02
Vial: 1:1,A

MMT 3/27/10

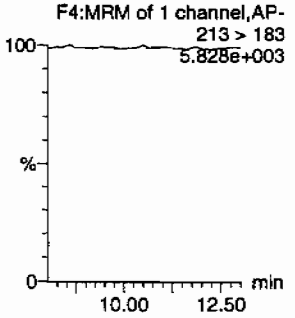
HMX



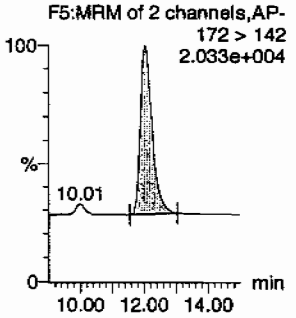
RDX



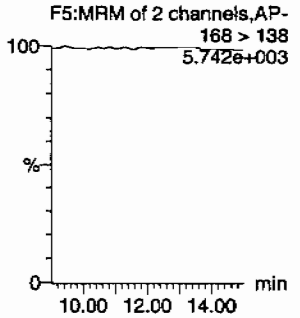
135-Trinitrobenzene



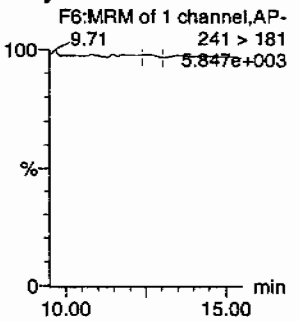
13-Dinitrobenzene-d4



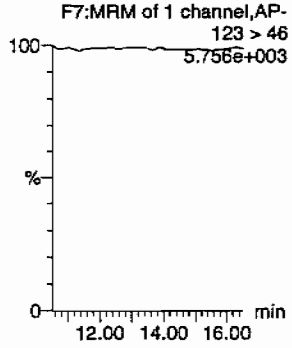
13-Dinitrobenzene



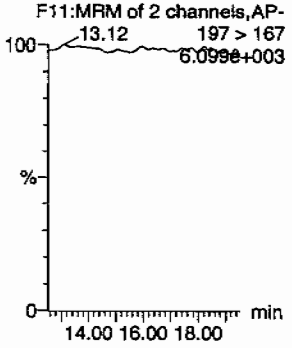
Tetryl



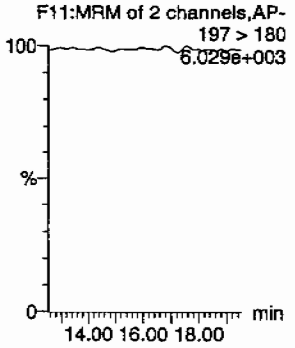
Nitrobenzene



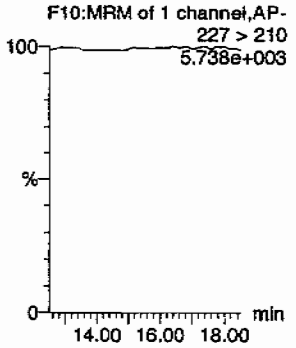
4-Amino-26-dinitrotoluene



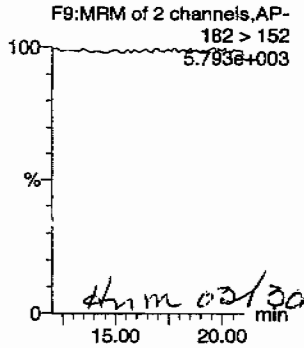
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

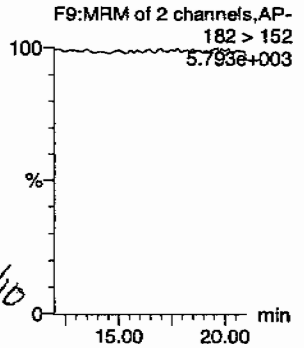


34-dinitrotoluene



dhm 03/30/10

26-dinitrotoluene

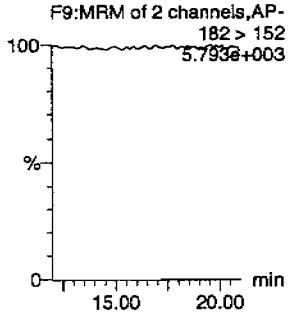


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

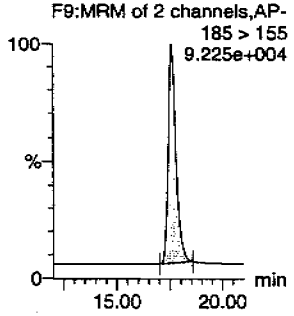
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

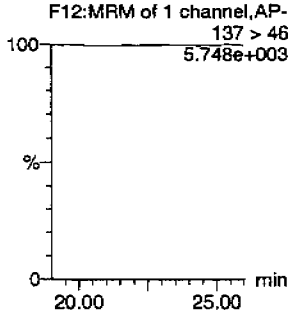
24-dinitrotoluene



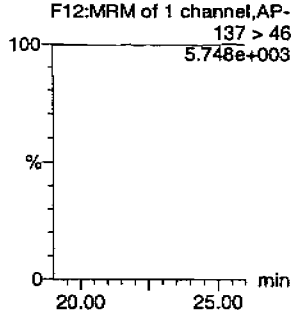
26-dinitrotoluene-d3



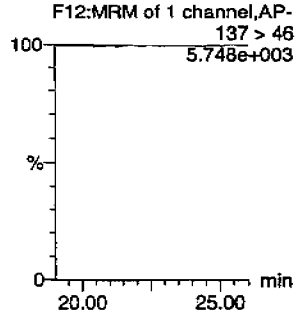
2-Nitrotoluene



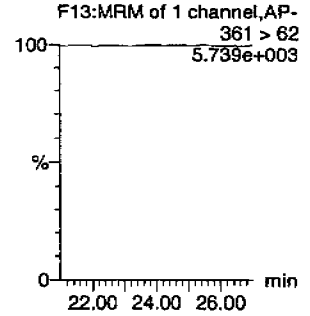
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK02	HMX	176 > 102			6311.530									
XIBLK02	RDX	176 > 102			6311.530									
XIBLK02	135-Trinitrobenzene	213 > 183			6311.530									
XIBLK02	13-Dinitrobenzene-d4	172 > 142	12.03	6311.530		6311.530	6311.530	bb			515.8679	103.2	3.2	376.2
XIBLK02	13-Dinitrobenzene	168 > 138			6311.530									
XIBLK02	Tetryl	241 > 181			6311.530			MM-	27-Mar-10	11:58:11				
XIBLK02	Nitrobenzene	123 > 46			6311.530									
XIBLK02	4-Amino-26-dinitrotoluene	197 > 167			37973.375									
XIBLK02	2-Amino-46-dinitrotoluene	197 > 180			37973.375									
XIBLK02	246-Trinitrotoluene	227 > 210			37973.375									
XIBLK02	34-dinitrotoluene	182 > 152			37973.375									
XIBLK02	26-dinitrotoluene	182 > 152			37973.375									
XIBLK02	24-dinitrotoluene	182 > 152			37973.375									
XIBLK02	26-dinitrotoluene-d3	185 > 155	17.57	37973.375		37973.375	37973.375	bb			517.2053	103.4	3.4	3166.6
XIBLK02	2-Nitrotoluene	137 > 46			37973.375									
XIBLK02	4-Nitrotoluene	137 > 46			37973.375									
XIBLK02	3-Nitrotoluene	137 > 46			37973.375									
XIBLK02	PETN	361 > 62			37973.375									

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): 10-1861
Lab Code: GEL
Lab Sample ID: XIBLK03
Analysis Date: 26-MAR-10 19:38
GEL Data File: EXP0326011a
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	485.062
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	531.851
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

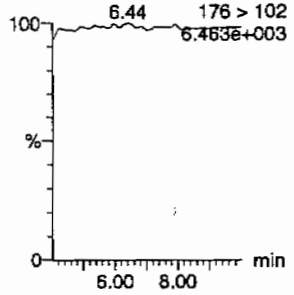
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

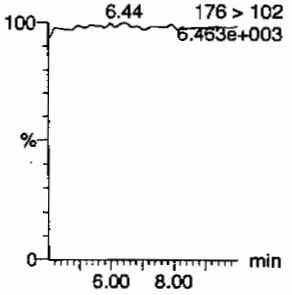
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326011a
Date: 26-Mar-2010
Time: 19:38:10
ID: XIBLK03
Vial: 1:1,A

MM 3/27/10

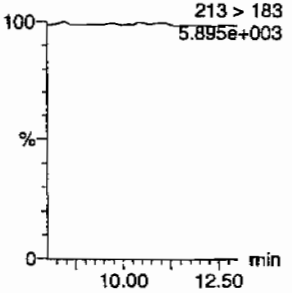
HMX
F2:MRM of 1 channel,AP-
6.44 176 > 102
6.463e+003



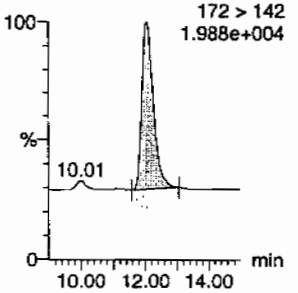
RDX
F2:MRM of 1 channel,AP-
6.44 176 > 102
6.463e+003



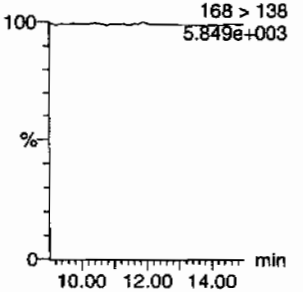
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.895e+003



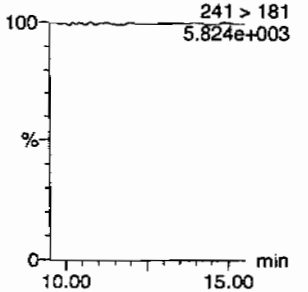
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.988e+004



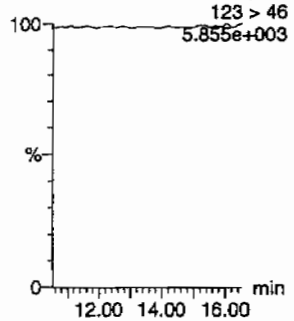
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.849e+003



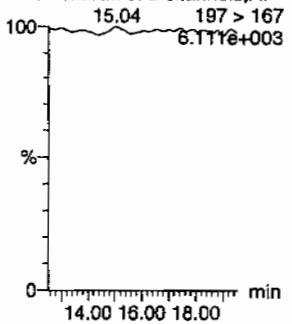
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.824e+003



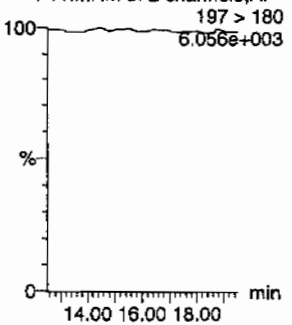
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.855e+003



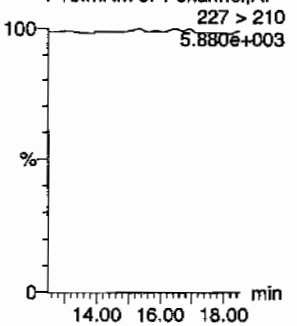
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
15.04 197 > 167
6.111e+003



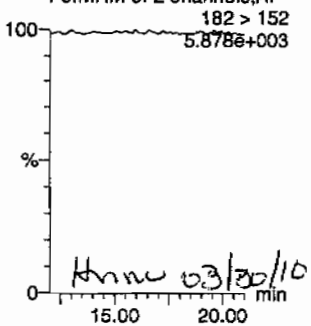
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.056e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.880e+003

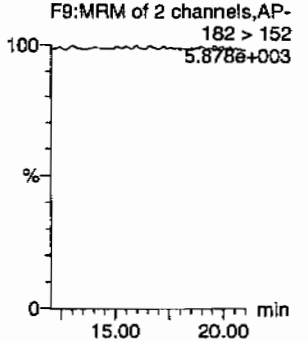


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.878e+003



Hmm 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.878e+003

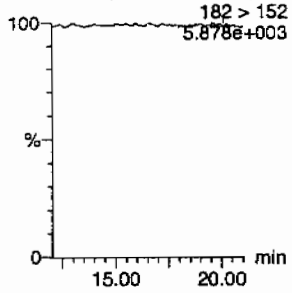


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

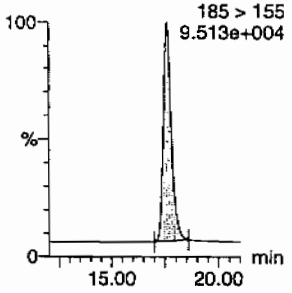
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

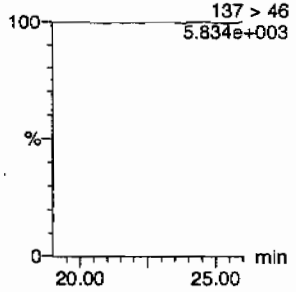
24-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.878e+003



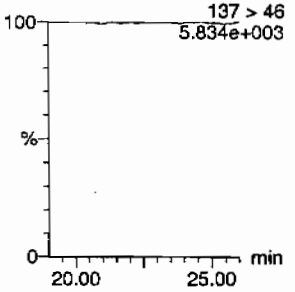
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
9.513e+004



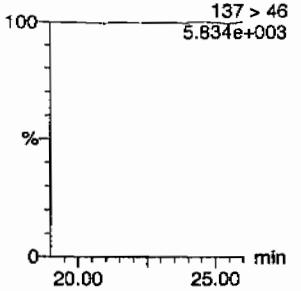
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.834e+003



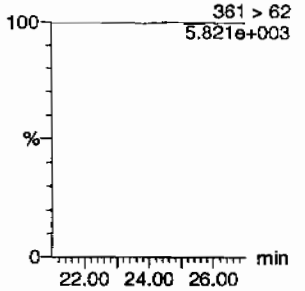
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.834e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.834e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.821e+003



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK03	HMX	176 > 102			5934.625									
XIBLK03	RDX	176 > 102			5934.625									
XIBLK03	135-Trinitrobenzene	213 > 183			5934.625									
XIBLK03	13-Dinitrobenzene-d4	172 > 142	12.03	5934.625		5934.625	5934.625	bb			485.0618	97.0	-3.0	914.7
XIBLK03	13-Dinitrobenzene	168 > 138			5934.625									
XIBLK03	Tetryl	241 > 181			5934.625									
XIBLK03	Nitrobenzene	123 > 46			5934.625									
XIBLK03	4-Amino-26-dinitrotoluene	197 > 167			39048.680									
XIBLK03	2-Amino-46-dinitrotoluene	197 > 180			39048.680									
XIBLK03	246-Trinitrotoluene	227 > 210			39048.680									
XIBLK03	34-dinitrotoluene	182 > 152			39048.680									
XIBLK03	26-dinitrotoluene	182 > 152			39048.680									
XIBLK03	24-dinitrotoluene	182 > 152			39048.680									
XIBLK03	26-dinitrotoluene-d3	185 > 155	17.57	39048.680		39048.680	39048.680	bb			531.8512	106.4	6.4	1537.1
XIBLK03	2-Nitrotoluene	137 > 46			39048.680									
XIBLK03	4-Nitrotoluene	137 > 46			39048.680									
XIBLK03	3-Nitrotoluene	137 > 46			39048.680									
XIBLK03	PETN	361 > 62			39048.680									

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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 26-MAR-10 23:04

GEL Data File: EXP0326018a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
p-Nitrotoluene	0	0
o-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	587.097
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	554.136
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

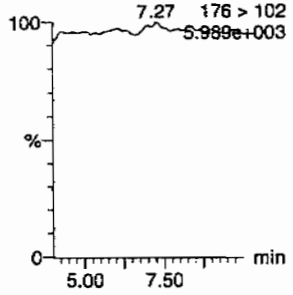
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

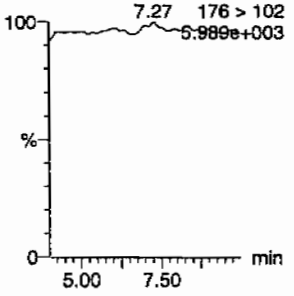
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326018a
Date: 26-Mar-2010
Time: 23:04:41
ID: XIBLK04
Vial: 1:1,A

MMT 3/27/10

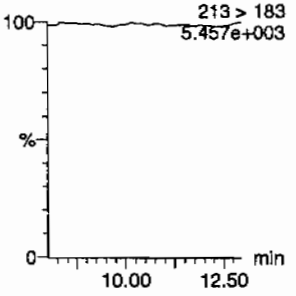
HMX
F2:MRM of 1 channel,AP-
7.27 176 > 102
5.989e+003



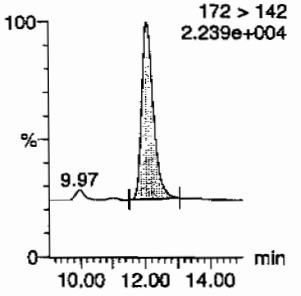
RDX
F2:MRM of 1 channel,AP-
7.27 176 > 102
5.989e+003



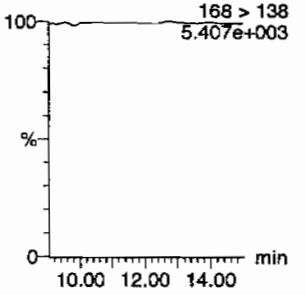
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.457e+003



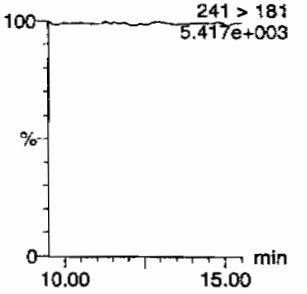
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.239e+004



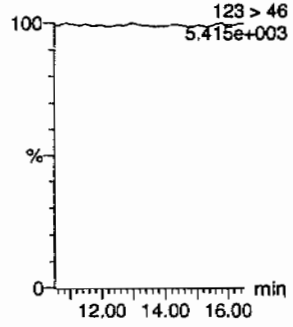
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.407e+003



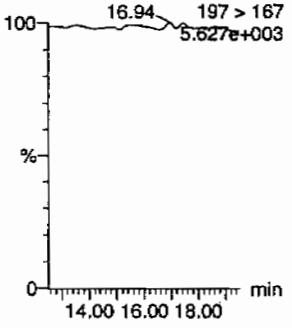
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.417e+003



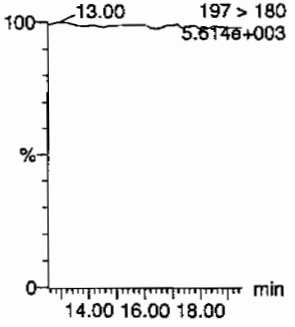
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.415e+003



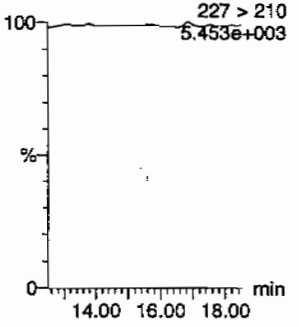
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
16.94 197 > 167
5.627e+003



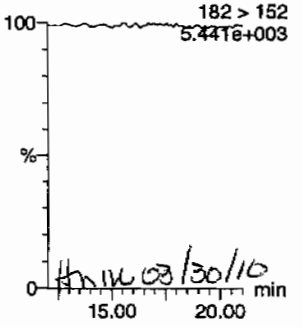
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
13.00 197 > 180
5.614e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.453e+003

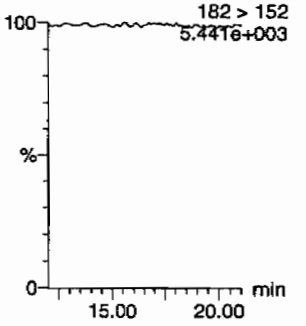


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.441e+003



MMW 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.441e+003

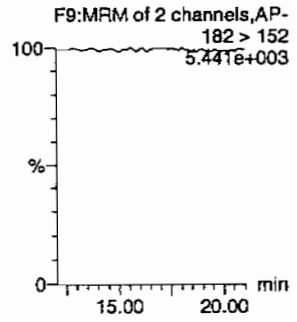


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

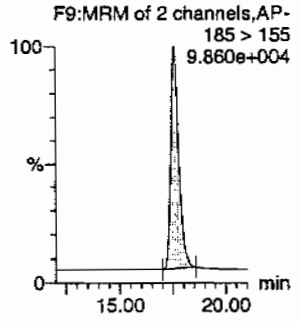
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

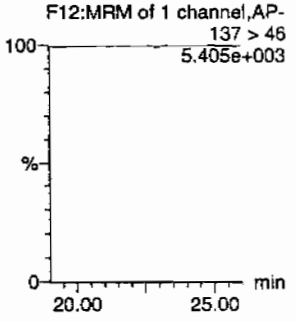
24-dinitrotoluene



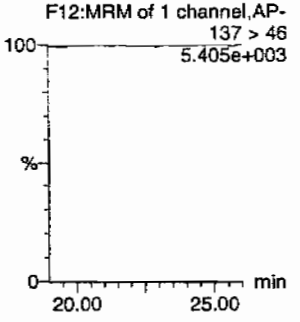
26-dinitrotoluene-d3



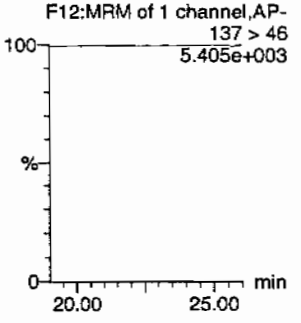
2-Nitrotoluene



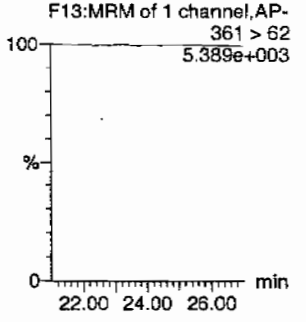
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK04	HMX	176 > 102			7183.005									
XIBLK04	RDX	176 > 102			7183.005									
XIBLK04	135-Trinitrobenzene	213 > 183			7183.005									
XIBLK04	13-Dinitrobenzene-d4	172 > 142	12.04	7183.005		7183.005	7183.005	bb			587.0972	117.4	17.4	342.8
XIBLK04	13-Dinitrobenzene	168 > 138			7183.005									
XIBLK04	Tetryl	241 > 181			7183.005									
XIBLK04	Nitrobenzene	123 > 46			7183.005									
XIBLK04	4-Amino-26-dinitrotoluene	197 > 167			40684.859									
XIBLK04	2-Amino-46-dinitrotoluene	197 > 180			40684.859									
XIBLK04	246-Trinitrotoluene	227 > 210			40684.859									
XIBLK04	34-dinitrotoluene	182 > 152			40684.859									
XIBLK04	26-dinitrotoluene	182 > 152			40684.859									
XIBLK04	24-dinitrotoluene	182 > 152			40684.859									
XIBLK04	26-dinitrotoluene-d3	185 > 155	17.57	40684.859		40684.859	40684.859	bb			554.1363	110.8	10.8	3285.8
XIBLK04	2-Nitrotoluene	137 > 46			40684.859									
XIBLK04	4-Nitrotoluene	137 > 46			40684.859									
XIBLK04	3-Nitrotoluene	137 > 46			40684.859									
XIBLK04	PETN	361 > 62			40684.859									

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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 27-MAR-10 01:32

GEL Data File: EXP0326023a

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	501.621
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	510.777
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

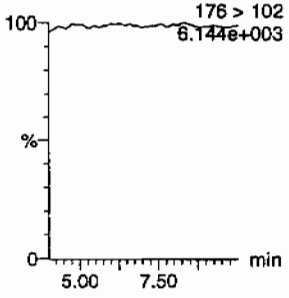
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

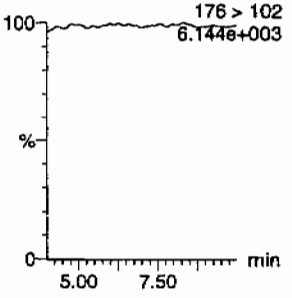
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326023a
Date: 27-Mar-2010
Time: 01:32:08
ID: XIBLK05
Vial: 1:3,A

MAP 3/30/10

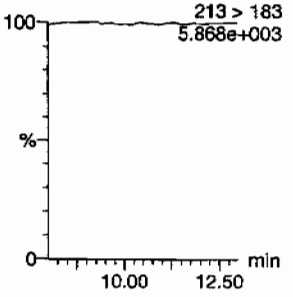
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.144e+003



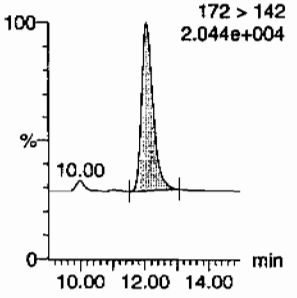
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.144e+003



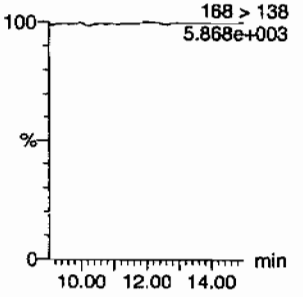
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.868e+003



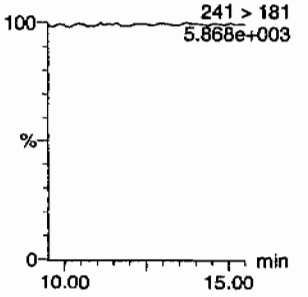
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.044e+004



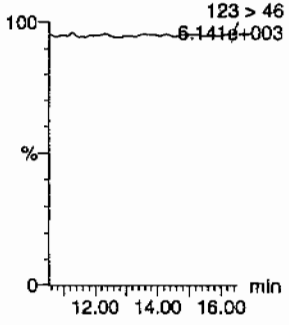
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.868e+003



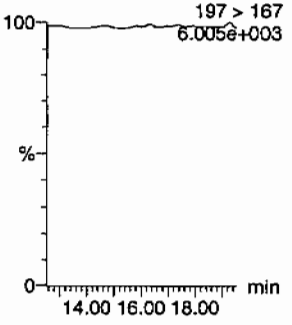
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.868e+003



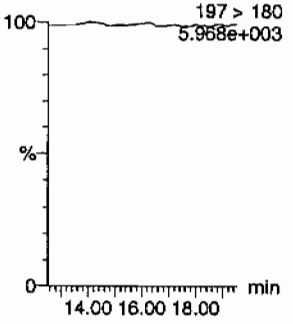
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.141e+003



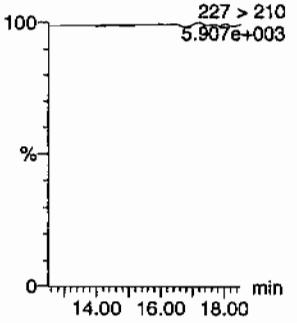
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
6.005e+003



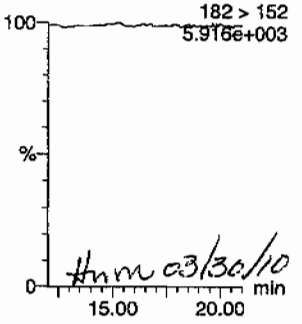
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.958e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.907e+003

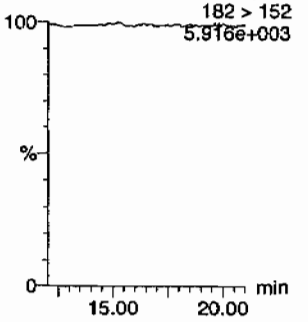


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.916e+003



HMM 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.916e+003

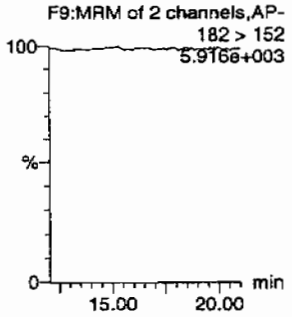


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

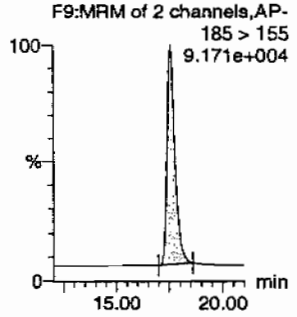
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

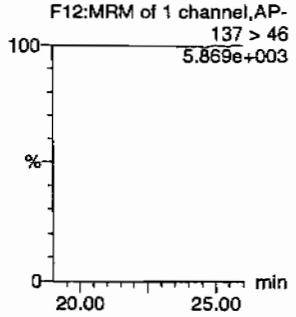
24-dinitrotoluene



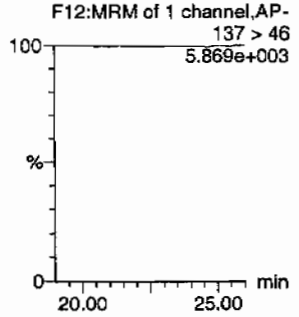
26-dinitrotoluene-d3



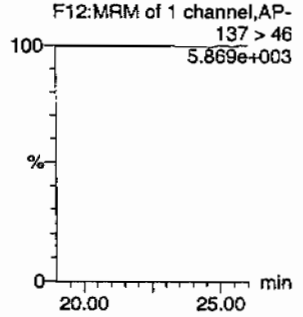
2-Nitrotoluene



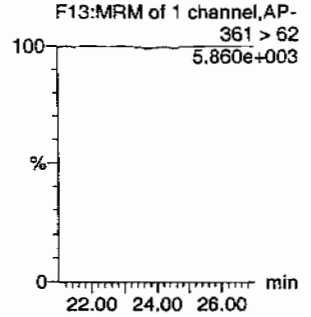
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	%Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK05	HMX	176 > 102			6137.228									
XIBLK05	RDX	176 > 102			6137.228									
XIBLK05	135-Trinitrobenzene	213 > 183			6137.228									
XIBLK05	13-Dinitrobenzene-d4	172 > 142	12.04	6137.228		6137.228	6137.228	bb			501.6214	100.3	0.3	1477.2
XIBLK05	13-Dinitrobenzene	168 > 138			6137.228									
XIBLK05	Tetryl	241 > 181			6137.228									
XIBLK05	Nitrobenzene	123 > 46			6137.228									
XIBLK05	4-Amino-26-dinitrotoluene	197 > 167			37501.387									
XIBLK05	2-Amino-46-dinitrotoluene	197 > 180			37501.387									
XIBLK05	246-Trinitrotoluene	227 > 210			37501.387									
XIBLK05	34-dinitrotoluene	182 > 152			37501.387									
XIBLK05	26-dinitrotoluene	182 > 152			37501.387									
XIBLK05	24-dinitrotoluene	182 > 152			37501.387									
XIBLK05	26-dinitrotoluene-d3	185 > 155	17.57	37501.387		37501.387	37501.387	bb			510.7767	102.2	2.2	2303.0
XIBLK05	2-Nitrotoluene	137 > 46			37501.387									
XIBLK05	4-Nitrotoluene	137 > 46			37501.387									
XIBLK05	3-Nitrotoluene	137 > 46			37501.387									
XIBLK05	PETN	361 > 62			37501.387									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK06

Analysis Date: 27-MAR-10 02:31

GEL Data File: EXP0326025a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

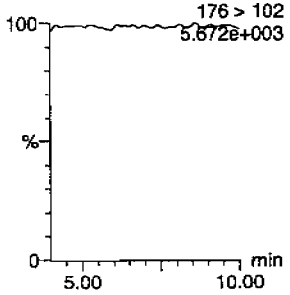
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	524.973
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	574.7
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0
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

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

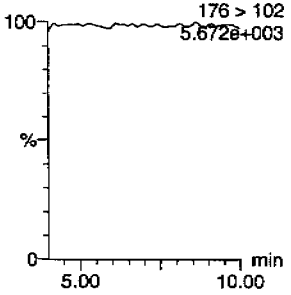
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326025a
Date: 27-Mar-2010
Time: 02:31:06
ID: XIBLK06
Vial: 1:3,A

MMP 3/27/10

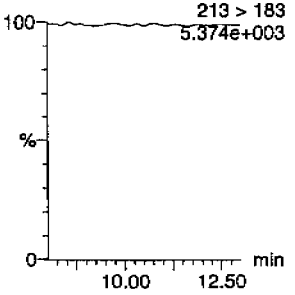
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.672e+003



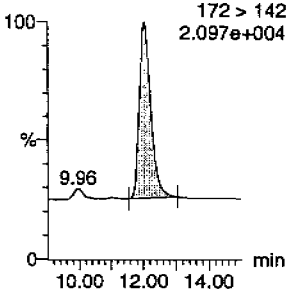
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.672e+003



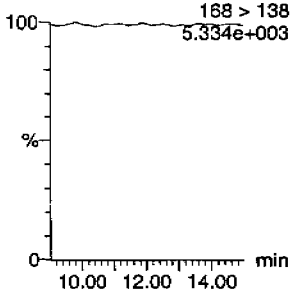
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.374e+003



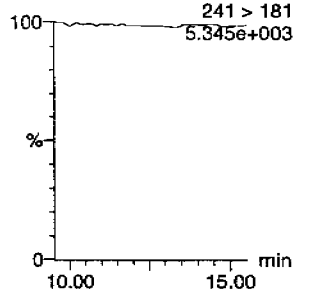
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.097e+004



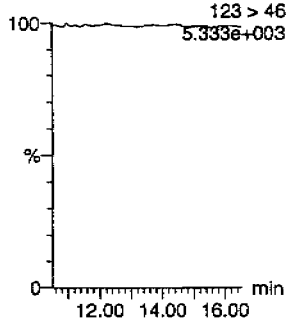
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.334e+003



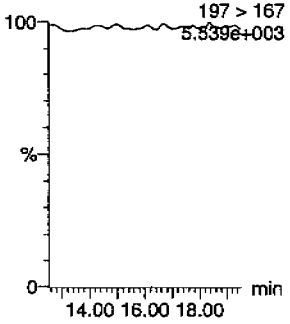
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.345e+003



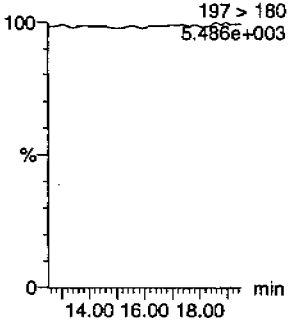
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.333e+003



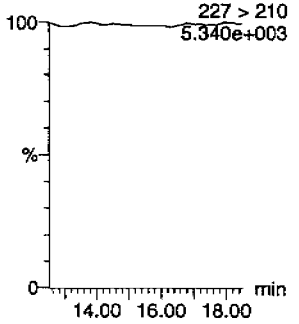
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.339e+003



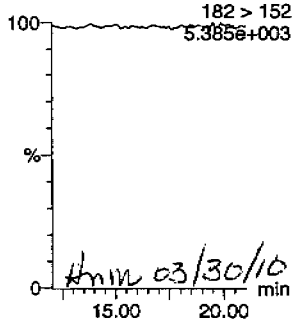
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.486e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.340e+003

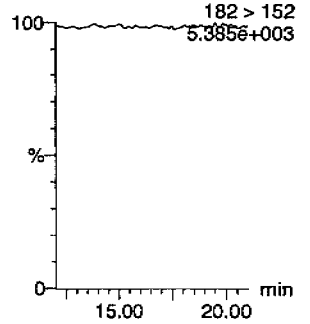


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.385e+003



Hmm 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.385e+003

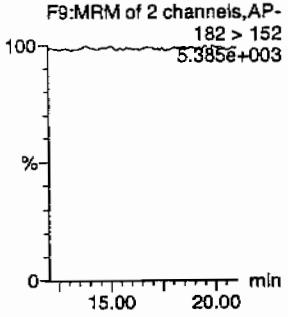


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

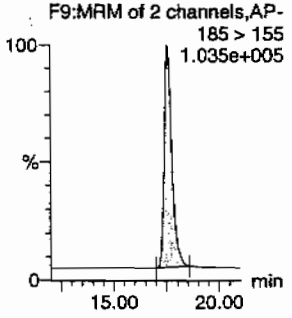
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

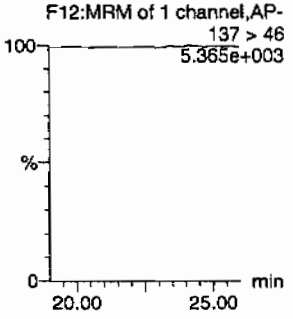
24-dinitrotoluene



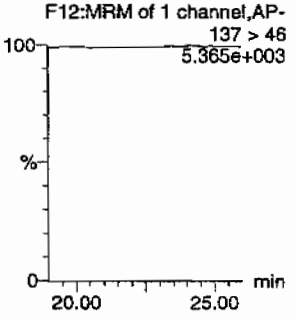
26-dinitrotoluene-d3



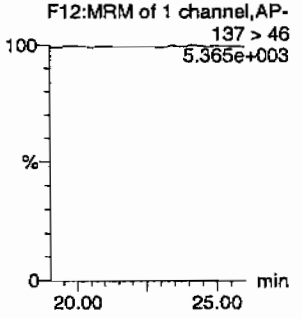
2-Nitrotoluene



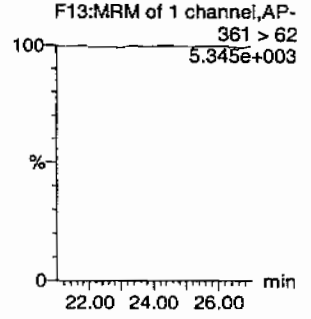
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK06	HMX	176 > 102			6422.927									
XIBLK06	RDX	176 > 102			6422.927									
XIBLK06	135-Trinitrobenzene	213 > 183			6422.927									
XIBLK06	13-Dinitrobenzene-d4	172 > 142	12.03	6422.927		6422.927	6422.927	bb			524.9728	105.0	5.0	978.8
XIBLK06	13-Dinitrobenzene	168 > 138			6422.927									
XIBLK06	Tetryl	241 > 181			6422.927									
XIBLK06	Nitrobenzene	123 > 46			6422.927									
XIBLK06	4-Amino-26-dinitrotoluene	197 > 167			42194.641									
XIBLK06	2-Amino-46-dinitrotoluene	197 > 180			42194.641									
XIBLK06	246-Trinitrotoluene	227 > 210			42194.641									
XIBLK06	34-dinitrotoluene	182 > 152			42194.641									
XIBLK06	26-dinitrotoluene	182 > 152			42194.641									
XIBLK06	24-dinitrotoluene	182 > 152			42194.641									
XIBLK06	26-dinitrotoluene-d3	185 > 155	17.57	42194.641		42194.641	42194.641	bb			574.6998	114.9	14.9	4518.6
XIBLK06	2-Nitrotoluene	137 > 46			42194.641									
XIBLK06	4-Nitrotoluene	137 > 46			42194.641									
XIBLK06	3-Nitrotoluene	137 > 46			42194.641									
XIBLK06	PETN	361 > 62			42194.641									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK07

Analysis Date: 27-MAR-10 03:30

GEL Data File: EXP0326027a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	511.375
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	531.237
2,4,6-Trinitrotoluene	0	0

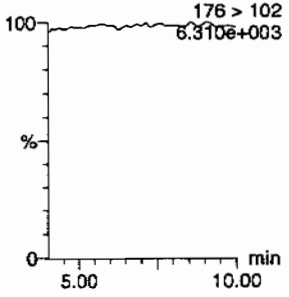
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

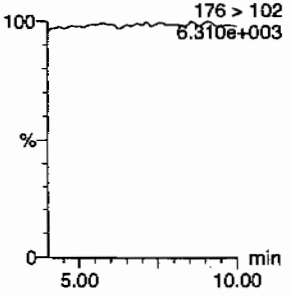
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326027a
Date: 27-Mar-2010
Time: 03:30:05
ID: XIBLK07
Vial: 1:3,A

MMT 3/27/10

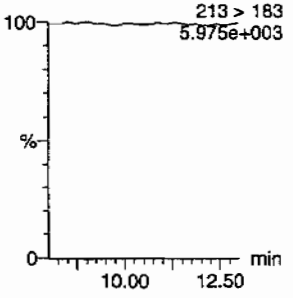
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.310e+003



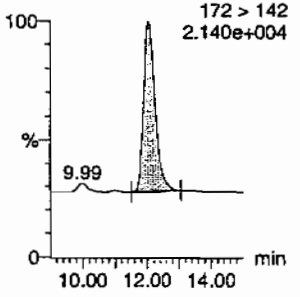
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.310e+003



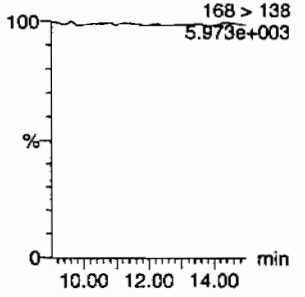
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.975e+003



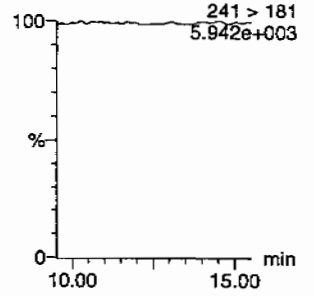
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.140e+004



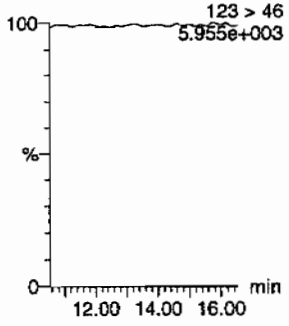
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.973e+003



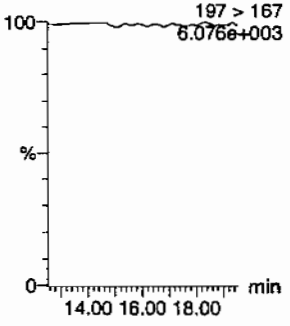
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.942e+003



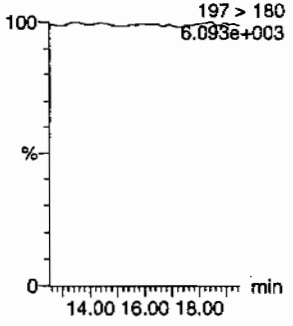
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.955e+003



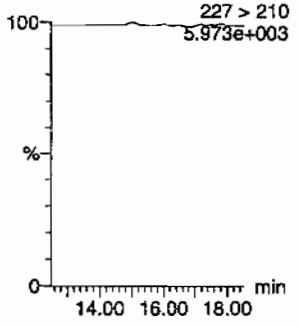
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
6.076e+003



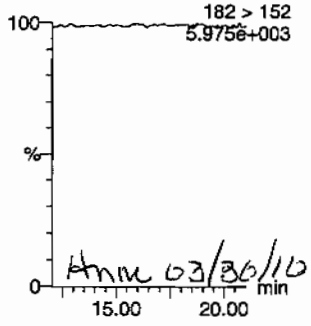
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.093e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.973e+003

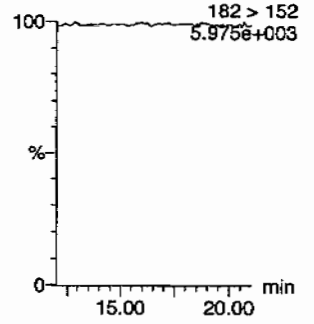


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.975e+003



AMM 03/30/10

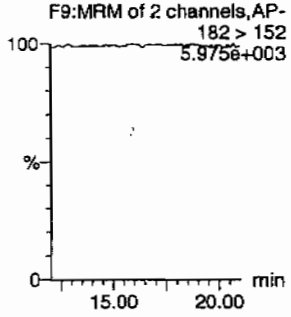
26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.975e+003



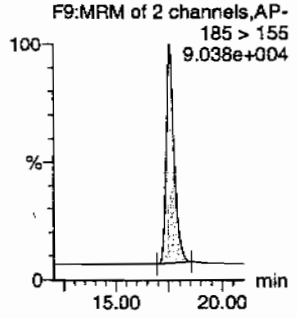
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

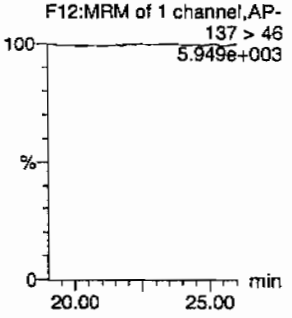
24-dinitrotoluene



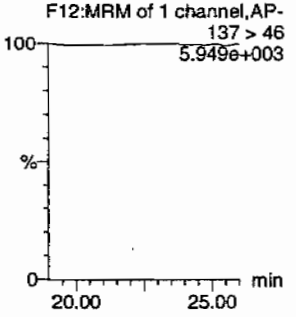
26-dinitrotoluene-d3



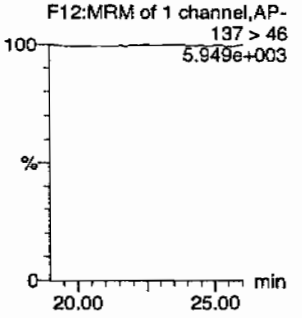
2-Nitrotoluene



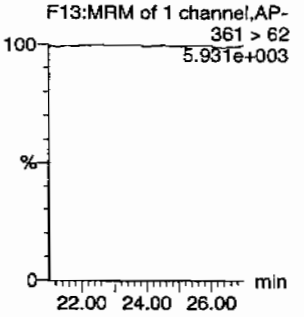
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK07	HMX	176 > 102			6499.568									
XIBLK07	RDX	176 > 102			6499.568									
XIBLK07	135-Trinitrobenzene	213 > 183			6499.568									
XIBLK07	13-Dinitrobenzene-d4	172 > 142	12.03	6499.568		6499.568	6499.568	bb			531.2370	106.2	6.2	805.7
XIBLK07	13-Dinitrobenzene	168 > 138			6499.568									
XIBLK07	Tetryl	241 > 181			6499.568									
XIBLK07	Nitrobenzene	123 > 46			6499.568									
XIBLK07	4-Amino-26-dinitrotoluene	197 > 167			37545.289									
XIBLK07	2-Amino-46-dinitrotoluene	197 > 180			37545.289									
XIBLK07	246-Trinitrotoluene	227 > 210			37545.289									
XIBLK07	34-dinitrotoluene	182 > 152			37545.289									
XIBLK07	26-dinitrotoluene	182 > 152			37545.289									
XIBLK07	24-dinitrotoluene	182 > 152			37545.289									
XIBLK07	26-dinitrotoluene-d3	185 > 155	17.55	37545.289		37545.289	37545.289	bb			511.3747	102.3	2.3	2228.0
XIBLK07	2-Nitrotoluene	137 > 46			37545.289									
XIBLK07	4-Nitrotoluene	137 > 46			37545.289									
XIBLK07	3-Nitrotoluene	137 > 46			37545.289									
XIBLK07	PETN	361 > 62			37545.289									

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): 10-1861
Lab Code: GEL
Lab Sample ID: XIBLK08
Analysis Date: 27-MAR-10 04:29
GEL Data File: EXP0326029a
Instrument ID: LCMSMS
Column: Phenomenex Ultracarb 5u ODS(20)

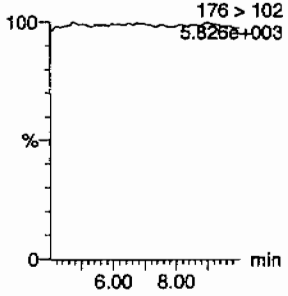
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	577.486
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	522.052
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	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

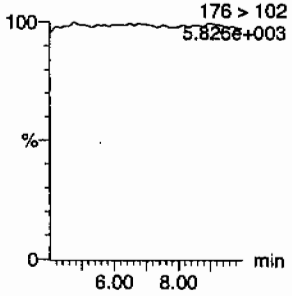
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326029a
Date: 27-Mar-2010
Time: 04:29:03
ID: XIBLK08
Vial: 1:1,A

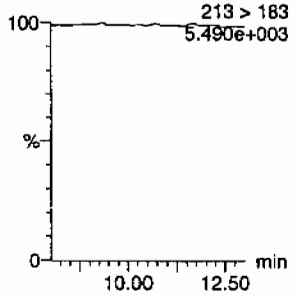
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.826e+003



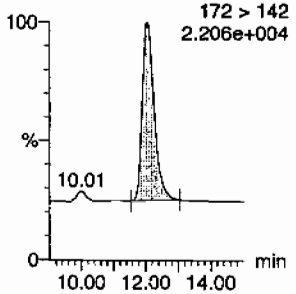
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.826e+003



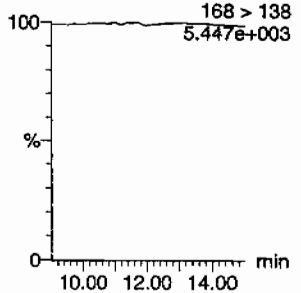
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.490e+003



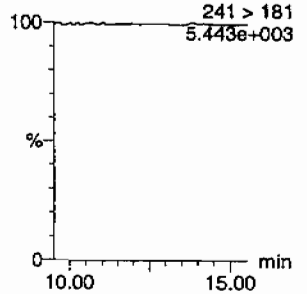
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.206e+004



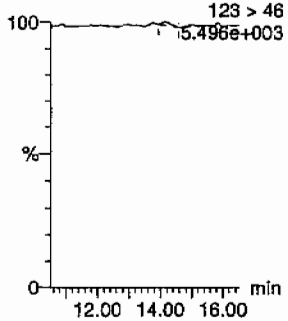
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.447e+003



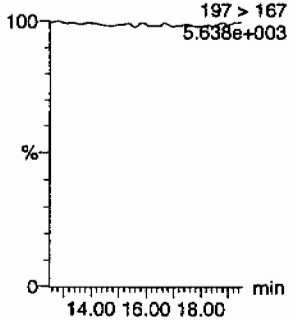
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.443e+003



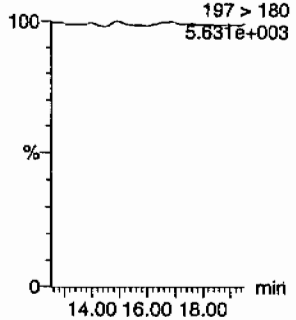
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.496e+003



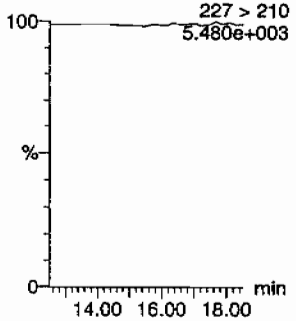
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.638e+003



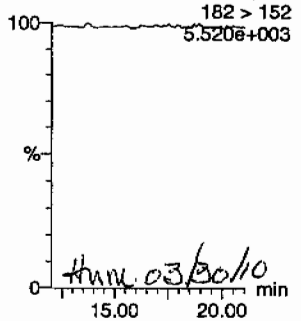
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.631e+003



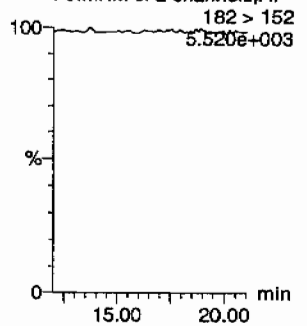
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.480e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.520e+003



26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.520e+003

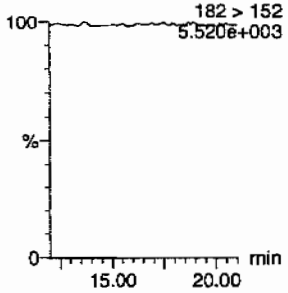


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

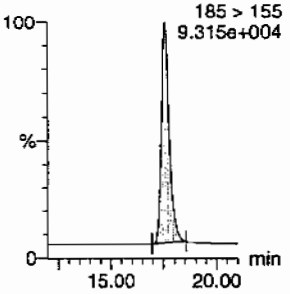
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

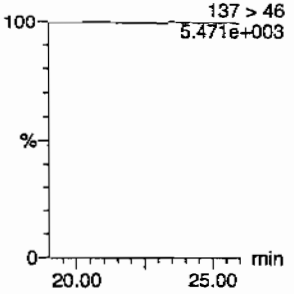
24-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.520e+003



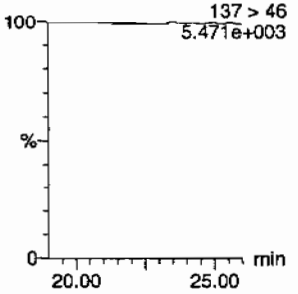
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
9.315e+004



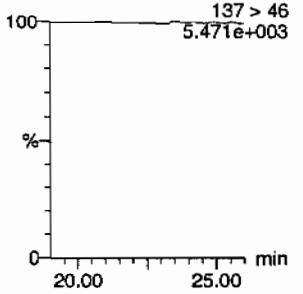
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.471e+003



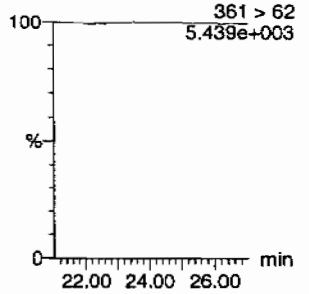
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.471e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.471e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.439e+003



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK08	HMX	176 > 102			7065.412									
XIBLK08	RDX	176 > 102			7065.412									
XIBLK08	135-Trinitrobenzene	213 > 183			7065.412									
XIBLK08	13-Dinitrobenzene-d4	172 > 142	12.03	7065.412		7065.412	7065.412	bb			577.4858	115.5	15.5	497.1
XIBLK08	13-Dinitrobenzene	168 > 138			7065.412									
XIBLK08	Tetryl	241 > 181			7065.412									
XIBLK08	Nitrobenzene	123 > 46			7065.412			MM-	27-Mar-10	11:58:26				
XIBLK08	4-Amino-26-dinitrotoluene	197 > 167			38329.223									
XIBLK08	2-Amino-46-dinitrotoluene	197 > 180			38329.223									
XIBLK08	246-Trinitrotoluene	227 > 210			38329.223									
XIBLK08	34-dinitrotoluene	182 > 152			38329.223									
XIBLK08	26-dinitrotoluene	182 > 152			38329.223									
XIBLK08	24-dinitrotoluene	182 > 152			38329.223									
XIBLK08	26-dinitrotoluene-d3	185 > 155	17.57	38329.223		38329.223	38329.223	bb			522.0520	104.4	4.4	669.1
XIBLK08	2-Nitrotoluene	137 > 46			38329.223									
XIBLK08	4-Nitrotoluene	137 > 46			38329.223									
XIBLK08	3-Nitrotoluene	137 > 46			38329.223									
XIBLK08	PETN	361 > 62			38329.223									

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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK09

Analysis Date: 27-MAR-10 10:52

GEL Data File: EXP0326042a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
p-Nitrotoluene	0	0
3,4-Dinitrotoluene	0	0
1,3,5-Trinitrobenzene	0	0
1,3-Dinitrobenzene-d4	500	546.681
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	586.987
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

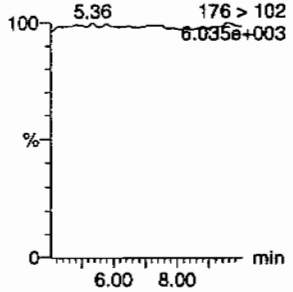
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

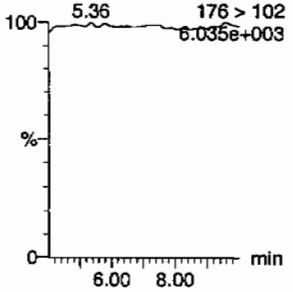
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326042a
Date: 27-Mar-2010
Time: 10:52:38
ID: XIBLK09
Vial: 1:1,A

MTP 3/29/10

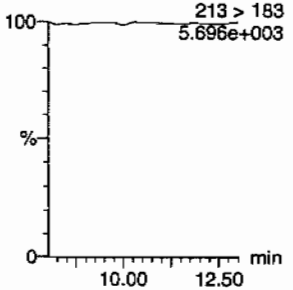
HMX
F2:MRM of 1 channel,AP-
5.36 176 > 102
6.035e+003



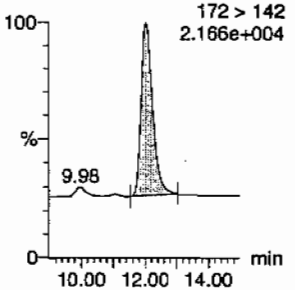
RDX
F2:MRM of 1 channel,AP-
5.36 176 > 102
6.035e+003



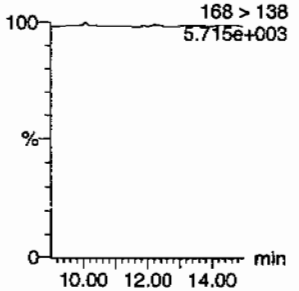
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.696e+003



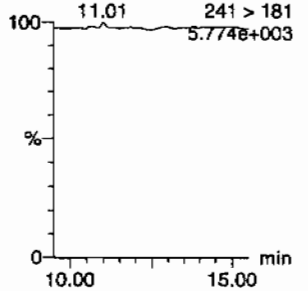
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.166e+004



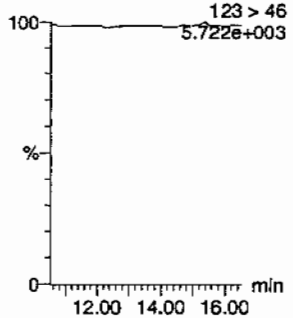
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.715e+003



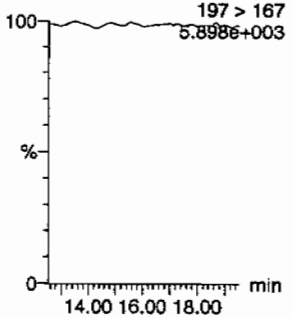
Tetryl
F6:MRM of 1 channel,AP-
11.01 241 > 181
5.774e+003



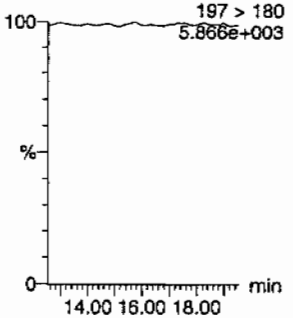
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.722e+003



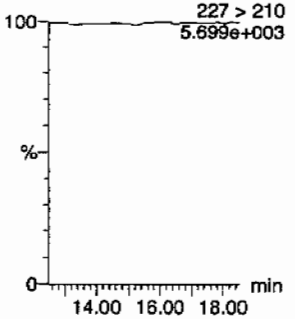
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.898e+003



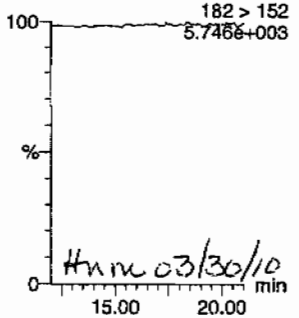
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.866e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.699e+003

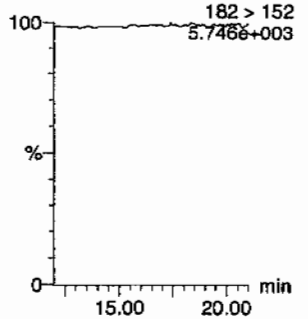


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.746e+003



Hnm 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.746e+003

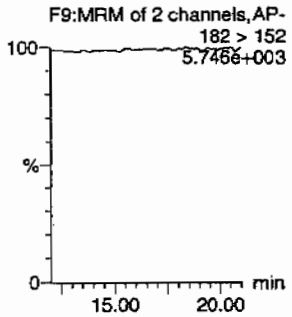


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

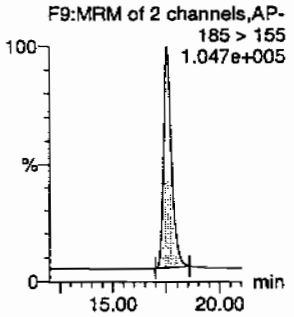
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

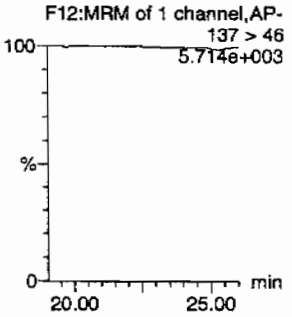
24-dinitrotoluene



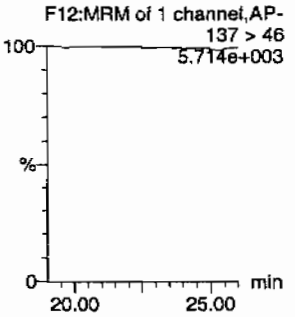
26-dinitrotoluene-d3



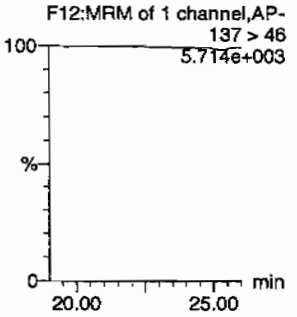
2-Nitrotoluene



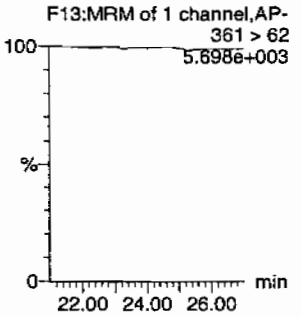
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK09	HMX	176 > 102			6688.527									
XIBLK09	RDX	176 > 102			6688.527									
XIBLK09	135-Trinitrobenzene	213 > 183			6688.527									
XIBLK09	13-Dinitrobenzene-d4	172 > 142	12.03	6688.527		6688.527	6688.527	bb			546.6814	109.3	9.3	636.0
XIBLK09	13-Dinitrobenzene	168 > 138			6688.527									
XIBLK09	Tetryl	241 > 181			6688.527									
XIBLK09	Nitrobenzene	123 > 46			6688.527									
XIBLK09	4-Amino-26-dinitrotoluene	197 > 167			43096.801									
XIBLK09	2-Amino-46-dinitrotoluene	197 > 180			43096.801									
XIBLK09	246-Trinitrotoluene	227 > 210			43096.801									
XIBLK09	34-dinitrotoluene	182 > 152			43096.801									
XIBLK09	26-dinitrotoluene	182 > 152			43096.801									
XIBLK09	24-dinitrotoluene	182 > 152			43096.801									
XIBLK09	26-dinitrotoluene-d3	185 > 155	17.55	43096.801		43096.801	43096.801	bb			586.9874	117.4	17.4	3945.6
XIBLK09	2-Nitrotoluene	137 > 46			43096.801									
XIBLK09	4-Nitrotoluene	137 > 46			43096.801									
XIBLK09	3-Nitrotoluene	137 > 46			43096.801									
XIBLK09	PETN	361 > 62			43096.801									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK10

Analysis Date: 27-MAR-10 16:46

GEL Data File: EXP0326054a

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	478.922
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	459.437
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

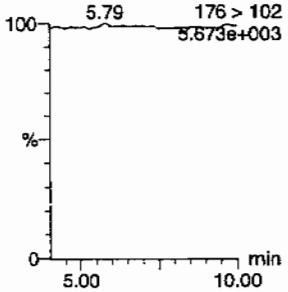
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

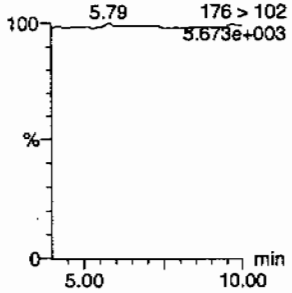
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326054a
Date: 27-Mar-2010
Time: 16:46:54
ID: XIBLK10
Vial: 1:1,A

HMT 3/29/10

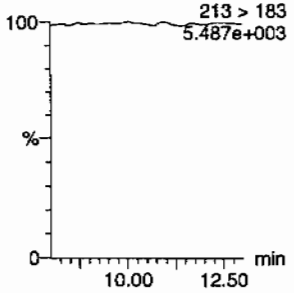
HMX
F2:MRM of 1 channel,AP-
5.79 176 > 102
5.673e+003



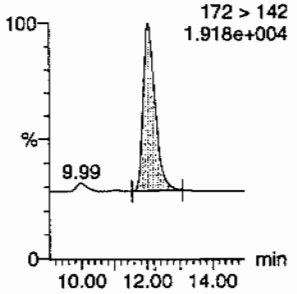
RDX
F2:MRM of 1 channel,AP-
5.79 176 > 102
5.673e+003



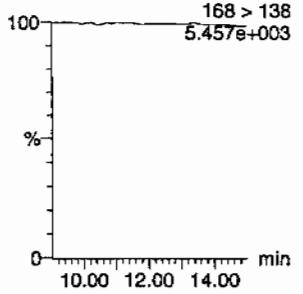
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.487e+003



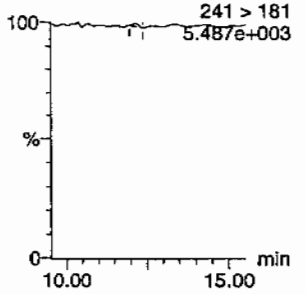
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.918e+004



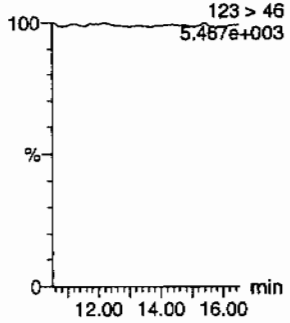
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.457e+003



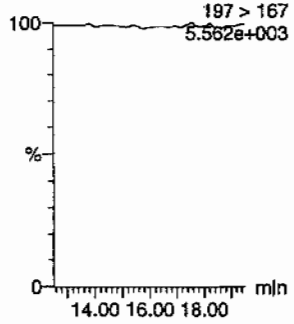
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.487e+003



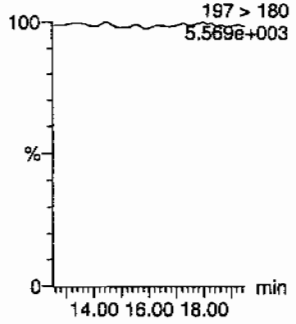
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.487e+003



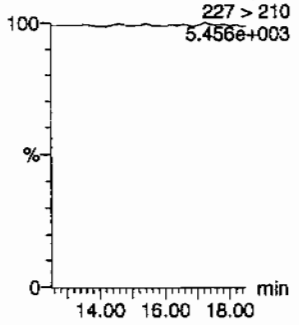
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.562e+003



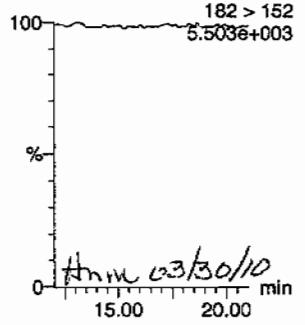
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.569e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.456e+003

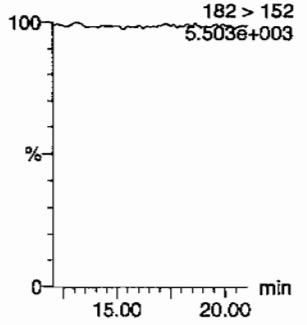


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.503e+003



Hmm 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.503e+003

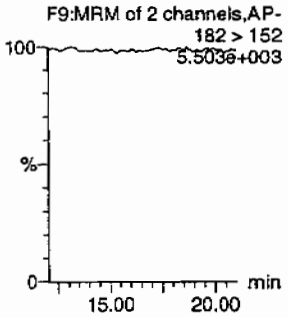


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

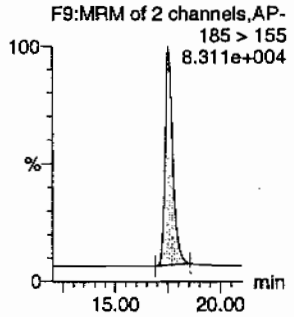
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

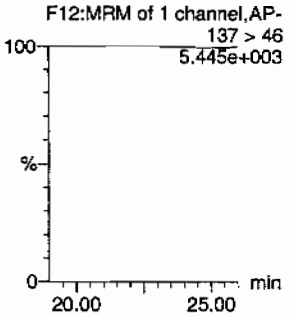
24-dinitrotoluene



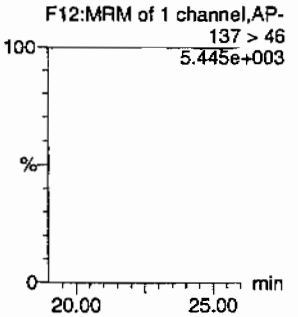
26-dinitrotoluene-d3



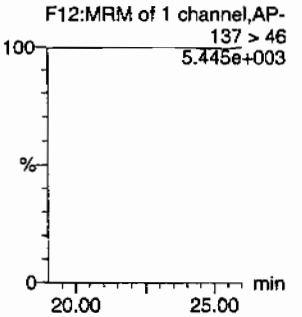
2-Nitrotoluene



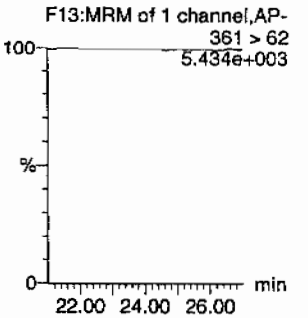
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
XIBLK10	HMX	176 > 102			5859.506									
XIBLK10	RDX	176 > 102			5859.506									
XIBLK10	135-Trinitrobenzene	213 > 183			5859.506									
XIBLK10	13-Dinitrobenzene-d4	172 > 142	12.03	5859.506		5859.506	5859.506	bb			478.9220	95.8	-4.2	474.3
XIBLK10	13-Dinitrobenzene	168 > 138			5859.506									
XIBLK10	Tetryl	241 > 181			5859.506			MM-	28-Mar-10	12:35:45				
XIBLK10	Nitrobenzene	123 > 46			5859.506									
XIBLK10	4-Amino-26-dinitrotoluene	197 > 167			33732.004									
XIBLK10	2-Amino-46-dinitrotoluene	197 > 180			33732.004									
XIBLK10	246-Trinitrotoluene	227 > 210			33732.004									
XIBLK10	34-dinitrotoluene	182 > 152			33732.004									
XIBLK10	26-dinitrotoluene	182 > 152			33732.004									
XIBLK10	24-dinitrotoluene	182 > 152			33732.004									
XIBLK10	26-dinitrotoluene-d3	185 > 155	17.55	33732.004		33732.004	33732.004	bb			459.4369	91.9	-8.1	2106.8
XIBLK10	2-Nitrotoluene	137 > 46			33732.004									
XIBLK10	4-Nitrotoluene	137 > 46			33732.004									
XIBLK10	3-Nitrotoluene	137 > 46			33732.004									
XIBLK10	PETN	361 > 62			33732.004									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC
GEL Job No(SDG): 10-1861
Lab Code: GEL
Lab Sample ID: XIBLK11
Analysis Date: 27-MAR-10 20:13
GEL Data File: EXP0326061a
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	420.804
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	493.576
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

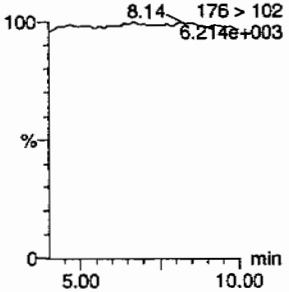
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

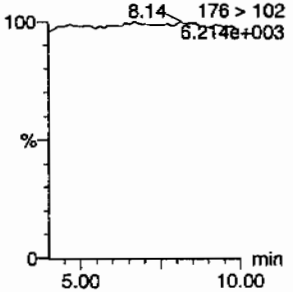
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326061a
Date: 27-Mar-2010
Time: 20:13:26
ID: XIBLK11
Vial: 1:1,A

MM 3/28/10

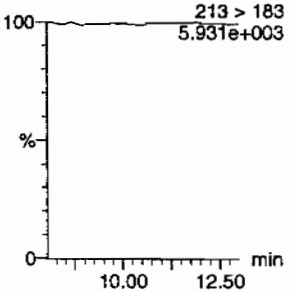
HMX
F2:MRM of 1 channel,AP-
8.14 176 > 102
6.214e+003



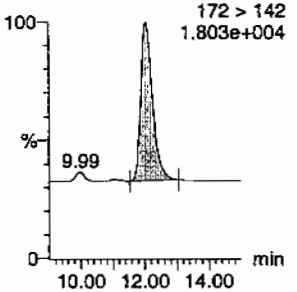
RDX
F2:MRM of 1 channel,AP-
8.14 176 > 102
6.214e+003



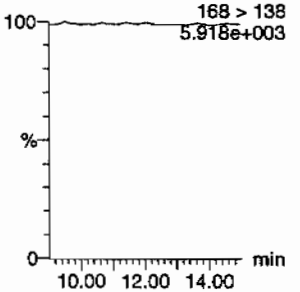
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.931e+003



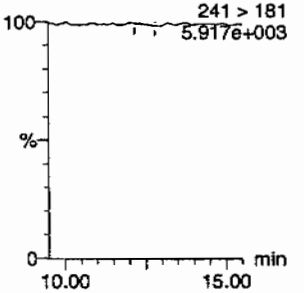
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.803e+004



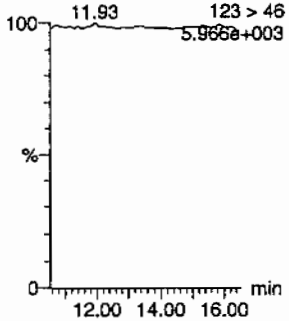
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.918e+003



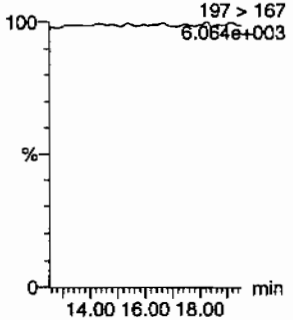
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.917e+003



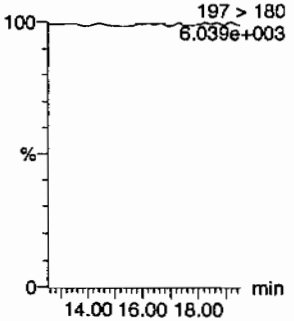
Nitrobenzene
F7:MRM of 1 channel,AP-
11.93 123 > 46
5.965e+003



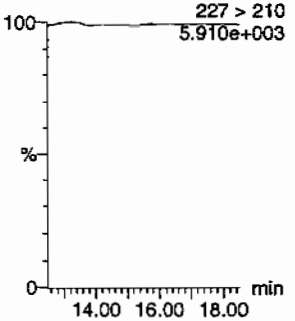
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
6.064e+003



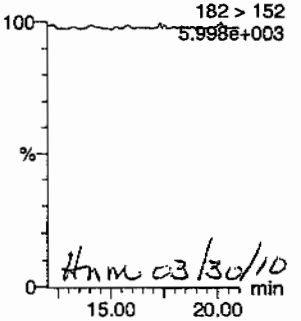
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.039e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.910e+003

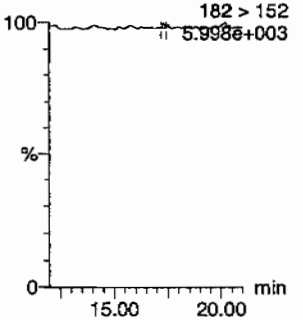


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.998e+003



Hnm 03/30/10

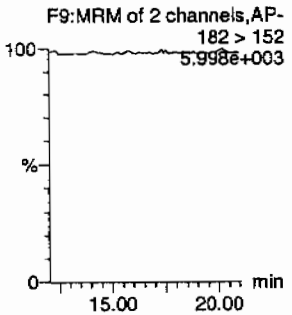
26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.998e+003



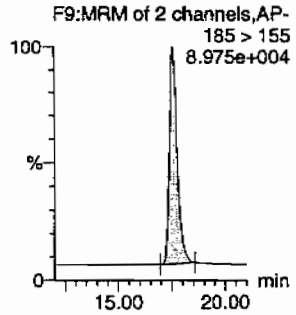
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

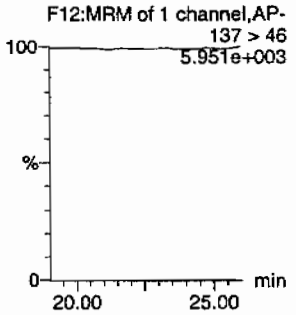
24-dinitrotoluene



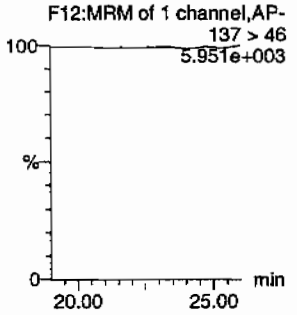
26-dinitrotoluene-d3



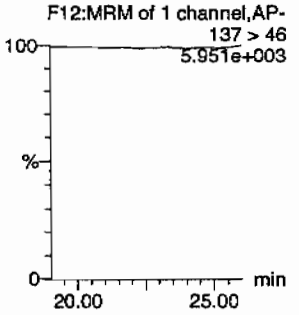
2-Nitrotoluene



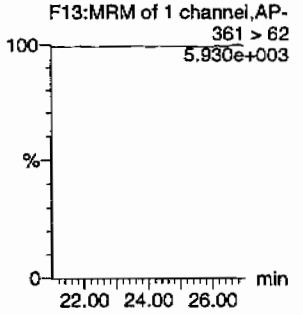
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
XIBLK11	HMX	176 > 102			5148.447									
XIBLK11	RDX	176 > 102			5148.447									
XIBLK11	135-Trinitrobenzene	213 > 183			5148.447									
XIBLK11	13-Dinitrobenzene-d4	172 > 142	12.03	5148.447		5148.447	5148.447	bb			420.8042	84.2	-15.8	670.6
XIBLK11	13-Dinitrobenzene	168 > 138			5148.447									
XIBLK11	Tetryl	241 > 181			5148.447			MM-	28-Mar-10	12:35:52				
XIBLK11	Nitrobenzene	123 > 46			5148.447									
XIBLK11	4-Amino-26-dinitrotoluene	197 > 167			36238.535									
XIBLK11	2-Amino-46-dinitrotoluene	197 > 180			36238.535									
XIBLK11	246-Trinitrotoluene	227 > 210			36238.535									
XIBLK11	34-dinitrotoluene	182 > 152			36238.535									
XIBLK11	26-dinitrotoluene	182 > 152			36238.535			MM-	28-Mar-10	12:46:08				
XIBLK11	24-dinitrotoluene	182 > 152			36238.535									
XIBLK11	26-dinitrotoluene-d3	185 > 155	17.55	36238.535		36238.535	36238.535	bb			493.5764	98.7	-1.3	2643.7
XIBLK11	2-Nitrotoluene	137 > 46			36238.535									
XIBLK11	4-Nitrotoluene	137 > 46			36238.535									
XIBLK11	3-Nitrotoluene	137 > 46			36238.535									
XIBLK11	PETN	361 > 62			36238.535									

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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK12

Analysis Date: 28-MAR-10 02:36

GEL Data File: EXP0326074a

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found (ug/L)
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	429.397
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	503.752
2-Amino-4,6-dinitrotoluene	0	0
4-Amino-2,6-dinitrotoluene	0	0
HMX	0	0
Nitrobenzene	0	0

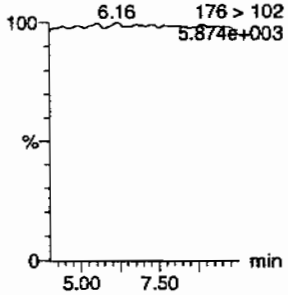
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

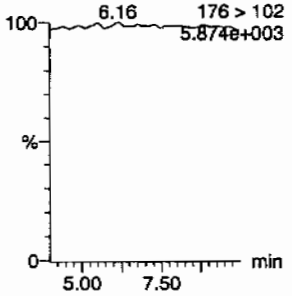
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326074a
Date: 28-Mar-2010
Time: 02:36:54
ID: XIBLK12
Vial: 1:1,A

MMT 3/29/10

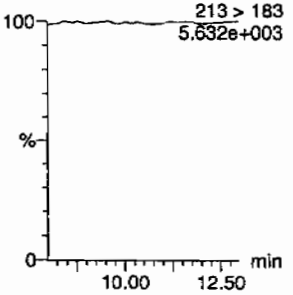
HMX
F2:MRM of 1 channel,AP-
6.16 176 > 102
5.874e+003



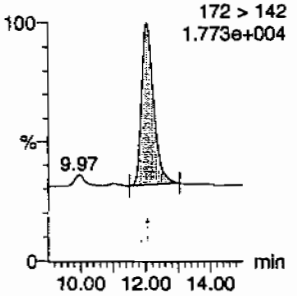
RDX
F2:MRM of 1 channel,AP-
6.16 176 > 102
5.874e+003



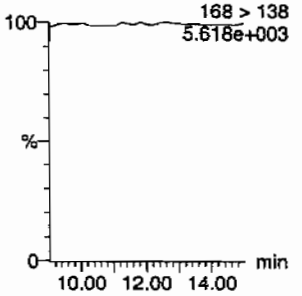
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.632e+003



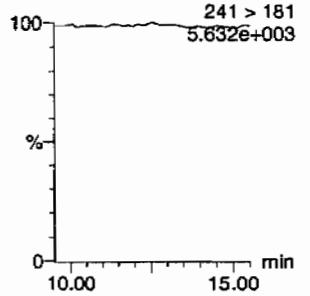
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.773e+004



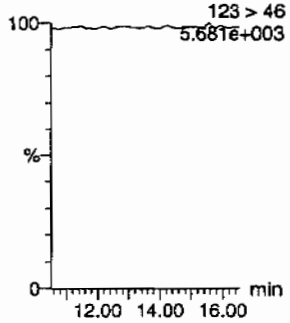
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.618e+003



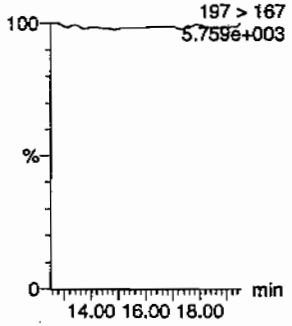
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.632e+003



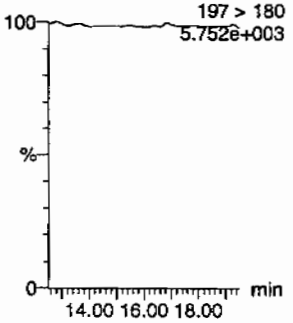
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.681e+003



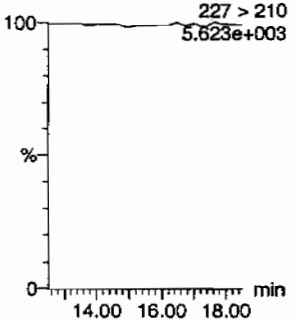
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.759e+003



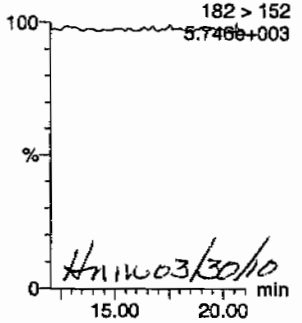
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.752e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.623e+003

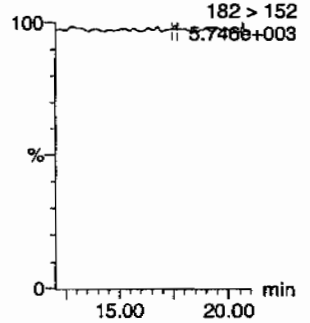


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.746e+003



HMM 03/30/10

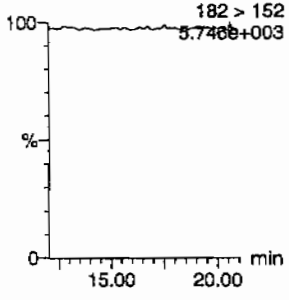
26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.746e+003



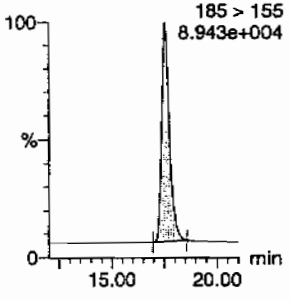
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

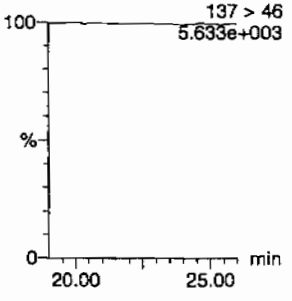
24-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.746e+003



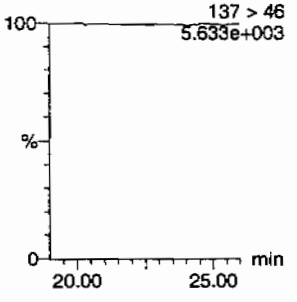
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
8.943e+004



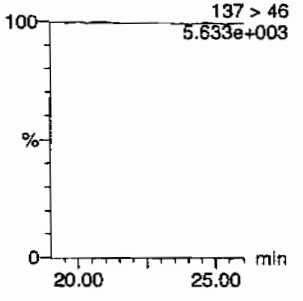
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.633e+003



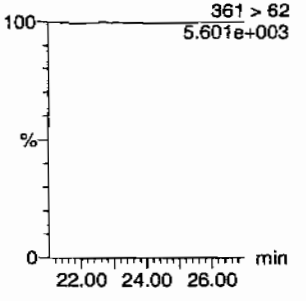
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.633e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.633e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.601e+003



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
XIBLK12	HMX	176 > 102			5253.583									
XIBLK12	RDX	176 > 102			5253.583									
XIBLK12	135-Trinitrobenzene	213 > 183			5253.583									
XIBLK12	13-Dinitrobenzene-d4	172 > 142	12.04	5253.583		5253.583	5253.583	bb			429.3974	85.9	-14.1	367.3
XIBLK12	13-Dinitrobenzene	168 > 138			5253.583									
XIBLK12	Tetryl	241 > 181			5253.583									
XIBLK12	Nitrobenzene	123 > 46			5253.583									
XIBLK12	4-Amino-26-dinitrotoluene	197 > 167			36985.594									
XIBLK12	2-Amino-46-dinitrotoluene	197 > 180			36985.594									
XIBLK12	246-Trinitrotoluene	227 > 210			36985.594									
XIBLK12	34-dinitrotoluene	182 > 152			36985.594									
XIBLK12	26-dinitrotoluene	182 > 152			36985.594			MM-	28-Mar-10	12:43:46				
XIBLK12	24-dinitrotoluene	182 > 152			36985.594									
XIBLK12	26-dinitrotoluene-d3	185 > 155	17.55	36985.594		36985.594	36985.594	bb			503.7515	100.8	0.8	1611.8
XIBLK12	2-Nitrotoluene	137 > 46			36985.594									
XIBLK12	4-Nitrotoluene	137 > 46			36985.594									
XIBLK12	3-Nitrotoluene	137 > 46			36985.594									
XIBLK12	PETN	361 > 62			36985.594									

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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK13

Analysis Date: 28-MAR-10 08:01

GEL Data File: EXP0326085a

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	403.89
2,4,6-Trinitrotoluene	0	0
2,4-Dinitrotoluene	0	0
2,6-Dinitrotoluene	0	0
2,6-Dinitrotoluene-d3	500	367.859
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

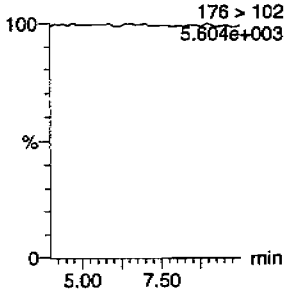
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

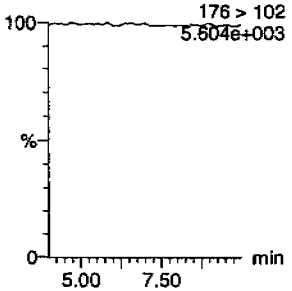
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326085a
Date: 28-Mar-2010
Time: 08:01:22
ID: XIBLK13
Vial: 1:1,A

MMT 3/29/10

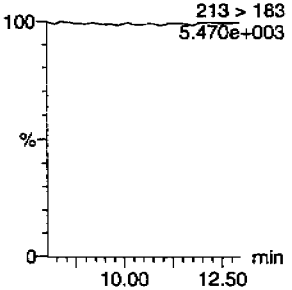
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.604e+003



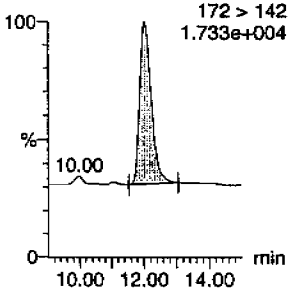
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.604e+003



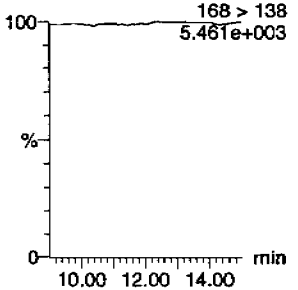
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.470e+003



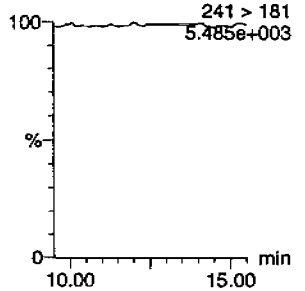
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.733e+004



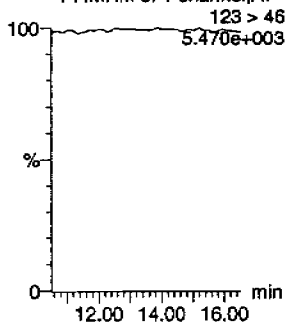
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.461e+003



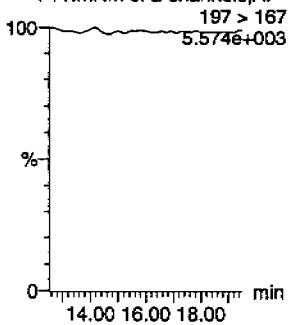
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.485e+003



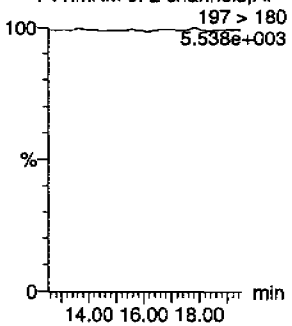
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.470e+003



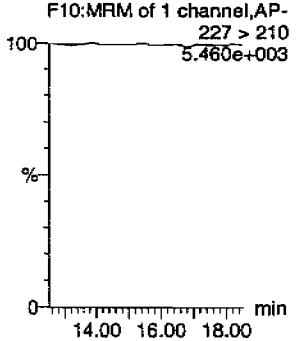
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.574e+003



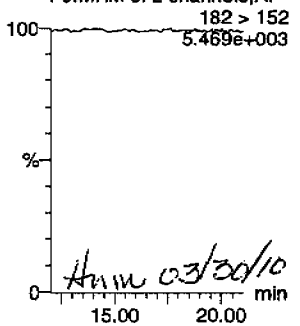
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.538e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.460e+003

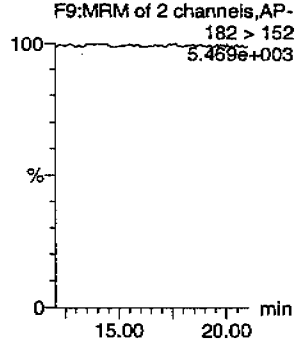


34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.469e+003



Hmm 03/30/10

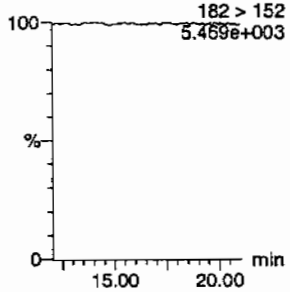
26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.469e+003



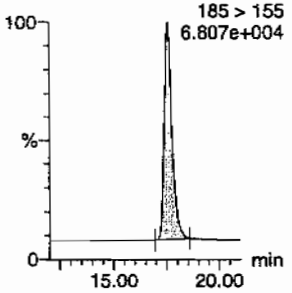
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

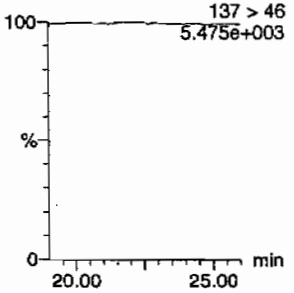
24-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
5.469e+003



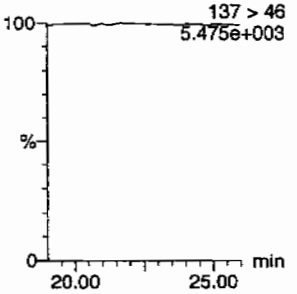
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
6.807e+004



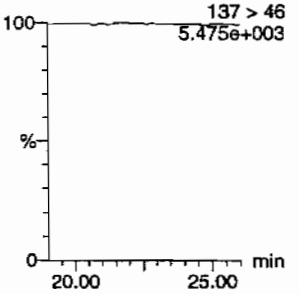
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.475e+003



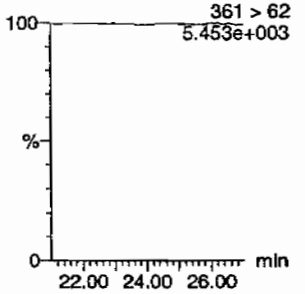
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.475e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.475e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.453e+003



ID	Name	Trace	RT	Area	IS Area	Abs Resp	% Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
XIBLK13	HMX	176 > 102			4941.503									
XIBLK13	RDX	176 > 102			4941.503									
XIBLK13	135-Trinitrobenzene	213 > 183			4941.503									
XIBLK13	13-Dinitrobenzene-d4	172 > 142	12.04	4941.503		4941.503	4941.503	bb			403.8898	80.8	-19.2	382.4
XIBLK13	13-Dinitrobenzene	168 > 138			4941.503									
XIBLK13	Tetryl	241 > 181			4941.503									
XIBLK13	Nitrobenzene	123 > 46			4941.503									
XIBLK13	4-Amino-26-dinitrotoluene	197 > 167			27008.322									
XIBLK13	2-Amino-46-dinitrotoluene	197 > 180			27008.322									
XIBLK13	246-Trinitrotoluene	227 > 210			27008.322									
XIBLK13	34-dinitrotoluene	182 > 152			27008.322									
XIBLK13	26-dinitrotoluene	182 > 152			27008.322									
XIBLK13	24-dinitrotoluene	182 > 152			27008.322									
XIBLK13	26-dinitrotoluene-d3	185 > 155	17.55	27008.322		27008.322	27008.322	bb			367.8590	73.6	-26.4	1918.2
XIBLK13	2-Nitrotoluene	137 > 46			27008.322									
XIBLK13	4-Nitrotoluene	137 > 46			27008.322									
XIBLK13	3-Nitrotoluene	137 > 46			27008.322									
XIBLK13	PETN	361 > 62			27008.322									

4A
Explosives Continuing Calibration Blank

Lab Name: GEL Laboratories LLC

GEL Job No(SDG): 10–1861

Lab Code: GEL

Lab Sample ID: XIBLK02

Analysis Date: 05–MAR–10 19:29

GEL Data File: EXS03050010.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

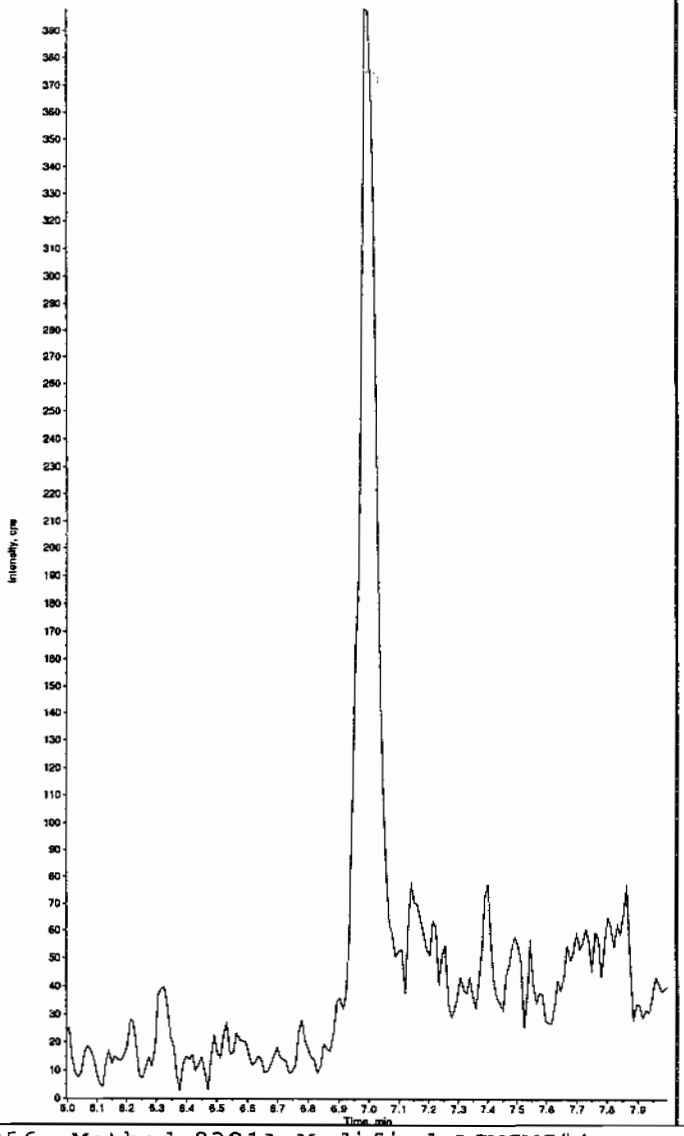
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	1.24
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Olan 3/9/10

Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03050010.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:29:01 PM

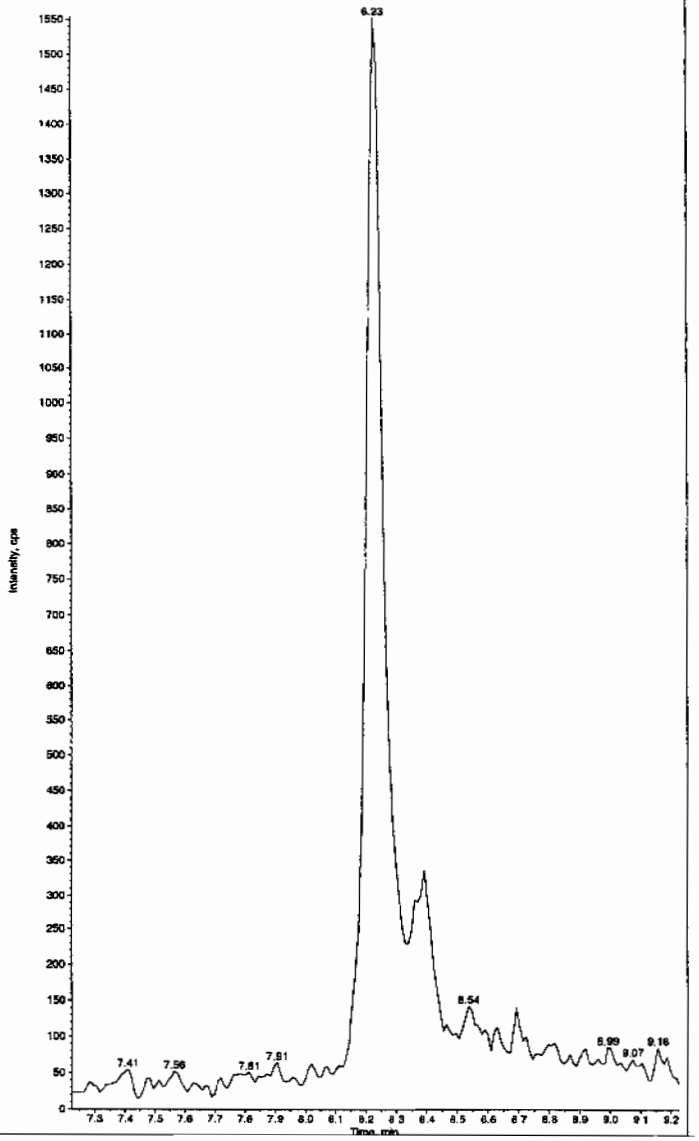
Modified: No



Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03050010.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:29:01 PM

Modified: No



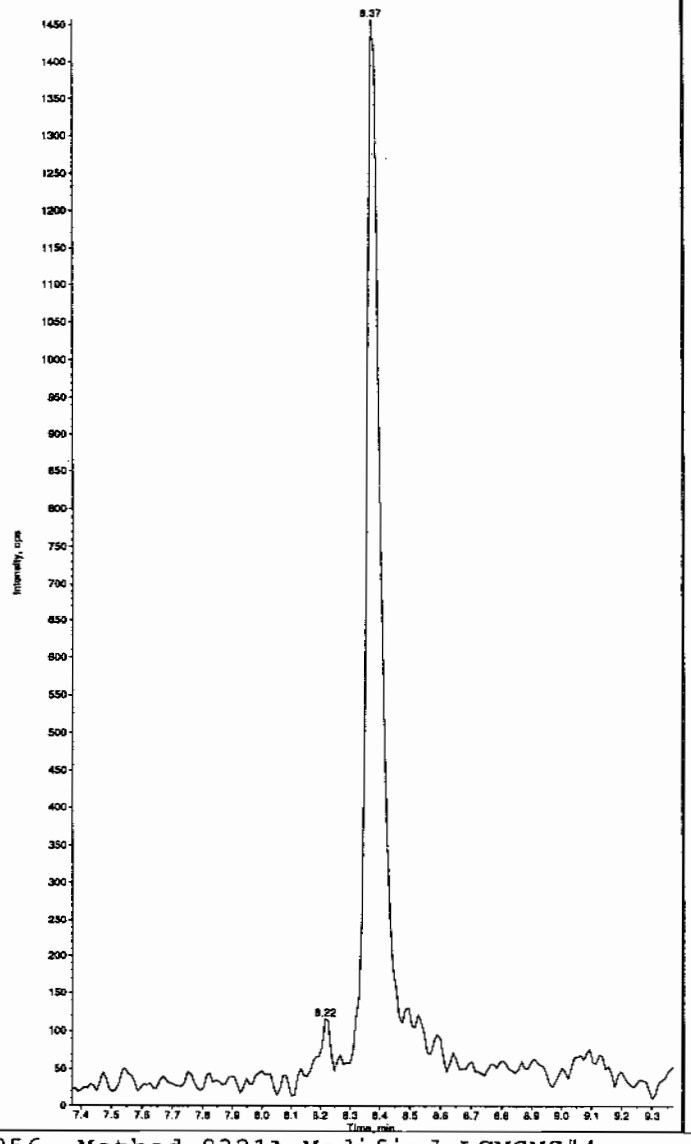
dmm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03050010.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:29:01 PM

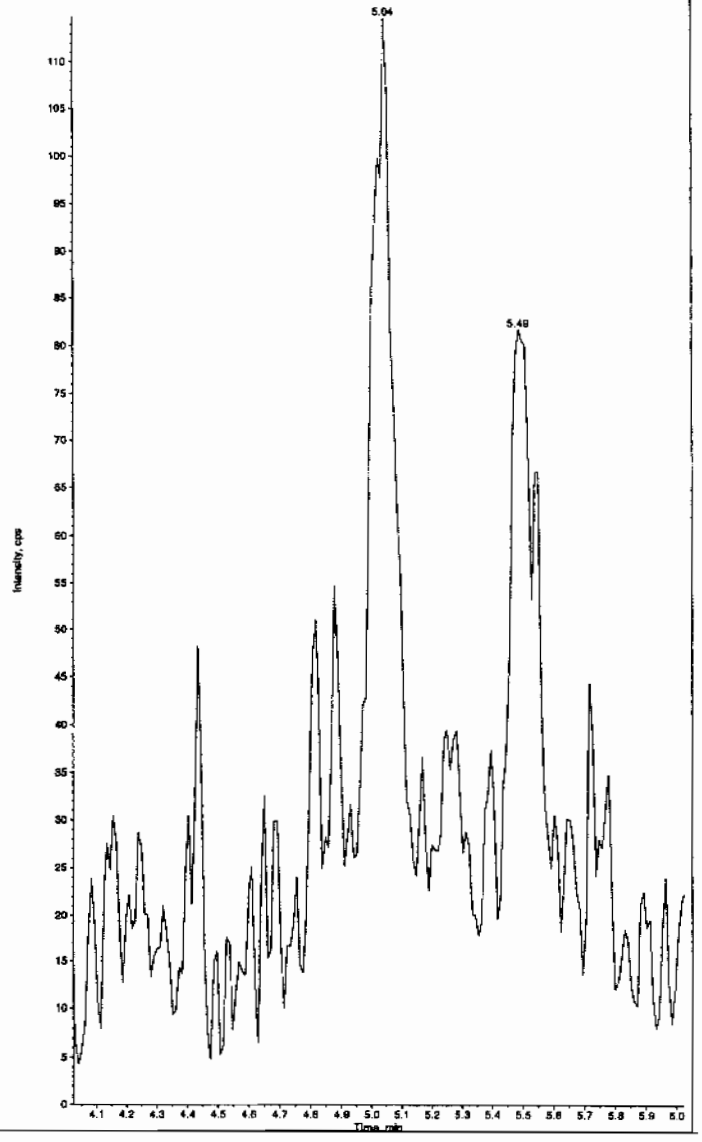
Modified: No



Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03050010.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(as): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:29:01 PM

Modified: No

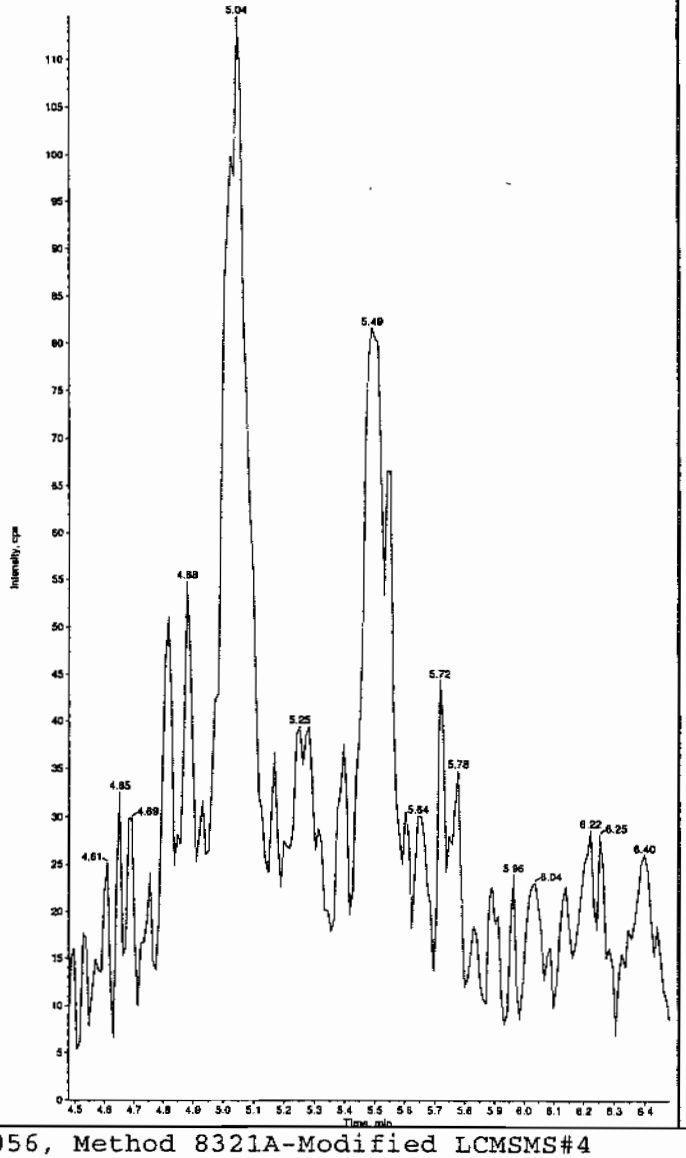


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03050010.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:29:01 PM

Modified: No

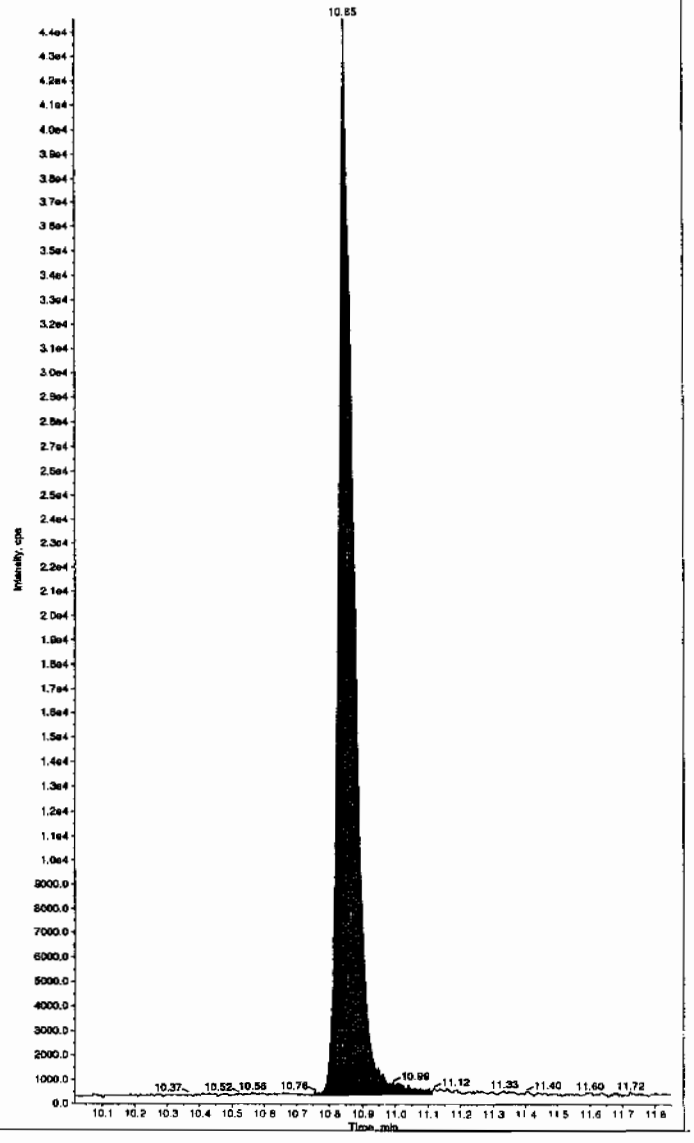


Sample Name: "XIBLK02" Sample ID: "[1]LER" File: "EXS03050010.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 1.24 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:29:01 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: 10.8 min
Area: 1.45e+005 counts
Height: 44249.924 cps
Start Time: 10.7 min
End Time: 11.1 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): 10–1861

Lab Code: GEL

Lab Sample ID: XIBLK03

Analysis Date: 05–MAR–10 20:00

GEL Data File: EXS03050012.wiff

Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

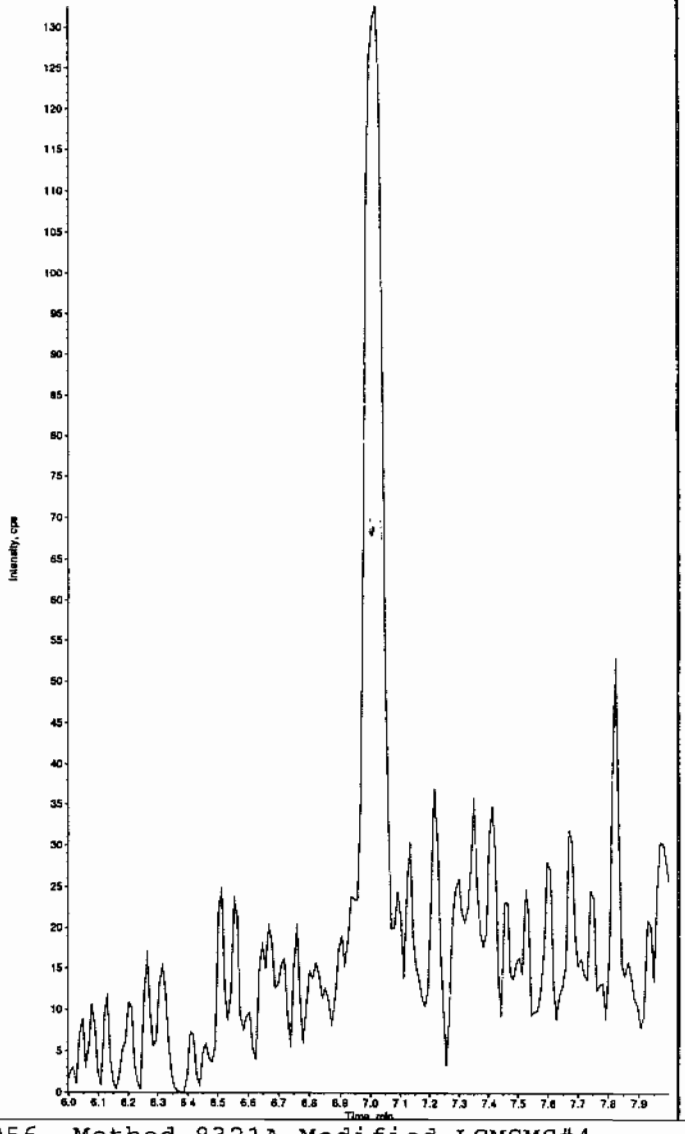
Compound	True	Found (ug/L)
3,4–Dinitrotoluene	0	0
tris(o–cresyl) phosphate	0	0
TATB	0	0
3,5–Dinitroaniline	0	0
2,4–Diamino–6–nitrotoluene	0	0
2,6–Diamino–4–nitrotoluene	0	0

Scan 3/9/10

Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03050012.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:00:24 PM

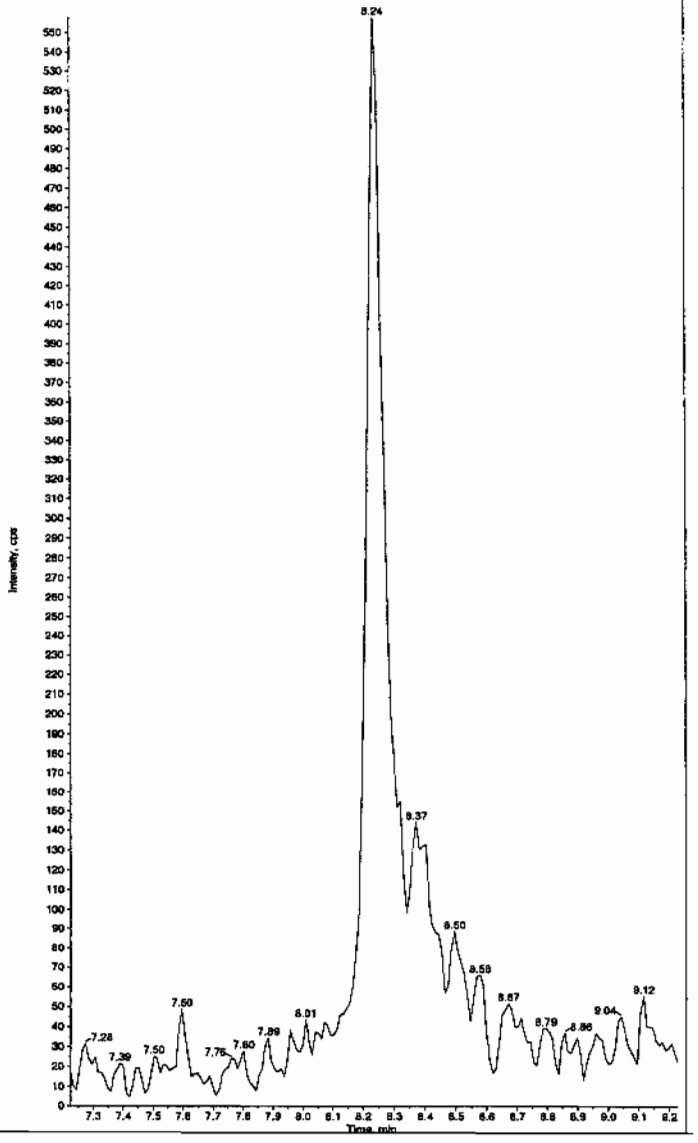
Modified: No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03050012.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:00:24 PM

Modified: No



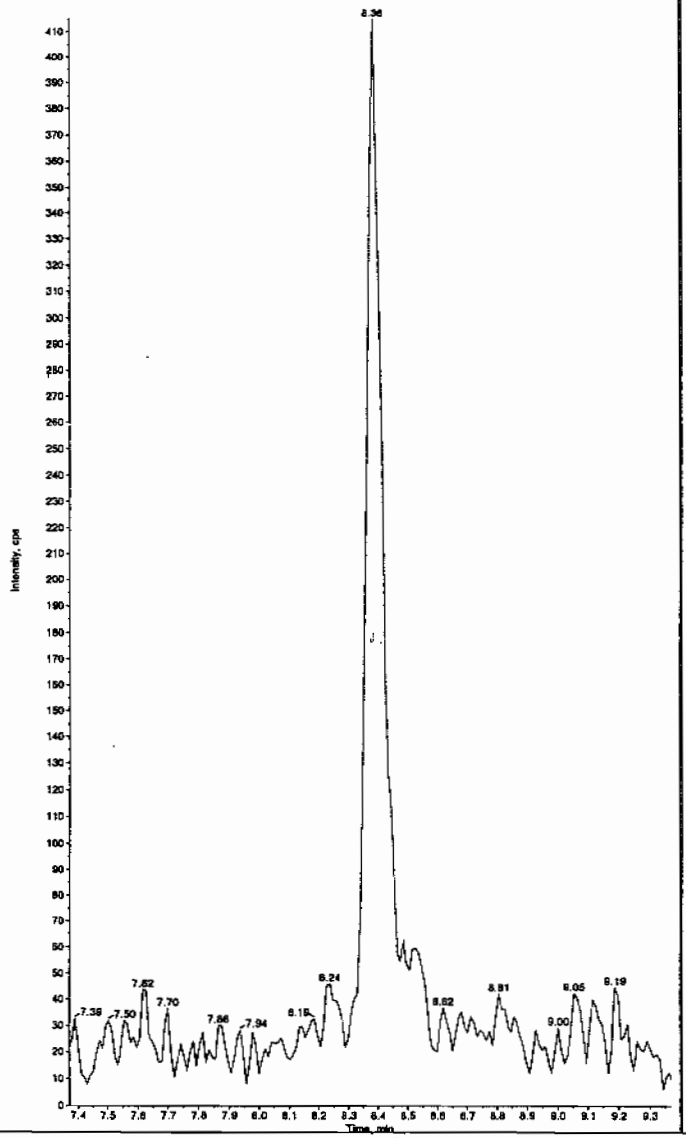
HMM 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03050012.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:00:24 PM

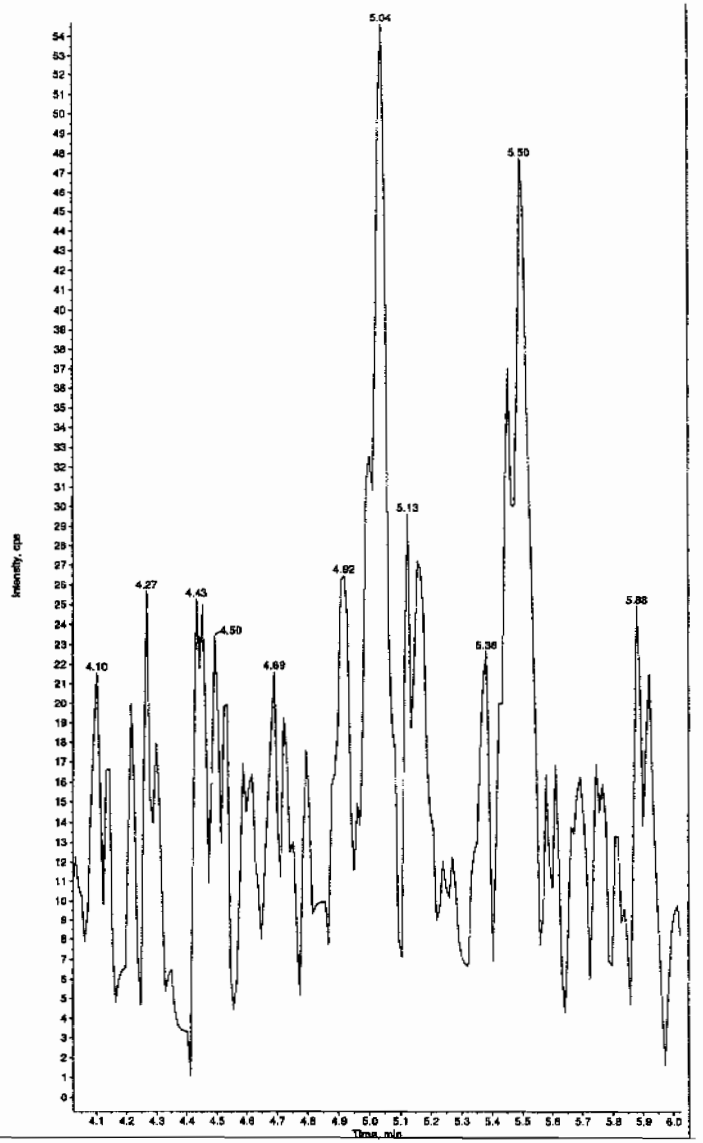
Modified: No



Sample Name: "XIBLK03" Sample ID: "|1|LER" File: "EXS03050012.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:00:24 PM

Modified: No

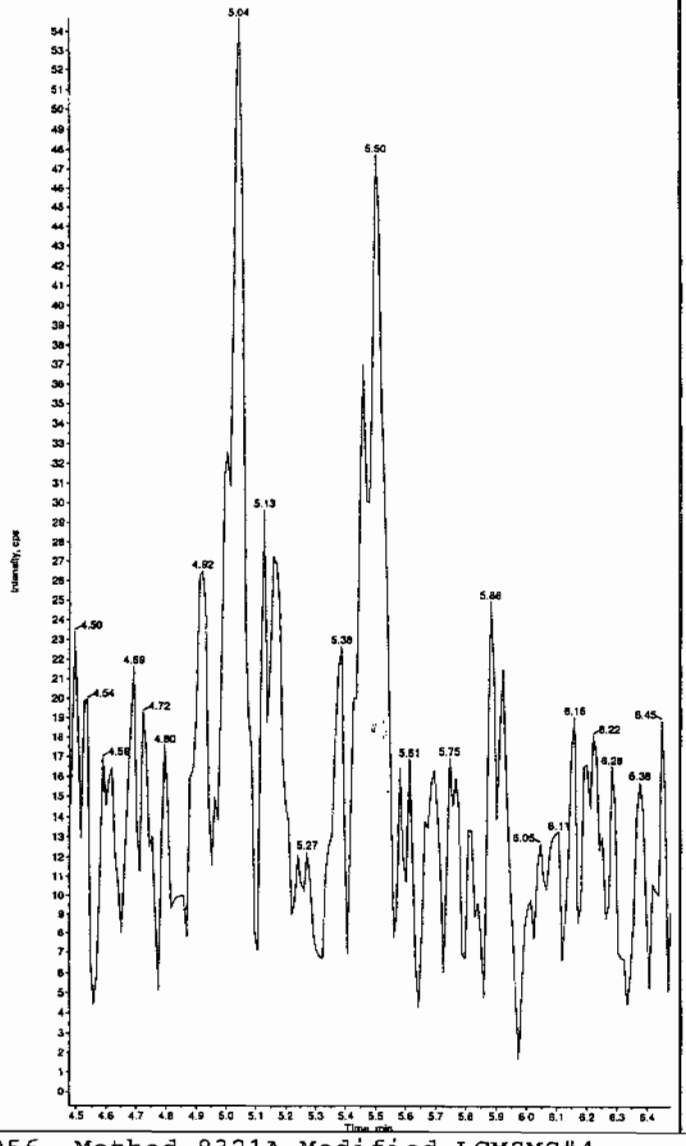


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS03050012.wiff"
Peak Name: "24-Dismino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:00:24 PM

Modified: No

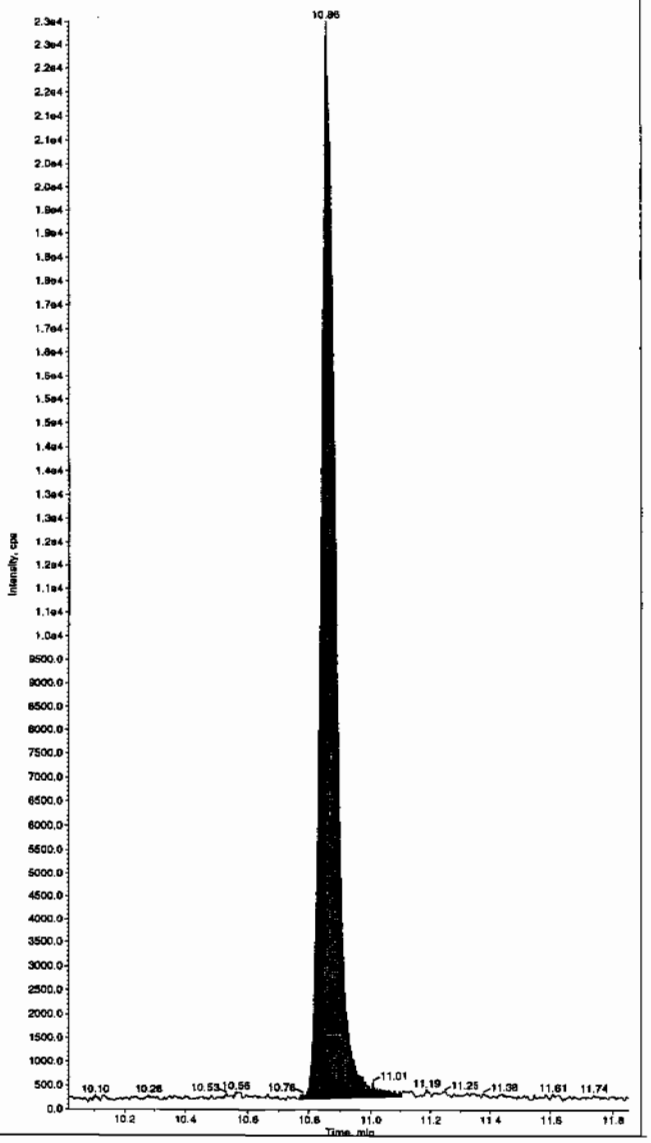


Sample Name: "XIBLK03" Sample ID: "[1]LER" File: "EXS03050012.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/5/2010
Acq. Time: 8:00:24 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: 7.77e+004 counts
Height: 22798.788 cps
Start Time: 10.8 min
End Time: 11.1 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): 10-1861

Lab Code: GEL

Lab Sample ID: XIBLK04

Analysis Date: 05-MAR-10 23:24

GEL Data File: EXS03050025.wiff

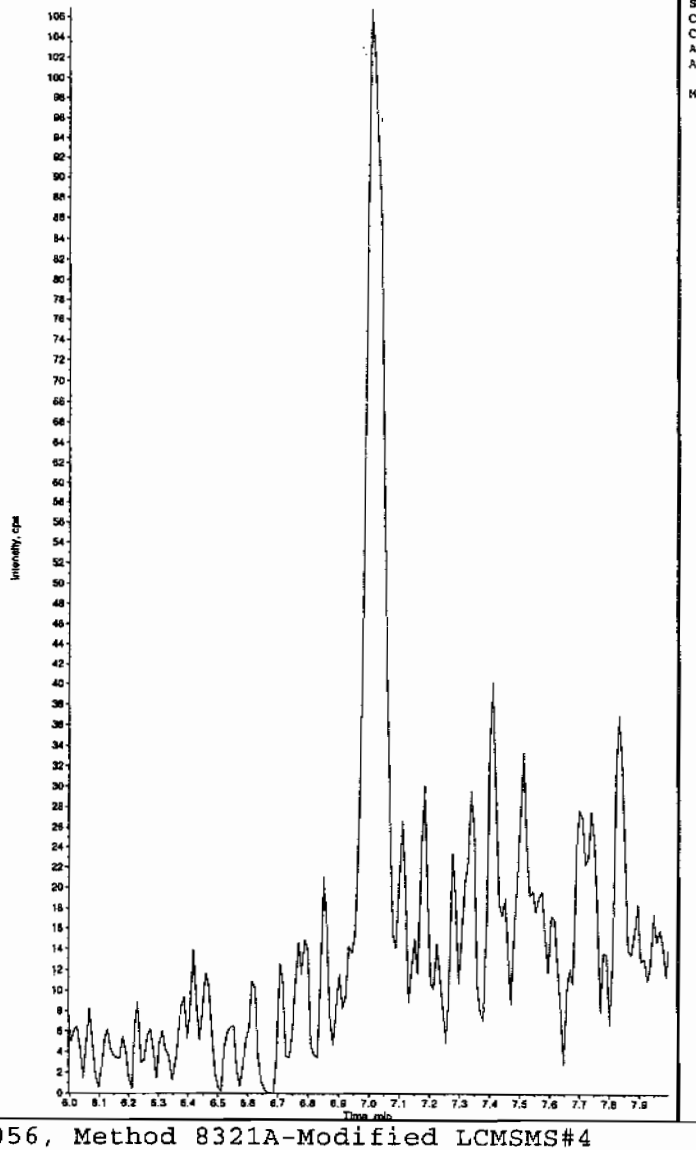
Instrument ID: LCMSMS

Column: Phenomenex Ultracarb 5u ODS(20)

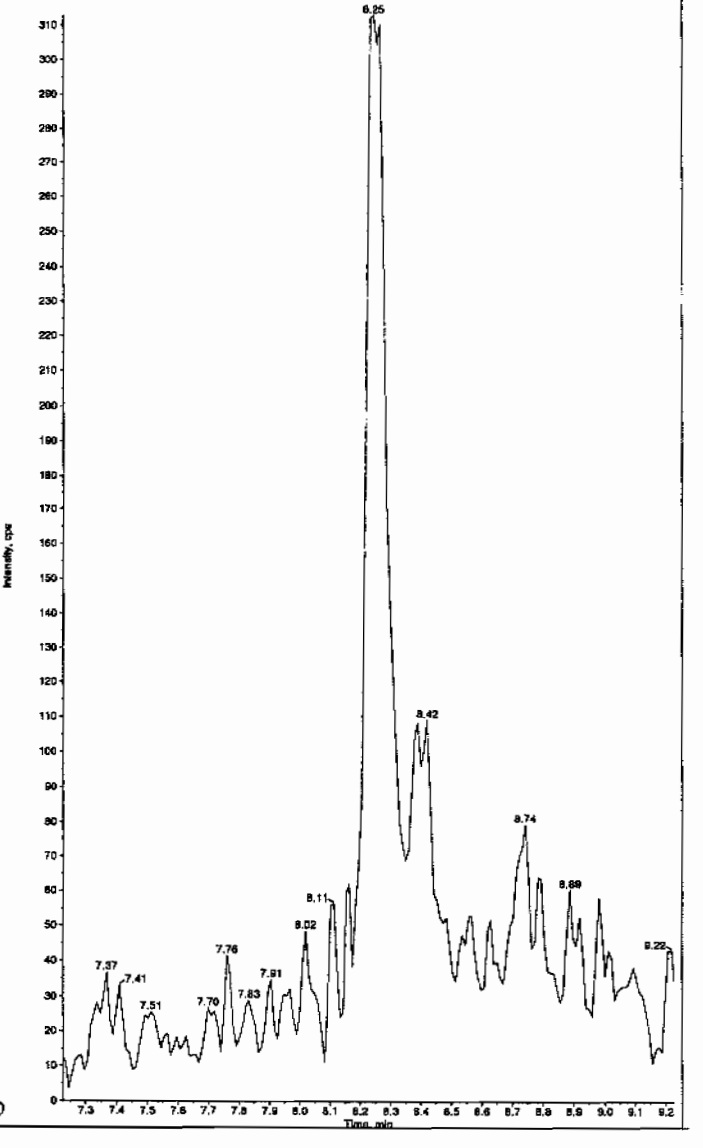
Compound	True	Found (ug/L)
3,4-Dinitrotoluene	0	0
tris(o-cresyl) phosphate	0	0
TATB	0	0
3,5-Dinitroaniline	0	0
2,4-Diamino-6-nitrotoluene	0	0
2,6-Diamino-4-nitrotoluene	0	0

Lcr 3/9/10

Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03050025.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:24:26 PM
Modified: No



Sample Name: "XIBLK04" Sample ID: "|1|LER" File: "EXS03050025.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:24:26 PM
Modified: No



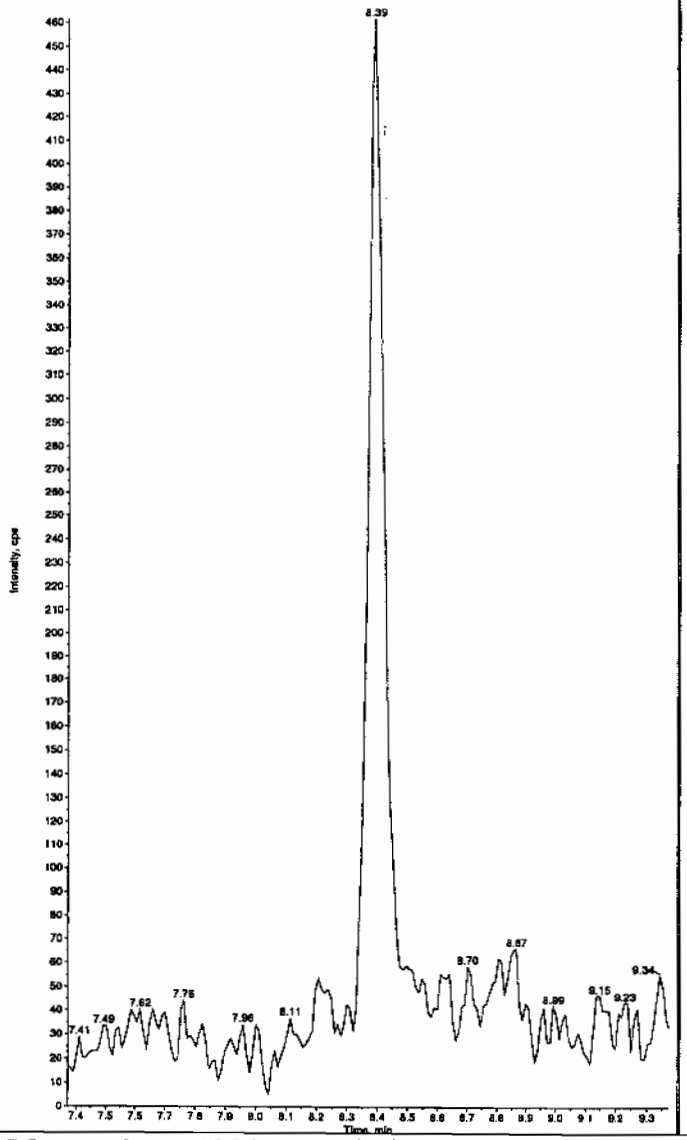
Hrm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK04" Sample ID: "[1]LER" File: "EXS03050025.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:24:26 PM

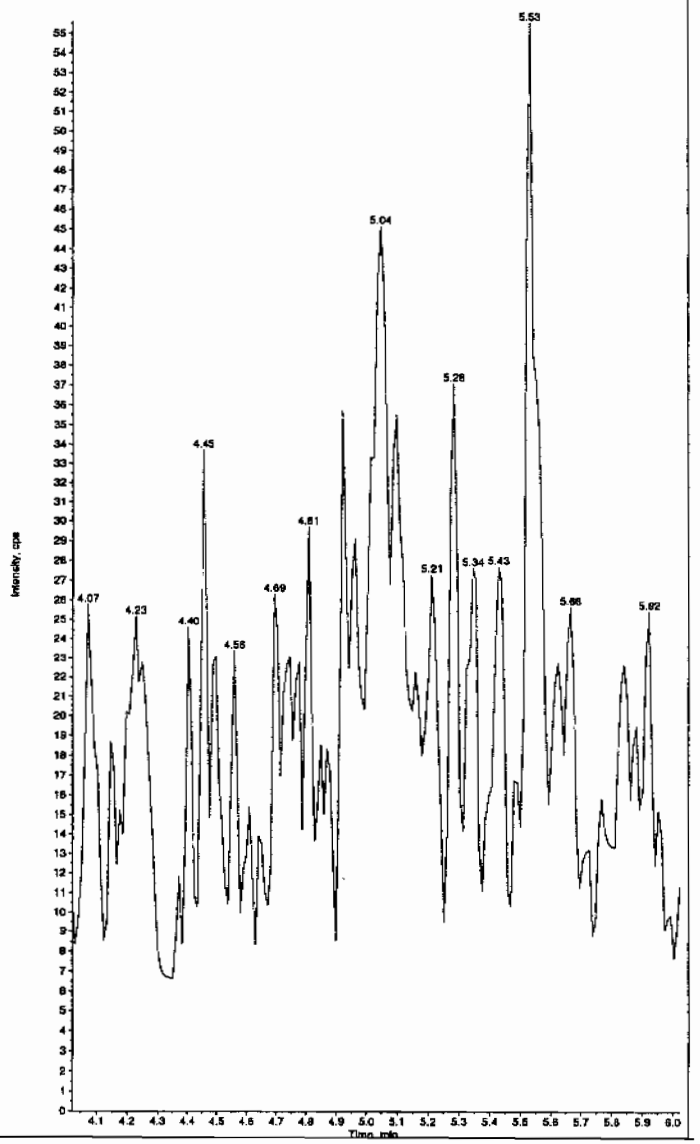
Modified: No



Sample Name: "XIBLK04" Sample ID: "[1]LER" File: "EXS03050025.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:24:26 PM

Modified: No

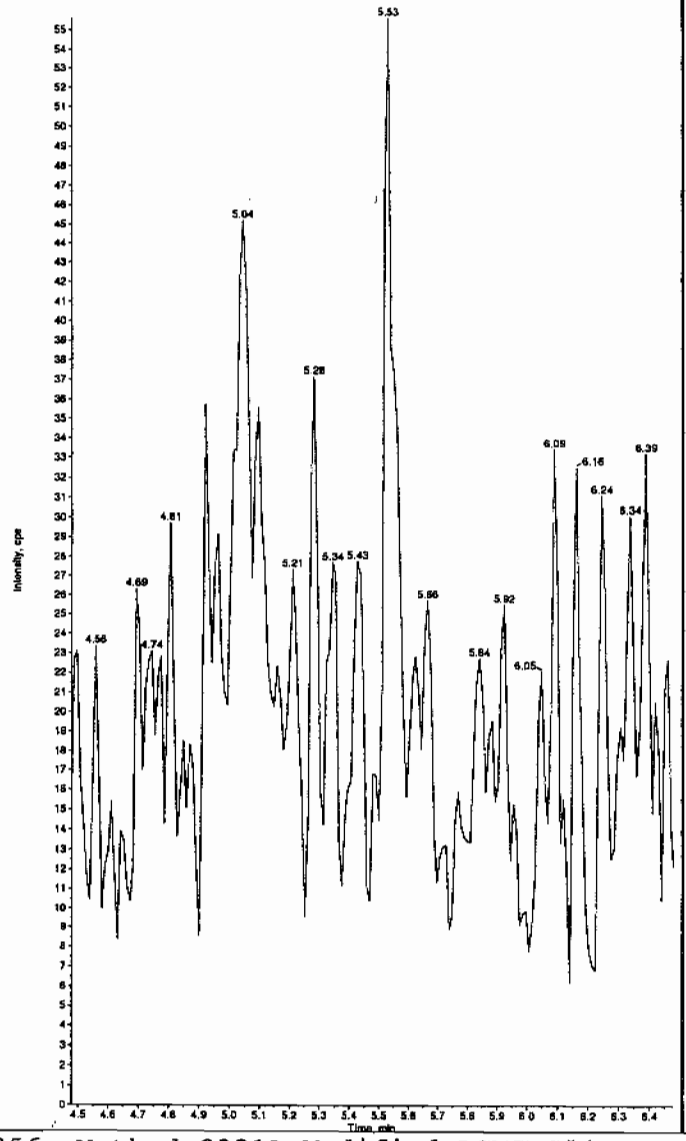


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK04" Sample ID: "]1|LER" File: "EXS03050025.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:24:26 PM

Modified: No

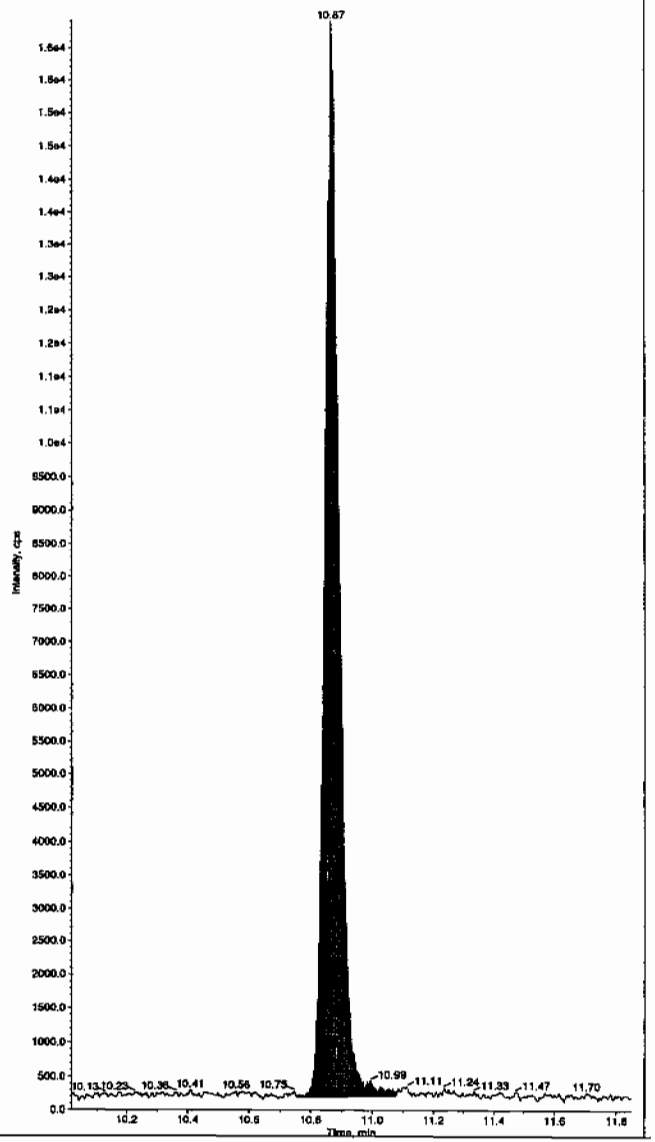


Sample Name: "XIBLK04" Sample ID: "]1|LER" File: "EXS03050025.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/5/2010
Acq. Time: 11:24:26 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: 5.49e+004 counts
Height: 15220.448 cps
Start Time: 10.8 min
End Time: 11.1 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): 10–1861

Lab Code: GEL

Lab Sample ID: XIBLK05

Analysis Date: 06–MAR–10 02:17

GEL Data File: EXS03050036.wiff

Instrument ID: LCMSMS

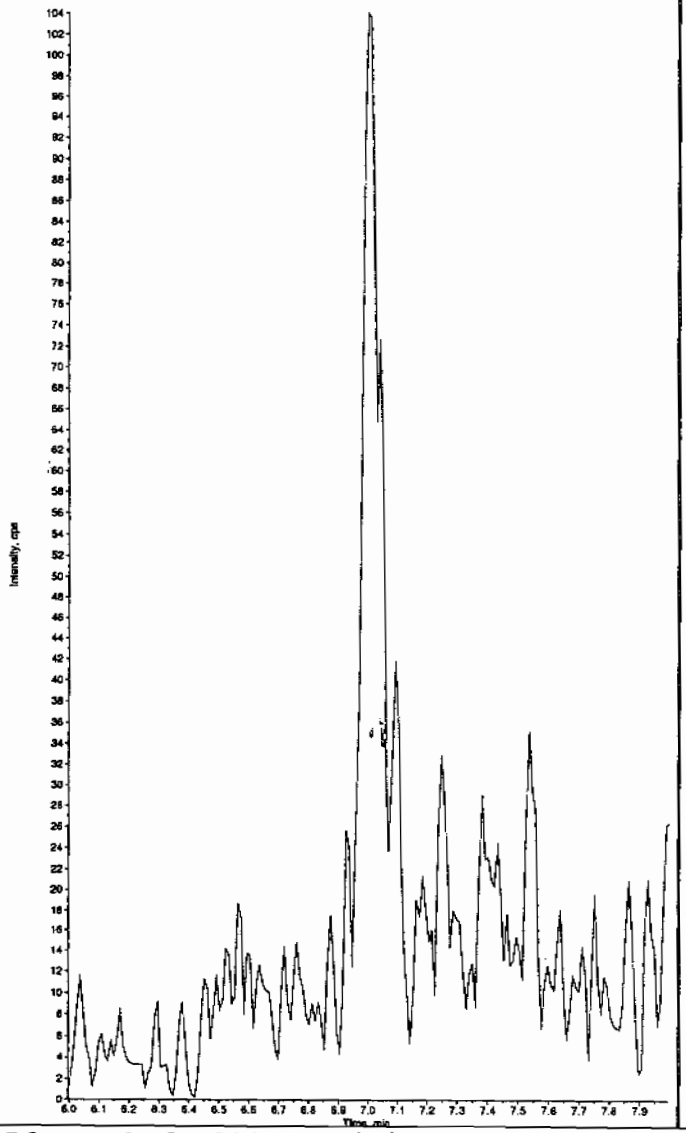
Column: Phenomenex Ultracarb 5u ODS(20)

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

Dan 3/9/10

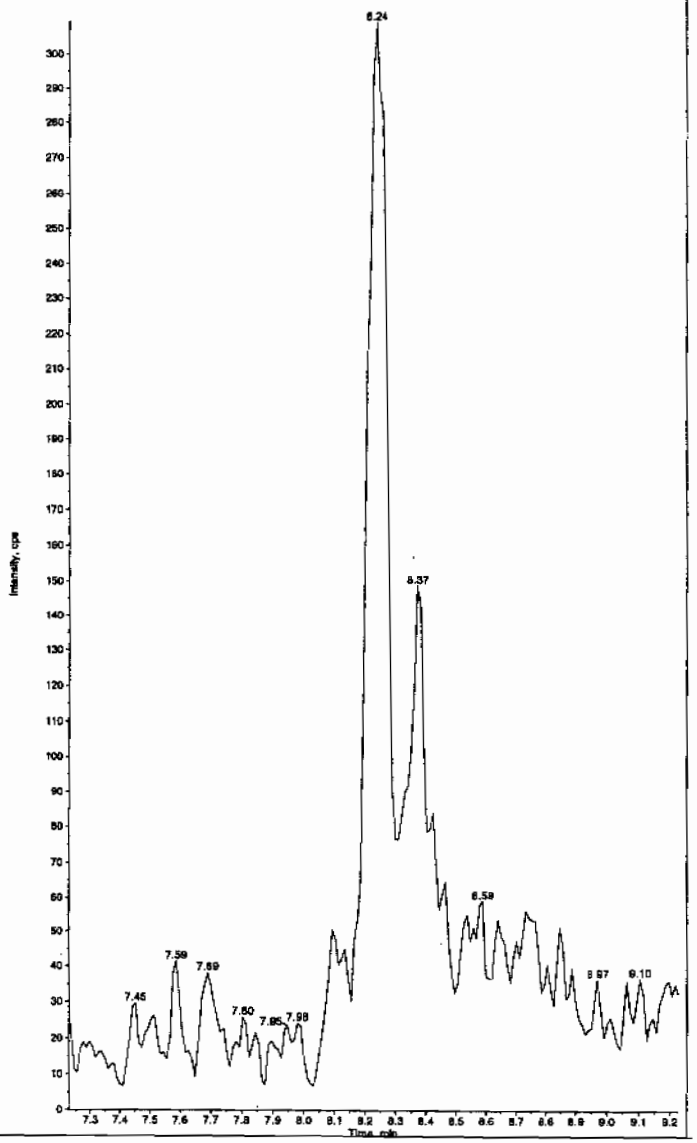
Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS03050036.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_8" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:17:09 AM

Modified: No



Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS03050036.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_8" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:17:09 AM

Modified: No

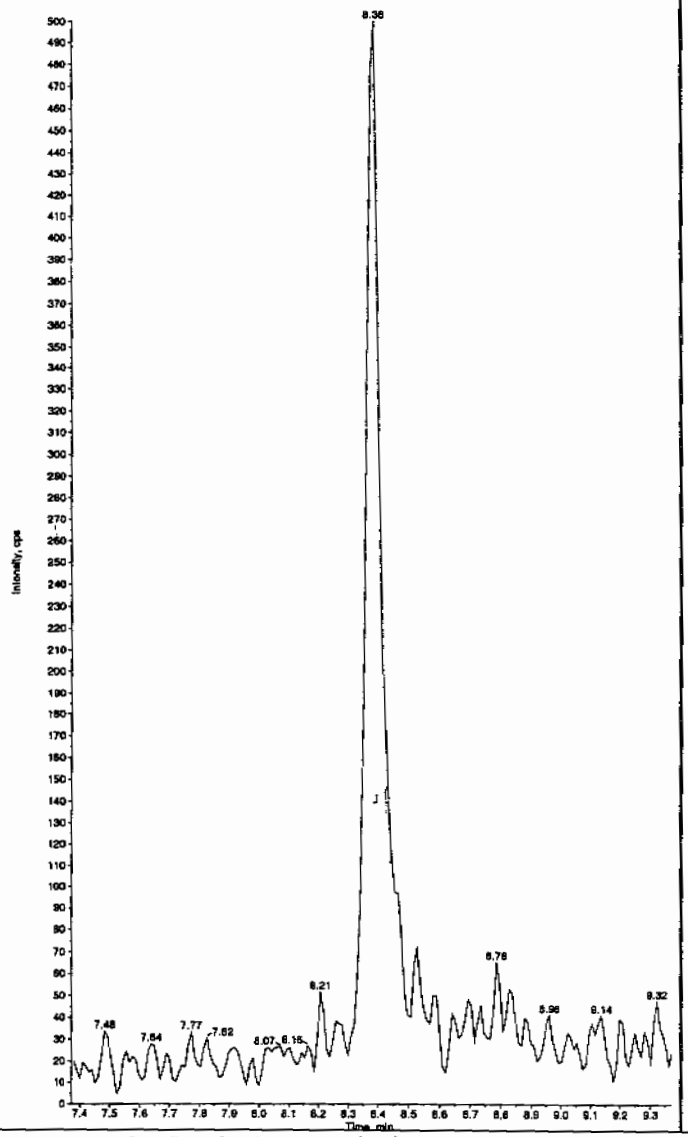


Hmm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

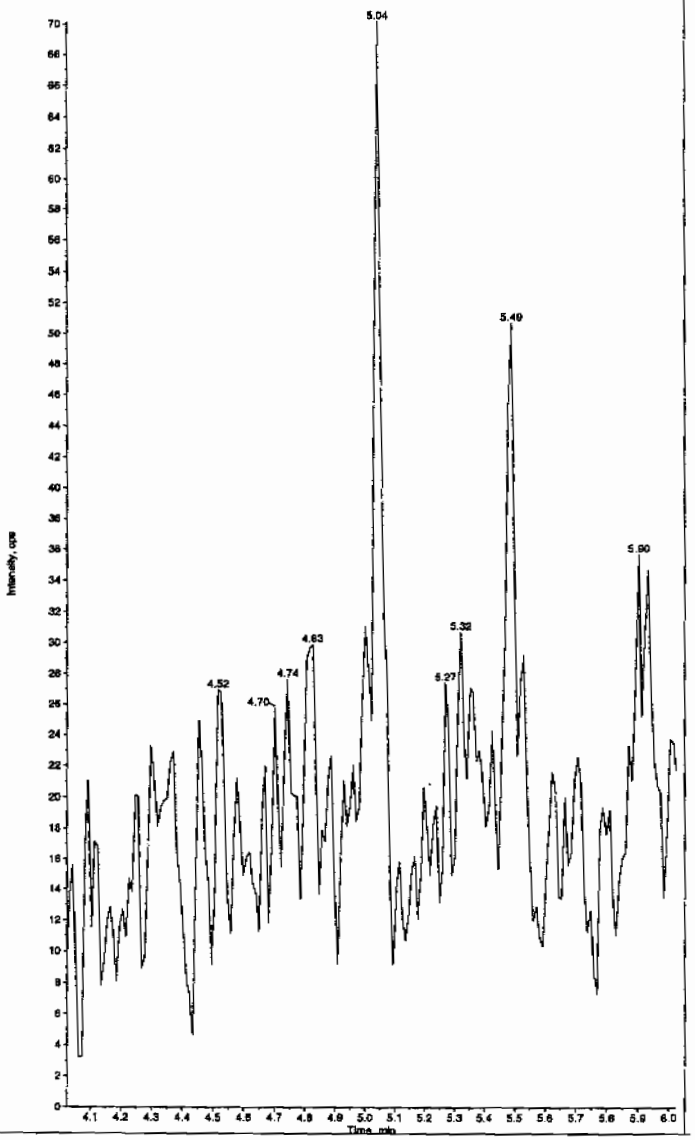
Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03050036.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:17:09 AM

Modified: No



Sample Name: "XIBLK05" Sample ID: "|1|LER" File: "EXS03050036.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "156.0/46.0 amu"
Comment: "LCMSEXP_B" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:17:09 AM

Modified: No

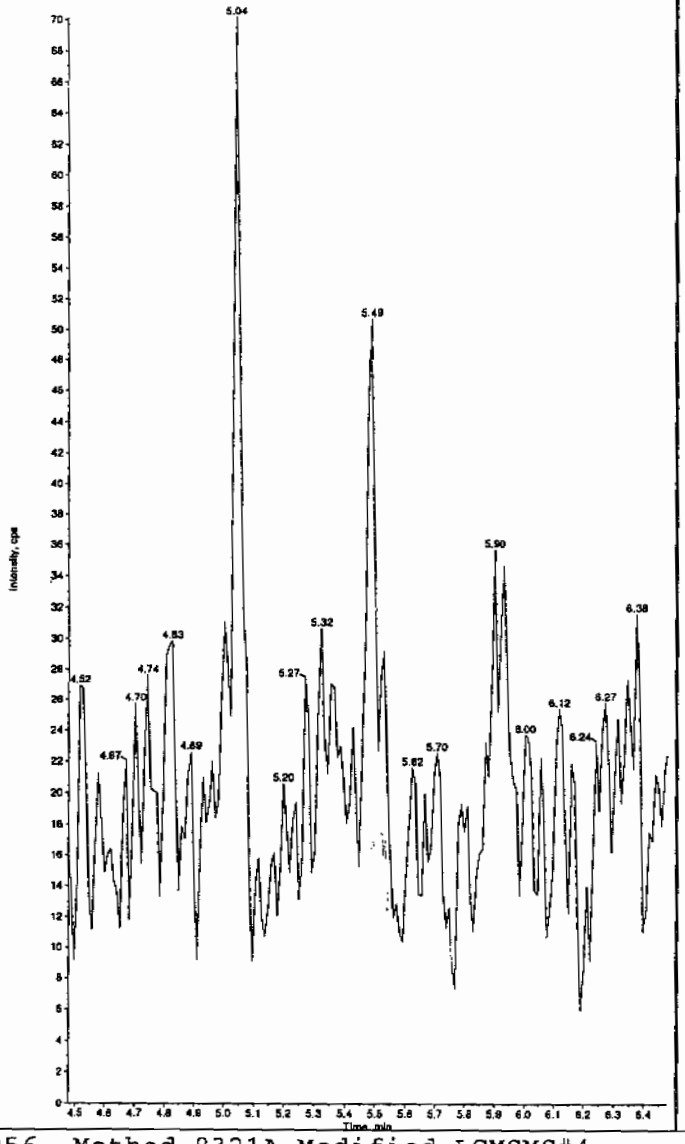


GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS03050036.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:17:09 AM

Modified: No

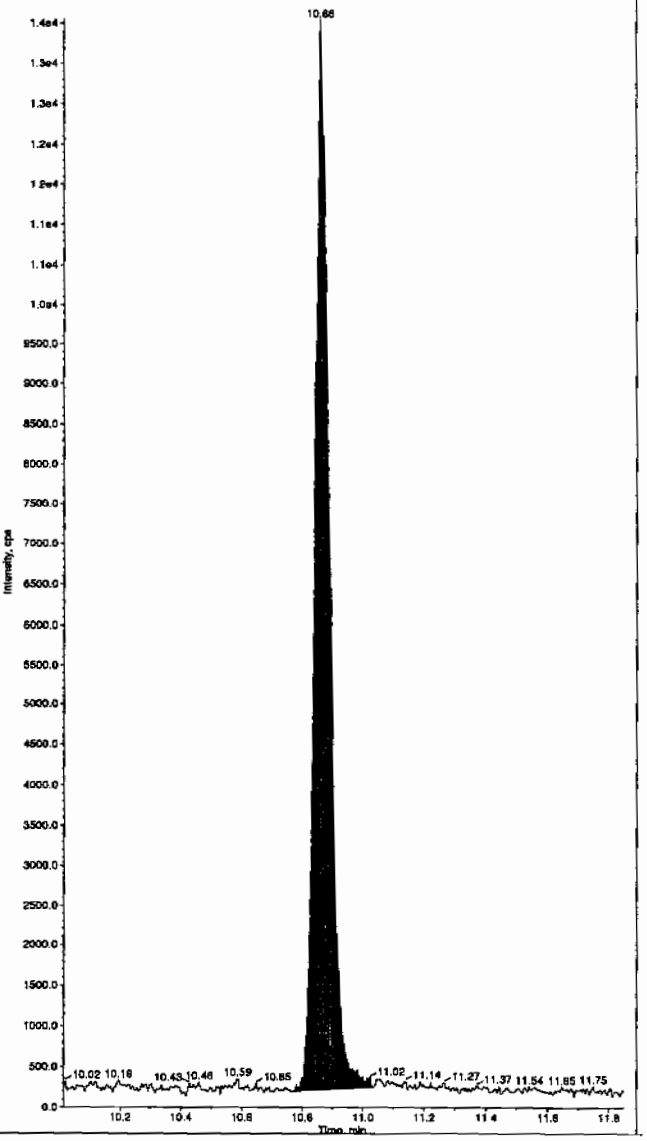


Sample Name: "XIBLK05" Sample ID: "[1]LER" File: "EXS03050036.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_B" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/6/2010
Acq. Time: 2:17:09 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: 4.56e+004 counts
Height: 13337.638 cps
Start Time: 10.8 min
End Time: 11.0 min



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

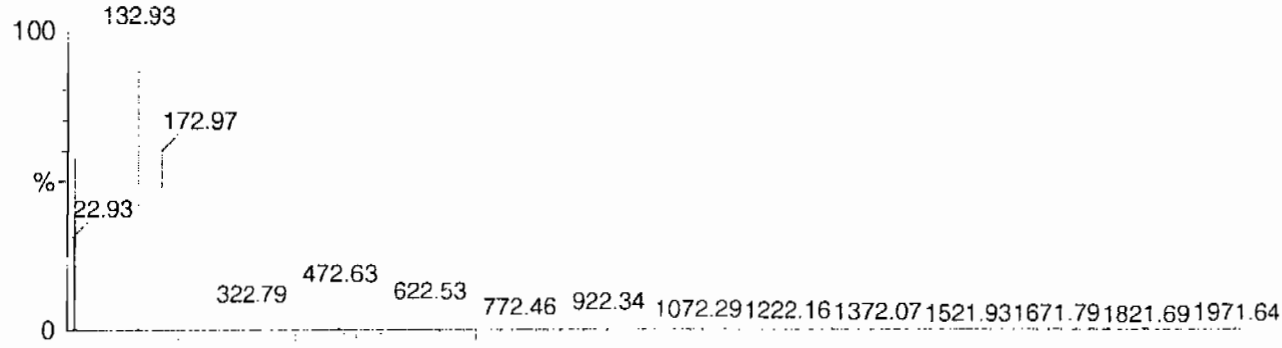
22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803	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

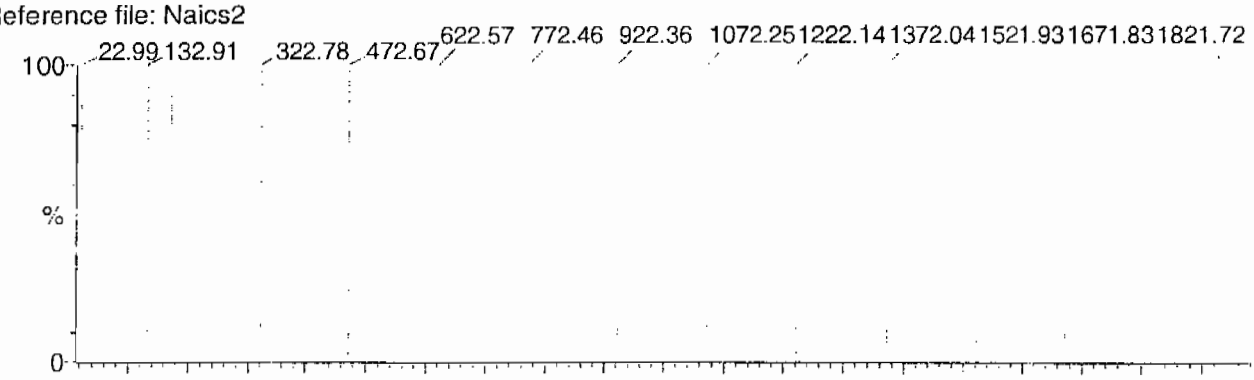
Printed: Fri Aug 25 10:50:01 2006

Data file: STATMS1 - Calibrated

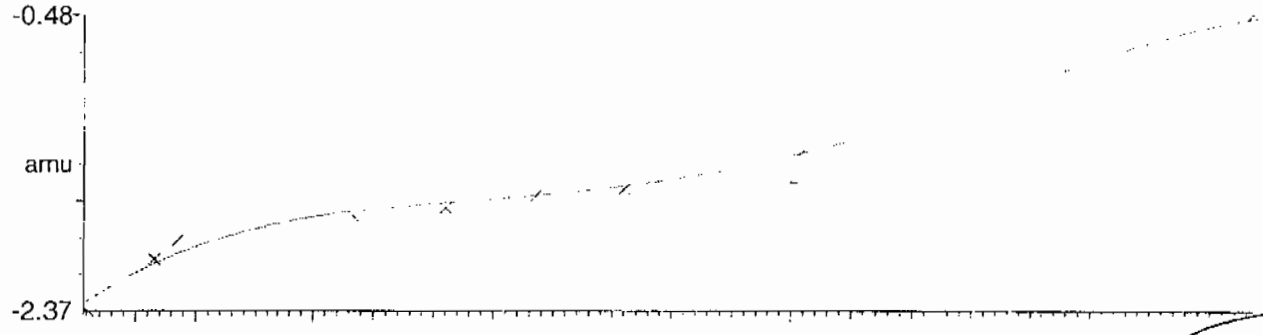
15 matches of 15 tested references



Reference file: Naics2



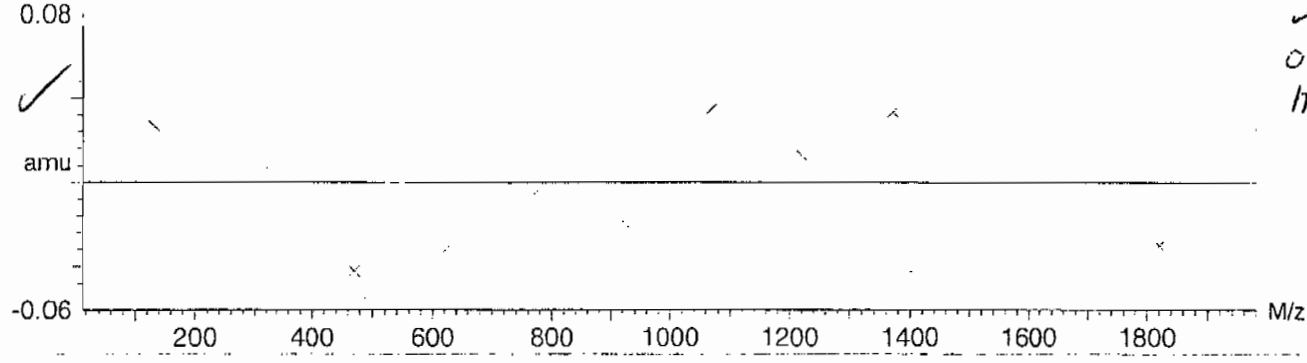
Mass difference (Raw - Ref mass)



Residuals

Mean residual = -1.673470e-9 ± 0.036953

ok
lm

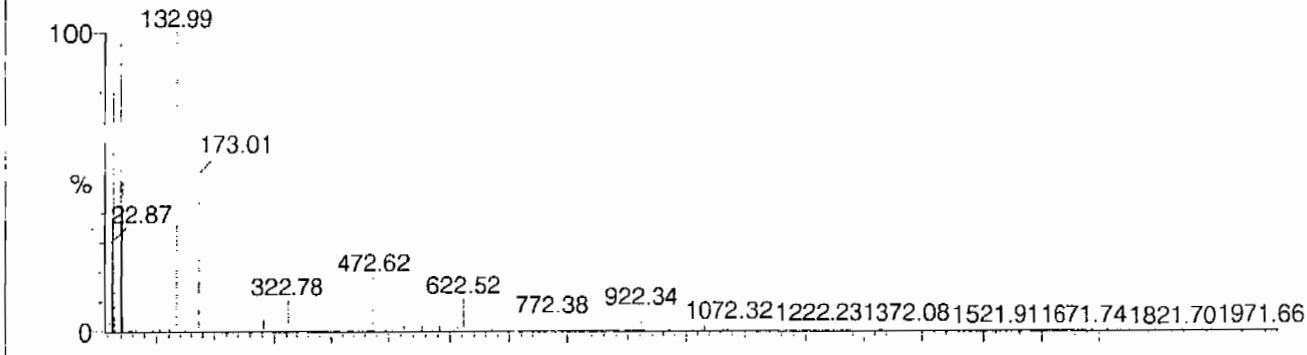


Calibration Report - MS1 Scanning

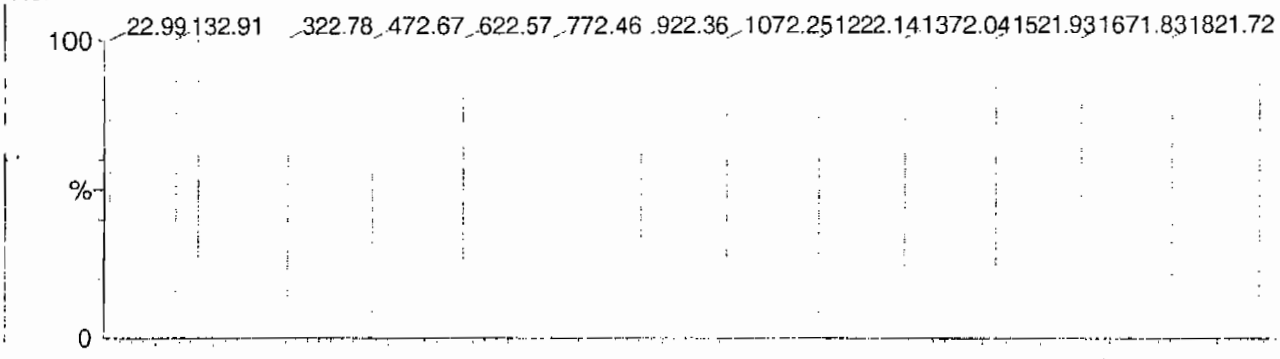
Printed: Fri Aug 25 10:51:06 2006

Data file: SCNMS1 - Calibrated

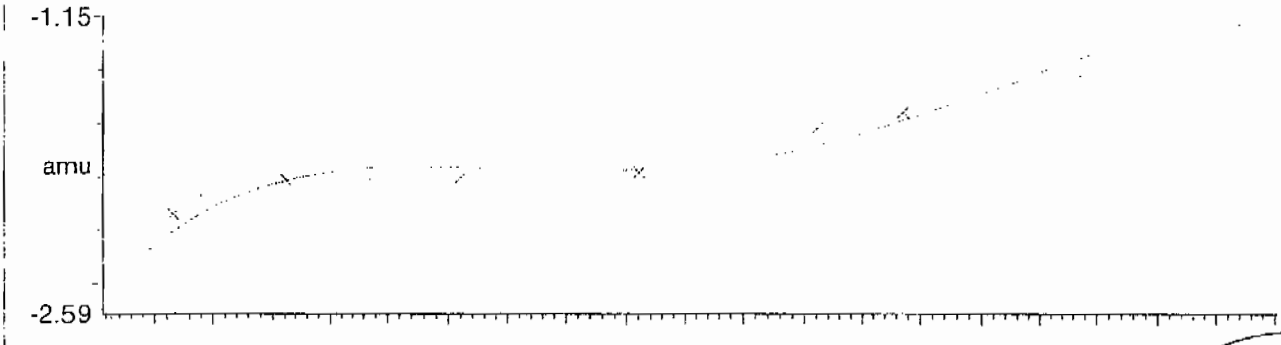
15 matches of 15 tested references



Reference file: Naics2



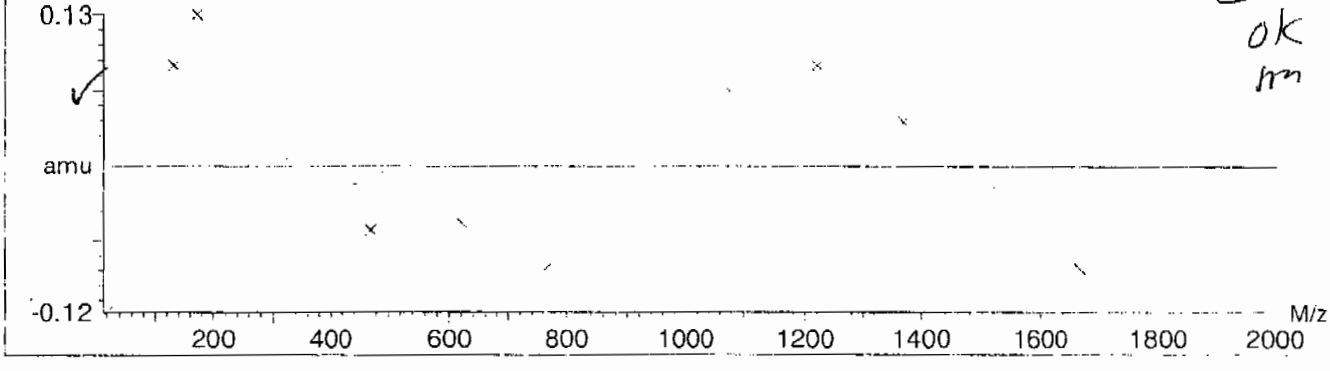
Mass difference (Raw - Ref mass)



Residuals

Mean residual = -5.432715e-9 ± 0.069858

ok
mm

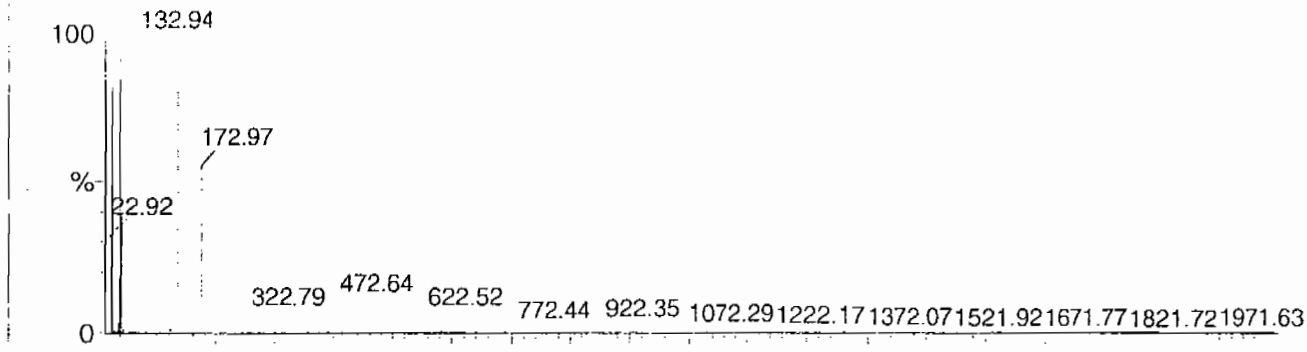


Calibration Report - MS1 Scan Speed Compensation

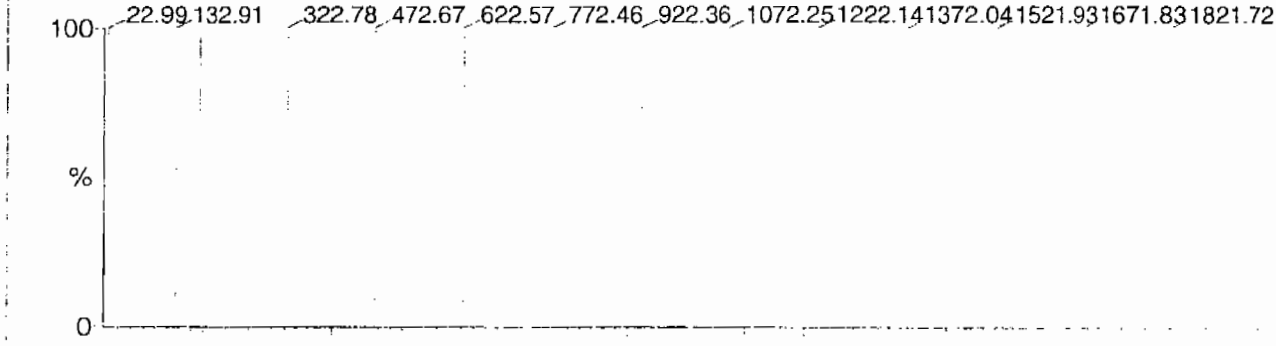
Printed: Fri Aug 25 10:52:01 2006

Data file: FASTMS1 - Calibrated

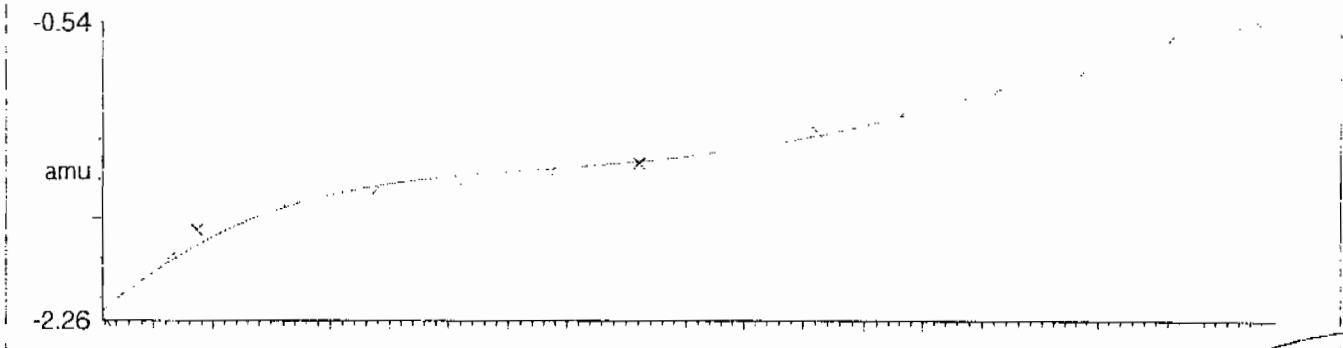
15 matches of 15 tested references



Reference file: Naics2

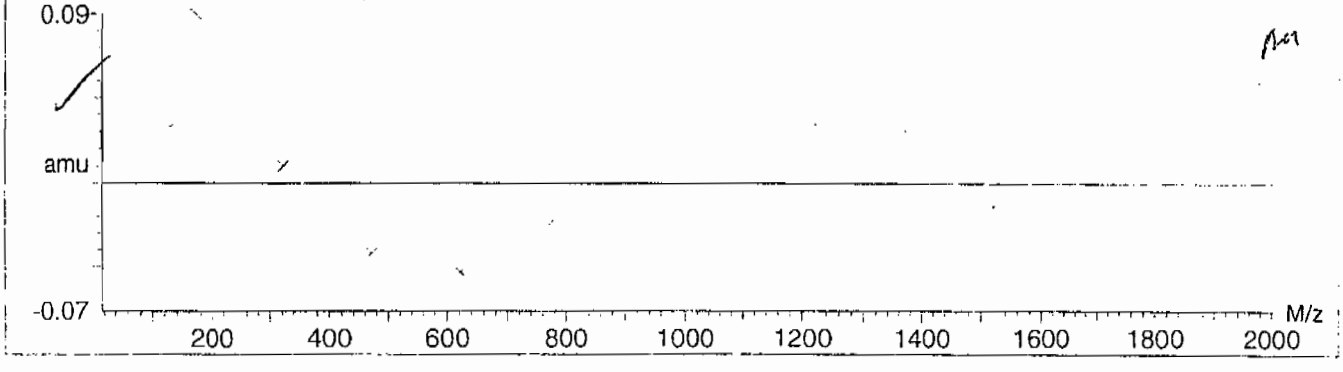


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 3.486639e-9 ± 0.040487

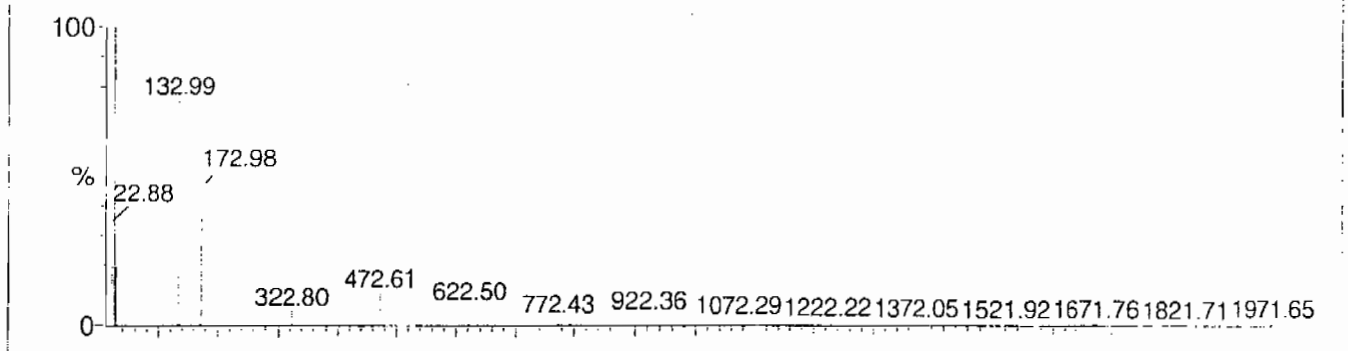


Calibration Report - MS2 Static

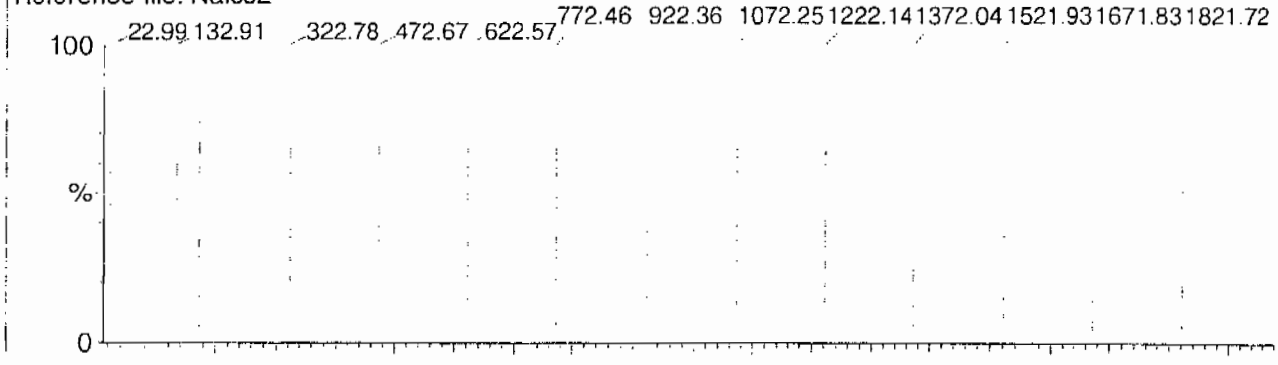
Printed: Fri Aug 25 10:52:54 2006

Data file: STATMS2 - Calibrated

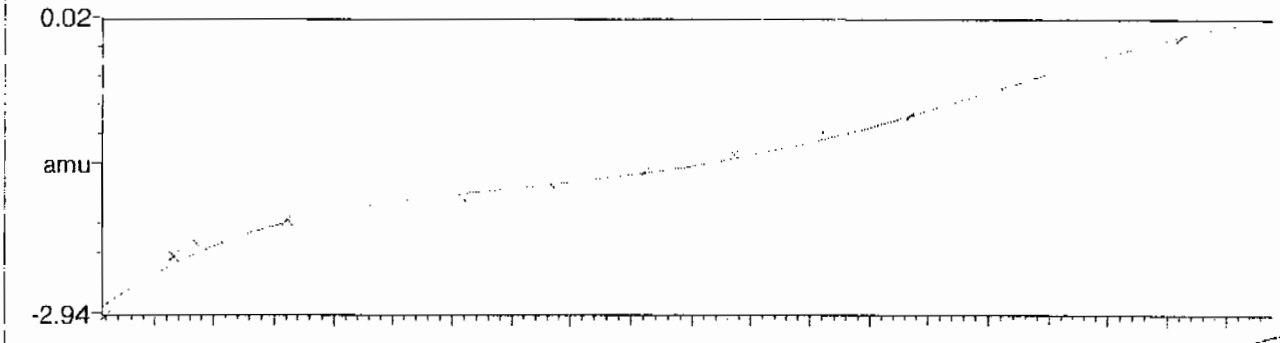
15 matches of 15 tested references



Reference file: Naics2

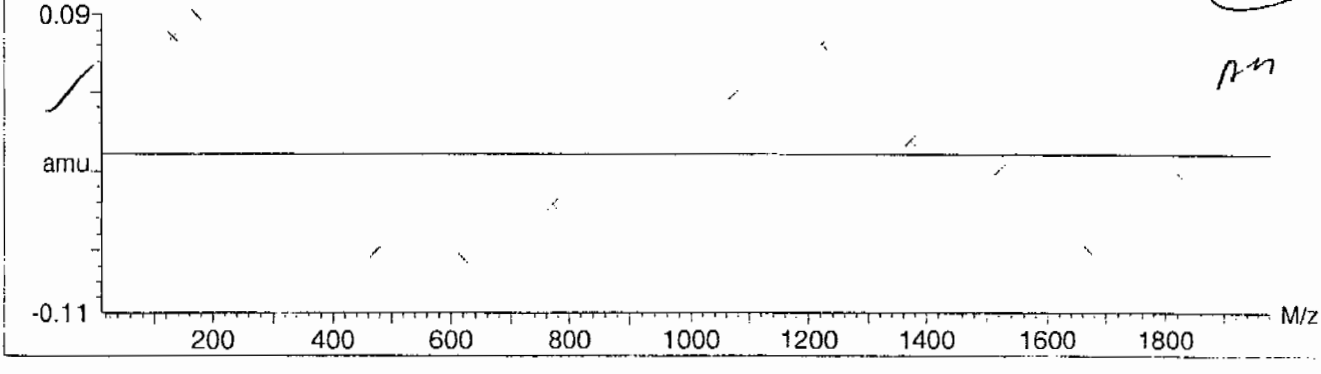


Mass difference (Raw - Ref mass)



Residuals

Mean residual = 2.048910e-9 ± 0.057803

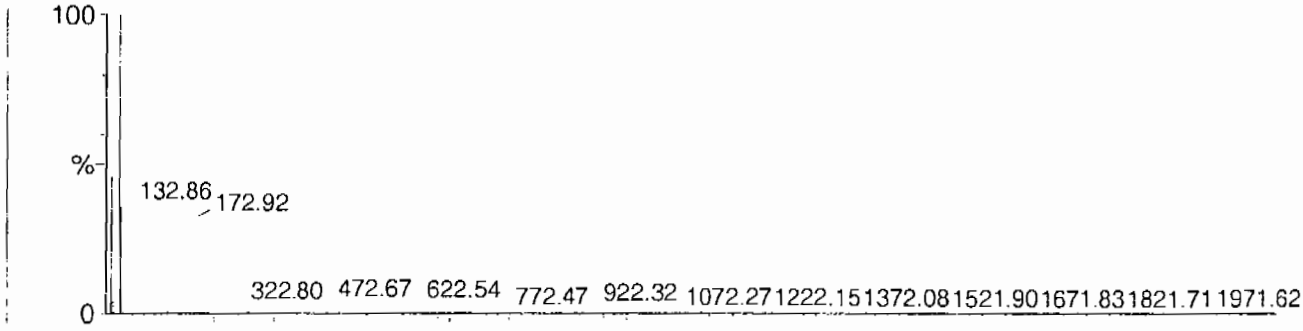


Calibration Report - MS2 Scanning

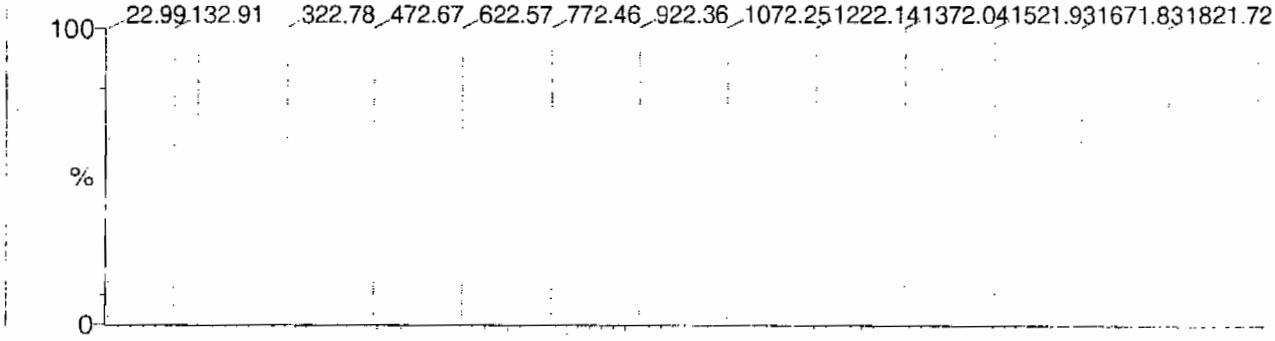
Printed: Fri Aug 25 10:54:00 2006

Data file: SCNMS2 - Calibrated

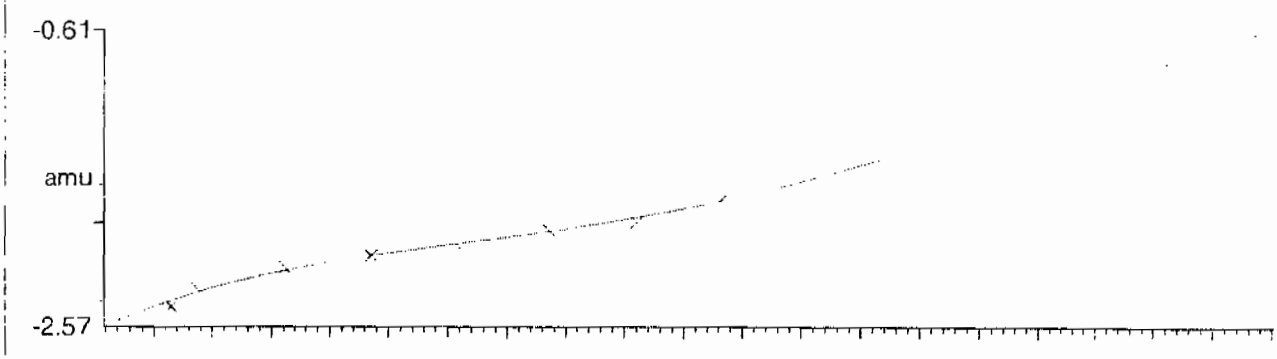
14 matches of 15 tested references



Reference file: Naics2

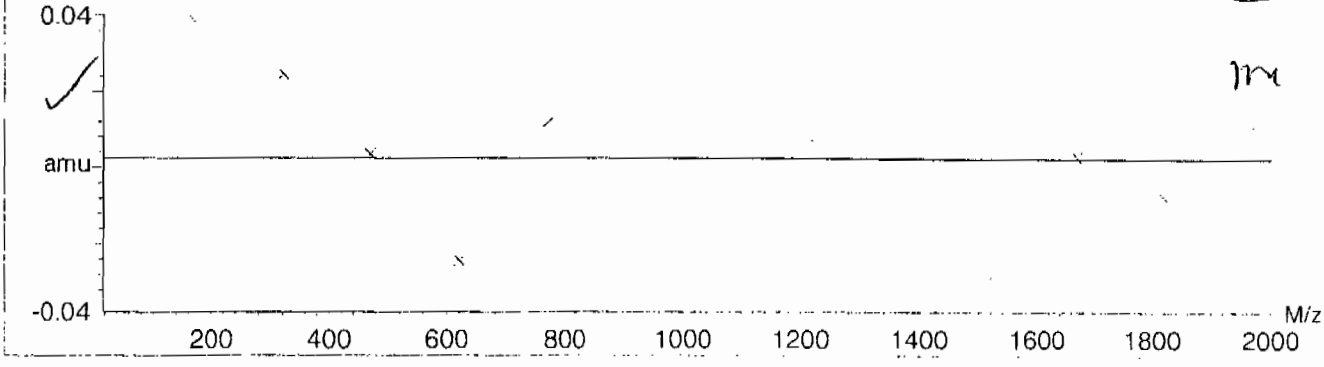


Mass difference (Raw - Ref mass)



Residuals

Mean residual = -2.623502e-9 ± 0.025622

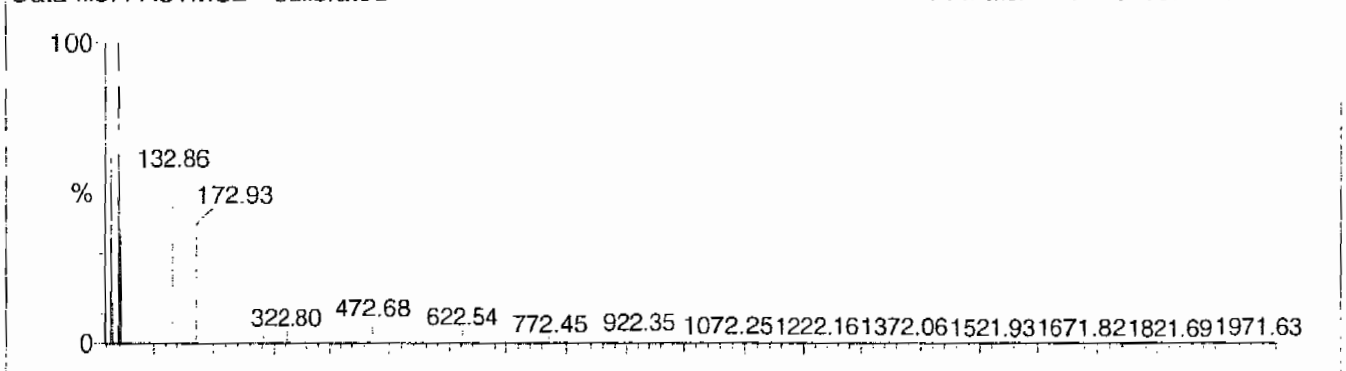


Calibration Report - MS2 Scan Speed Compensation

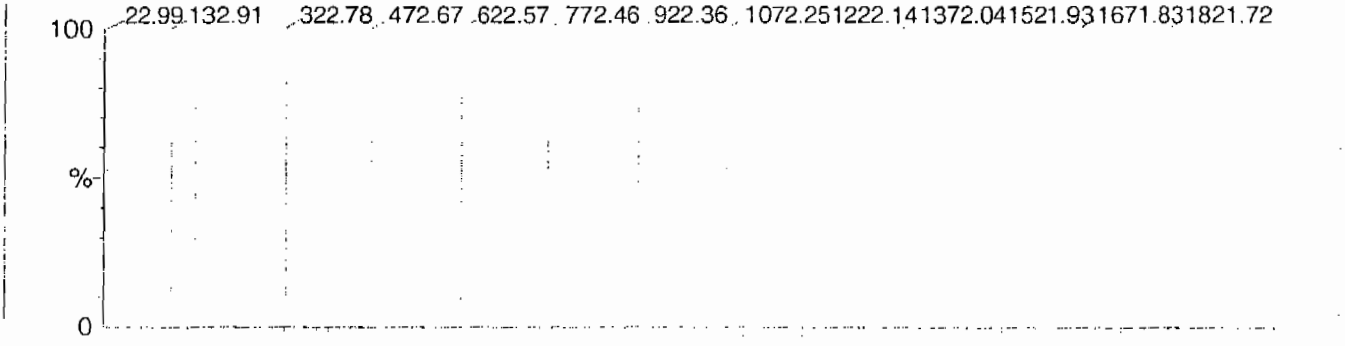
Printed: Fri Aug 25 10:54:54 2006

Data file: FASTMS2 - Calibrated

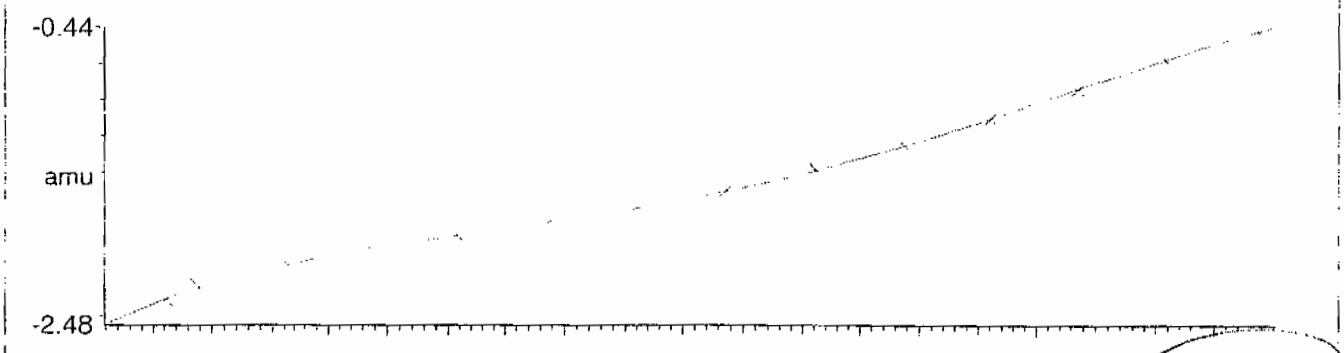
14 matches of 15 tested references



Reference file: Naics2



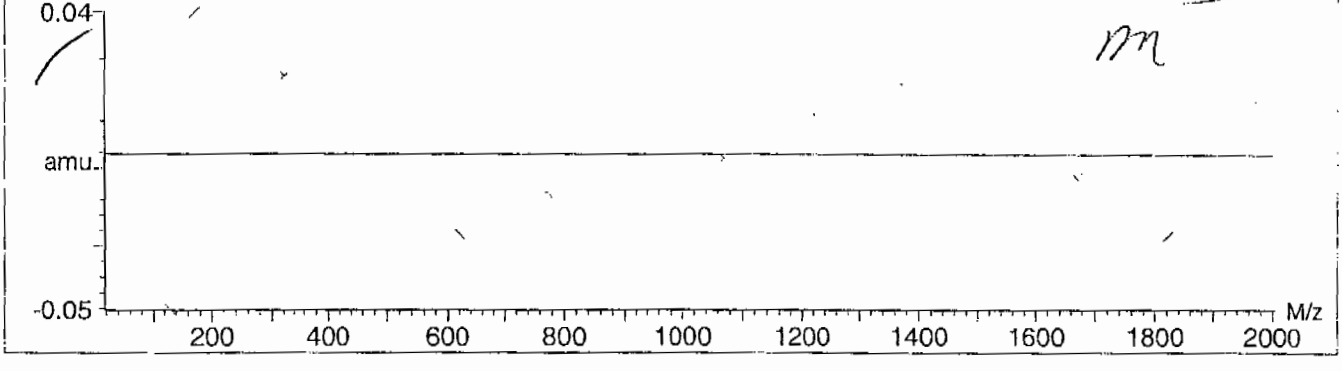
Mass difference (Raw - Ref mass)



Residuals

Mean residual = -6.785350e-9 ± 0.023134

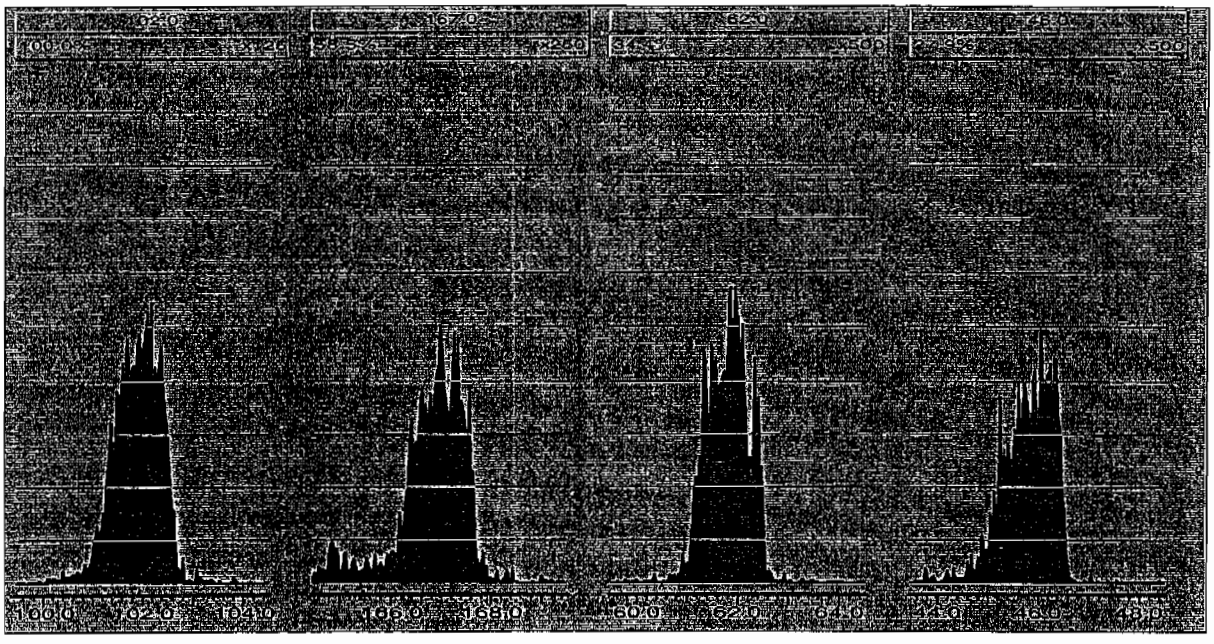
m



Quattro Micro Tune Parameters

Parameter File: C:\MASSLYNX\NEW_EXP.PRO\ACQUDB\explosives04.IPR

Printed : Fri Mar 26 14:42:16 2010



8

High Explosives Internal Standard Summary

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1861

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) #
			6117.39	12.04	36710.15	17.586
Upper Limit			7952.607	12.54	47723.195	18.086
Lower Limit			4282.173	11.54	25697.105	17.086
MB for batch 954282	27-mar-10 21:12	EXP0326063a	5387.97	12.033	31786.1	17.577
LCS for batch 954282	27-mar-10 21:41	EXP0326064a	5980.45	12.035	34038.7	17.553
RE15-10-7904	28-mar-10 00:38	EXP0326070a	7482.09	12.038	38340.5	17.552
RE15-10-7903	28-mar-10 01:08	EXP0326071a	5177.28	12.033	32393.6	17.576
RE15-10-7994	28-mar-10 01:37	EXP0326072a	5631.77	12.031	39143.8	17.566
RE15-10-7997	28-mar-10 03:35	EXP0326076a	5722.92	12.039	37541.2	17.553
RE15-10-7998	28-mar-10 04:05	EXP0326077a	5954.07	12.037	34148.7	17.573
RE15-10-8000	28-mar-10 04:34	EXP0326078a	5005.66	12.033	30392	17.555
RE15-10-7999	28-mar-10 05:04	EXP0326079a	6100.55	12.033	37031.1	17.554
RE15-10-7995	28-mar-10 05:33	EXP0326080a	5785.63	12.033	35581.8	17.555
RE15-10-7996	28-mar-10 06:03	EXP0326081a	4998.08	12.04	31702.6	17.554
RE15-10-7993	28-mar-10 06:32	EXP0326082a	5401.97	12.039	32760.7	17.553
RE15-10-8064	28-mar-10 07:02	EXP0326083a	5883.92	12.03	33961	17.566

IS1 (DNB) = 1,3-Dinitrobenzene-d4
IS2 (DNT) = 2,6-Dinitrotoluene-d3

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: RE15-10-7904

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178001

Sample Amount 2

Moisture: 10.5

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326070a

Date Analyzed: 28-MAR-10 00:38

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

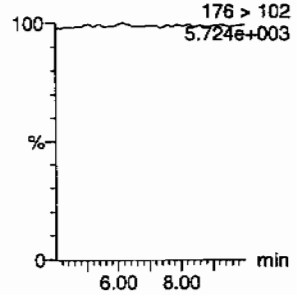
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

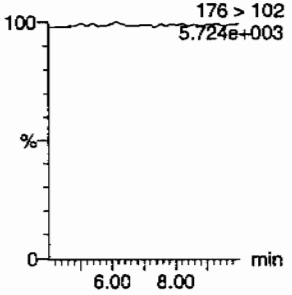
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326070a
Date: 28-Mar-2010
Time: 00:38:55
ID: 247178001 | LANL | 954321 | SOLID | 21
Vial: 1:7,B

MMT 3/29/10

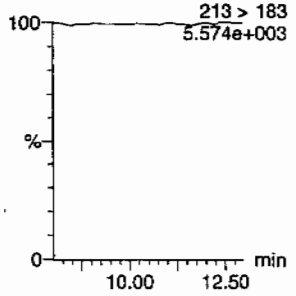
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.724e+003



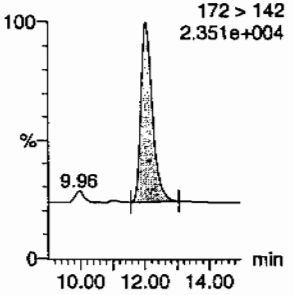
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.724e+003



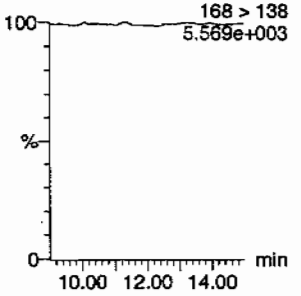
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.574e+003



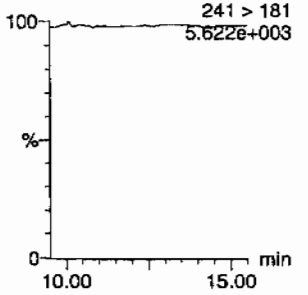
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.351e+004



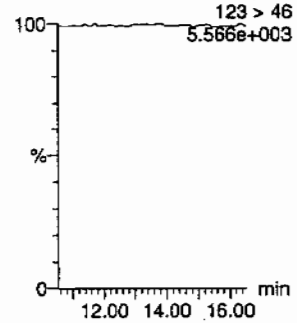
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.569e+003



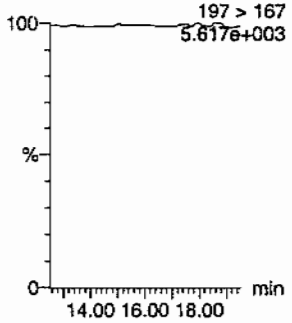
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.622e+003



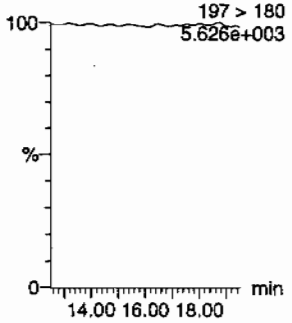
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.566e+003



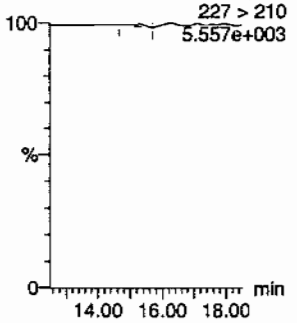
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.617e+003



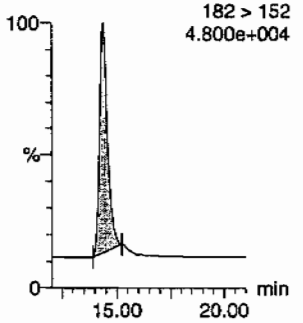
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.626e+003



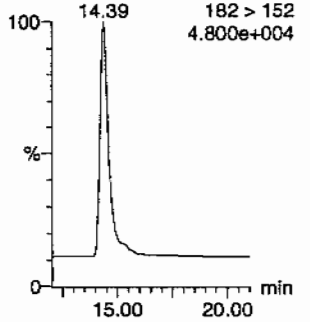
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.557e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.800e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39
182 > 152
4.800e+004



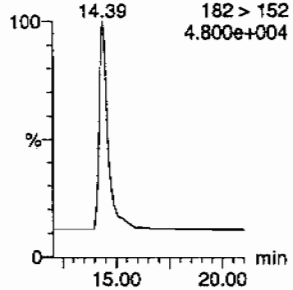
thm 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

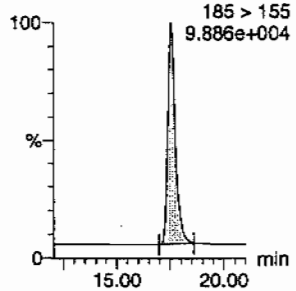
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

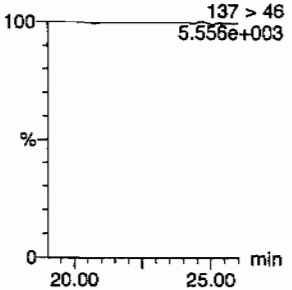
24-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39 182 > 152
4.800e+004



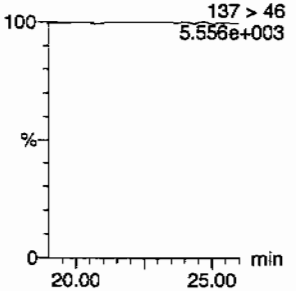
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
9.886e+004



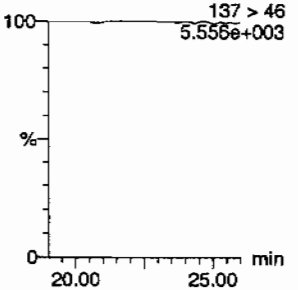
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.556e+003



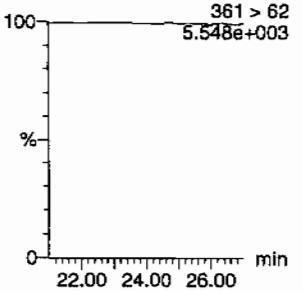
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.556e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.556e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.548e+003



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
247178001	HMX	176 > 102			7482.085									
247178001	RDX	176 > 102			7482.085									
247178001	135-Trinitrobenzene	213 > 183			7482.085									
247178001	13-Dinitrobenzene-d4	172 > 142	12.04	7482.085		7482.085	7482.085	bb			611.5422	122.3	22.3	877.6
247178001	13-Dinitrobenzene	168 > 138			7482.085									
247178001	Tetryl	241 > 181			7482.085									
247178001	Nitrobenzene	123 > 46			7482.085									
247178001	4-Amino-26-dinitrotoluene	197 > 167			38340.473									
247178001	2-Amino-46-dinitrotoluene	197 > 180			38340.473									
247178001	246-Trinitrotoluene	227 > 210			38340.473			MM-	28-Mar-10	12:34:04				
247178001	34-dinitrotoluene	182 > 152	14.39	17664.779	38340.473	17664.779	230.367	bb			218.0063	87.2	-12.8	799.9
247178001	26-dinitrotoluene	182 > 152			38340.473									
247178001	24-dinitrotoluene	182 > 152			38340.473									
247178001	26-dinitrotoluene-d3	185 > 155	17.55	38340.473		38340.473	38340.473	bb			522.2053	104.4	4.4	3397.0
247178001	2-Nitrotoluene	137 > 46			38340.473									
247178001	4-Nitrotoluene	137 > 46			38340.473									
247178001	3-Nitrotoluene	137 > 46			38340.473									
247178001	PETN	361 > 62			38340.473									

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: RE15-10-7904

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178001

Sample Amount 2

Moisture: 10.5

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050021.wiff

Date Analyzed: 05-MAR-10 22:21

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

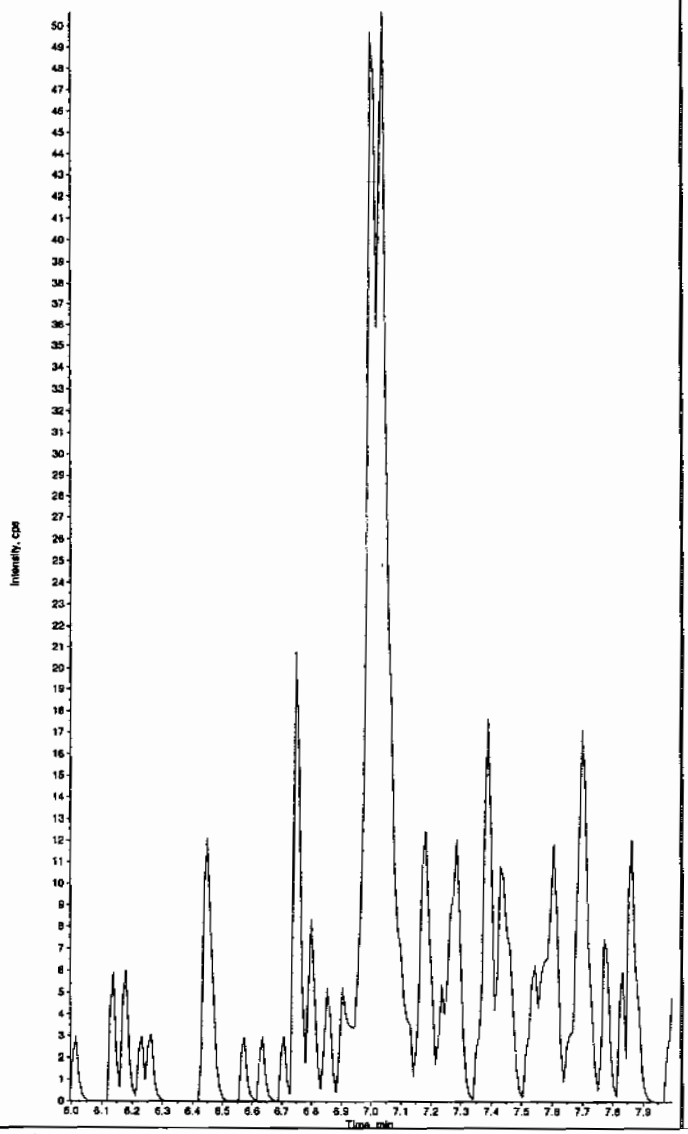
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Scan 3/9/10

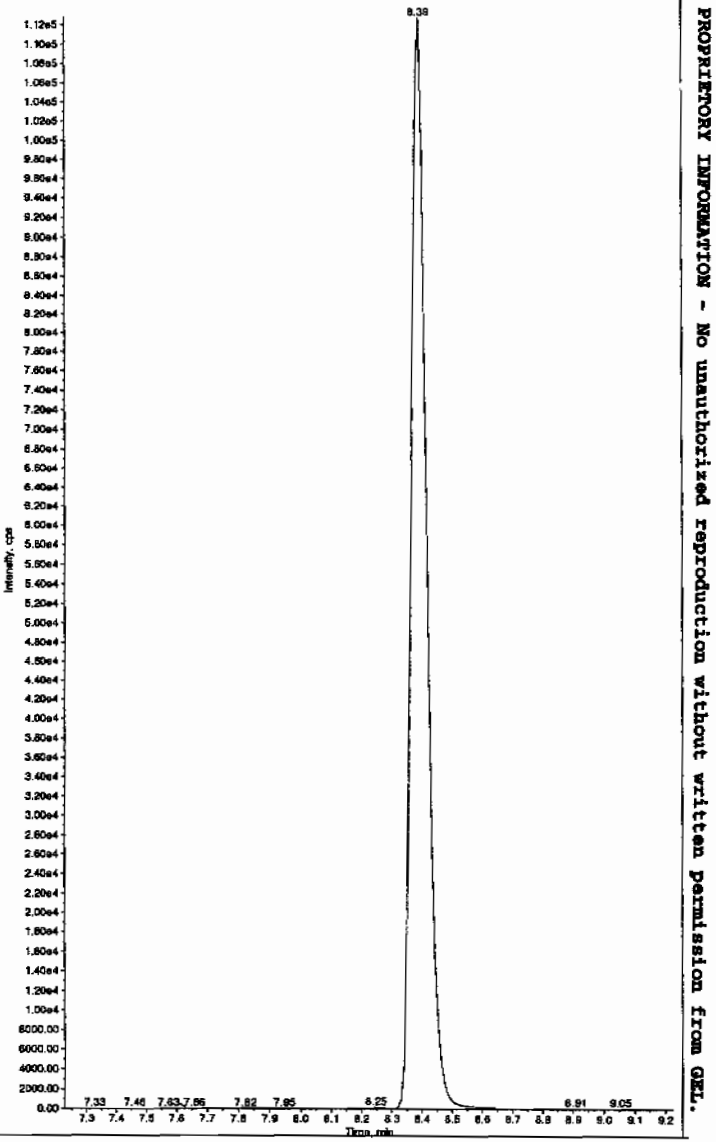
Sample Name: "247178001" Sample ID: "954321|2|LER" File: "EXS03050021.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:21:39 PM

Modified: No



Sample Name: "247178001" Sample ID: "954321|2|LER" File: "EXS03050021.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:21:39 PM

Modified: No



HMW 03/09/10

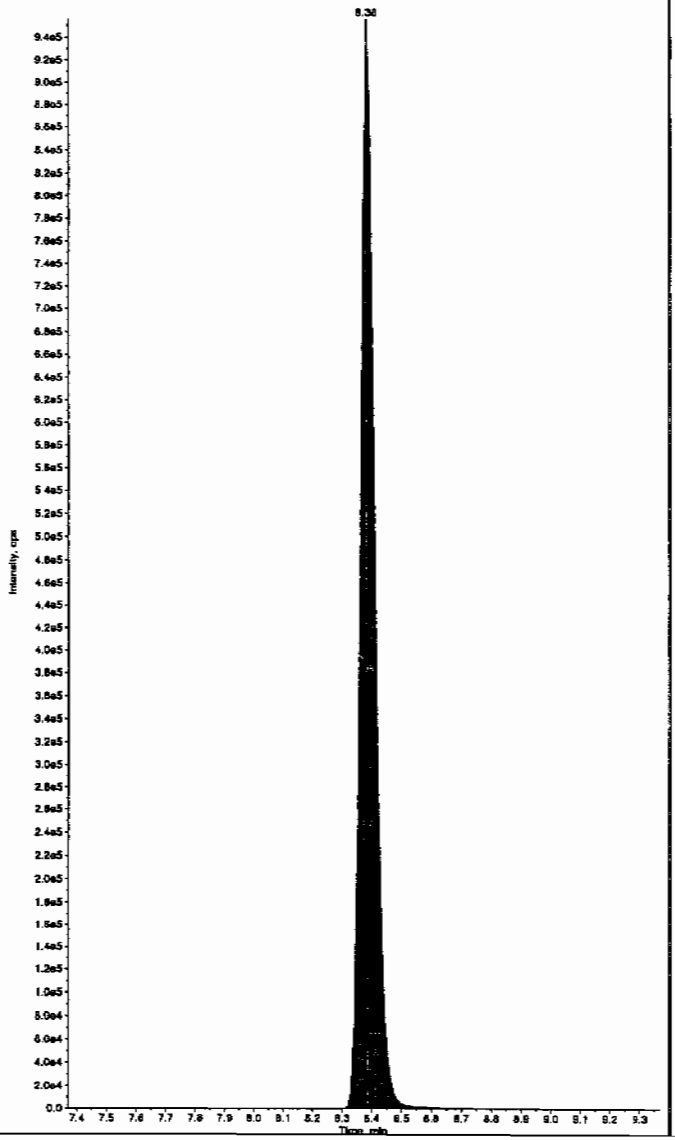
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178001" Sample ID: "954321[2]LER" File: "EXS03050021.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 262. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:21:39 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

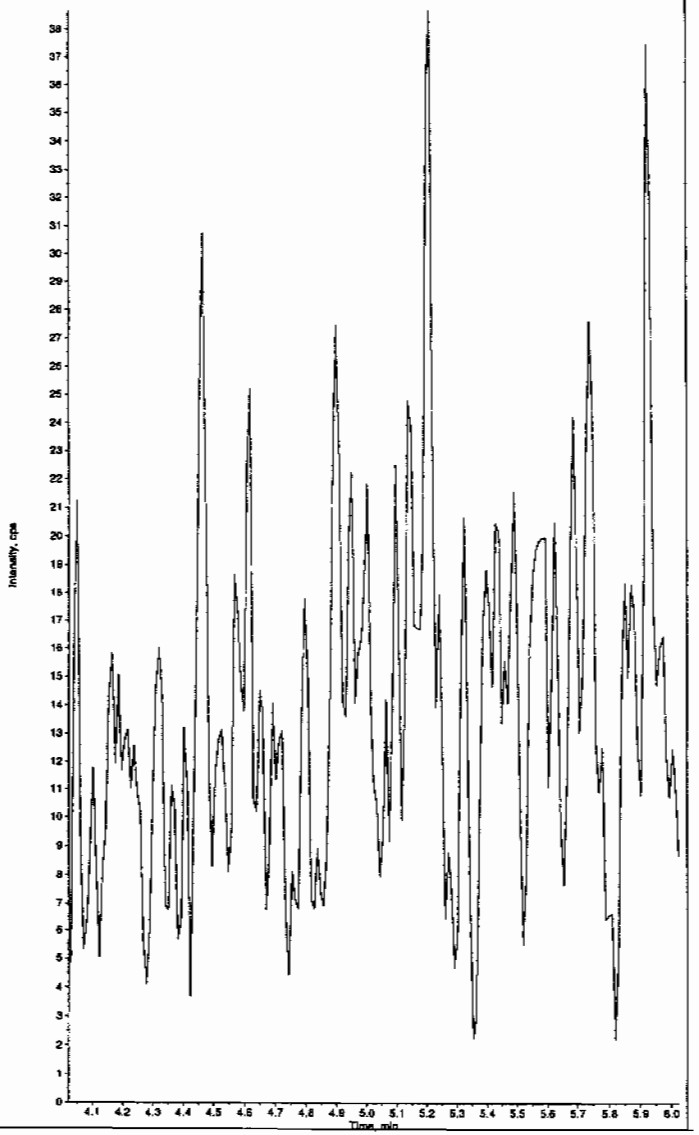
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.26e+006 counts
Height: 956243.408 cps
Start Time: 8.29 min
End Time: 8.75 min



Sample Name: "247178001" Sample ID: "954321[2]LER" File: "EXS03050021.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/5/2010
Acq. Time: 10:21:39 PM

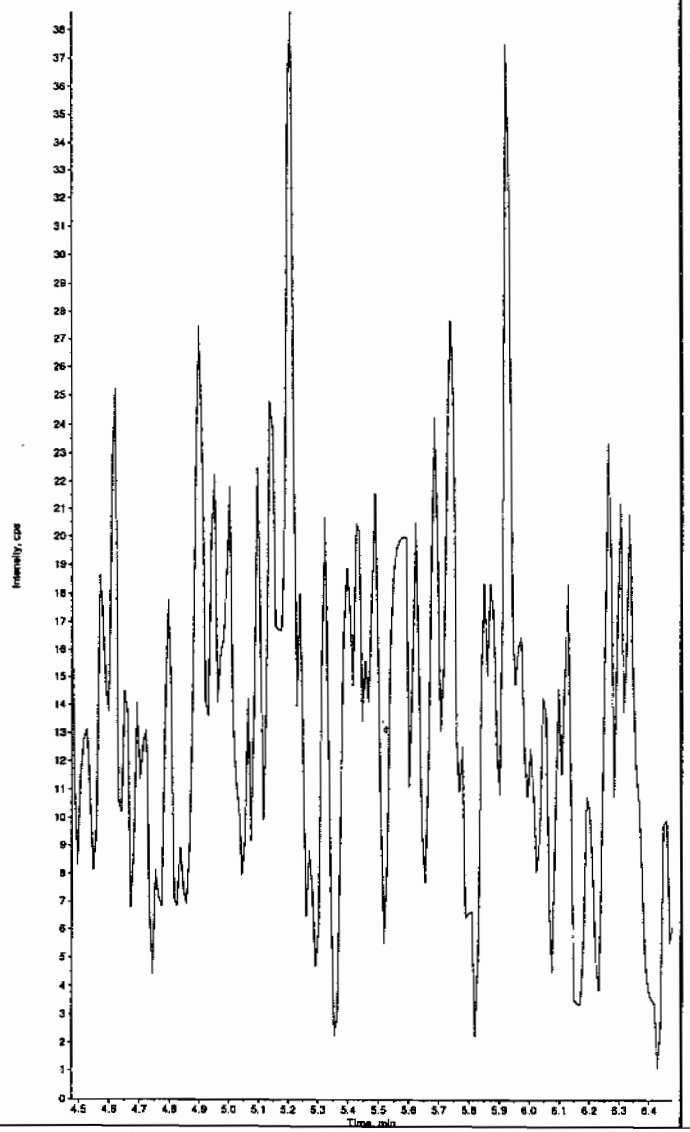
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

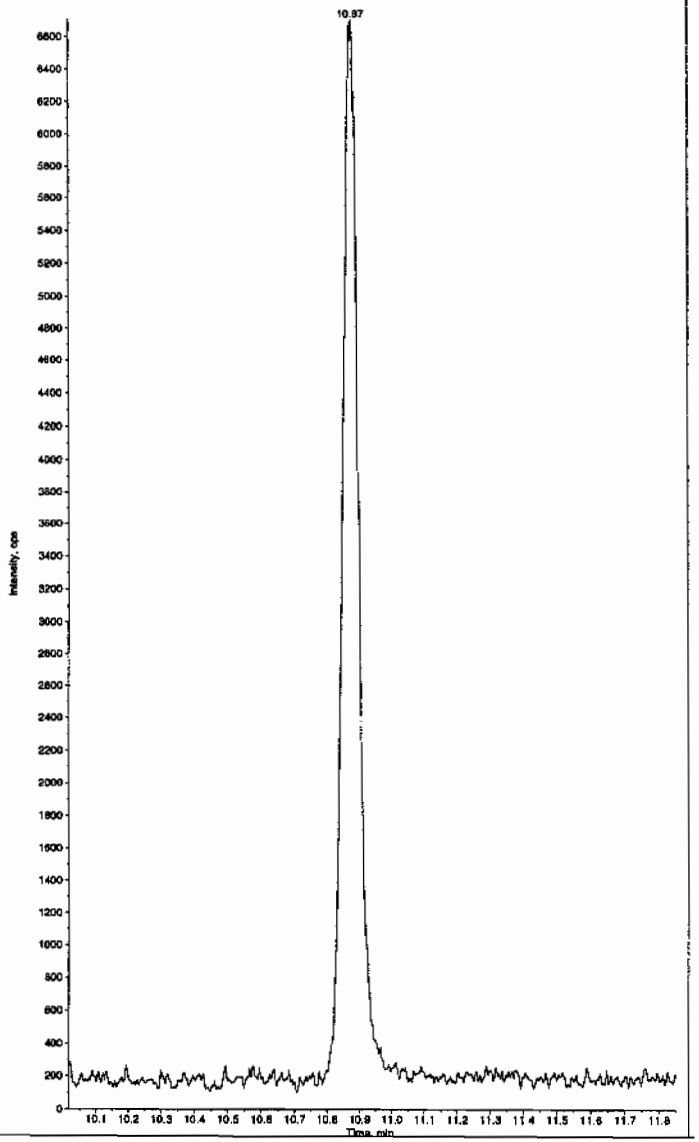
Sample Name: "247178001" Sample ID: "954321|2|LER" File: "EXS03050021.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:21:39 PM

Modified: No



Sample Name: "247178001" Sample ID: "954321|2|LER" File: "EXS03050021.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:21:39 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: RE15-10-7903

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178002

Sample Amount 2

Moisture: 19.4

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326071a

Date Analyzed: 28-MAR-10 01:08

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

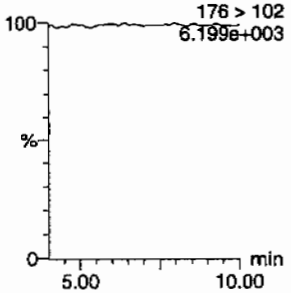
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

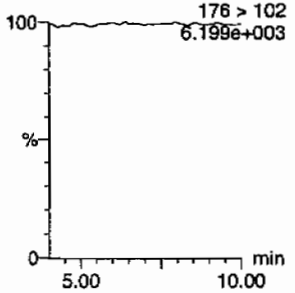
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326071a
Date: 28-Mar-2010
Time: 01:08:26
ID: 247178002 | LANL | 954321 | SOLID | 2 |
Vial: 1:7,C

MM 3/29/10

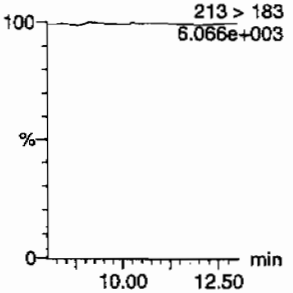
HMX
F2:MRM of 1 channel,AP-
176 > 102
6.199e+003



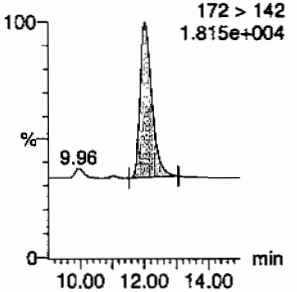
RDX
F2:MRM of 1 channel,AP-
176 > 102
6.199e+003



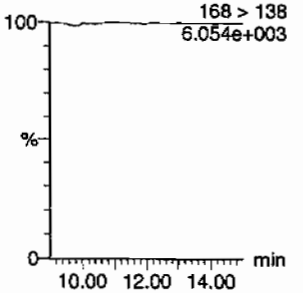
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
6.066e+003



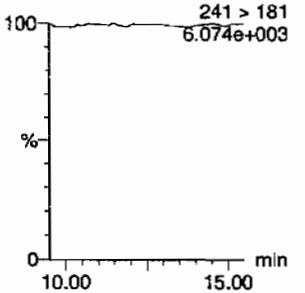
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.815e+004



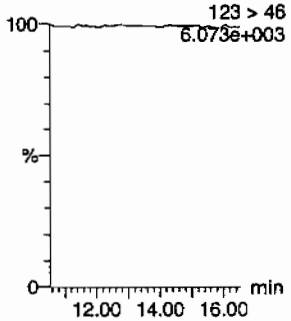
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
6.054e+003



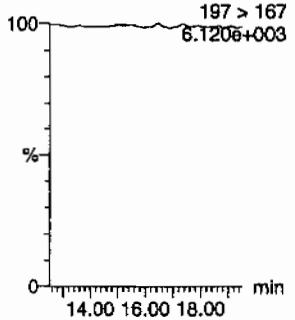
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
6.074e+003



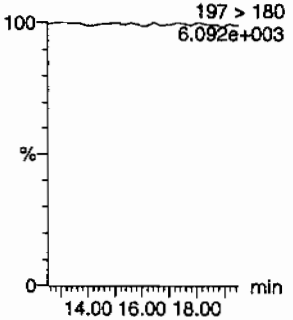
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.073e+003



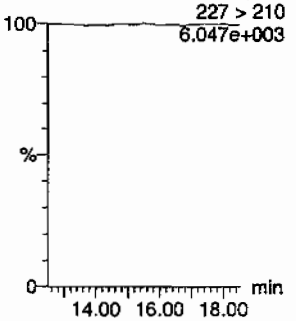
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
6.120e+003



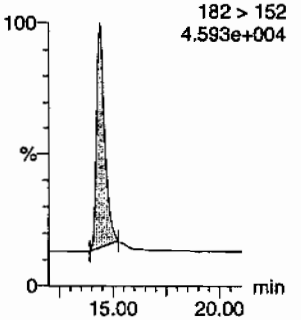
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.092e+003



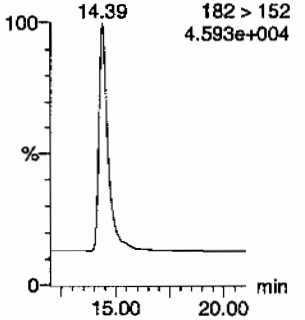
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
6.047e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.593e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39
182 > 152
4.593e+004



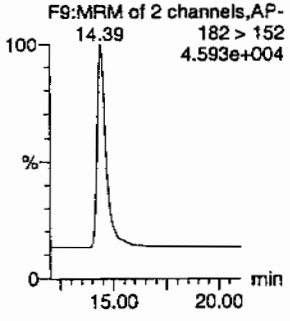
HMW 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

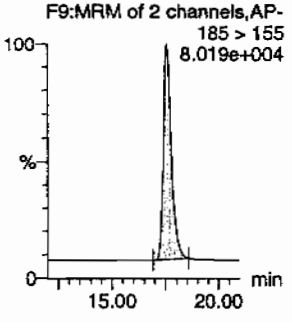
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

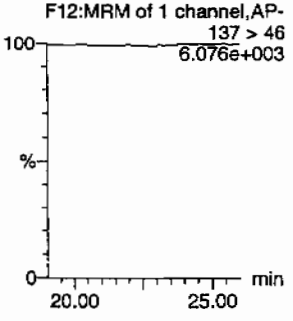
24-dinitrotoluene



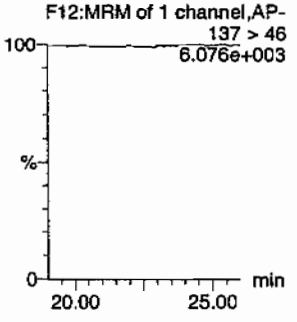
26-dinitrotoluene-d3



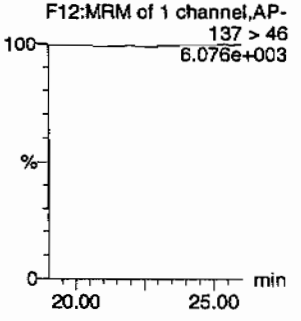
2-Nitrotoluene



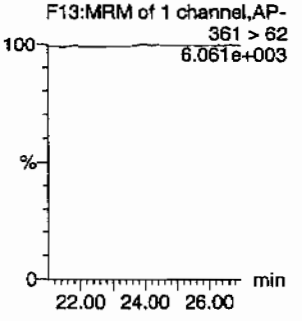
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
247178002	HMX	176 > 102			5177.285									
247178002	RDX	176 > 102			5177.285									
247178002	135-Trinitrobenzene	213 > 183			5177.285									
247178002	13-Dinitrobenzene-d4	172 > 142	12.03	5177.285		5177.285	5177.285	bb			423.1613	84.6	-15.4	600.2
247178002	13-Dinitrobenzene	168 > 138			5177.285									
247178002	Tetryl	241 > 181			5177.285									
247178002	Nitrobenzene	123 > 46			5177.285									
247178002	4-Amino-26-dinitrotoluene	197 > 167			32393.619									
247178002	2-Amino-46-dinitrotoluene	197 > 180			32393.619									
247178002	246-Trinitrotoluene	227 > 210			32393.619									
247178002	34-dinitrotoluene	182 > 152	14.39	17299.480	32393.619	17299.480	267.020	bb			252.6923	101.1	1.1	616.4
247178002	26-dinitrotoluene	182 > 152			32393.619									
247178002	24-dinitrotoluene	182 > 152			32393.619									
247178002	26-dinitrotoluene-d3	185 > 155	17.58	32393.619		32393.619	32393.619	bb			441.2079	88.2	-11.8	3140.2
247178002	2-Nitrotoluene	137 > 46			32393.619									
247178002	4-Nitrotoluene	137 > 46			32393.619									
247178002	3-Nitrotoluene	137 > 46			32393.619									
247178002	PETN	361 > 62			32393.619									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7903

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178002

Sample Amount 2

Moisture: 19.4

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050022.wiff

Date Analyzed: 05-MAR-10 22:37

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

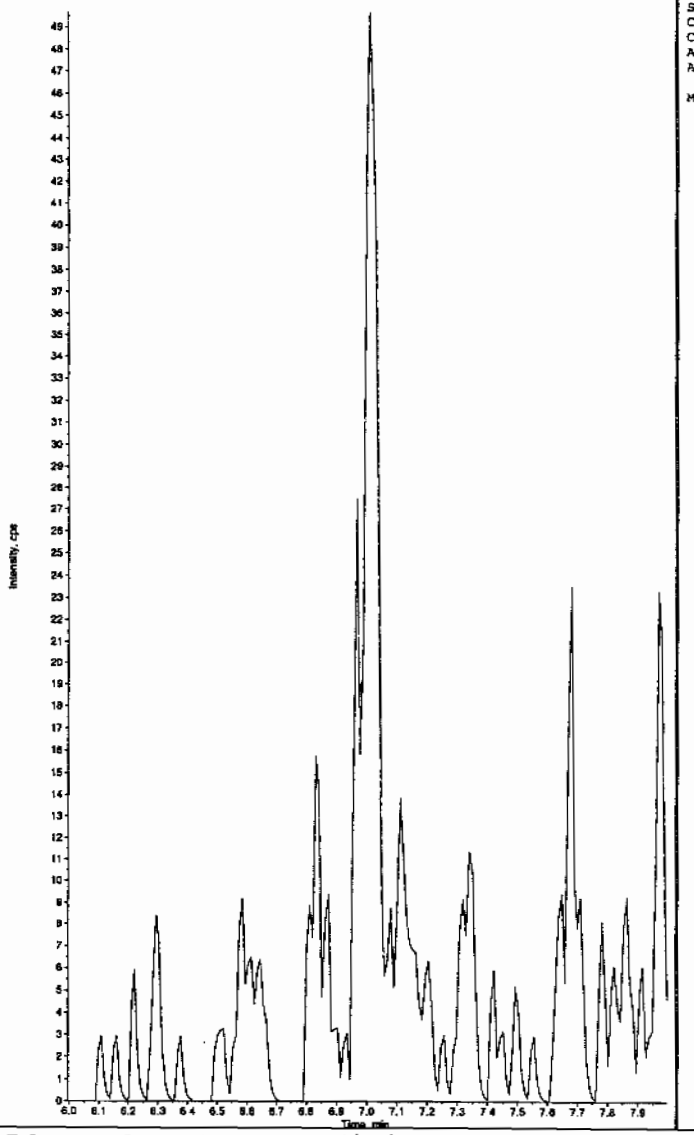
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 3/9/10

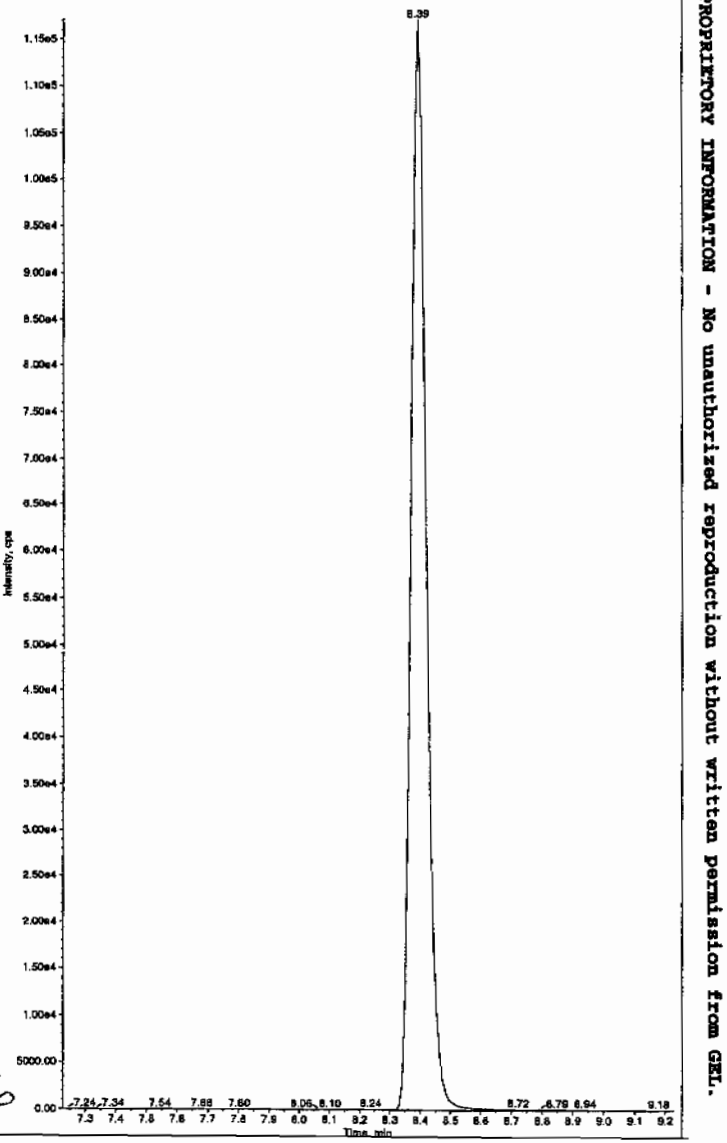
Sample Name: "247178002" Sample ID: "954321|2|LER" File: "EXS03050022.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX63212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:37:21 PM

Modified: No



Sample Name: "247178002" Sample ID: "954321|2|LER" File: "EXS03050022.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX63212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:37:21 PM

Modified: No



Hmm 03/09/10

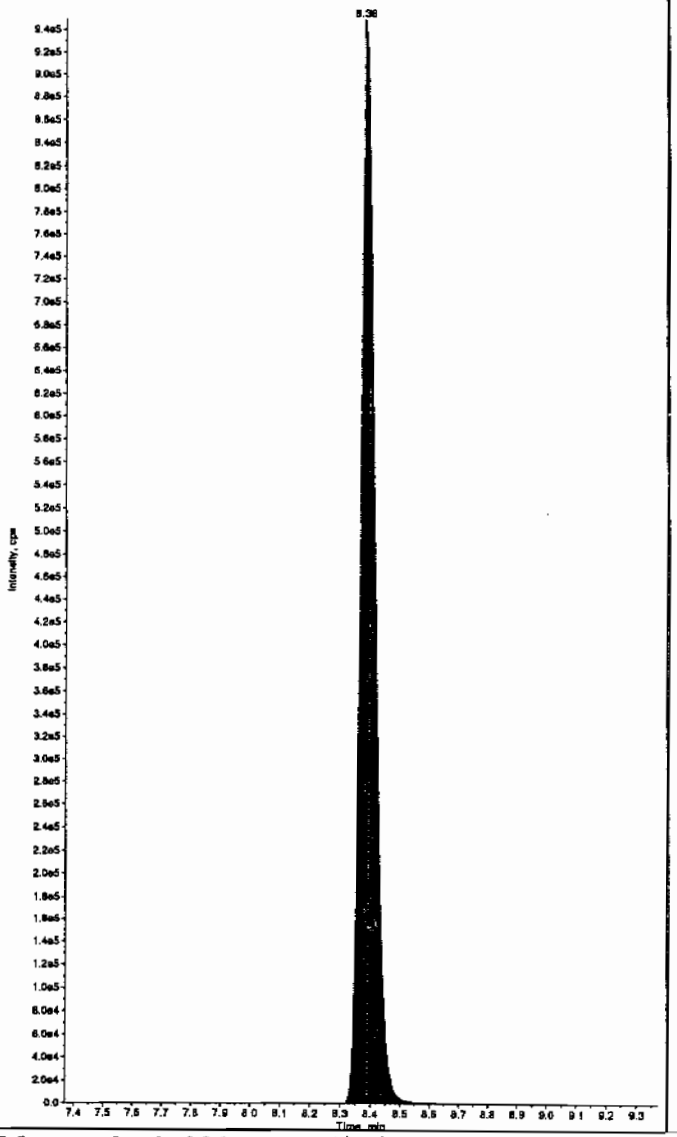
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178002" Sample ID: "954321|2|LER" File: "EXS03050022.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 260. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:37:21 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

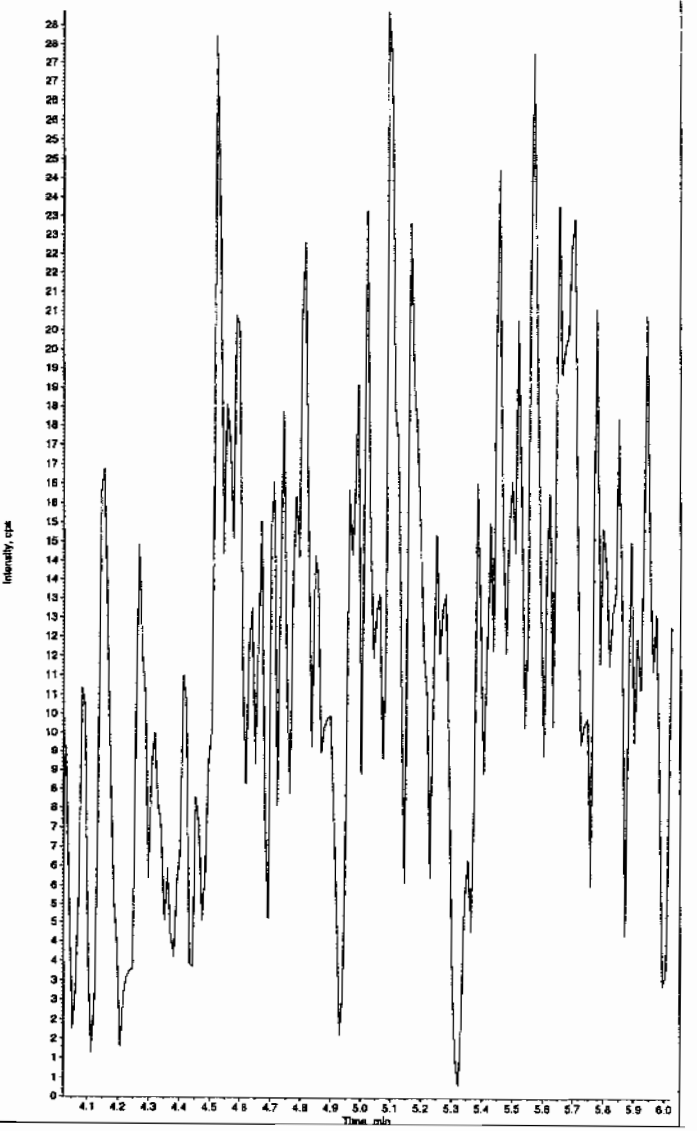
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.24e+006 counts
Height: 949526.306 cps
Start Time: 8.25 min
End Time: 8.76 min



Sample Name: "247178002" Sample ID: "954321|2|LER" File: "EXS03050022.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/5/2010
Acq. Time: 10:37:21 PM

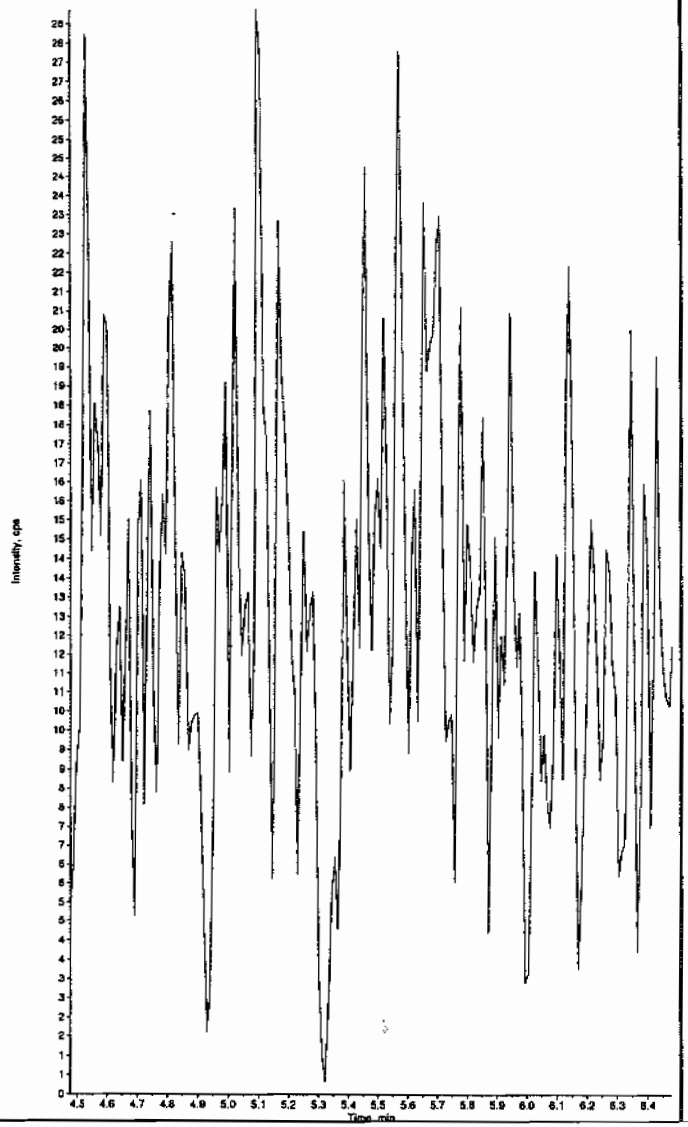
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

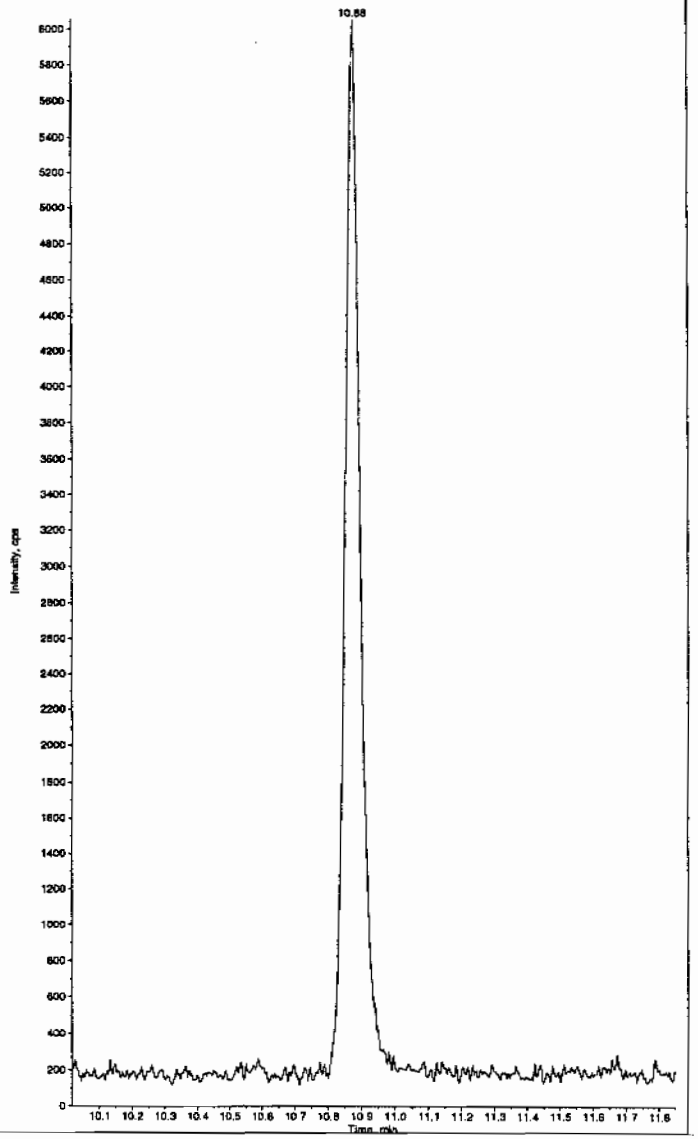
Sample Name: "247178002" Sample ID: "954321|2|LER" File: "EXS03050022.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:37:21 PM

Modified: No



Sample Name: "247178002" Sample ID: "954321|2|LER" File: "EXS03050022.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:37:21 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: RE15-10-7994

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178003

Sample Amount 2

Moisture: 11.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326072a

Date Analyzed: 28-MAR-10 01:37

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

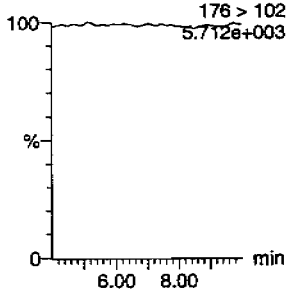
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326072a
Date: 28-Mar-2010
Time: 01:37:56
ID: 247178003
Vial: 1:7,D

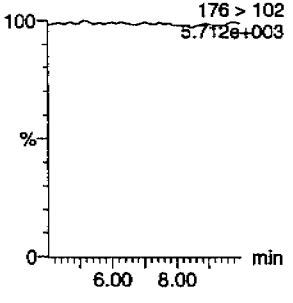
LANU | 93421 | Solid | 21

MM 3/29/10

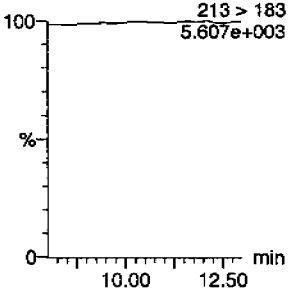
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.712e+003



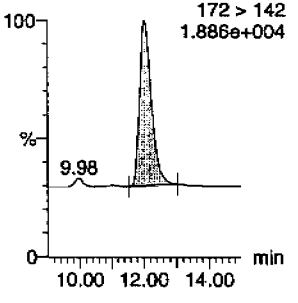
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.712e+003



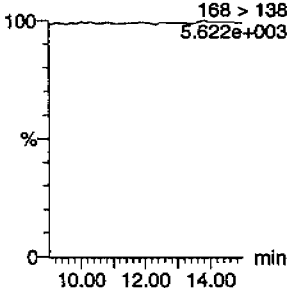
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.607e+003



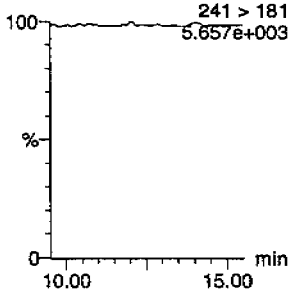
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.886e+004



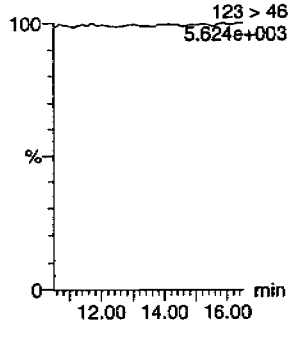
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.622e+003



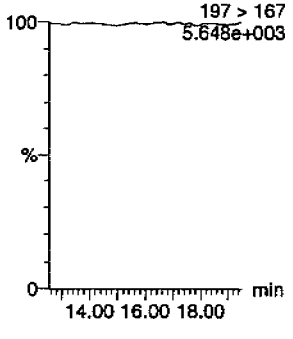
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.657e+003



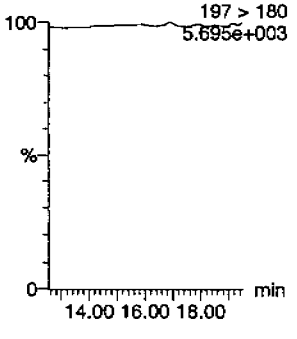
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.624e+003



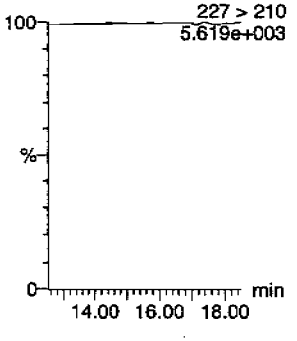
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.648e+003



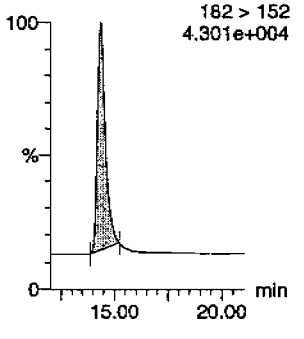
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.695e+003



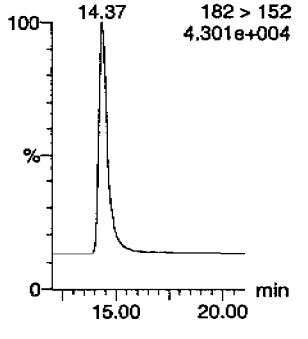
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.619e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.301e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.37
182 > 152
4.301e+004

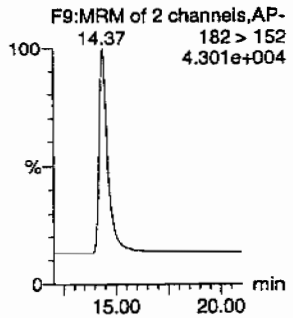


MM 03/30/10

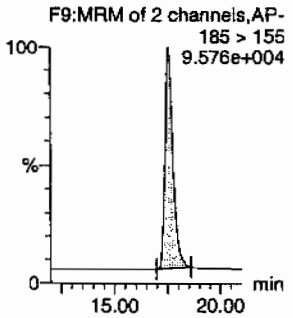
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

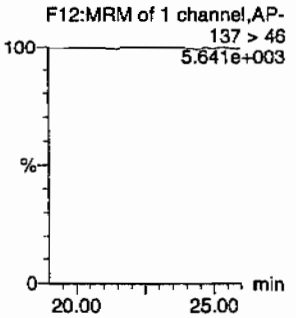
24-dinitrotoluene



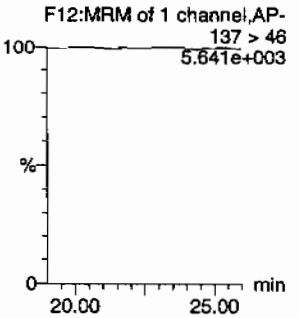
26-dinitrotoluene-d3



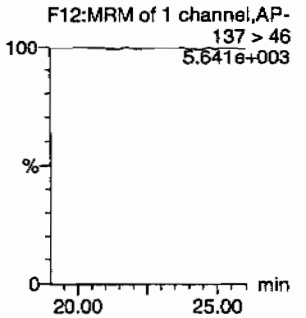
2-Nitrotoluene



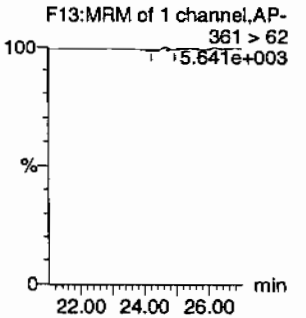
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
247178003	HMX	176 > 102			5631.766									
247178003	RDX	176 > 102			5631.766									
247178003	135-Trinitrobenzene	213 > 183			5631.766									
247178003	13-Dinitrobenzene-d4	172 > 142	12.03	5631.766		5631.766	5631.766	bb			460.3079	92.1	-7.9	533.5
247178003	13-Dinitrobenzene	168 > 138			5631.766									
247178003	Tetryl	241 > 181			5631.766									
247178003	Nitrobenzene	123 > 46			5631.766									
247178003	4-Amino-26-dinitrotoluene	197 > 167			39143.762									
247178003	2-Amino-46-dinitrotoluene	197 > 180			39143.762									
247178003	246-Trinitrotoluene	227 > 210			39143.762									
247178003	34-dinitrotoluene	182 > 152	14.37	16028.171	39143.762	16028.171	204.735	bb			193.7491	77.5	-22.5	624.7
247178003	26-dinitrotoluene	182 > 152			39143.762									
247178003	24-dinitrotoluene	182 > 152			39143.762									
247178003	26-dinitrotoluene-d3	185 > 155	17.57	39143.762		39143.762	39143.762	bb			533.1462	106.6	6.6	3020.2
247178003	2-Nitrotoluene	137 > 46			39143.762									
247178003	4-Nitrotoluene	137 > 46			39143.762									
247178003	3-Nitrotoluene	137 > 46			39143.762									
247178003	PETN	361 > 62			39143.762			MM-	28-Mar-10	12:32:19				

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: RE15-10-7994

Lab Code: GEI

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178003

Sample Amount 2

Moisture: 11.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050023.wiff

Date Analyzed: 05-MAR-10 22:53

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

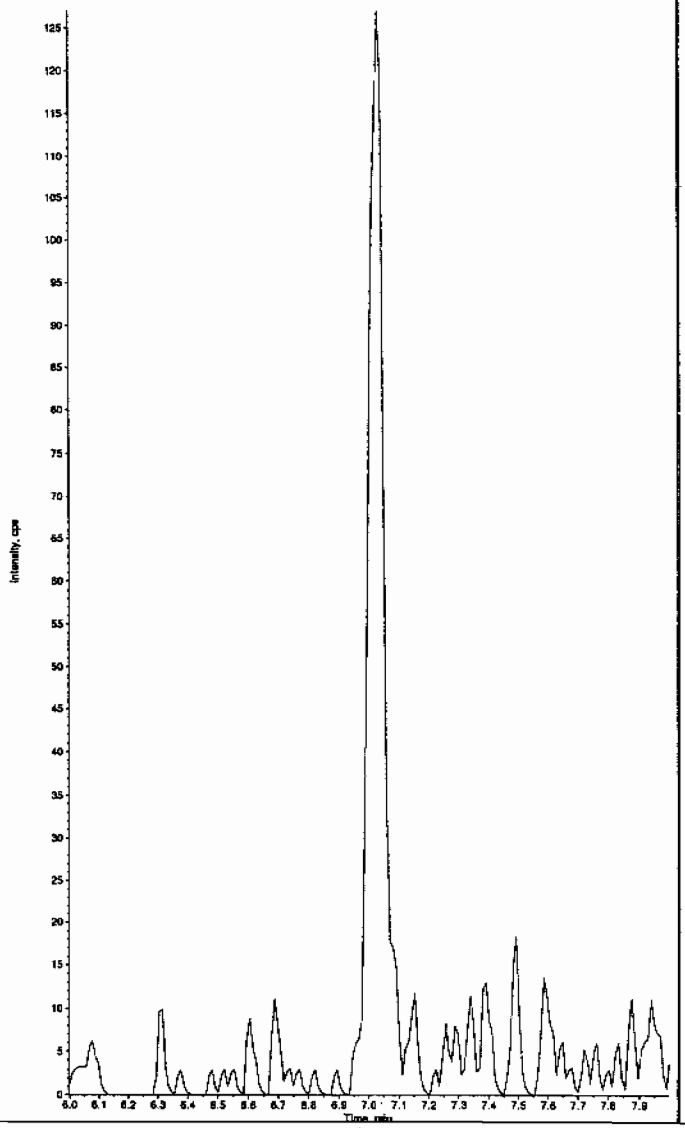
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Scan 3/9/10

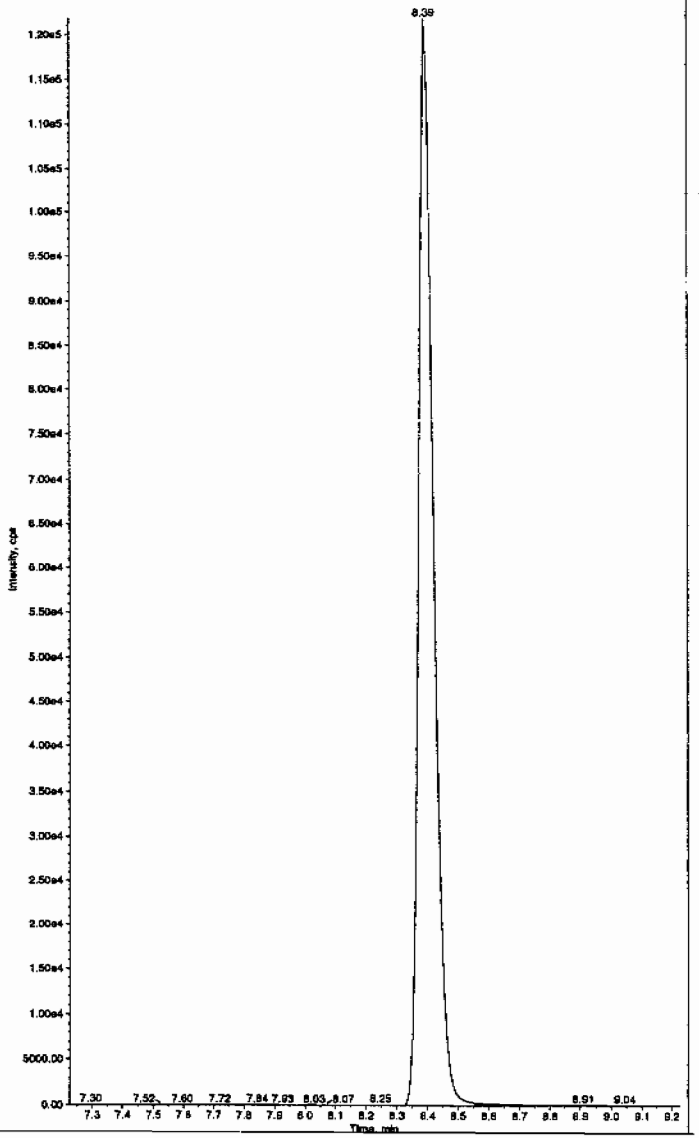
Sample Name: "247178003" Sample ID: "954321|2|LER" File: "EXS03050023.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:53:03 PM

Modified: No



Sample Name: "247178003" Sample ID: "954321|2|LER" File: "EXS03050023.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:53:03 PM

Modified: No



HMM 03/09/10

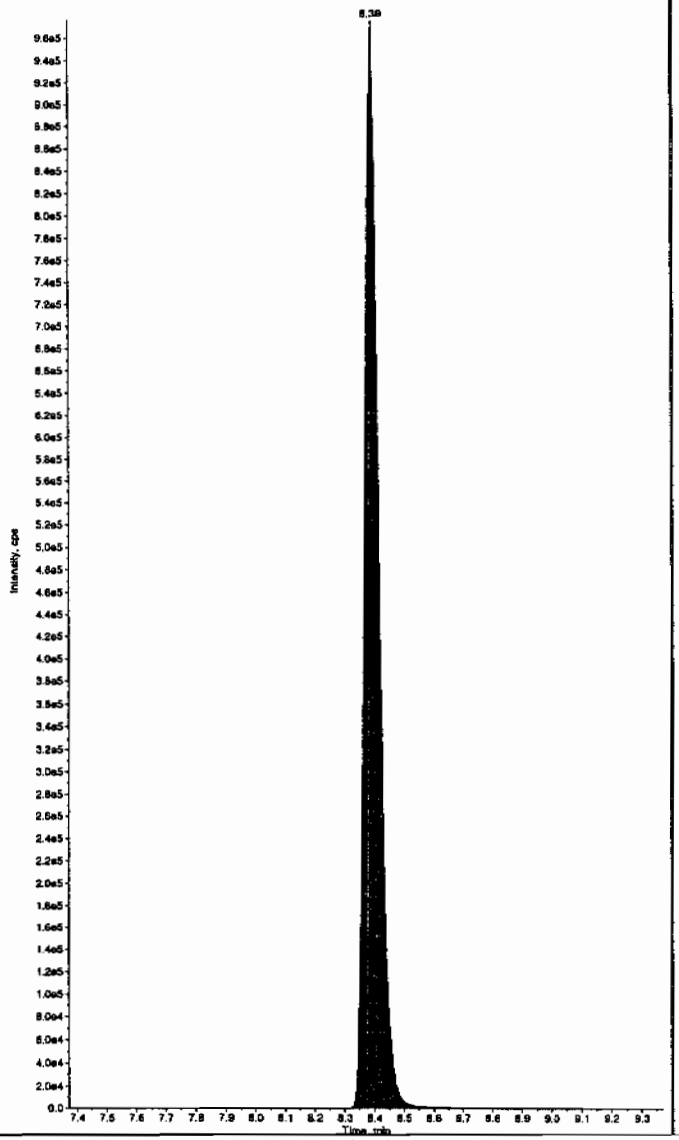
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178003" Sample ID: "954321|2|LER" File: "EXS03050023.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 264. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:53:03 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

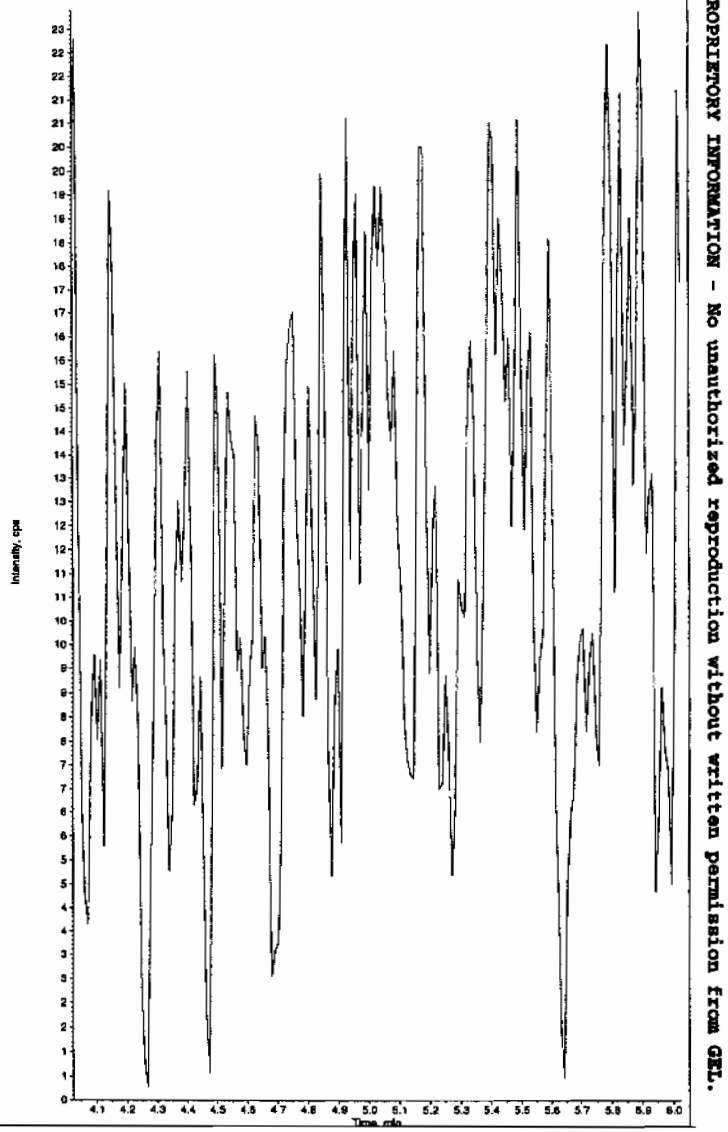
Int. Type: Valley
Retention Time: 8.39 min
Area: 3.29e+006 counts
Height: 976889.893 cps
Start Time: 8.30 min
End Time: 8.70 min



Sample Name: "247178003" Sample ID: "954321|2|LER" File: "EXS03050023.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/5/2010
Acq. Time: 10:53:03 PM

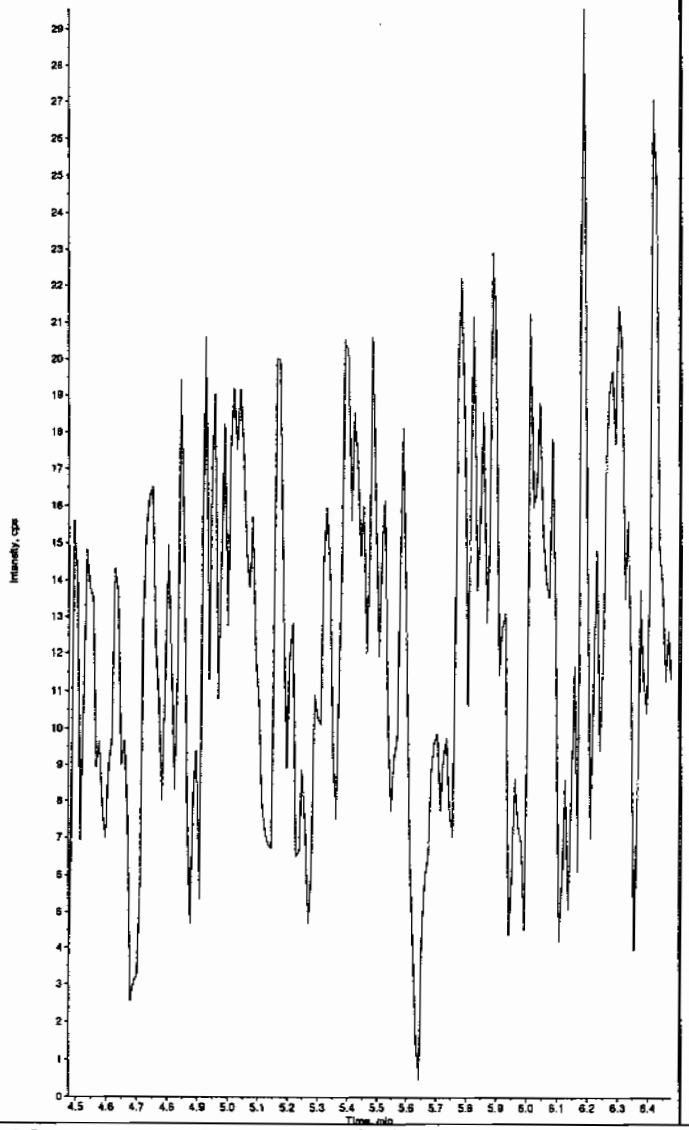
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

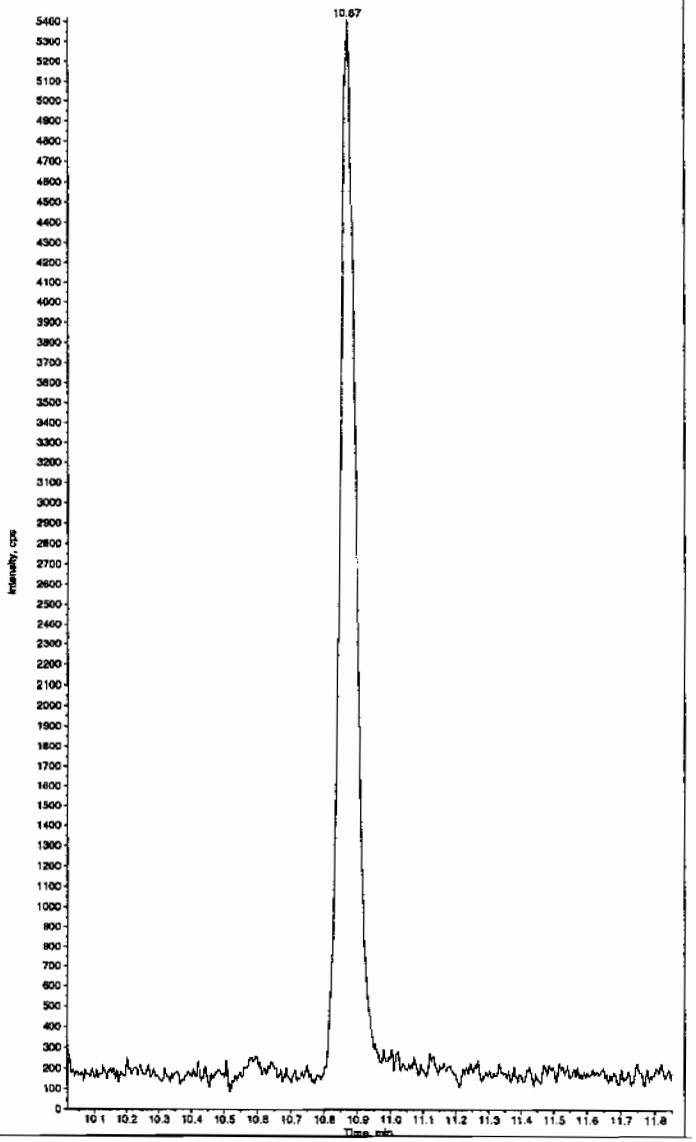
Sample Name: "247178003" Sample ID: "954321|2|LER" File: "EXS03050023.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:53:03 PM

Modified: No



Sample Name: "247178003" Sample ID: "954321|2|LER" File: "EXS03050023.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 10:53:03 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: RE15-10-7997

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178004

Sample Amount 2

Moisture: 23.0

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326076a

Date Analyzed: 28-MAR-10 03:35

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

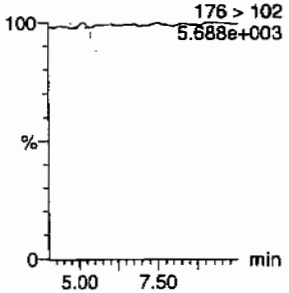
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

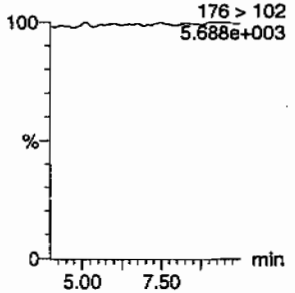
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326076a
Date: 28-Mar-2010
Time: 03:35:52
ID: 247178004 | LANL | 95432 | Solid | 21
Vial: 1:7,E

MH 3/29/10

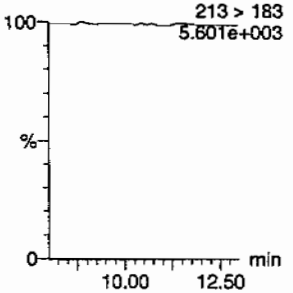
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.688e+003



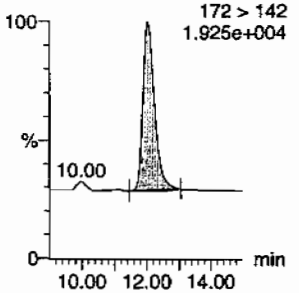
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.688e+003



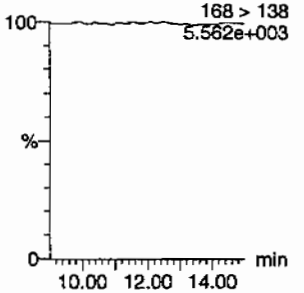
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.601e+003



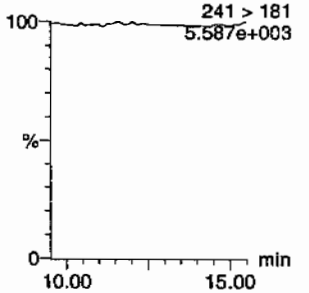
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.925e+004



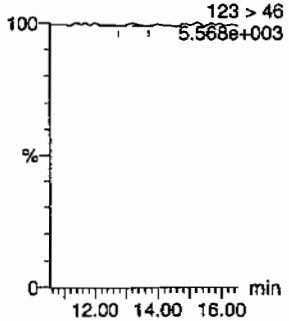
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.562e+003



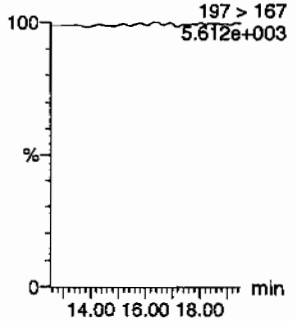
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.587e+003



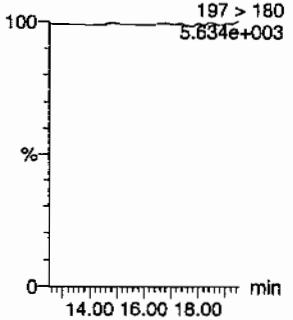
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.568e+003



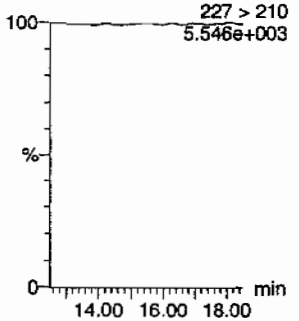
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.612e+003



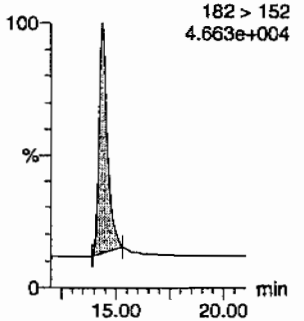
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.634e+003



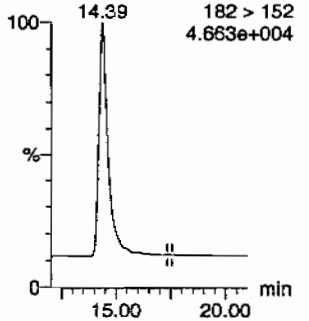
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.546e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.663e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39
182 > 152
4.663e+004



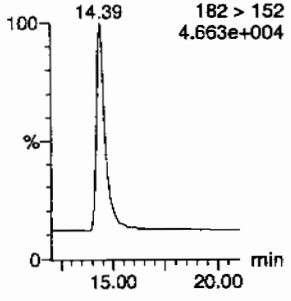
HMM 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

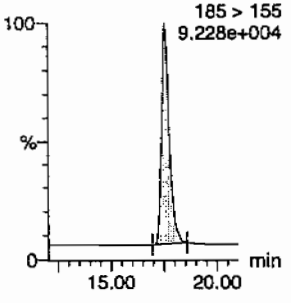
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

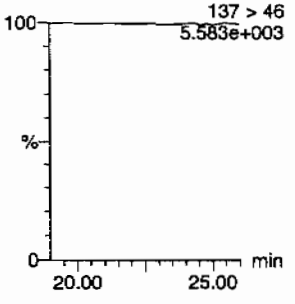
24-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39 182 > 152
4.663e+004



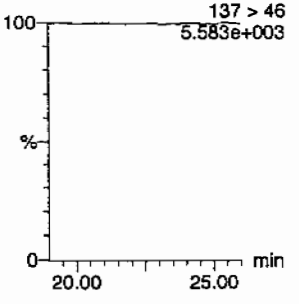
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
9.228e+004



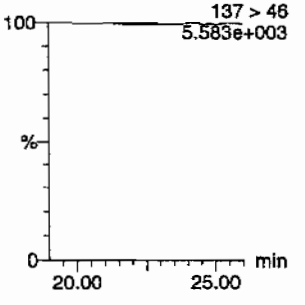
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.583e+003



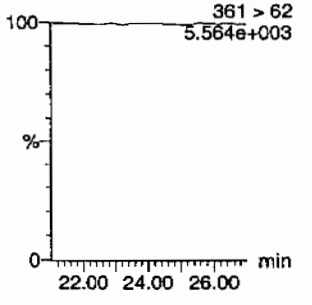
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.583e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.583e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.564e+003



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N
247178004	HMX	176 > 102			5722.916			MM-	28-Mar-10	12:38:30				
247178004	RDX	176 > 102			5722.916									
247178004	135-Trinitrobenzene	213 > 183			5722.916									
247178004	13-Dinitrobenzene-d4	172 > 142	12.04	5722.916		5722.916	5722.916	bb			467.7580	93.6	-6.4	476.4
247178004	13-Dinitrobenzene	168 > 138			5722.916									
247178004	Tetryl	241 > 181			5722.916									
247178004	Nitrobenzene	123 > 46			5722.916			MM-	28-Mar-10	12:34:43				
247178004	4-Amino-26-dinitrotoluene	197 > 167			37541.152									
247178004	2-Amino-46-dinitrotoluene	197 > 180			37541.152									
247178004	246-Trinitrotoluene	227 > 210			37541.152									
247178004	34-dinitrotoluene	182 > 152	14.39	18211.188	37541.152	18211.188	242.550	bb			229.5351	91.8	-8.2	623.2
247178004	26-dinitrotoluene	182 > 152			37541.152			MM-	28-Mar-10	12:43:35				
247178004	24-dinitrotoluene	182 > 152			37541.152									
247178004	26-dinitrotoluene-d3	185 > 155	17.55	37541.152		37541.152	37541.152	bb			511.3183	102.3	2.3	990.3
247178004	2-Nitrotoluene	137 > 46			37541.152									
247178004	4-Nitrotoluene	137 > 46			37541.152									
247178004	3-Nitrotoluene	137 > 46			37541.152									
247178004	PETN	361 > 62			37541.152									

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: RE15-10-7997

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178004

Sample Amount 2

Moisture: 23.0

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050027.wiff

Date Analyzed: 05-MAR-10 23:55

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

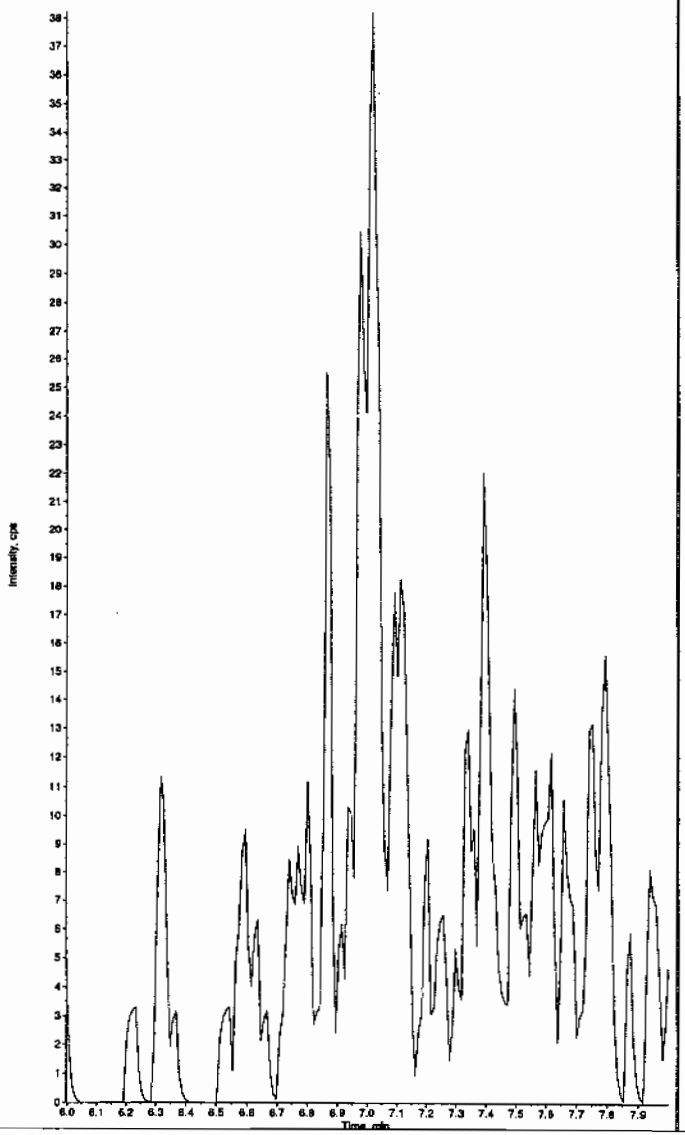
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lcn 3/9/10

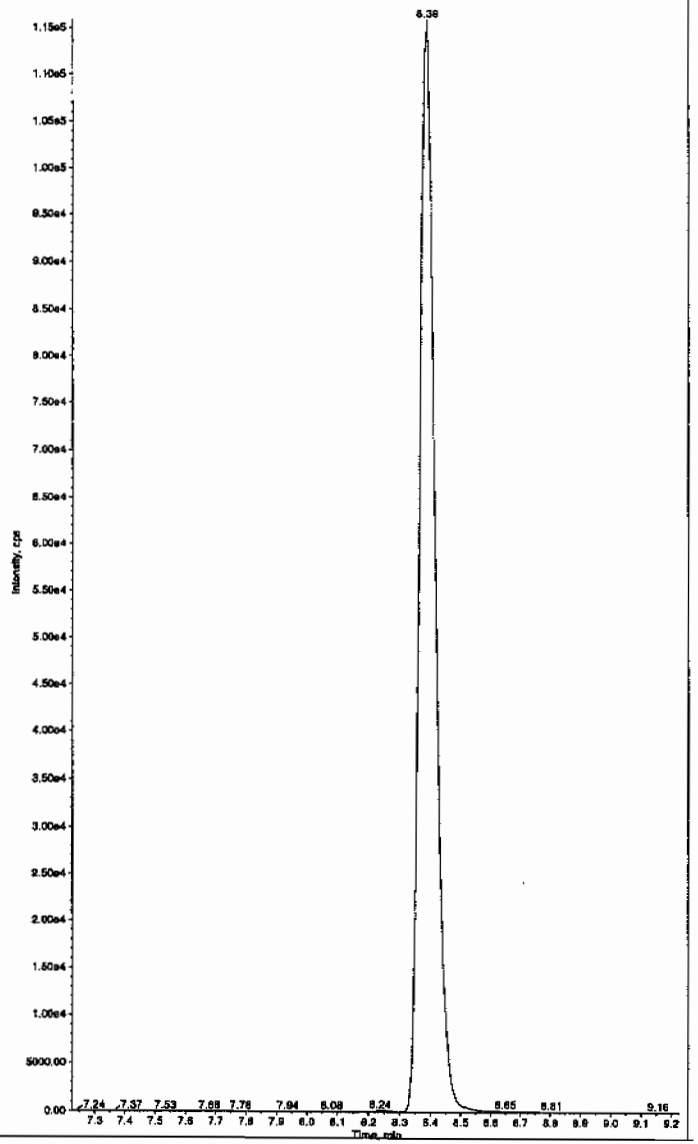
Sample Name: "247178004" Sample ID: "954321|2|LER" File: "EXS03050027.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:55:50 PM

Modified: No



Sample Name: "247178004" Sample ID: "954321|2|LER" File: "EXS03050027.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:55:50 PM

Modified: No



HM 03/09/10

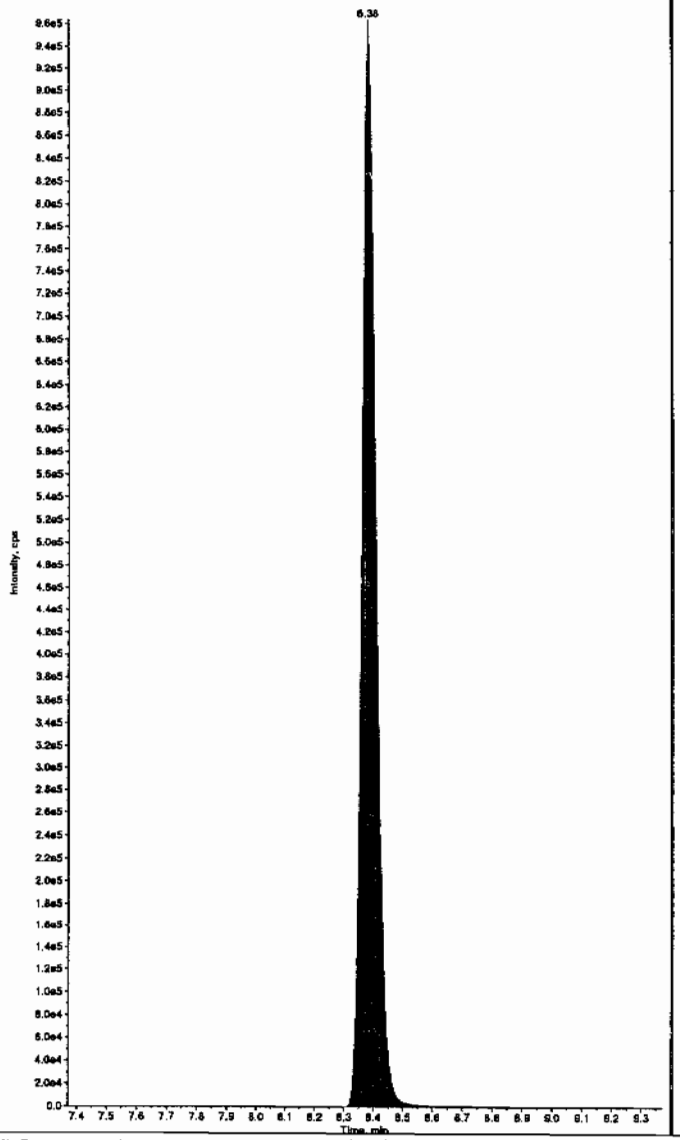
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178004" Sample ID: "954321|2|LER" File: "EXS03050027.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 263. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:55:50 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

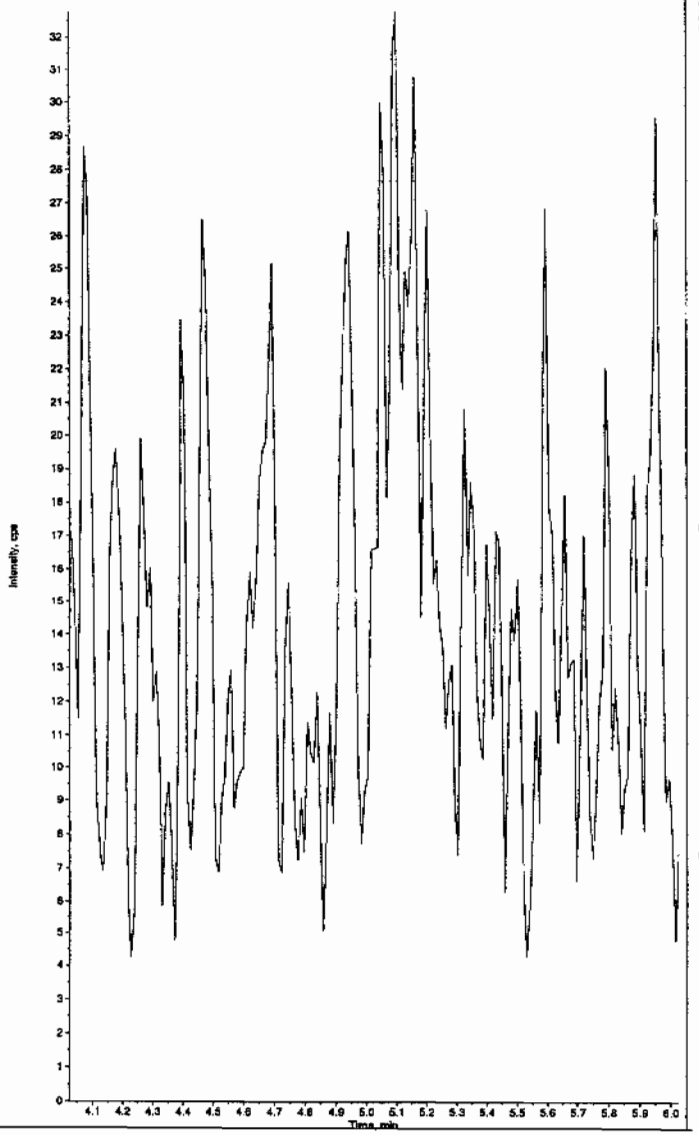
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.28e+006 counts
Height: 963721.375 cps
Start Time: 8.29 min
End Time: 8.78 min



Sample Name: "247178004" Sample ID: "954321|2|LER" File: "EXS03050027.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/5/2010
Acq. Time: 11:55:50 PM

Modified: No

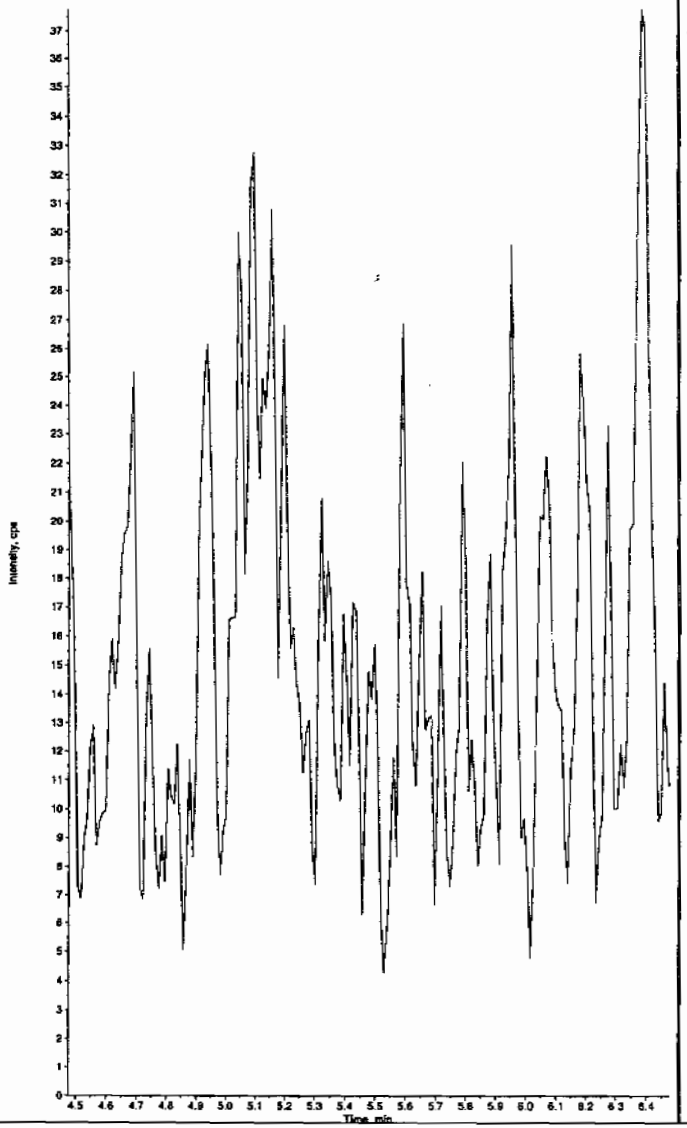


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178004" Sample ID: "954321|2|LER" File: "EXS03050027.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" 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: 3/5/2010
Acq. Time: 11:55:50 PM

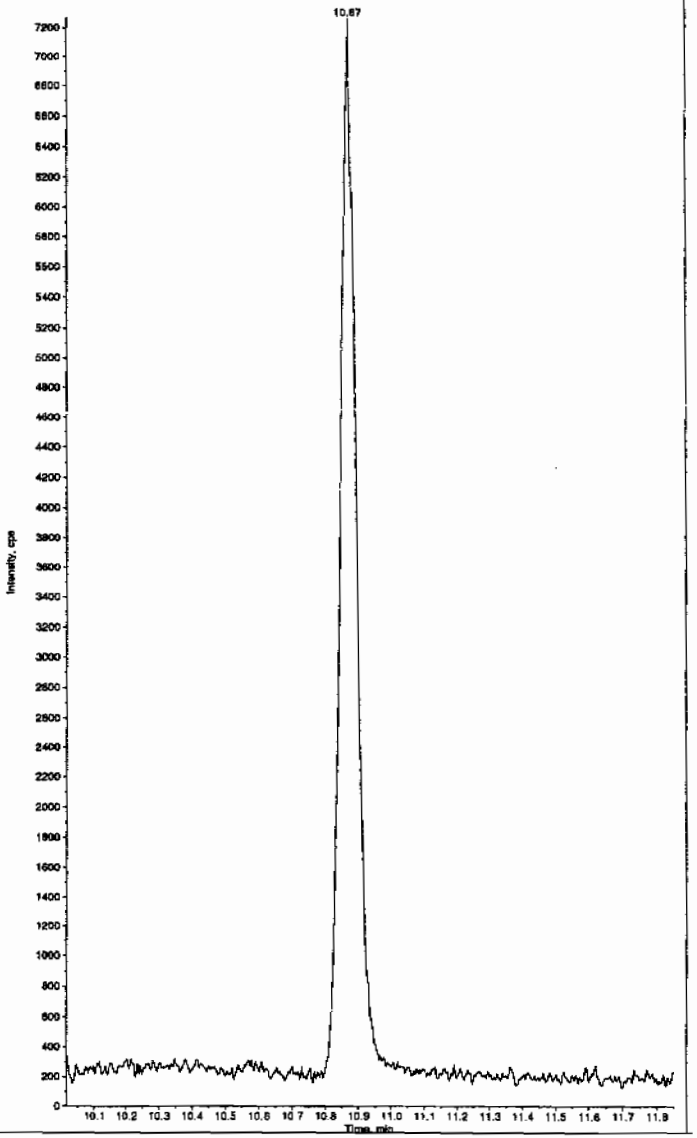
Modified: No



Sample Name: "247178004" Sample ID: "954321|2|LER" File: "EXS03050027.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:55:50 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: RE15-10-7998

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178005

Sample Amount 2

Moisture: 13.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326077a

Date Analyzed: 28-MAR-10 04:05

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

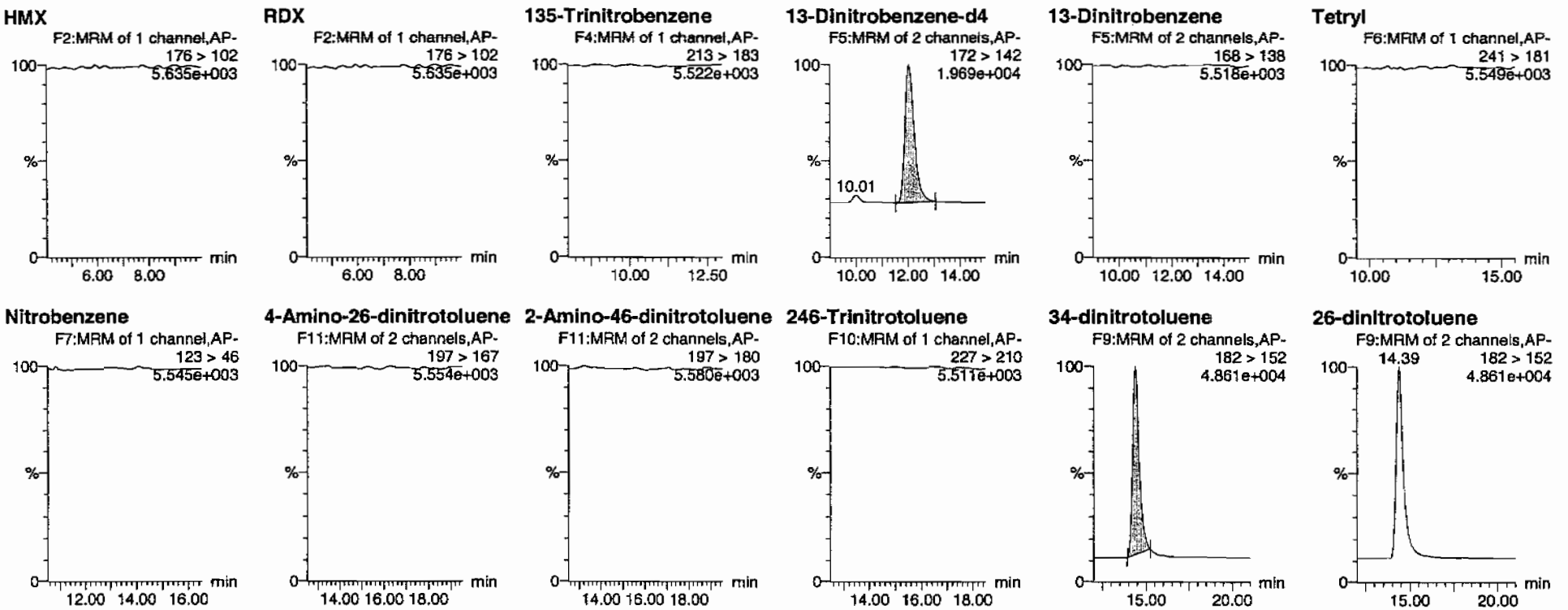
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326077a
Date: 28-Mar-2010
Time: 04:05:22
ID: 247178005
Vial: 1:7,F

| LANU | 954321 | Soil | 2 |

HAT 3/29/10

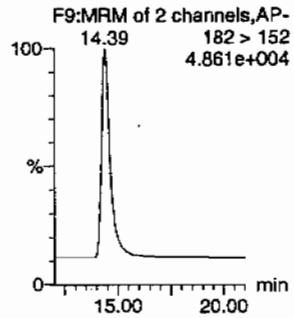


HMW 03/30/10

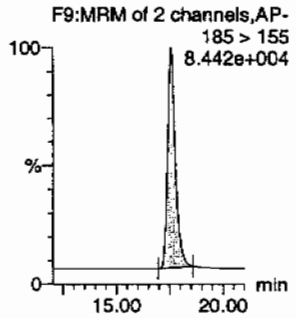
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

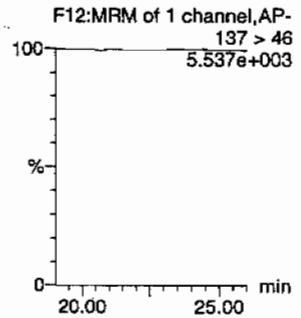
24-dinitrotoluene



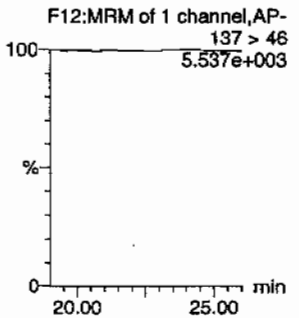
26-dinitrotoluene-d3



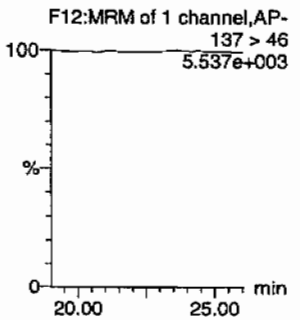
2-Nitrotoluene



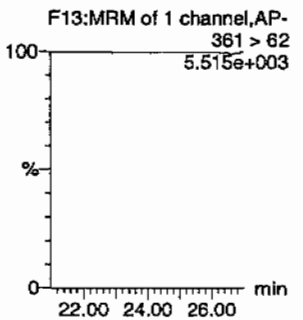
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
247178005	HMX	176 > 102			5954.072									
247178005	RDX	176 > 102			5954.072									
247178005	135-Trinitrobenzene	213 > 183			5954.072									
247178005	13-Dinitrobenzene-d4	172 > 142	12.04	5954.072		5954.072	5954.072	bb			486.6513	97.3	-2.7	1294.4
247178005	13-Dinitrobenzene	168 > 138			5954.072									
247178005	Tetryl	241 > 181			5954.072									
247178005	Nitrobenzene	123 > 46			5954.072									
247178005	4-Amino-26-dinitrotoluene	197 > 167			34148.660									
247178005	2-Amino-46-dinitrotoluene	197 > 180			34148.660									
247178005	246-Trinitrotoluene	227 > 210			34148.660									
247178005	34-dinitrotoluene	182 > 152	14.39	18687.459	34148.660	18687.459	273.619	bb			258.9375	103.6	3.6	762.4
247178005	26-dinitrotoluene	182 > 152			34148.660									
247178005	24-dinitrotoluene	182 > 152			34148.660									
247178005	26-dinitrotoluene-d3	185 > 155	17.57	34148.660		34148.660	34148.660	bb			465.1119	93.0	-7.0	2179.1
247178005	2-Nitrotoluene	137 > 46			34148.660									
247178005	4-Nitrotoluene	137 > 46			34148.660									
247178005	3-Nitrotoluene	137 > 46			34148.660									
247178005	PETN	361 > 62			34148.660									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7998

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178005

Sample Amount 2

Moisture: 13.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050028.wiff

Date Analyzed: 06-MAR-10 00:11

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

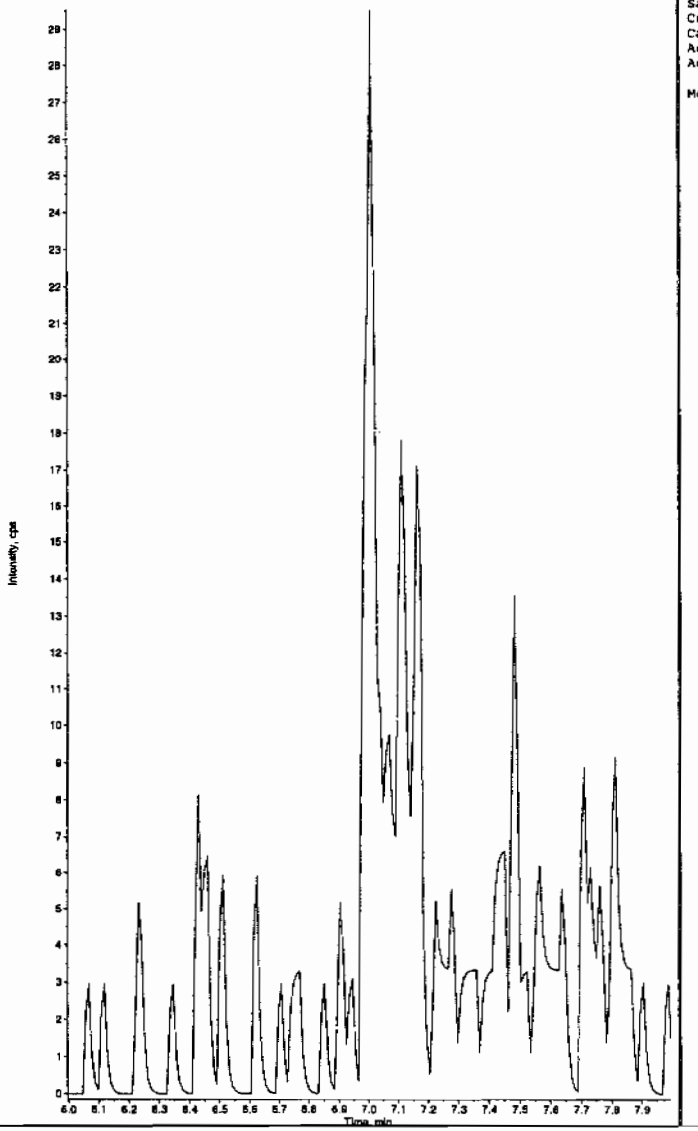
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Rcn 3/9/10

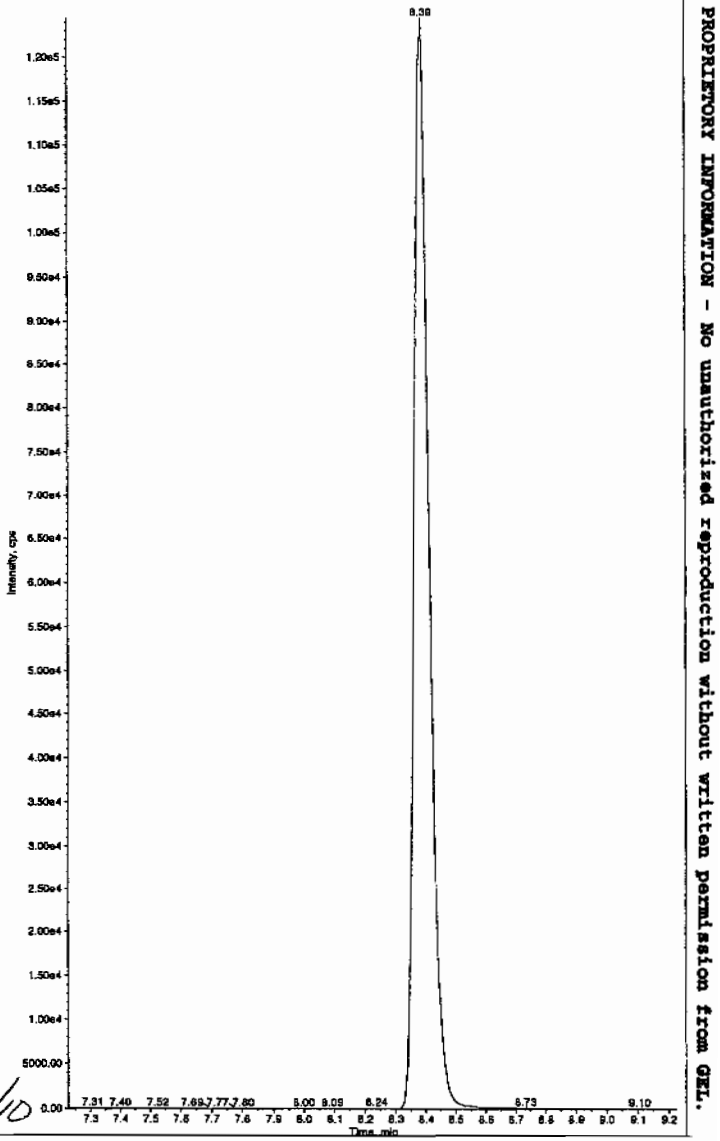
Sample Name: "247178005" Sample ID: "954321[2]LER" File: "EXS03050028.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:11:33 AM

Modified: No



Sample Name: "247178005" Sample ID: "954321[2]LER" File: "EXS03050028.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:11:33 AM

Modified: No



AMM 03/09/10

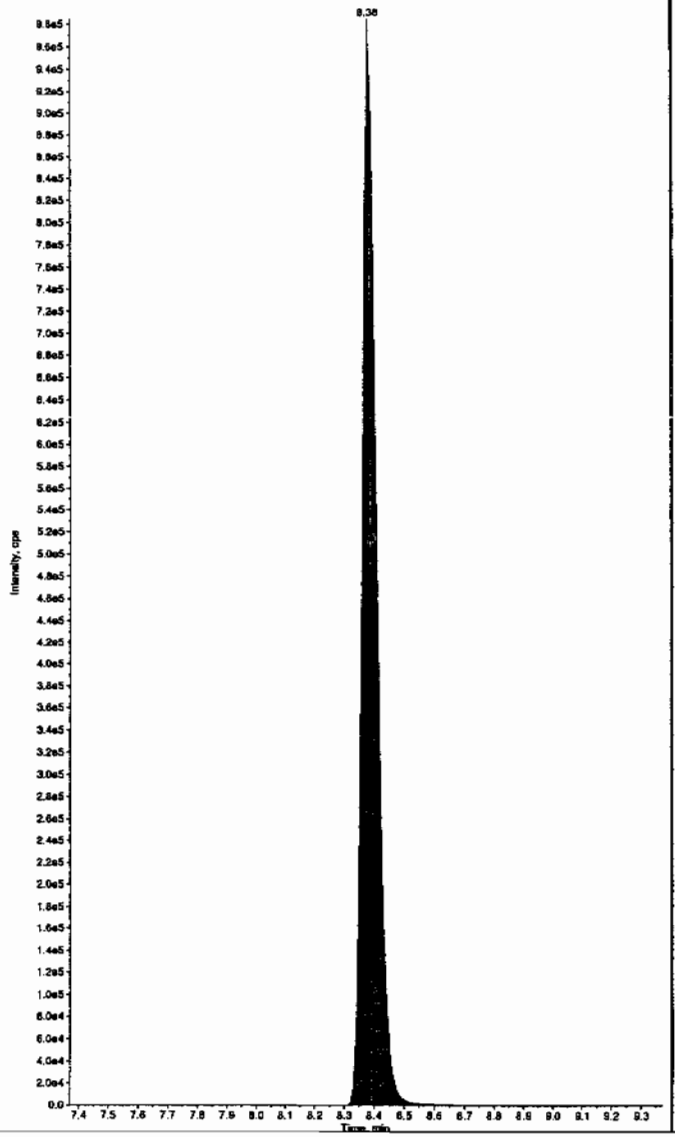
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178005" Sample ID: "954321|2|LER" File: "EXS03050028.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 269. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:11:33 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

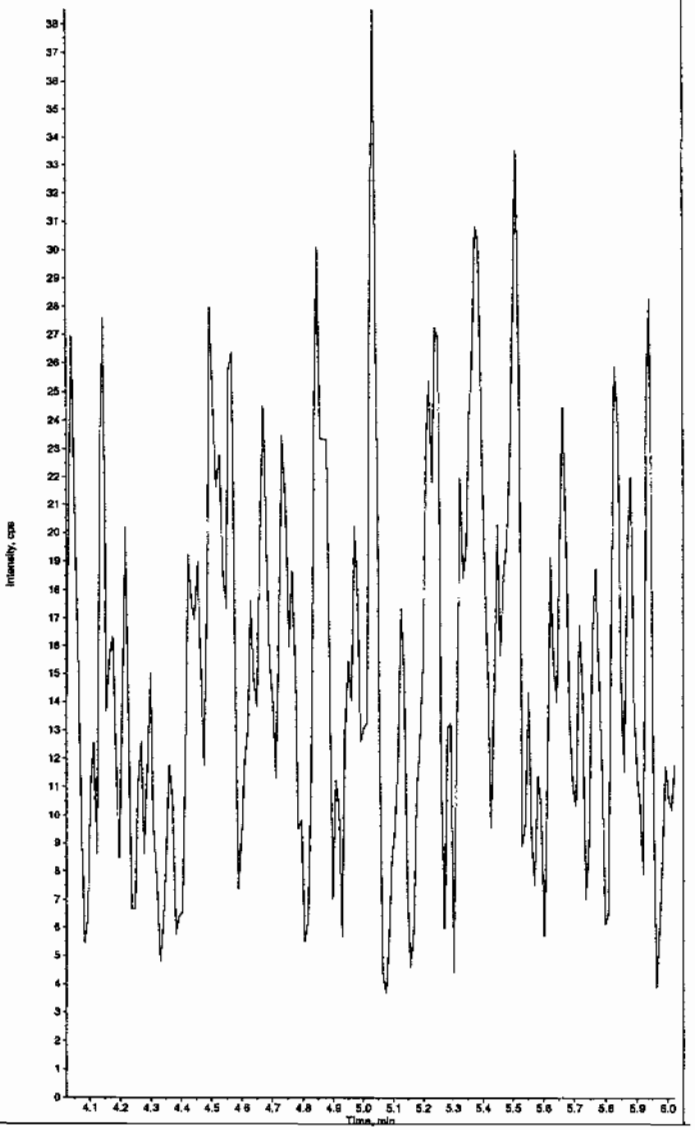
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.35e+006 counts
Height: 984912.170 cps
Start Time: 8.30 min
End Time: 8.71 min



Sample Name: "247178005" Sample ID: "954321|2|LER" File: "EXS03050028.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/6/2010
Acq. Time: 12:11:33 AM

Modified: No

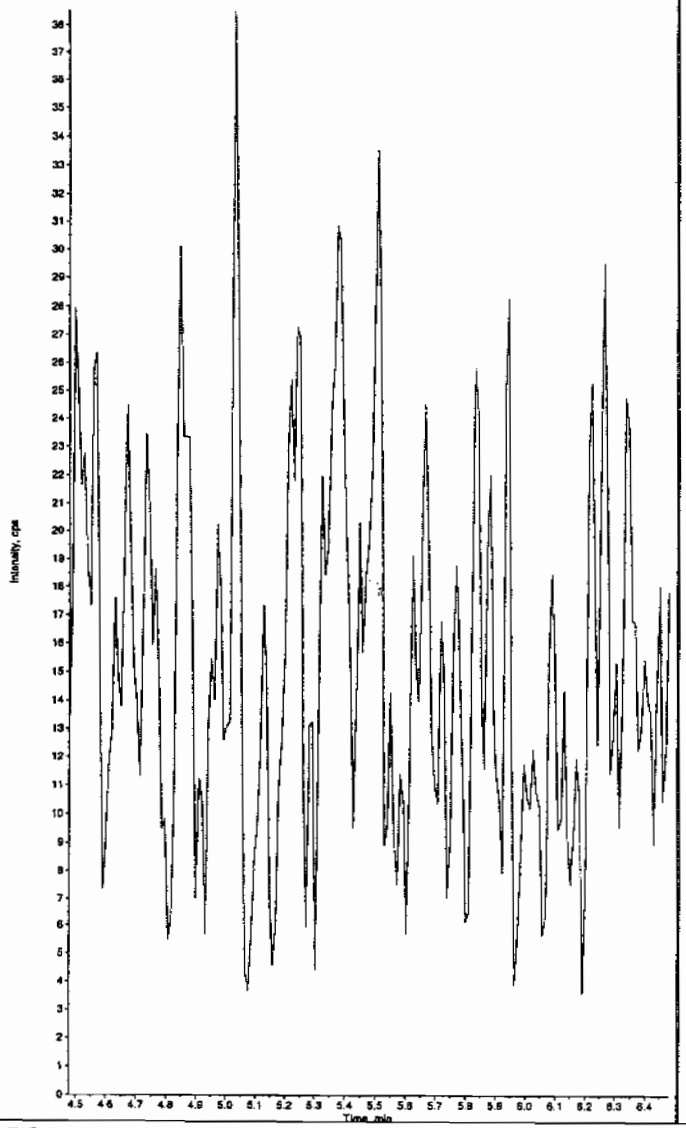


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178005" Sample ID: "954321|2|LER" File: "EXS03050028.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" 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: 3/6/2010
Acq. Time: 12:11:33 AM

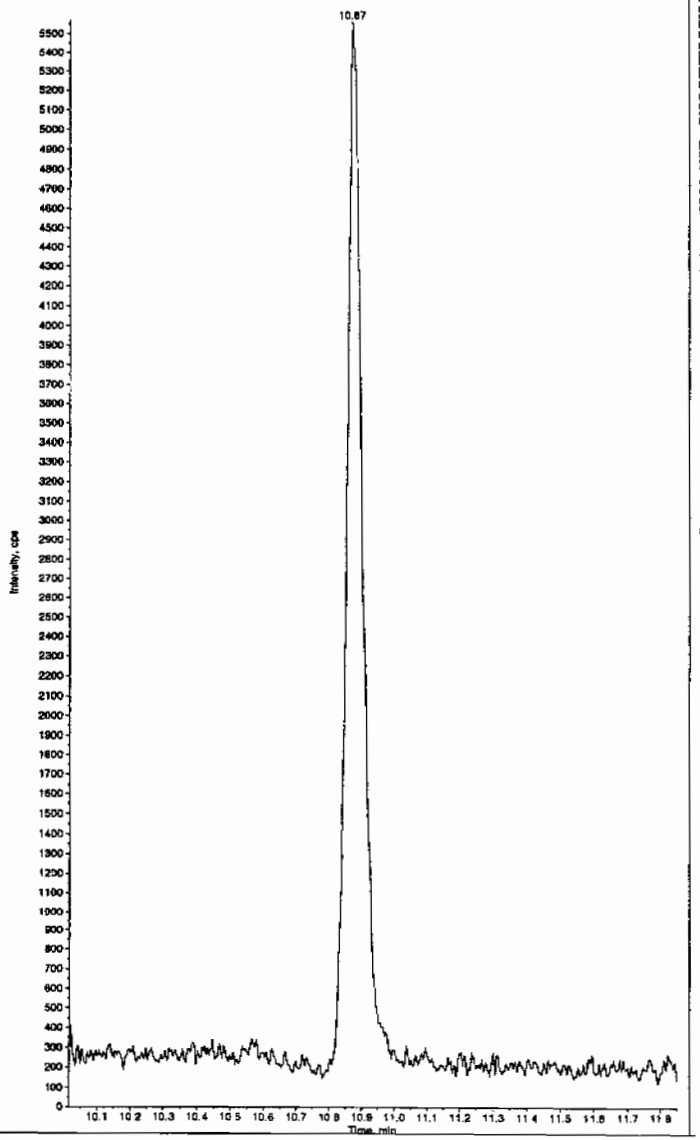
Modified: No



Sample Name: "247178005" Sample ID: "954321|2|LER" File: "EXS03050028.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:11:33 AM

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: RE15-10-8000

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178006

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326078a

Date Analyzed: 28-MAR-10 04:34

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

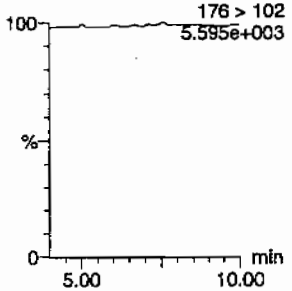
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

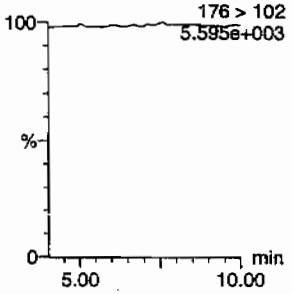
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326078a
Date: 28-Mar-2010
Time: 04:34:51
ID: 247178006 | LANC | 954321 | Soil | 21
Vial: 1:8,A

MH 3/29/10

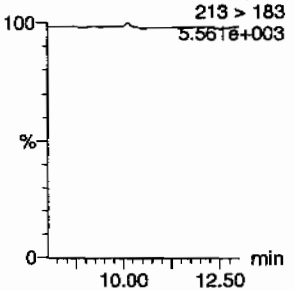
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.595e+003



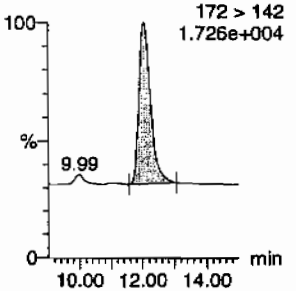
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.595e+003



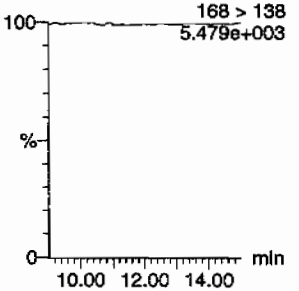
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.561e+003



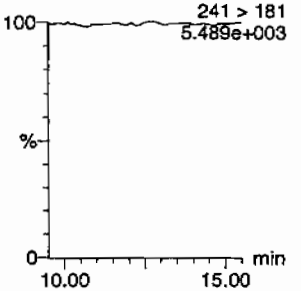
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.726e+004



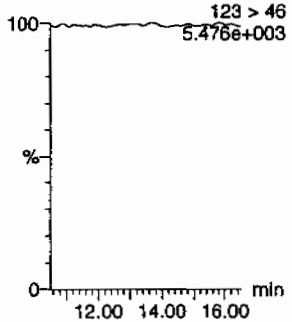
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.479e+003



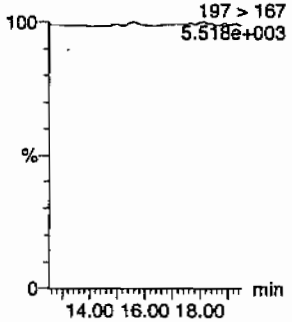
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.489e+003



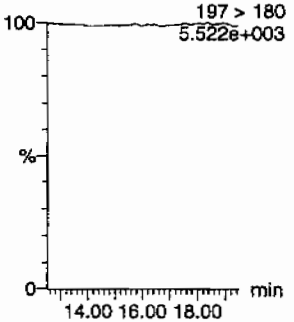
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.476e+003



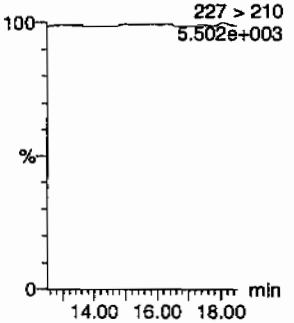
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.518e+003



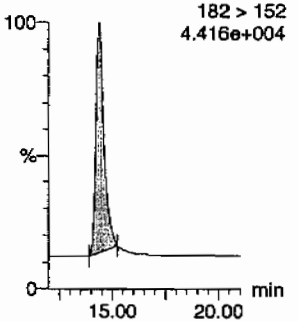
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.522e+003



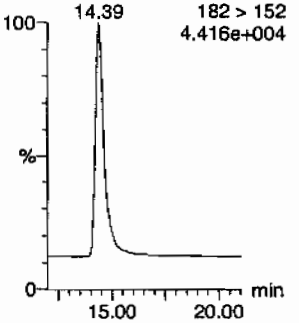
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.502e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.416e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39
182 > 152
4.416e+004

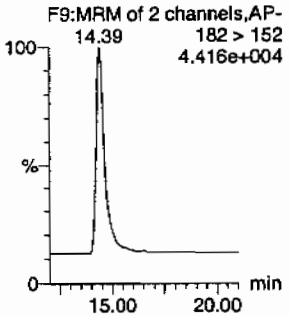


ATM 03/30/10

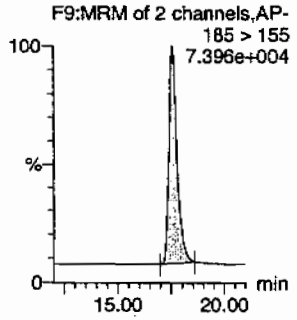
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

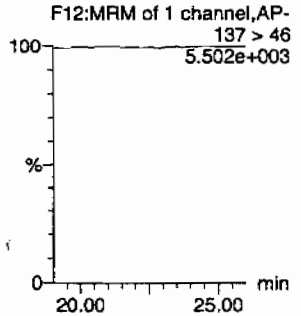
24-dinitrotoluene



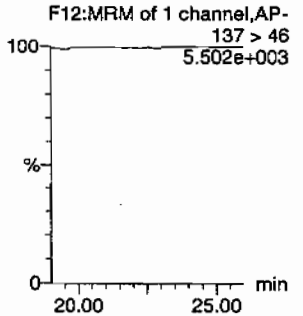
26-dinitrotoluene-d3



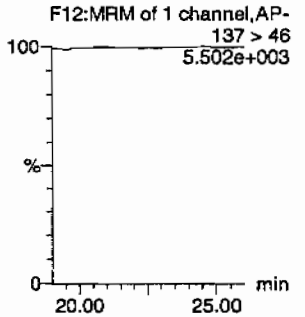
2-Nitrotoluene



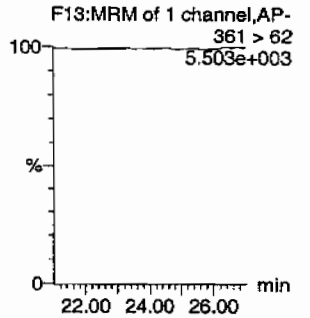
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
247178006	HMX	176 > 102			5005.656									
247178006	RDX	176 > 102			5005.656									
247178006	135-Trinitrobenzene	213 > 183			5005.656									
247178006	13-Dinitrobenzene-d4	172 > 142	12.03	5005.656		5005.656	5005.656	bb			409.1333	81.8	-18.2	1045.4
247178006	13-Dinitrobenzene	168 > 138			5005.656									
247178006	Tetryl	241 > 181			5005.656									
247178006	Nitrobenzene	123 > 46			5005.656									
247178006	4-Amino-26-dinitrotoluene	197 > 167			30391.969									
247178006	2-Amino-46-dinitrotoluene	197 > 180			30391.969									
247178006	246-Trinitrotoluene	227 > 210			30391.969									
247178006	34-dinitrotoluene	182 > 152	14.39	16723.598	30391.969	16723.598	275.132	bb			260.3690	104.1	4.1	680.5
247178006	26-dinitrotoluene	182 > 152			30391.969									
247178006	24-dinitrotoluene	182 > 152			30391.969									
247178006	26-dinitrotoluene-d3	185 > 155	17.55	30391.969		30391.969	30391.969	bb			413.9450	82.8	-17.2	2950.9
247178006	2-Nitrotoluene	137 > 46			30391.969									
247178006	4-Nitrotoluene	137 > 46			30391.969									
247178006	3-Nitrotoluene	137 > 46			30391.969									
247178006	PETN	361 > 62			30391.969									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-8000

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178006

Sample Amount 2

Moisture: 12.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050029.wiff

Date Analyzed: 06-MAR-10 00:27

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

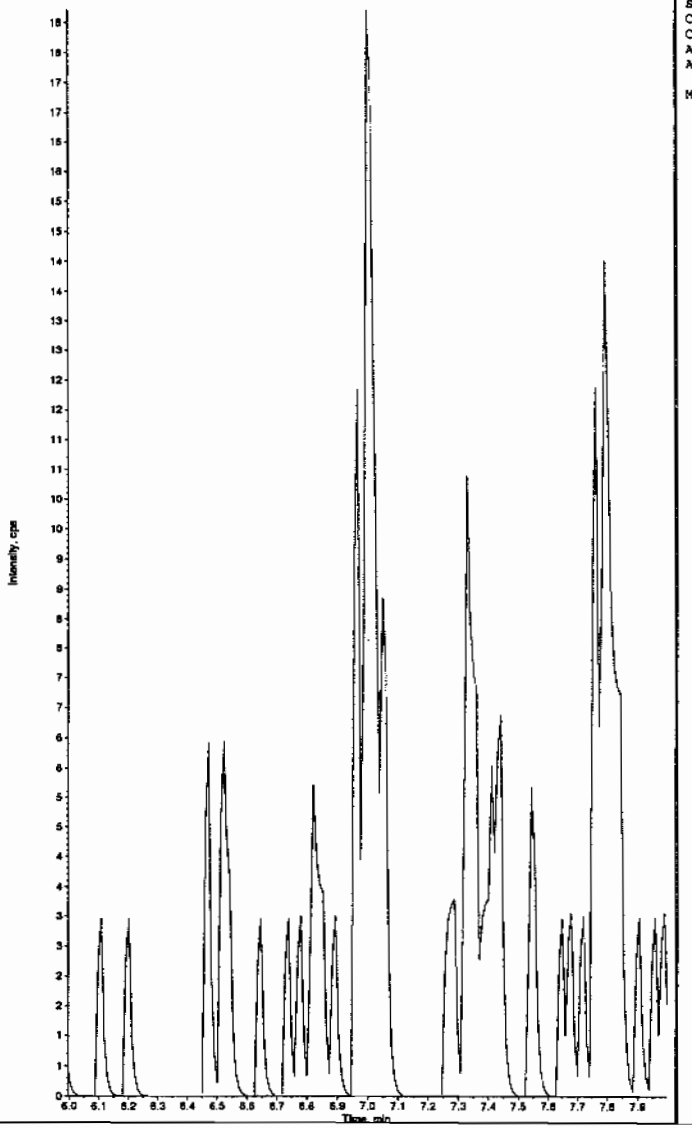
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Ran 3/9/10

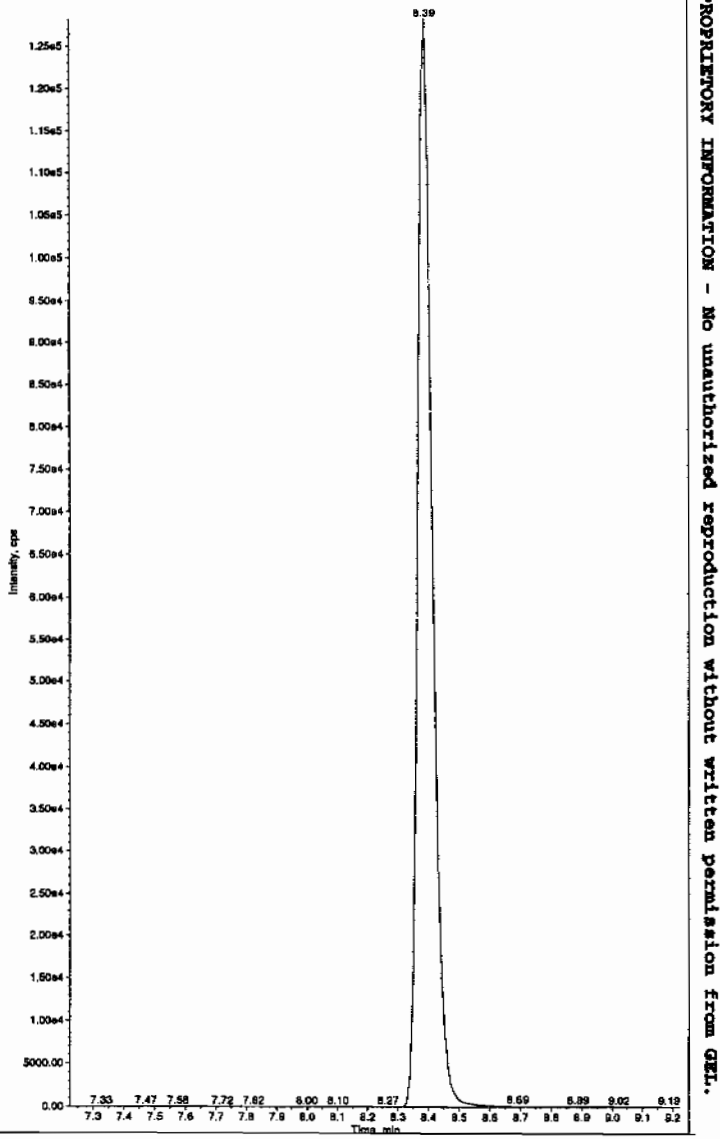
Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EXS03050029.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:27:16 AM

Modified: No



Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EXS03050029.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:27:16 AM

Modified: No



HMM 03/09/10

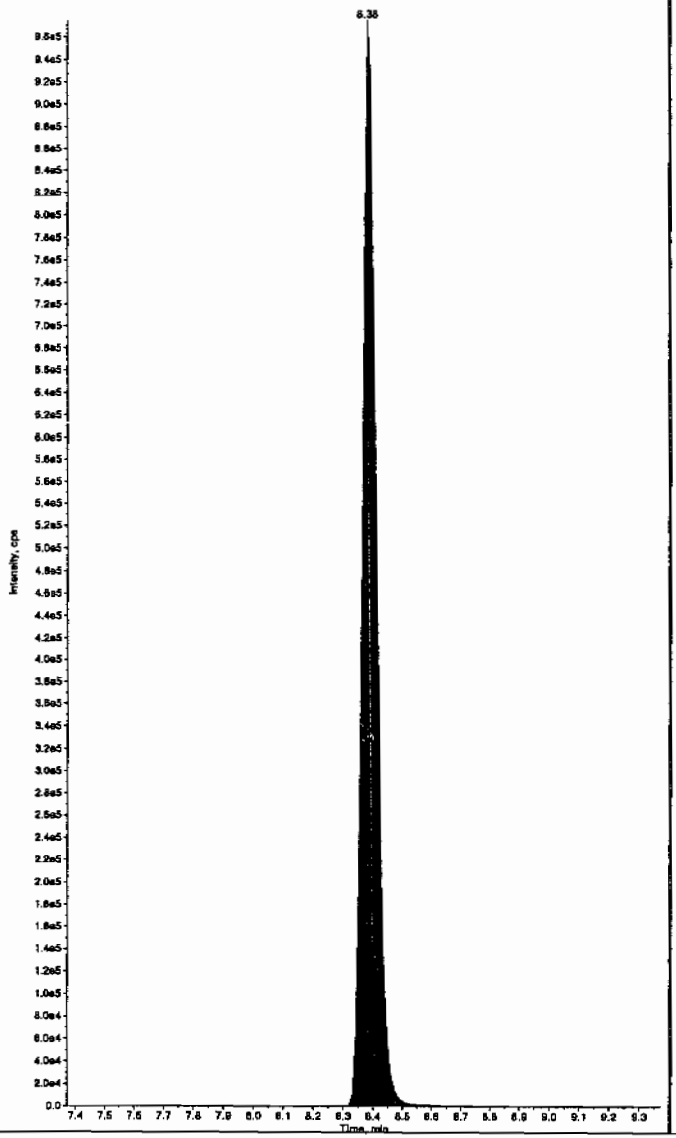
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EXS03050029.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 265. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:27:16 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

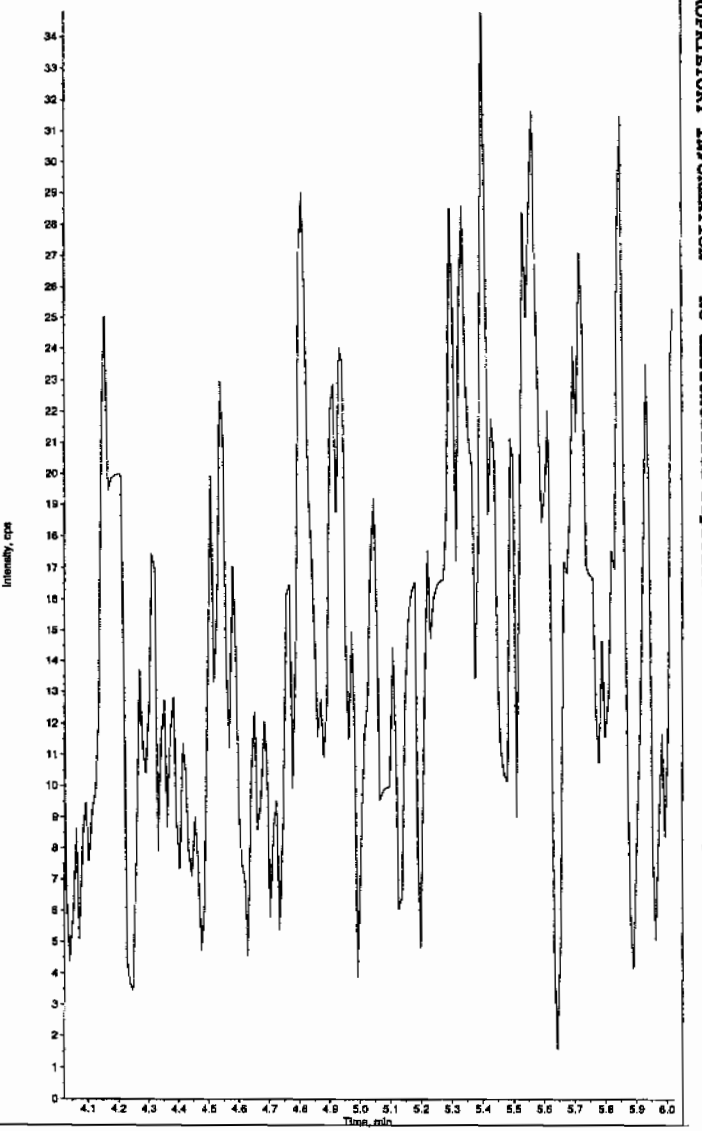
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.30e+006 counts
Height: 974925.659 cps
Start Time: 8.29 min
End Time: 8.71 min



Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EXS03050029.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/6/2010
Acq. Time: 12:27:16 AM

Modified: No

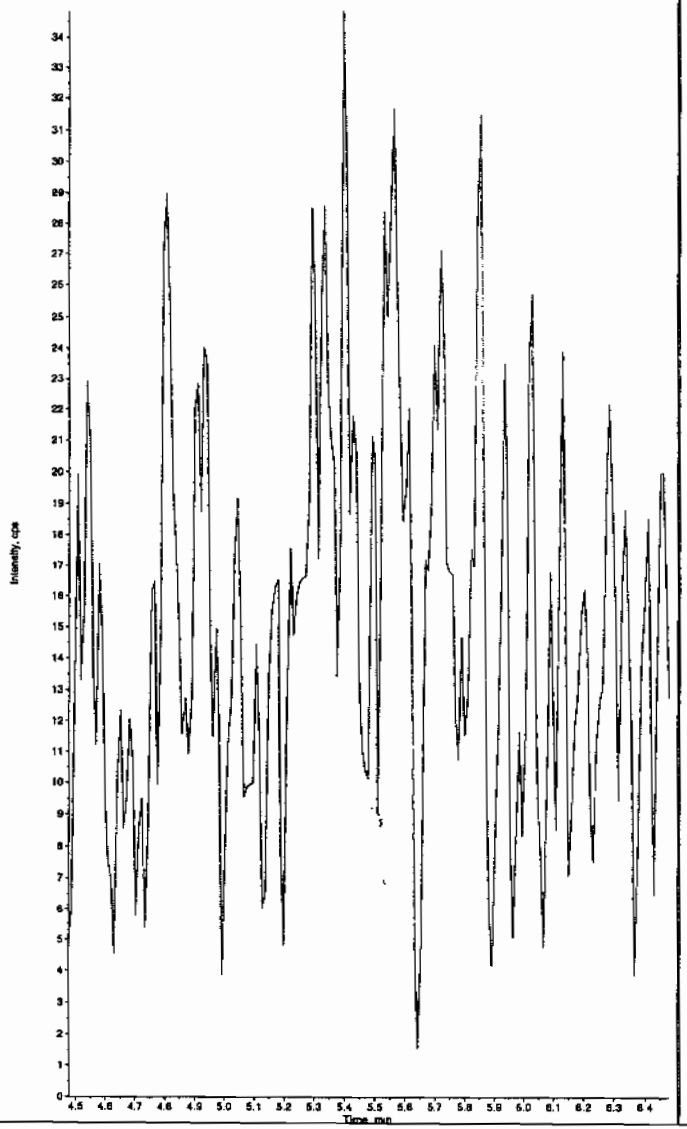


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EX503050029.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "186.0/46.0 amu"
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:27:16 AM

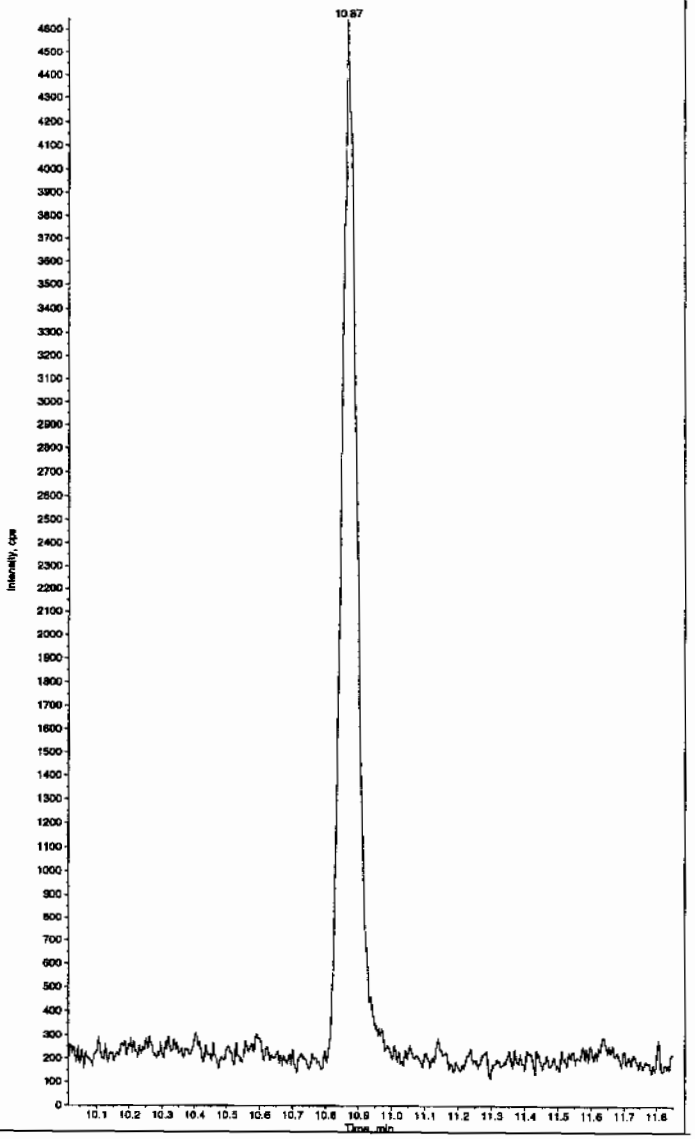
Modified: No



Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EX503050029.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: "

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:27:16 AM

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: RE15-10-7999

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178007

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326079a

Date Analyzed: 28-MAR-10 05:04

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

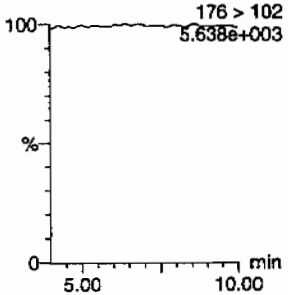
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326079a
Date: 28-Mar-2010
Time: 05:04:23
ID: 247178007
Vial: 1:8,B

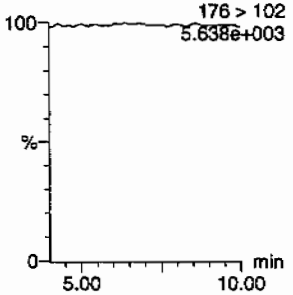
| LANU | 95432 | Solid | 21

MAT 3/29/10

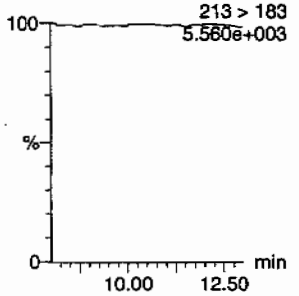
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.638e+003



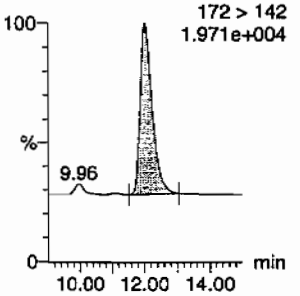
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.638e+003



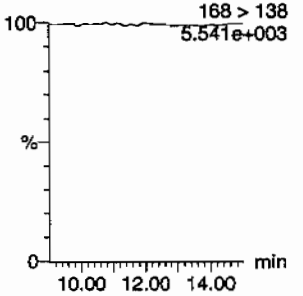
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.560e+003



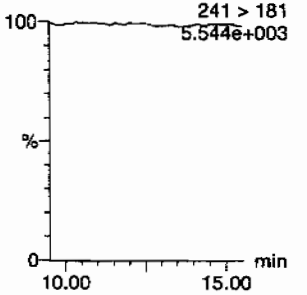
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.971e+004



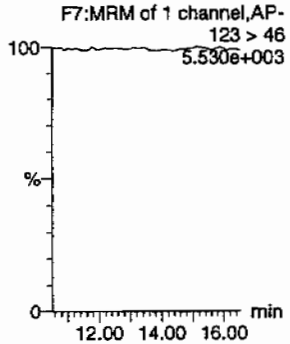
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.541e+003



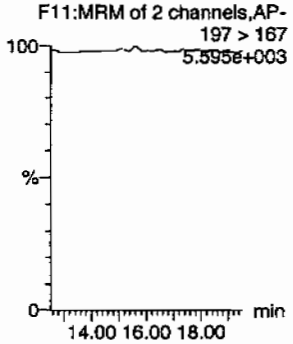
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.544e+003



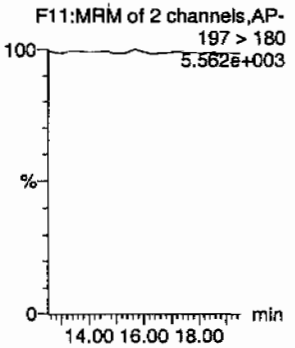
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.530e+003



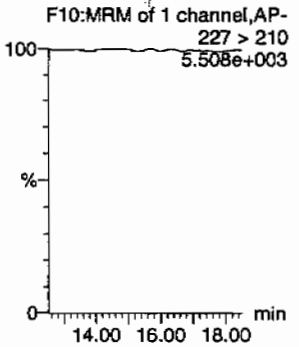
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.595e+003



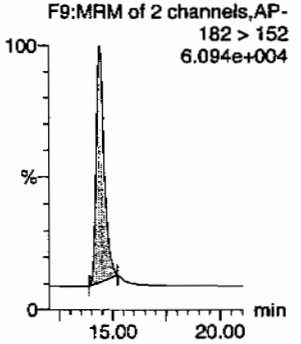
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.562e+003



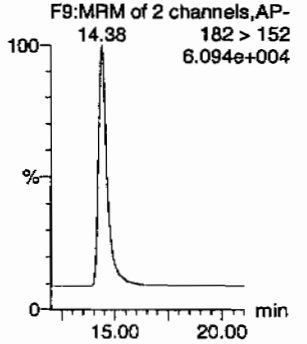
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.508e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
6.094e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.38
182 > 152
6.094e+004



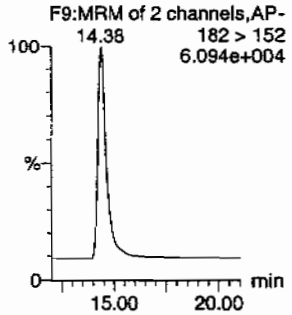
tm 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

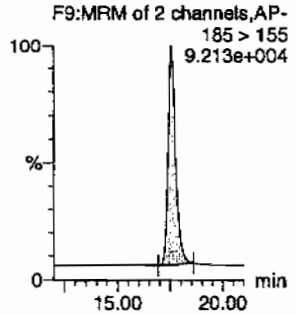
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

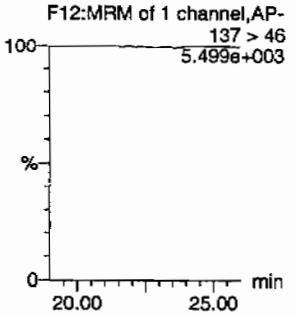
24-dinitrotoluene



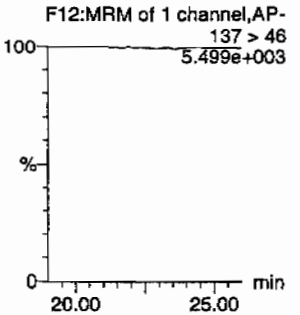
26-dinitrotoluene-d3



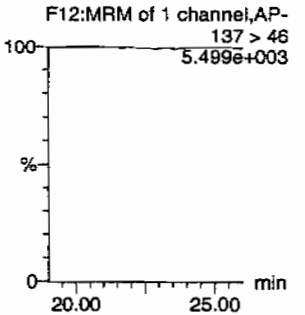
2-Nitrotoluene



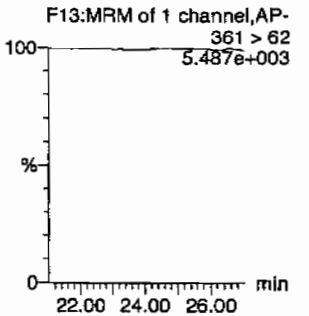
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
247178007	HMX	176 > 102			6100.552									
247178007	RDX	176 > 102			6100.552									
247178007	135-Trinitrobenzene	213 > 183			6100.552									
247178007	13-Dinitrobenzene-d4	172 > 142	12.03	6100.552		6100.552	6100.552	bb			498.6237	99.7	-0.3	479.4
247178007	13-Dinitrobenzene	168 > 138			6100.552									
247178007	Tetryl	241 > 181			6100.552									
247178007	Nitrobenzene	123 > 46			6100.552									
247178007	4-Amino-26-dinitrotoluene	197 > 167			37031.148									
247178007	2-Amino-46-dinitrotoluene	197 > 180			37031.148									
247178007	246-Trinitrotoluene	227 > 210			37031.148									
247178007	34-dinitrotoluene	182 > 152	14.38	23513.248	37031.148	23513.248	317.479	bb			300.4442	120.2	20.2	1045.4
247178007	26-dinitrotoluene	182 > 152			37031.148									
247178007	24-dinitrotoluene	182 > 152			37031.148									
247178007	26-dinitrotoluene-d3	185 > 155	17.55	37031.148		37031.148	37031.148	bb			504.3720	100.9	0.9	3083.6
247178007	2-Nitrotoluene	137 > 46			37031.148									
247178007	4-Nitrotoluene	137 > 46			37031.148									
247178007	3-Nitrotoluene	137 > 46			37031.148									
247178007	PETN	361 > 62			37031.148									

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: RE15-10-7999

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178007

Sample Amount 2

Moisture: 17.6

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050030.wiff

Date Analyzed: 06-MAR-10 00:42

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 =

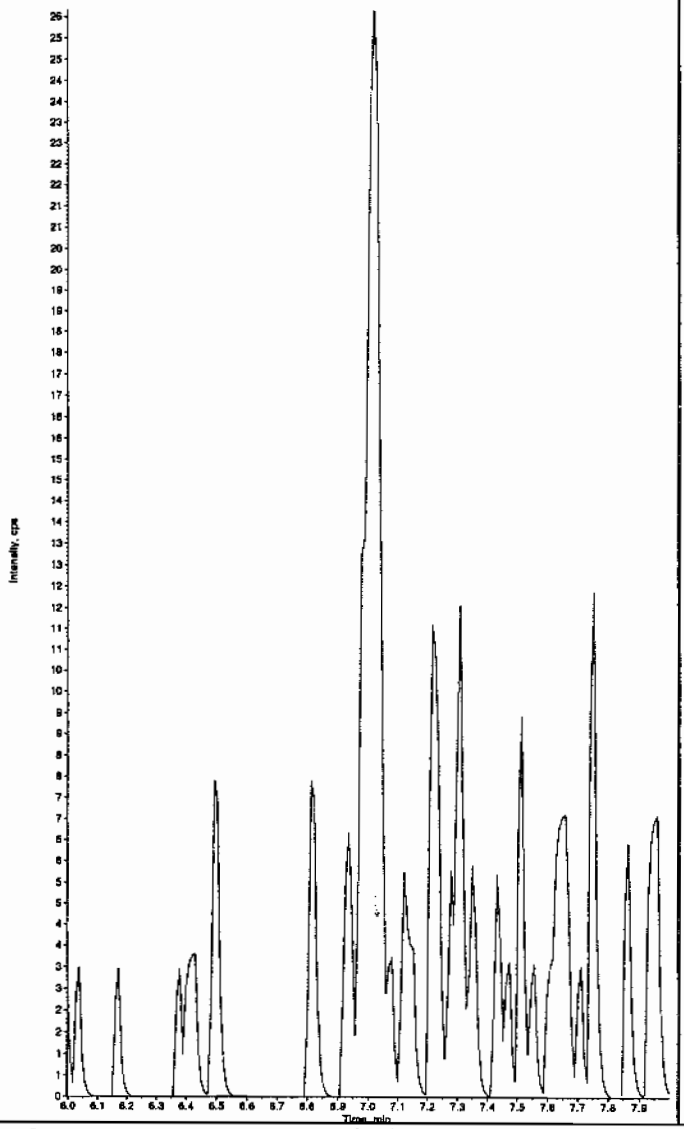
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Ran 3/9/10

Sample Name: "247178007" Sample ID: "954321|2|LER" File: "EXS03050030.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:42:59 AM

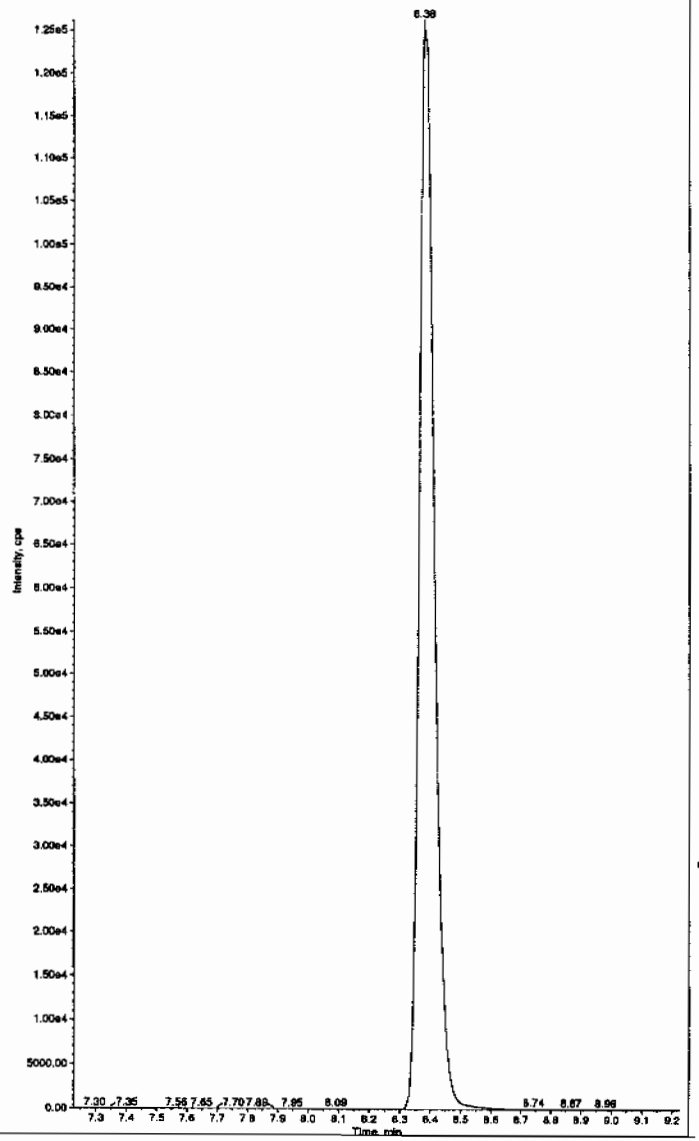
Modified: No



Sample Name: "247178007" Sample ID: "954321|2|LER" File: "EXS03050030.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:42:59 AM

Modified: No



HMM 03/09/10

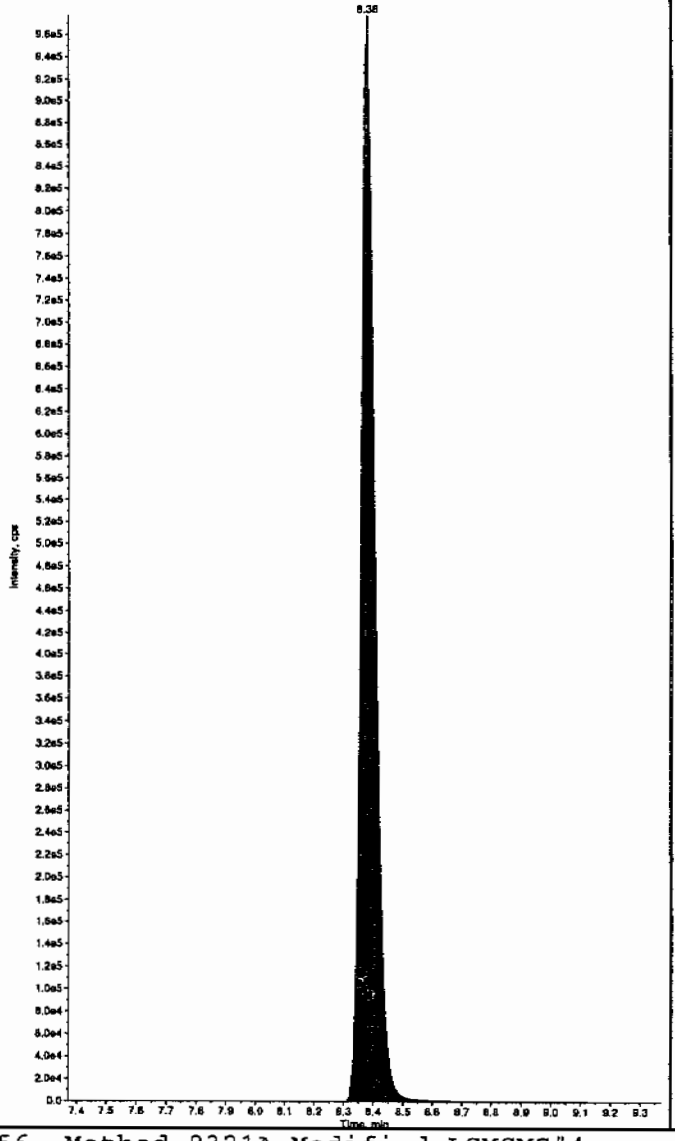
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178007" Sample ID: "954321|2|LER" File: "EXS03050030.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 267. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:42:59 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

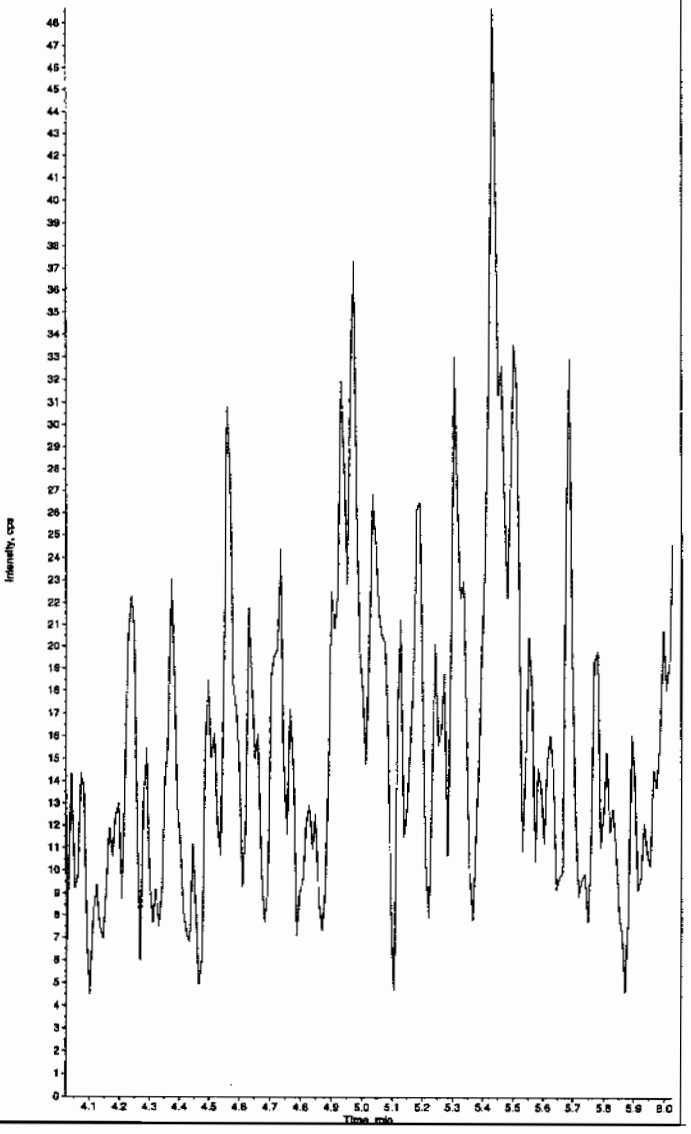
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.33e+006 counts
Height: 976862.427 cps
Start Time: 8.27 min
End Time: 8.72 min



Sample Name: "247178007" Sample ID: "954321|2|LER" File: "EXS03050030.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/6/2010
Acq. Time: 12:42:59 AM

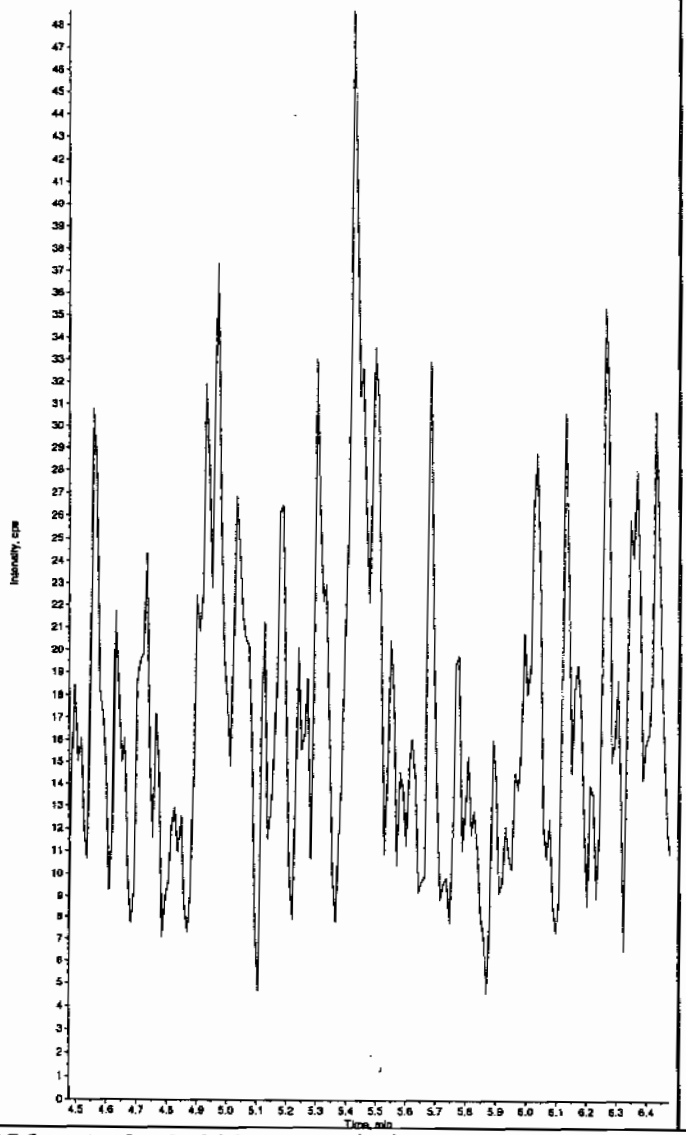
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

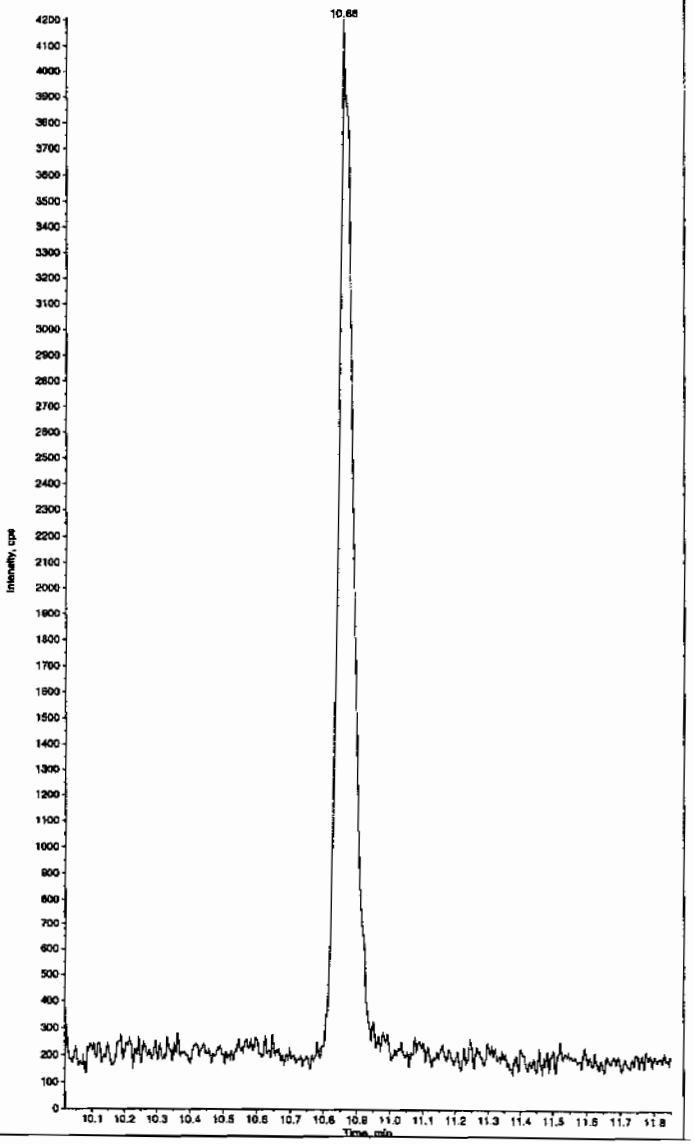
Sample Name: "247178007" Sample ID: "954321|2|LER" File: "EXS03050030.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:42:59 AM

Modified: No



Sample Name: "247178007" Sample ID: "954321|2|LER" File: "EXS03050030.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "368.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:42:59 AM

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: RE15-10-7995

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178008

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326080a

Date Analyzed: 28-MAR-10 05:33

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 =

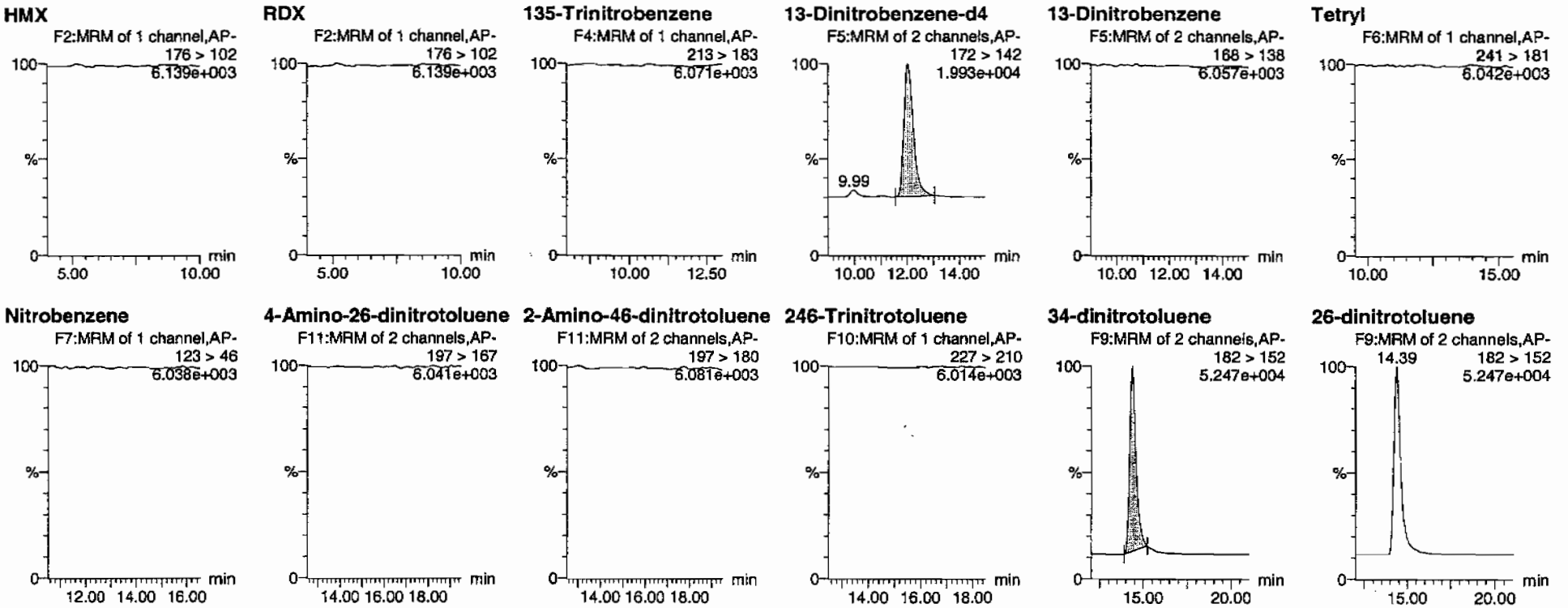
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326080a
Date: 28-Mar-2010
Time: 05:33:54
ID: 247178008 | LANL | 954321 | Solid | 2 |
Vial: 1:8,C

MHT 3/29/10

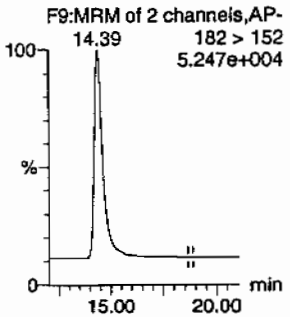


HMM 03/30/10

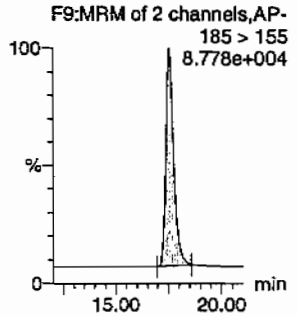
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

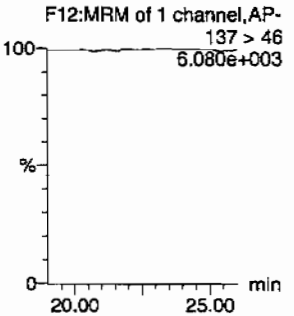
24-dinitrotoluene



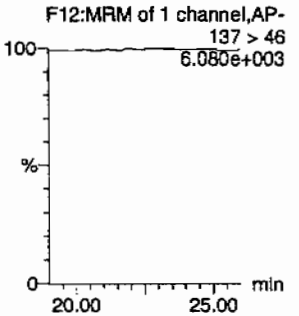
26-dinitrotoluene-d3



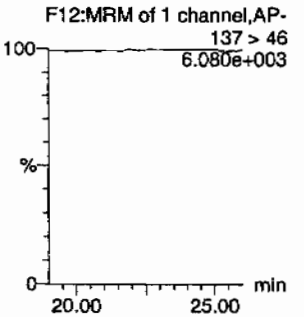
2-Nitrotoluene



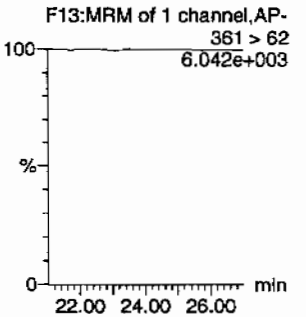
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/ml	%Rec	%Dev	S/N
247178008	HMX	176 > 102			5785.629									
247178008	RDX	176 > 102			5785.629									
247178008	135-Trinitrobenzene	213 > 183			5785.629									
247178008	13-Dinitrobenzene-d4	172 > 142	12.03	5785.629		5785.629	5785.629	bb			472.8838	94.6	-5.4	279.0
247178008	13-Dinitrobenzene	168 > 138			5785.629									
247178008	Tetryl	241 > 181			5785.629									
247178008	Nitrobenzene	123 > 46			5785.629									
247178008	4-Amino-26-dinitrotoluene	197 > 167			35581.813									
247178008	2-Amino-46-dinitrotoluene	197 > 180			35581.813									
247178008	246-Trinitrotoluene	227 > 210			35581.813									
247178008	34-dinitrotoluene	182 > 152	14.39	19573.178	35581.813	19573.178	275.045	bb			260.2865	104.1	4.1	1141.4
247178008	26-dinitrotoluene	182 > 152			35581.813									
247178008	24-dinitrotoluene	182 > 152			35581.813			MM-	28-Mar-10	12:50:08				
247178008	26-dinitrotoluene-d3	185 > 155	17.55	35581.813		35581.813	35581.813	bb			484.6317	96.9	-3.1	2743.4
247178008	2-Nitrotoluene	137 > 46			35581.813									
247178008	4-Nitrotoluene	137 > 46			35581.813									
247178008	3-Nitrotoluene	137 > 46			35581.813									
247178008	PETN	361 > 62			35581.813									

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: RE15-10-7995

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178008

Sample Amount 2

Moisture: 25.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050031.wiff

Date Analyzed: 06-MAR-10 00:58

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

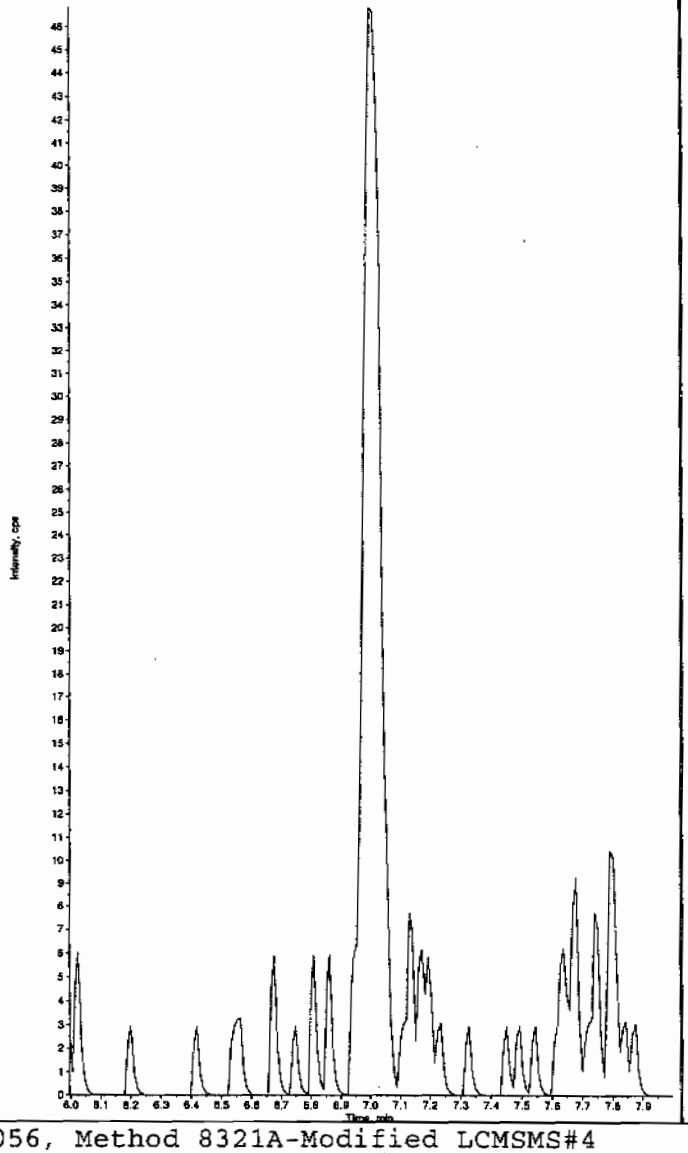
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 3/9/10

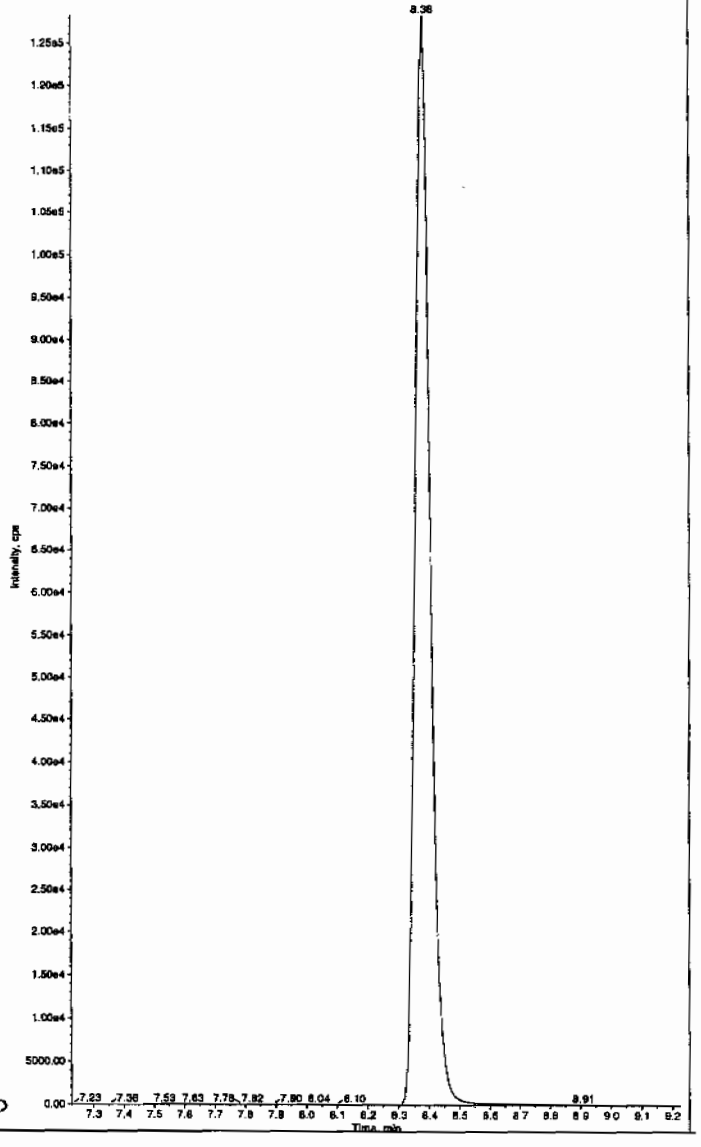
Sample Name: "247178008" Sample ID: "954321|2|LER" File: "EXS03050031.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:58:42 AM

Modified: No



Sample Name: "247178008" Sample ID: "954321|2|LER" File: "EXS03050031.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:58:42 AM

Modified: No



HMC 03/09/10

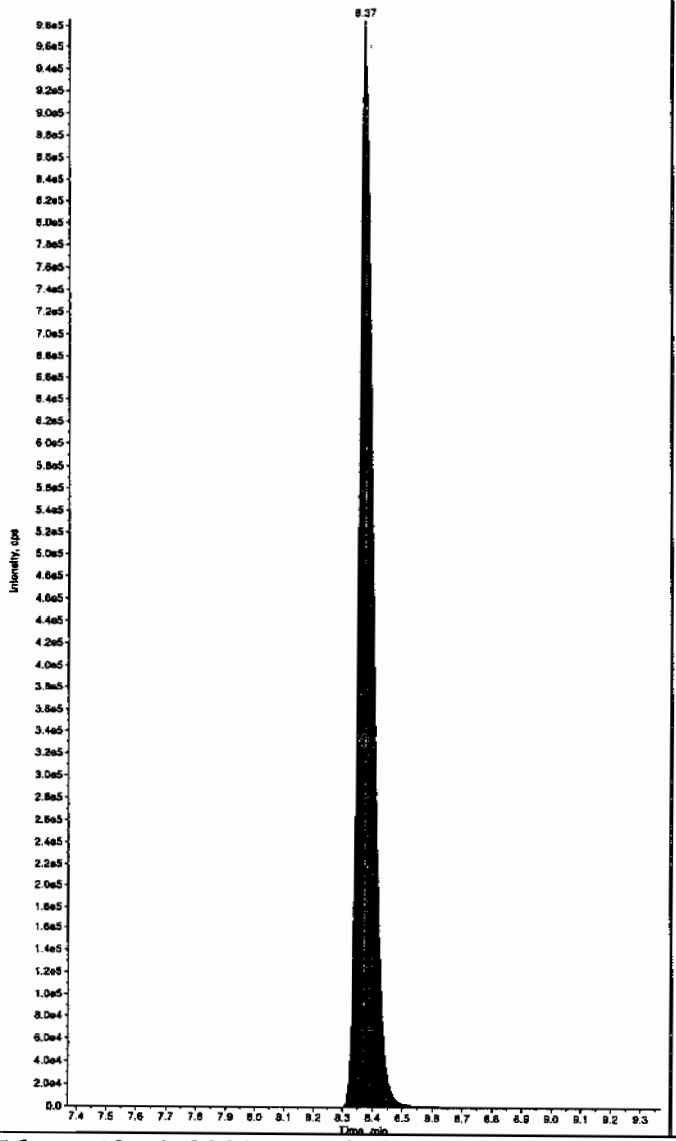
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EXS03050031.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 271. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:58:42 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

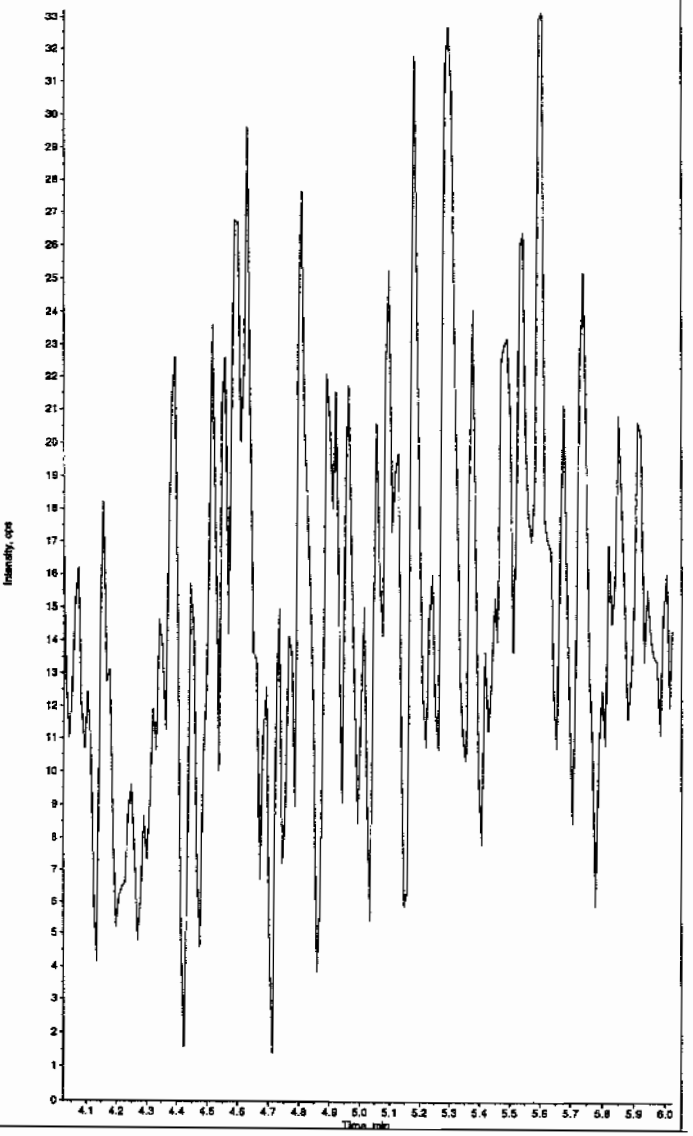
Int. Type: Valley
Retention Time: 8.37 min
Area: 3.37e+006 counts
Height: 987381.104 cps
Start Time: 8.27 min
End Time: 8.73 min



Sample Name: "247178006" Sample ID: "954321|2|LER" File: "EXS03050031.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/6/2010
Acq. Time: 12:58:42 AM

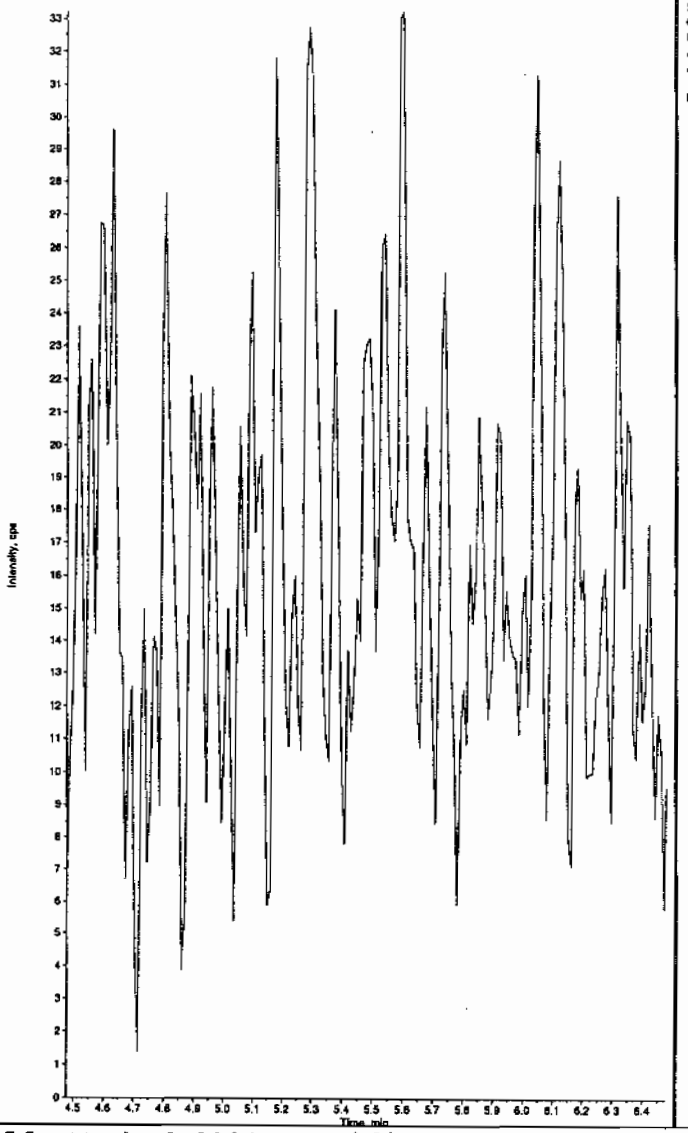
Modified: No



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

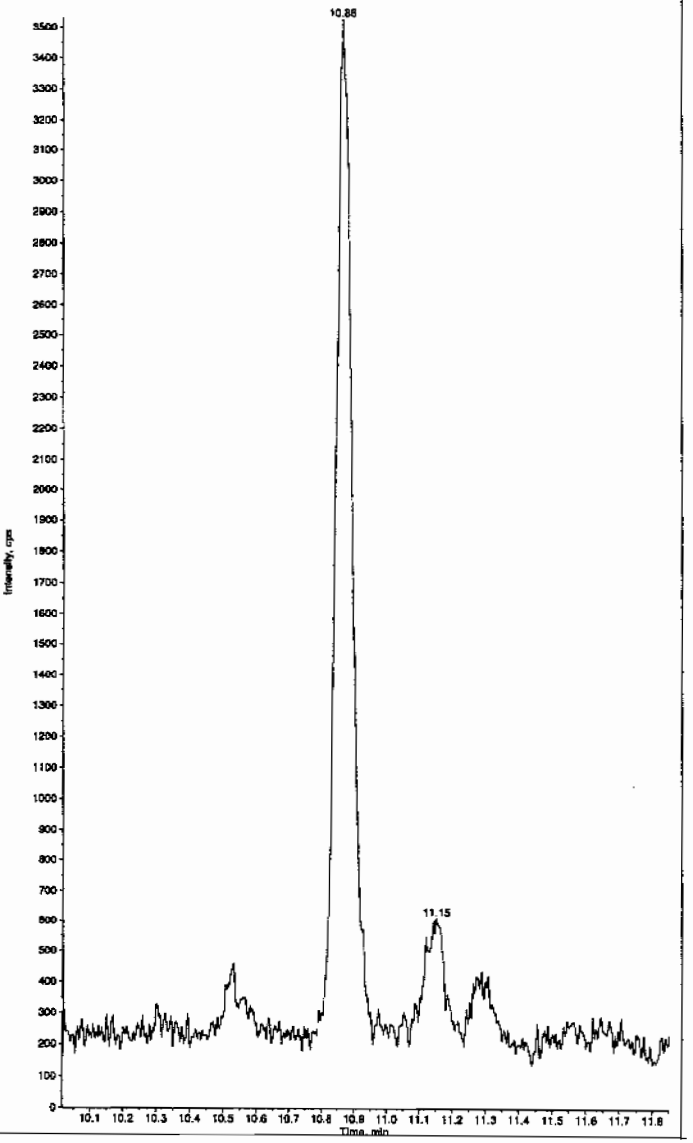
Sample Name: "247178008" Sample ID: "954321|2|LER" File: "EXS03050031.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:58:42 AM

Modified: No



Sample Name: "247178008" Sample ID: "954321|2|LER" File: "EXS03050031.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 12:58:42 AM

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: RE15-10-7996

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178009

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326081a

Date Analyzed: 28-MAR-10 06:03

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

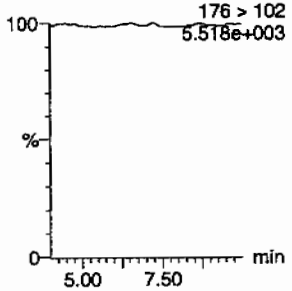
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

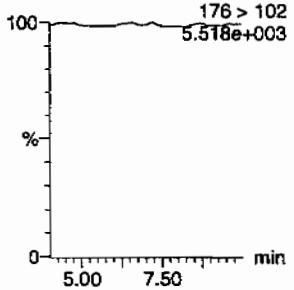
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326081a
Date: 28-Mar-2010
Time: 06:03:26
ID: 247178009 | LANL | 954321 | Solid | 2 |
Vial: 1:8,D

MAP 3/29/10

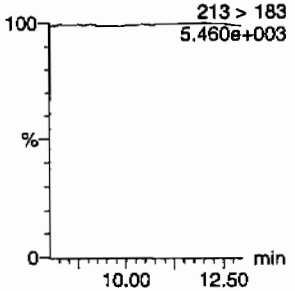
HMX
F2:MRM of 1 channel,AP-176 > 102
5.518e+003



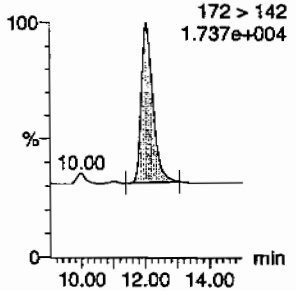
RDX
F2:MRM of 1 channel,AP-176 > 102
5.518e+003



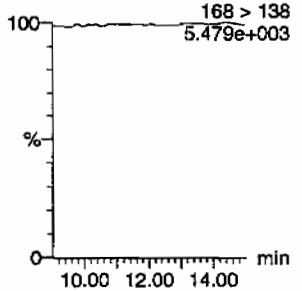
135-Trinitrobenzene
F4:MRM of 1 channel,AP-213 > 183
5.460e+003



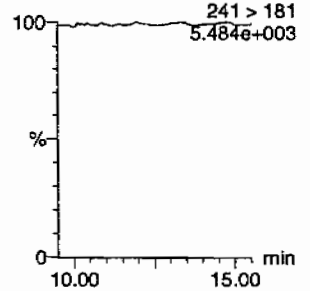
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-172 > 142
1.737e+004



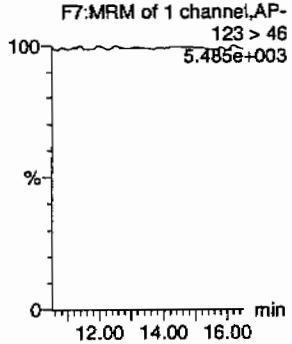
13-Dinitrobenzene
F5:MRM of 2 channels,AP-168 > 138
5.479e+003



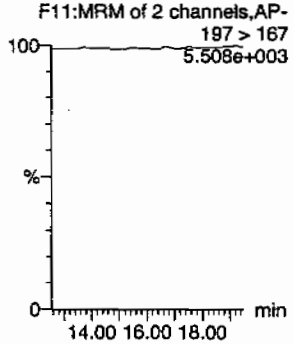
Tetryl
F6:MRM of 1 channel,AP-241 > 181
5.484e+003



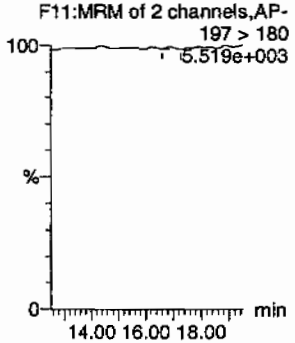
Nitrobenzene
F7:MRM of 1 channel,AP-123 > 46
5.485e+003



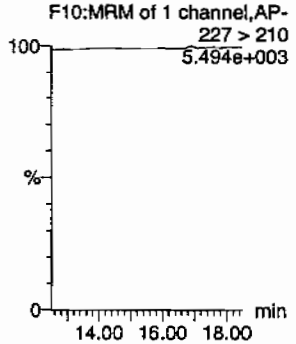
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-197 > 167
5.508e+003



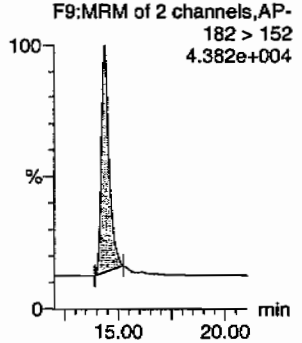
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-197 > 180
5.519e+003



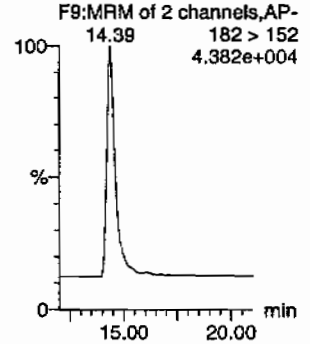
246-Trinitrotoluene
F10:MRM of 1 channel,AP-227 > 210
5.494e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-182 > 152
4.382e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-182 > 152
14.39
4.382e+004



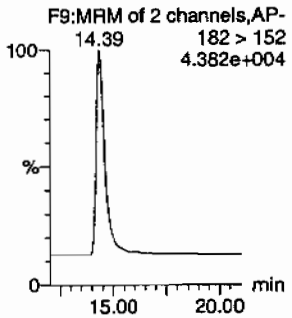
tm 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

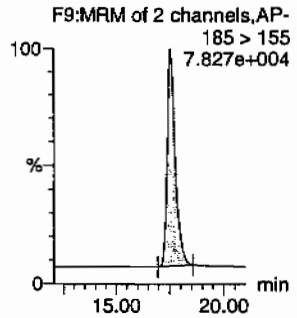
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

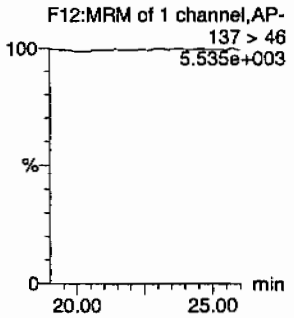
24-dinitrotoluene



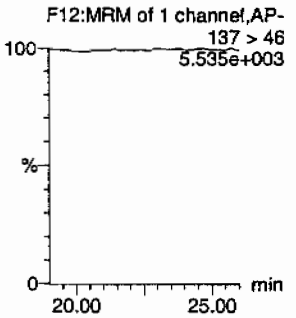
26-dinitrotoluene-d3



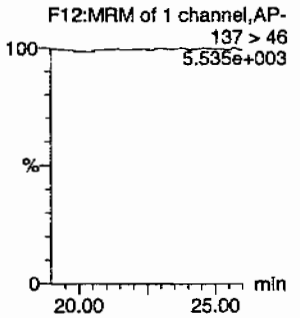
2-Nitrotoluene



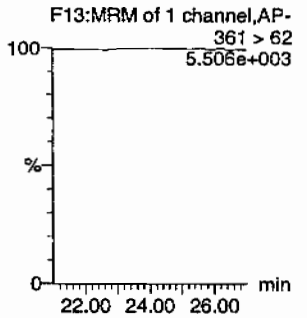
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
247178009	HMX	176 > 102			4998.080									
247178009	RDX	176 > 102			4998.080									
247178009	135-Trinitrobenzene	213 > 183			4998.080									
247178009	13-Dinitrobenzene-d4	172 > 142	12.04	4998.080		4998.080	4998.080	bb			408.5141	81.7	-18.3	290.1
247178009	13-Dinitrobenzene	168 > 138			4998.080									
247178009	Tetryl	241 > 181			4998.080									
247178009	Nitrobenzene	123 > 46			4998.080									
247178009	4-Amino-26-dinitrotoluene	197 > 167			31702.598									
247178009	2-Amino-46-dinitrotoluene	197 > 180			31702.598			MM-	28-Mar-10	12:34:36				
247178009	246-Trinitrotoluene	227 > 210			31702.598									
247178009	34-dinitrotoluene	182 > 152	14.39	16104.262	31702.598	16104.262	253.990	bb			240.3612	96.1	-3.9	509.6
247178009	26-dinitrotoluene	182 > 152			31702.598									
247178009	24-dinitrotoluene	182 > 152			31702.598									
247178009	26-dinitrotoluene-d3	185 > 155	17.55	31702.598		31702.598	31702.598	bb			431.7960	86.4	-13.6	2182.4
247178009	2-Nitrotoluene	137 > 46			31702.598									
247178009	4-Nitrotoluene	137 > 46			31702.598									
247178009	3-Nitrotoluene	137 > 46			31702.598									
247178009	PETN	361 > 62			31702.598									

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: RE15-10-7996

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178009

Sample Amount 2

Moisture: 15.3

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050032.wiff

Date Analyzed: 06-MAR-10 01:14

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 =

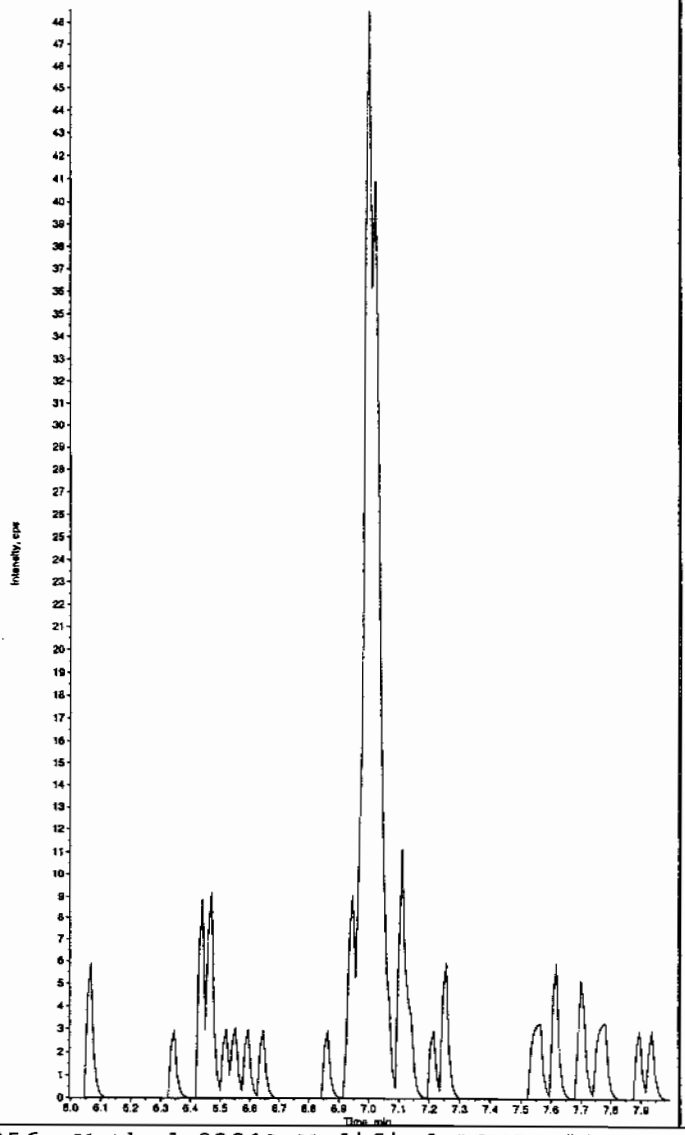
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Ran 3/9/10

Sample Name: "247178009" Sample ID: "954321|2|LER" File: "EXS03050032.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:14:25 AM

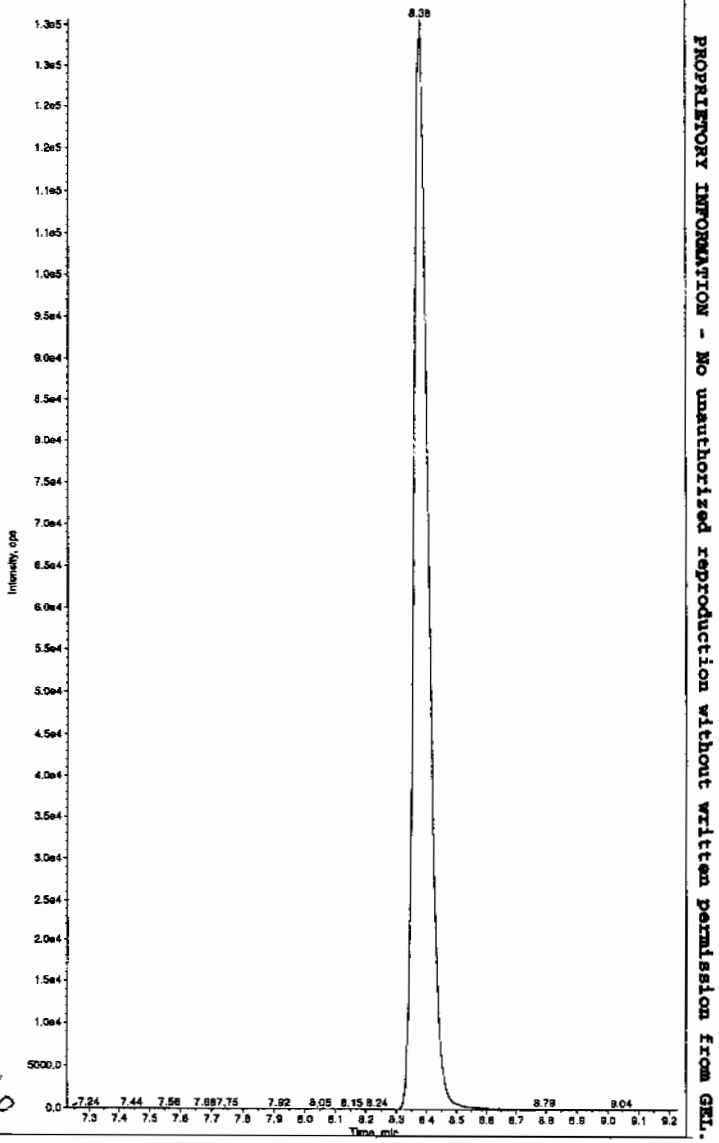
Modified: No



Sample Name: "247178009" Sample ID: "954321|2|LER" File: "EXS03050032.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:14:25 AM

Modified: No



HMW 03/09/10

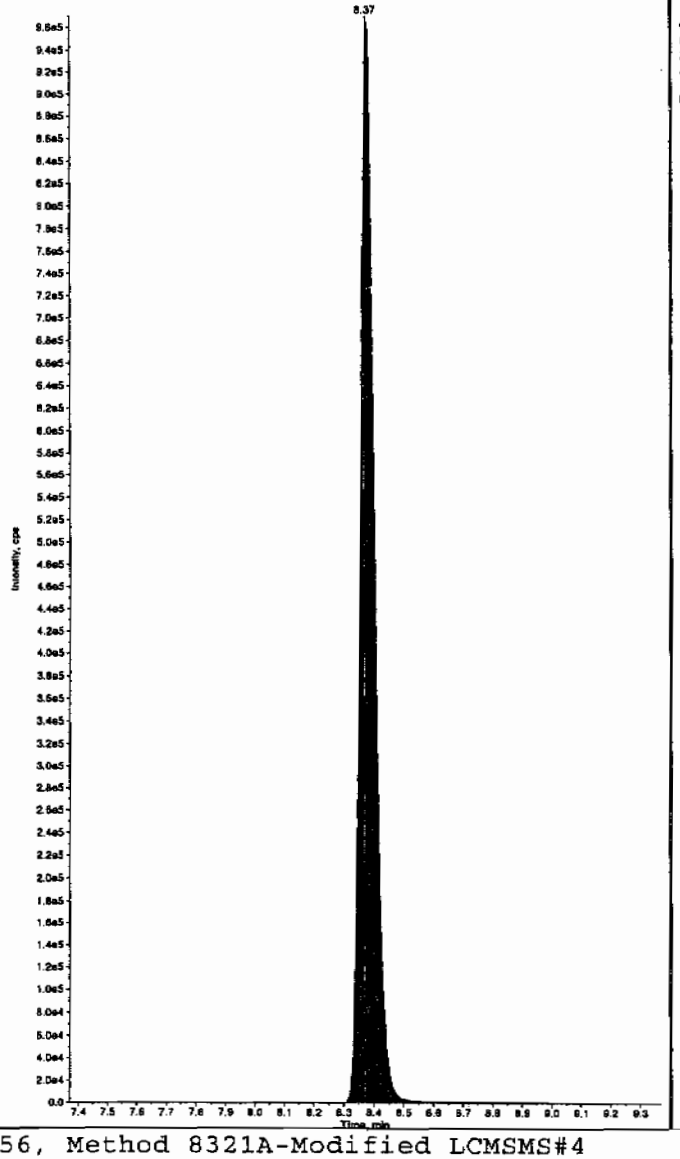
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178009" Sample ID: "954321|2|LER" File: "EXS03050032.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 264. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:14:25 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

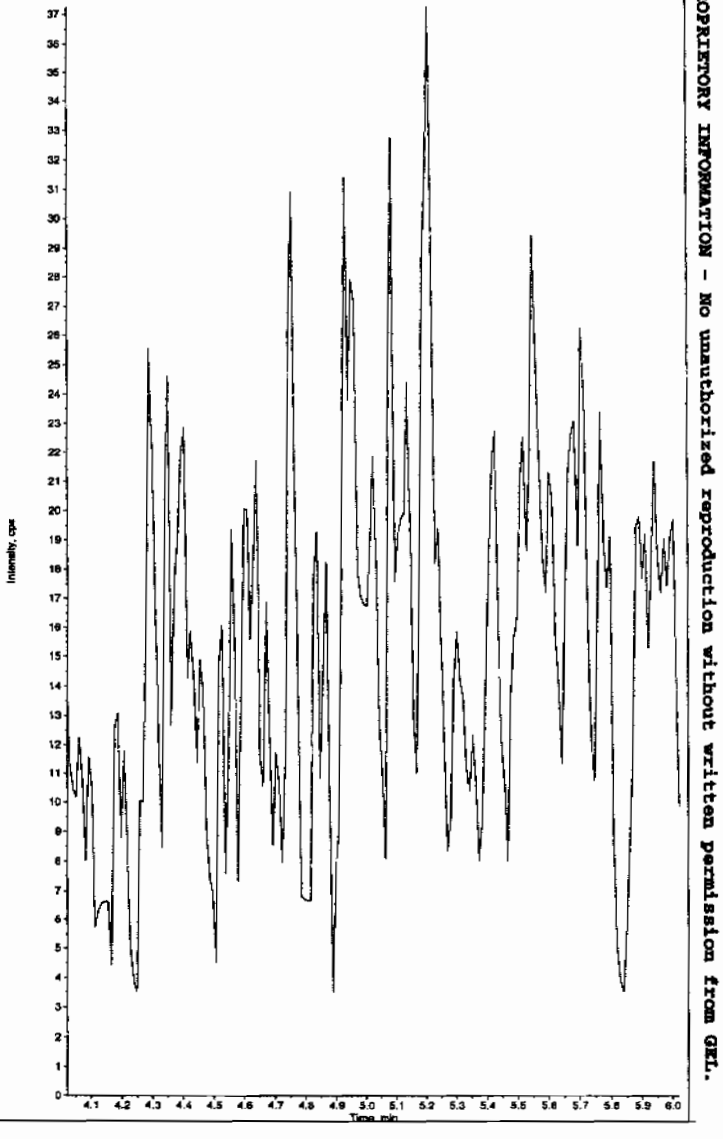
Int. Type: Valley
Retention Time: 8.37 min
Area: 3.29e+006 counts
Height: 970353.271 cps
Start Time: 8.28 min
End Time: 8.71 min



Sample Name: "247178009" Sample ID: "954321|2|LER" File: "EXS03050032.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:14:25 AM

Modified: No

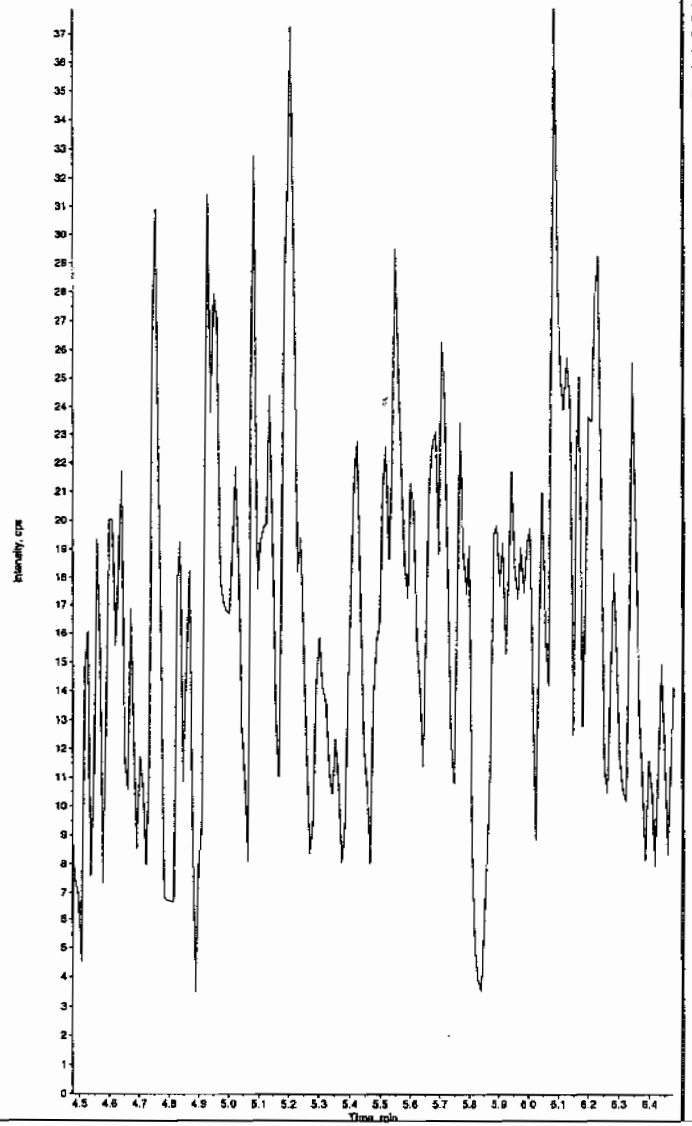


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178009" Sample ID: "954321|2|LER" File: "EXS03050032.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX63212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:14:25 AM

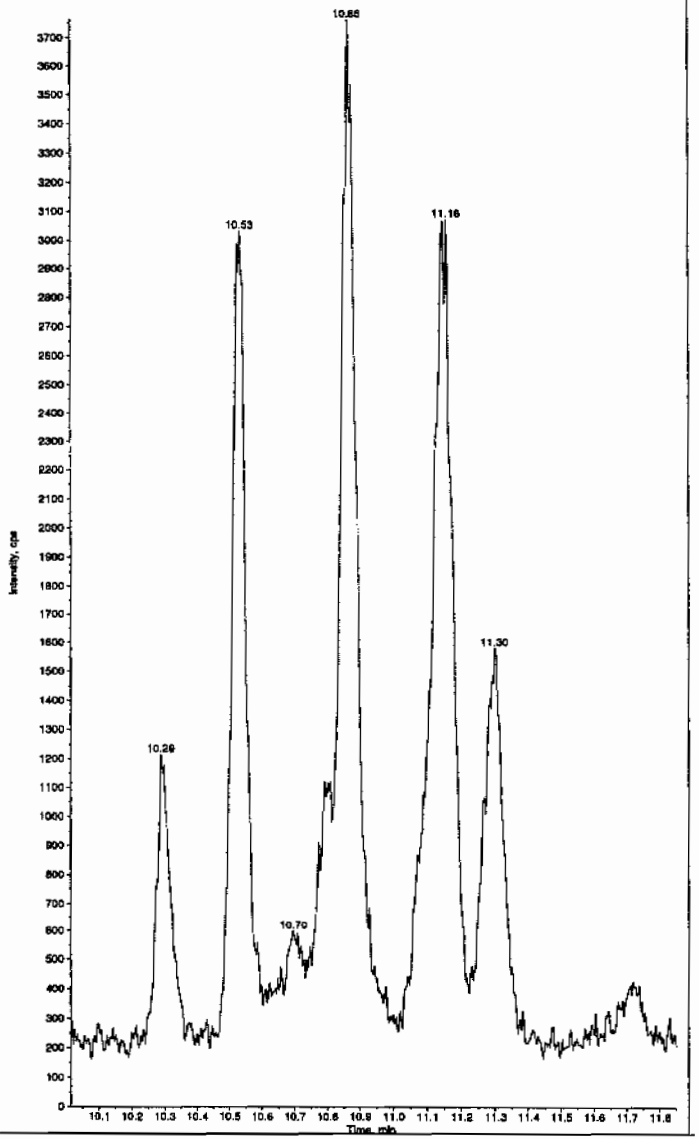
Modified: No



Sample Name: "247178009" Sample ID: "954321|2|LER" File: "EXS03050032.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX63212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:14:25 AM

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: RE15-10-7993

Lab Code: GEI

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178010

Sample Amount 2

Moisture: 19.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326082a

Date Analyzed: 28-MAR-10 06:32

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

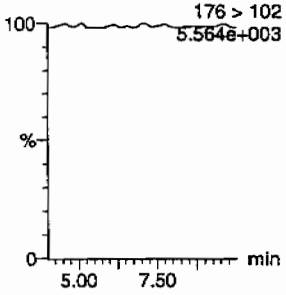
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

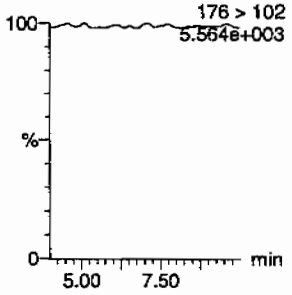
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326082a
Date: 28-Mar-2010
Time: 06:32:55
ID: 247178010 | LANL | 954321 | Solid | 21
Vial: 1:8,E

MAP 3/29/10

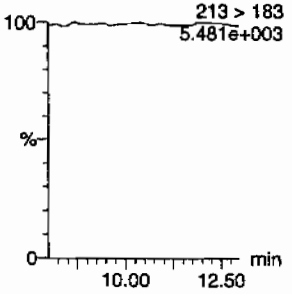
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.564e+003



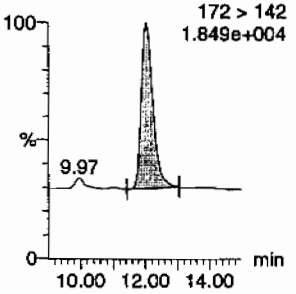
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.564e+003



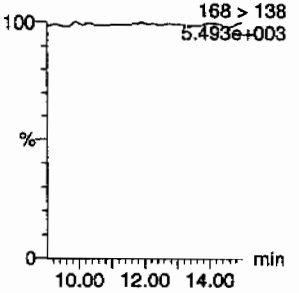
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.481e+003



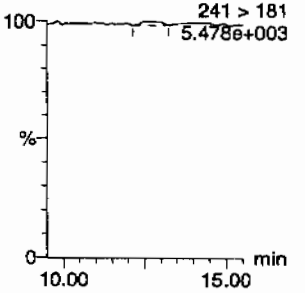
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.849e+004



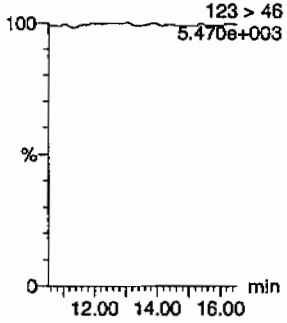
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.493e+003



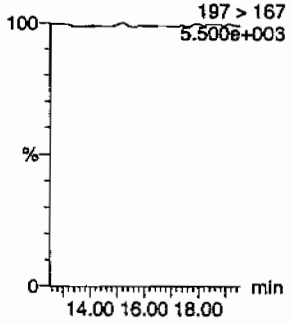
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.478e+003



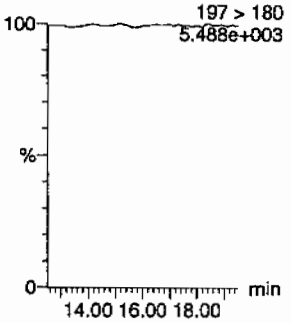
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.470e+003



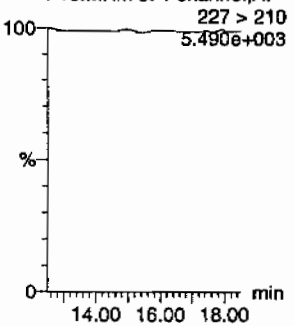
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.500e+003



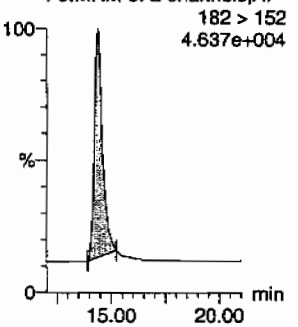
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.488e+003



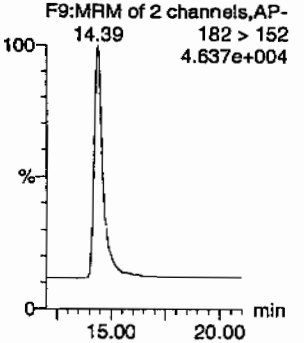
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.490e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.637e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39
182 > 152
4.637e+004

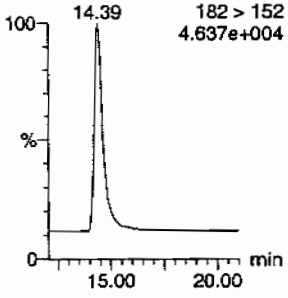


HMM 03/30/10

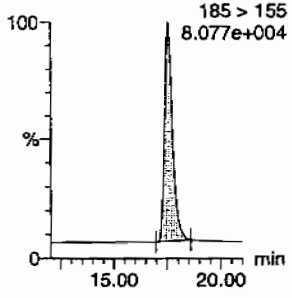
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

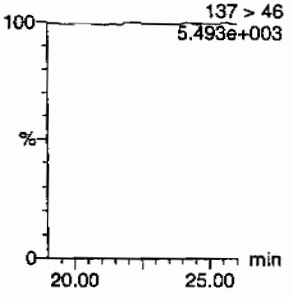
24-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39 182 > 152
4.637e+004



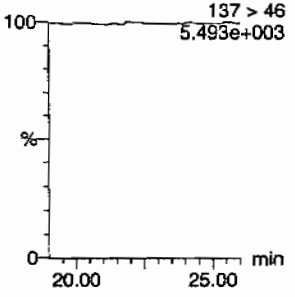
26-dinitrotoluene-d3
F9:MRM of 2 channels,AP-
185 > 155
8.077e+004



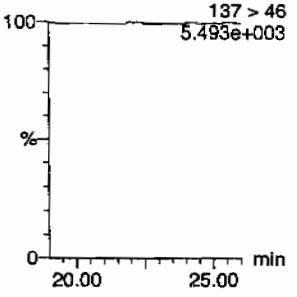
2-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.493e+003



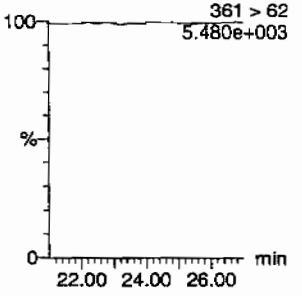
4-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.493e+003



3-Nitrotoluene
F12:MRM of 1 channel,AP-
137 > 46
5.493e+003



PETN
F13:MRM of 1 channel,AP-
361 > 62
5.480e+003



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
247178010	HMX	176 > 102			5401.972									
247178010	RDX	176 > 102			5401.972									
247178010	135-Trinitrobenzene	213 > 183			5401.972									
247178010	13-Dinitrobenzene-d4	172 > 142	12.04	5401.972		5401.972	5401.972	bb			441.5259	88.3	-11.7	557.3
247178010	13-Dinitrobenzene	168 > 138			5401.972									
247178010	Tetryl	241 > 181			5401.972			MM-	28-Mar-10	12:36:07				
247178010	Nitrobenzene	123 > 46			5401.972									
247178010	4-Amino-26-dinitrotoluene	197 > 167			32760.713									
247178010	2-Amino-46-dinitrotoluene	197 > 180			32760.713									
247178010	246-Trinitrotoluene	227 > 210			32760.713									
247178010	34-dinitrotoluene	182 > 152	14.39	17353.957	32760.713	17353.957	264.859	bb			250.6476	100.3	0.3	1047.9
247178010	26-dinitrotoluene	182 > 152			32760.713									
247178010	24-dinitrotoluene	182 > 152			32760.713									
247178010	26-dinitrotoluene-d3	185 > 155	17.55	32760.713		32760.713	32760.713	bb			446.2078	89.2	-10.8	2073.9
247178010	2-Nitrotoluene	137 > 46			32760.713									
247178010	4-Nitrotoluene	137 > 46			32760.713									
247178010	3-Nitrotoluene	137 > 46			32760.713									
247178010	PETN	361 > 62			32760.713									

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: RE15-10-7993

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178010

Sample Amount 2

Moisture: 19.8

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050033.wiff

Date Analyzed: 06-MAR-10 01:30

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 =

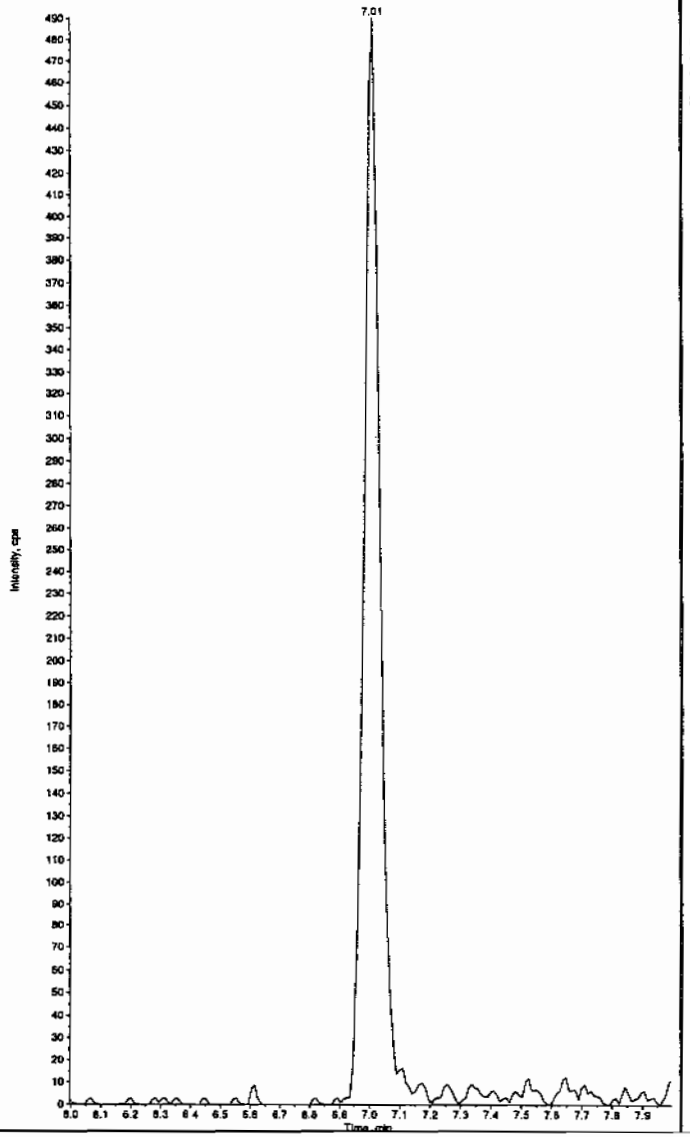
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

LCor 3/9/10

Sample Name: "247178010" Sample ID: "954321|2|LER" File: "EXS03050033.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:30:07 AM

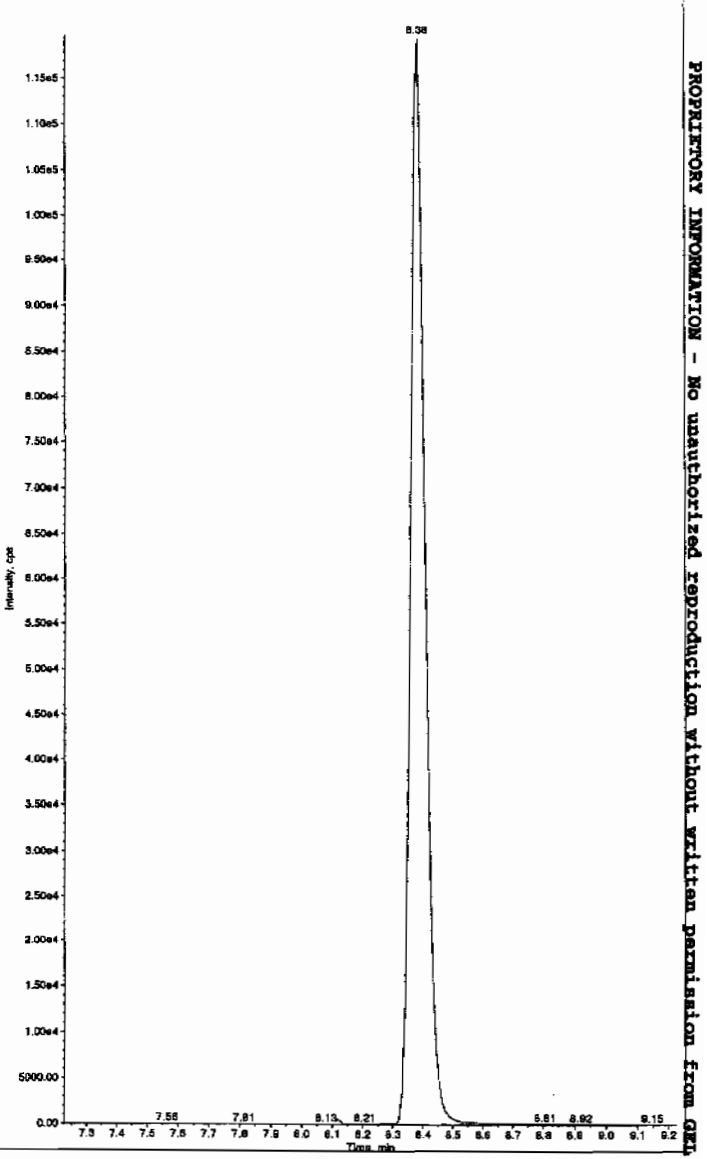
Modified: No



Sample Name: "247178010" Sample ID: "954321|2|LER" File: "EXS03050033.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:30:07 AM

Modified: No



HMC 03/09/10

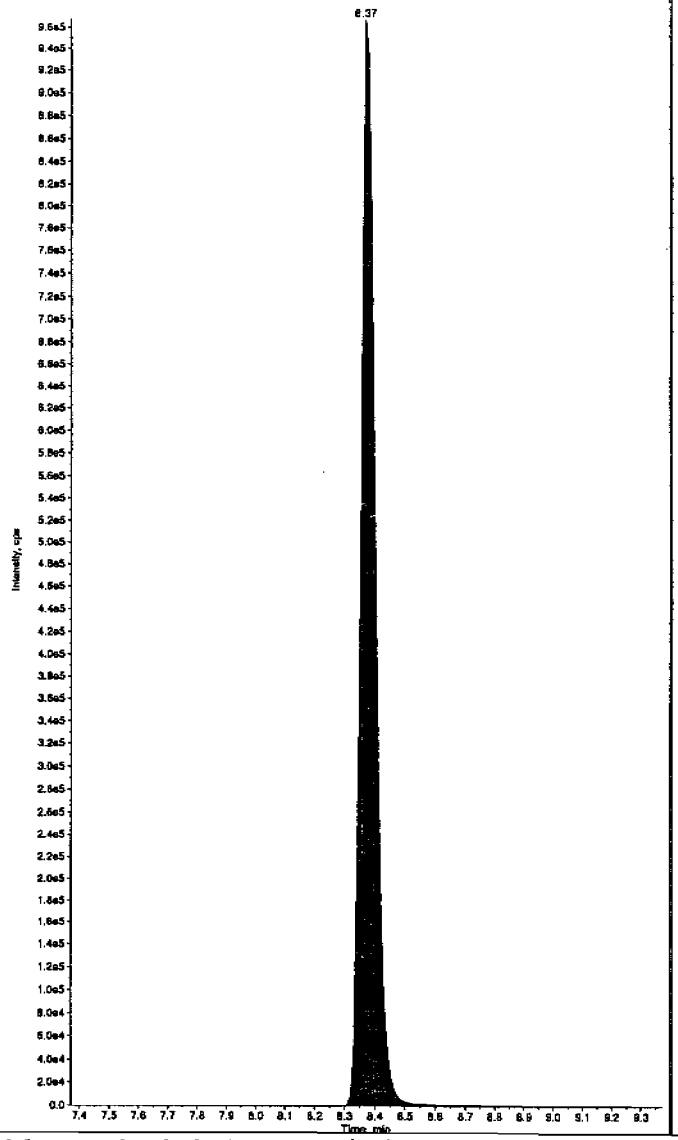
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178010" Sample ID: "954321|2|LER" File: "EXS03050033.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 265. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:30:07 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

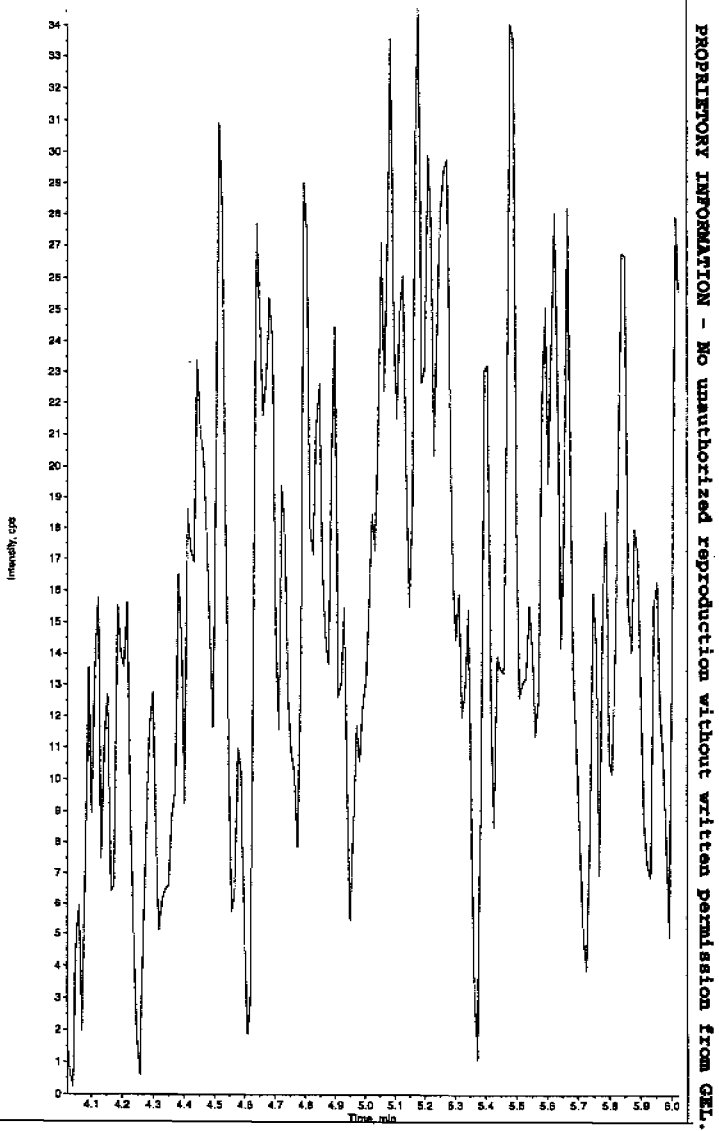
Int. Type: Valley
Retention Time: 8.37 min
Area: 3.31e+006 counts
Height: 967924.500 cps
Start Time: 8.29 min
End Time: 8.74 min



Sample Name: "247178010" Sample ID: "954321|2|LER" File: "EXS03050033.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/6/2010
Acq. Time: 1:30:07 AM

Modified: No

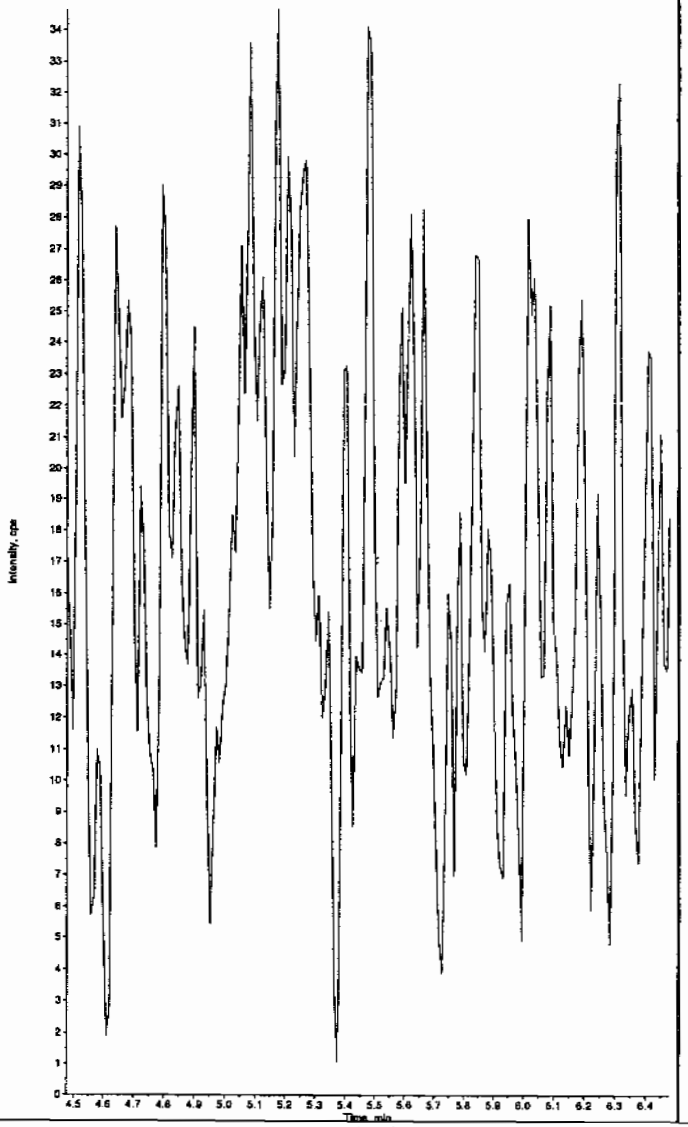


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178010" Sample ID: "954321|2|LER" File: "EXS03050033.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX832125" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:30:07 AM

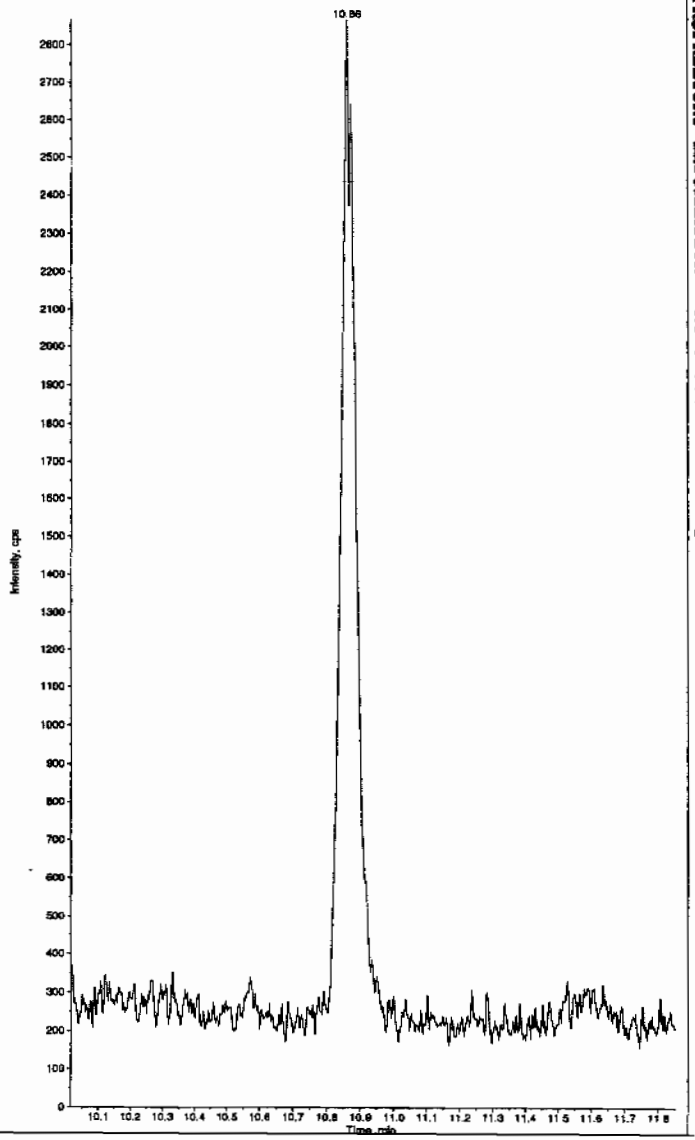
Modified: No



Sample Name: "247178010" Sample ID: "954321|2|LER" File: "EXS03050033.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "368.1/91.0 amu"
Comment: "LCX832125" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:30:07 AM

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: RE15-10-8064

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178011

Sample Amount 2

Moisture: 29.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326083a

Date Analyzed: 28-MAR-10 07:02

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

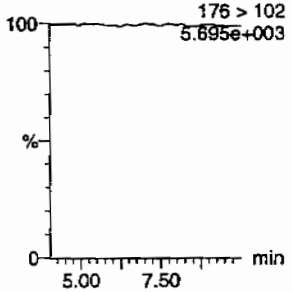
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

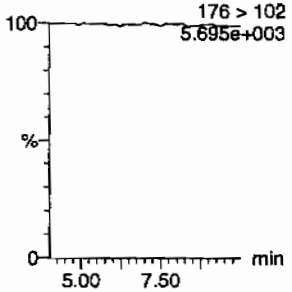
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326083a
Date: 28-Mar-2010
Time: 07:02:25
ID: 247178011 | LANC | 95432 | Solids | 2 |
Vial: 1:8,F

LMT 3/29/10

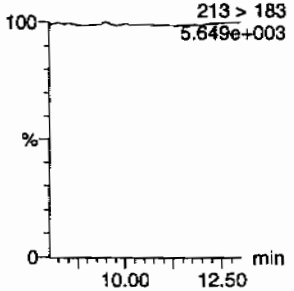
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.695e+003



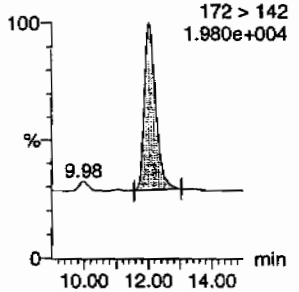
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.695e+003



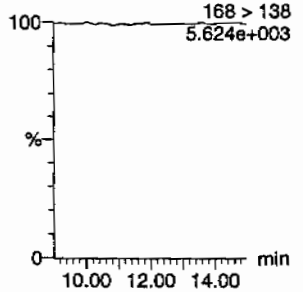
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.649e+003



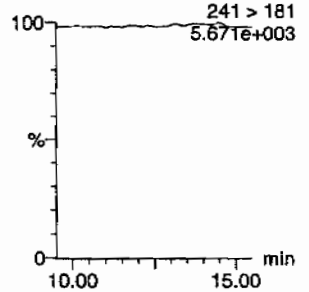
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.980e+004



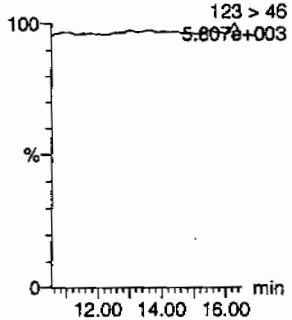
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.624e+003



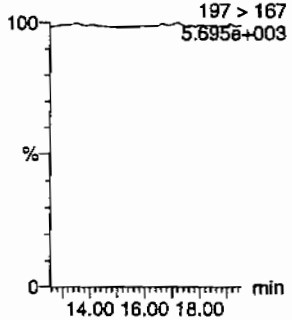
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.671e+003



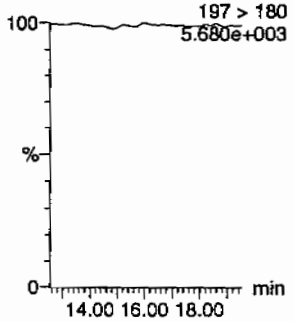
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.607e+003



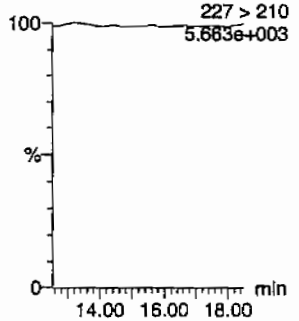
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.695e+003



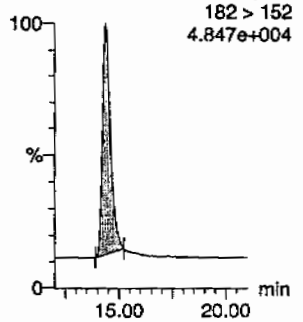
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.680e+003



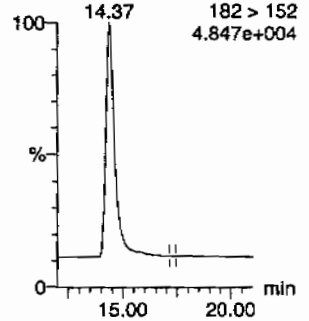
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.683e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.847e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.37
182 > 152
4.847e+004

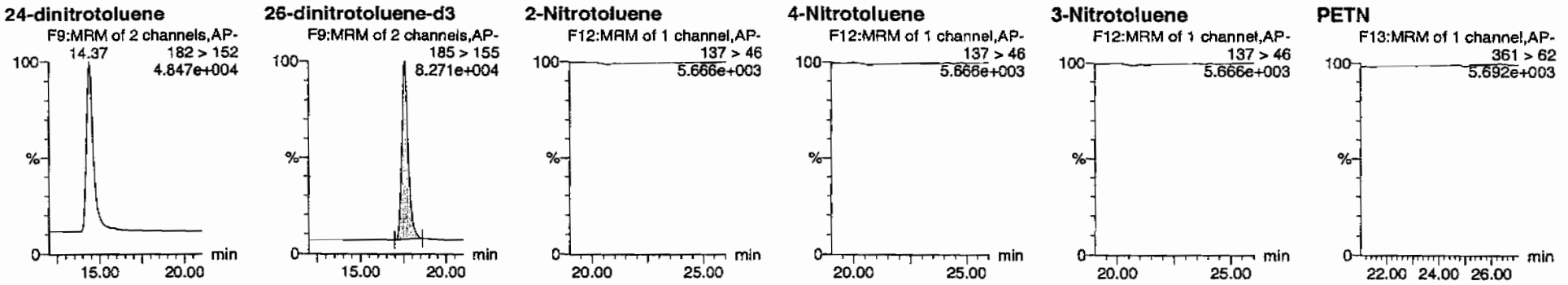


HMM 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



ID	Name	Traces	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
247178011	HMX	176 > 102			5883.924									
247178011	RDX	176 > 102			5883.924									
247178011	135-Trinitrobenzene	213 > 183			5883.924									
247178011	13-Dinitrobenzene-d4	172 > 142	12.03	5883.924		5883.924	5883.924	bb			480.9178	96.2	-3.8	454.3
247178011	13-Dinitrobenzene	168 > 138			5883.924									
247178011	Tetryl	241 > 181			5883.924									
247178011	Nitrobenzene	123 > 46			5883.924									
247178011	4-Amino-26-dinitrotoluene	197 > 167			33961.012									
247178011	2-Amino-46-dinitrotoluene	197 > 180			33961.012									
247178011	246-Trinitrotoluene	227 > 210			33961.012									
247178011	34-dinitrotoluene	182 > 152	14.37	18329.787	33961.012	18329.787	269.865	bb			255.3849	102.2	2.2	811.9
247178011	26-dinitrotoluene	182 > 152			33961.012			MM-	28-Mar-10	12:43:28				
247178011	24-dinitrotoluene	182 > 152			33961.012									
247178011	26-dinitrotoluene-d3	185 > 155	17.57	33961.012		33961.012	33961.012	bb			462.5561	92.5	-7.5	1907.0
247178011	2-Nitrotoluene	137 > 46			33961.012									
247178011	4-Nitrotoluene	137 > 46			33961.012									
247178011	3-Nitrotoluene	137 > 46			33961.012									
247178011	PETN	361 > 62			33961.012									

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: RE15-10-8064

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 247178011

Sample Amount 2

Moisture: 29.1

Amount Units g

Date Received: 16-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050034.wiff

Date Analyzed: 06-MAR-10 01:45

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

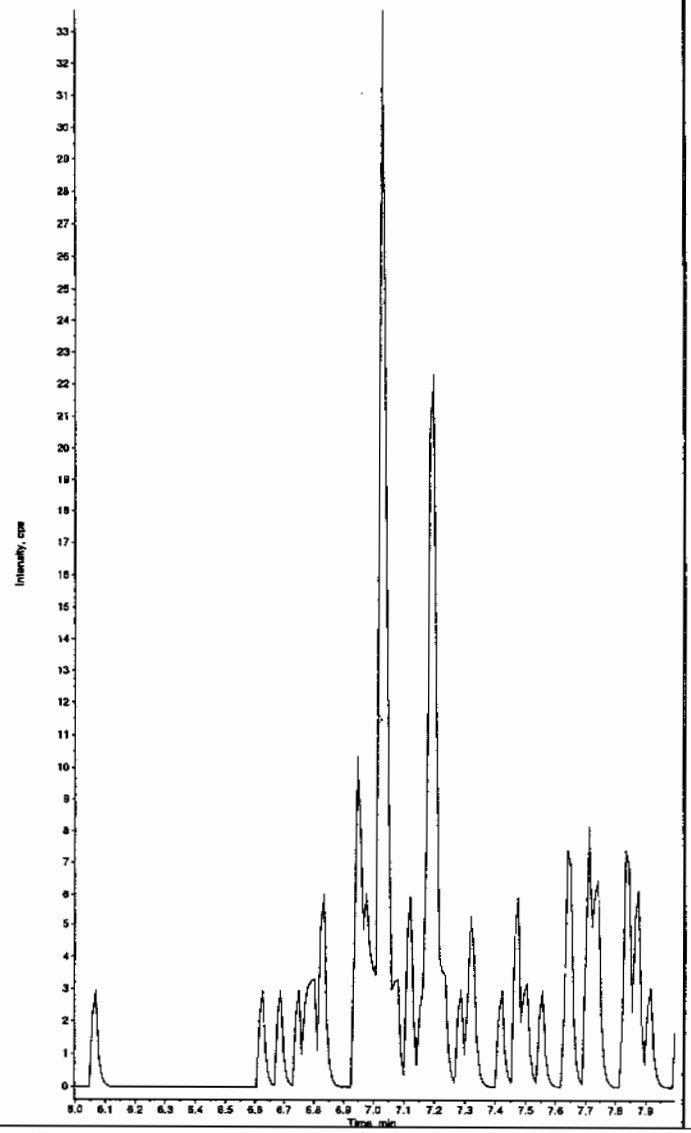
*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Scan 3/9/10

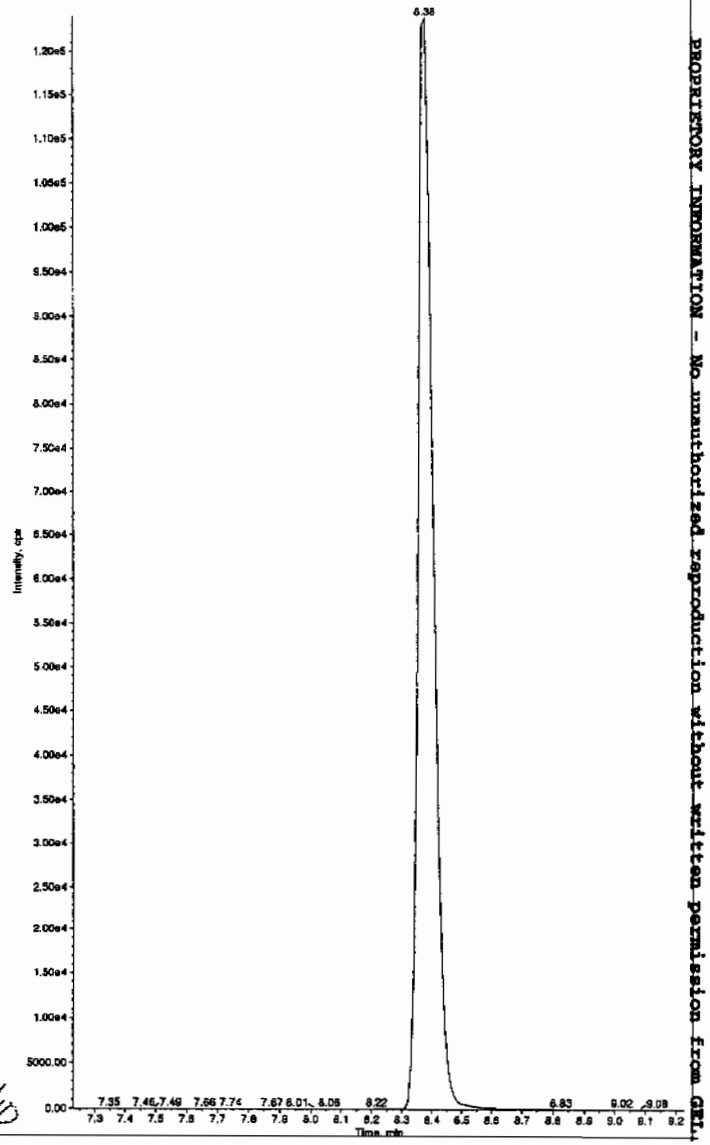
Sample Name: "247178011" Sample ID: "954321|2|LER" File: "EXS03050034.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:45:47 AM

Modified: No



Sample Name: "247178011" Sample ID: "954321|2|LER" File: "EXS03050034.wiff"
Peak Name: "35-Dinitroanilina" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""
Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:45:47 AM

Modified: No



Hmm 03/09/10

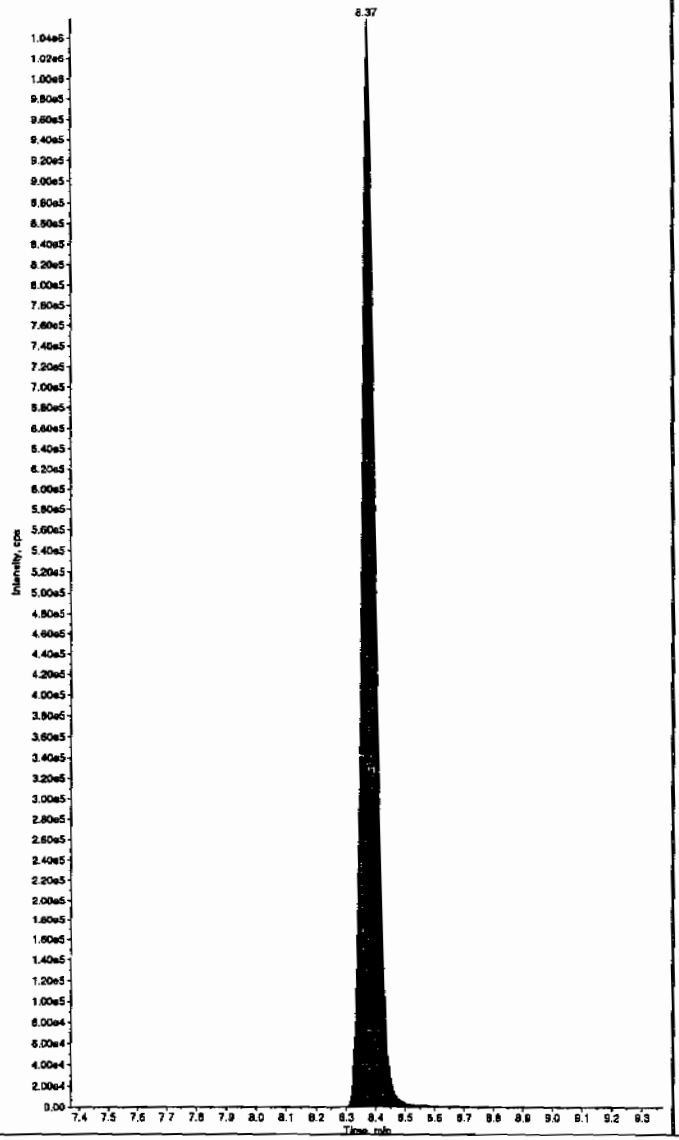
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178011" Sample ID: "954321|2|LER" File: "EXS03050034.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 284. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:45:47 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

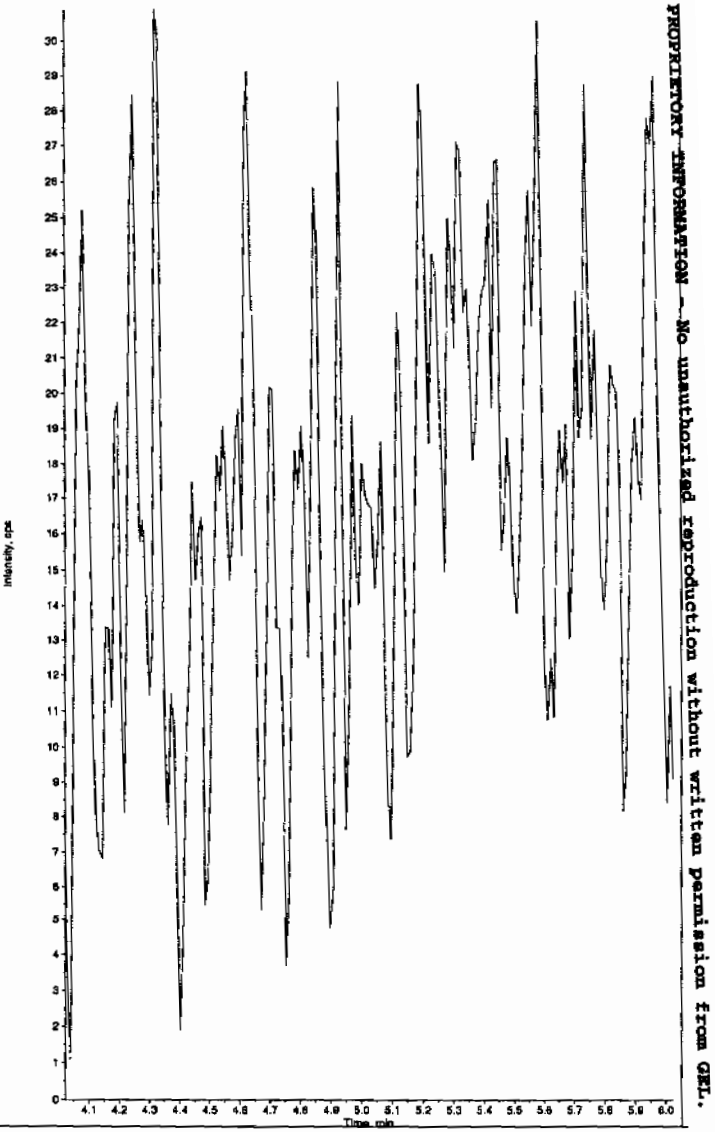
Int. Type: Valley
Retention Time: 8.37 min
Area: 3.53e+006 counts
Height: 1058991.333 cps
Start Time: 8.28 min
End Time: 8.68 min



Sample Name: "247178011" Sample ID: "954321|2|LER" File: "EXS03050034.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/6/2010
Acq. Time: 1:45:47 AM

Modified: No

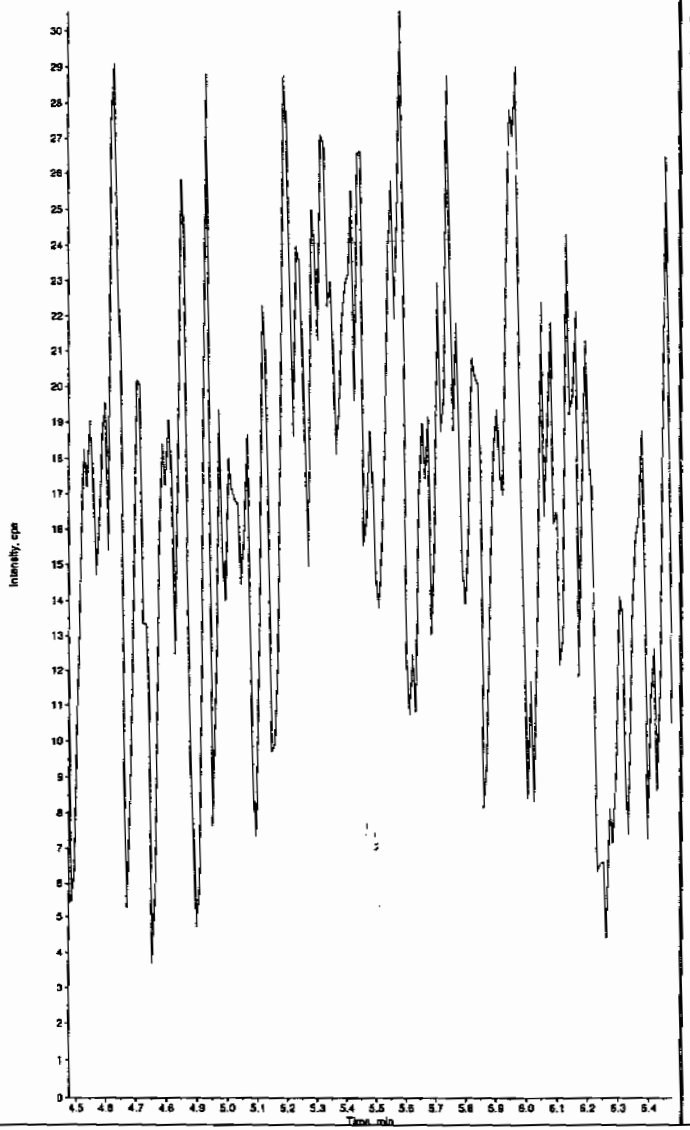


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "247178011" Sample ID: "954321|2|LER" File: "EXS03050034.wiff"
Peak Name: "24-Diamino-5-nitrotoluene" 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: 3/6/2010
Acq. Time: 1:45:47 AM

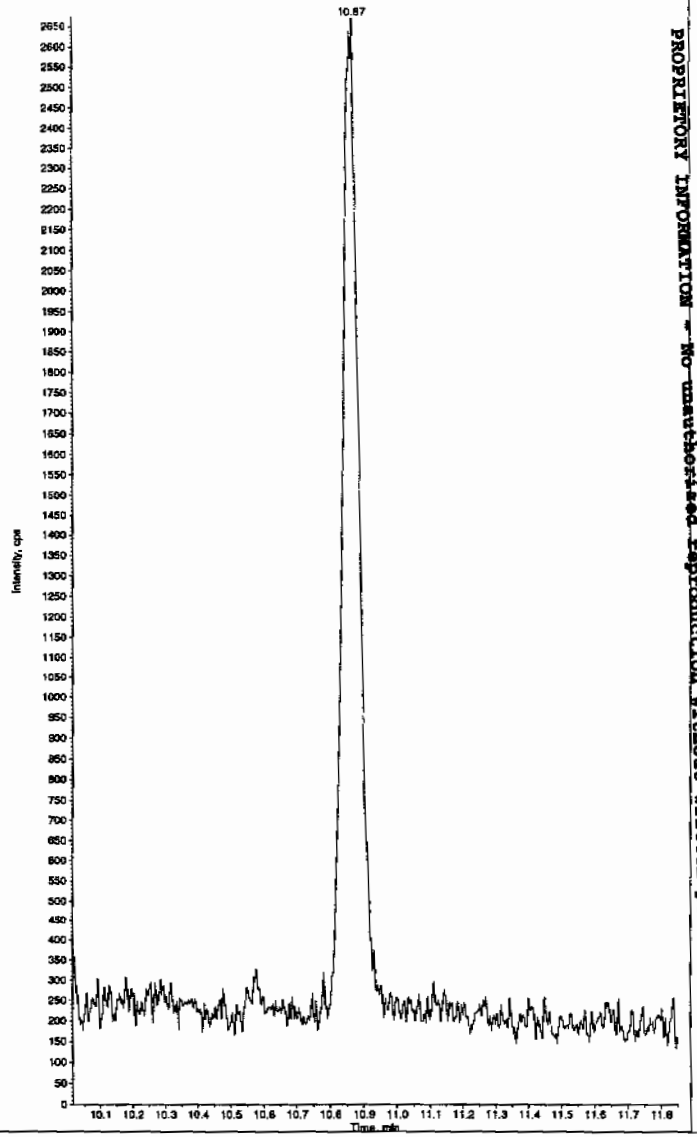
Modified: No



Sample Name: "247178011" Sample ID: "954321|2|LER" File: "EXS03050034.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 1:45:47 AM

Modified: No



*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
MNX	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)

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1861

Lab Code: GEL

Run Date: 05-MAR-10,26-MAR-10

LCMSMS Instrument ID: LCMSMS

Method: 8321A Modified

HPLC Column: Phenomenex Ultracarb 5 ODS(20)

Calibration Type: Average RF

Calibration Level:	1	2	3	4	5	6	Ave RF	RSD	Q
Data File:	EXP0326003a	EXP0326004a	EXP0326005a	EXP0326006a	EXP0326007a	EXP0326008a			
Parmname									
1,3,5-Trinitrobenzene	5.153	4.696	4.191	4.102	4.113	4.104	4.393	9.958	
1,3-Dinitrobenzene-d4	13.759	12.461	11.644	12.183	11.945	11.415	12.235	6.82	
2,4,6-Trinitrotoluene	.309	.313	.313	.321	.342	.335	0.322	4.197	
2,4-Dinitrotoluene	.3	.264	.288	.302	.304	.318	0.296	6.268	
2,6-Dinitrotoluene	1.122	1.126	1.138	1.137	1.176	1.164	1.144	1.874	
2,6-Dinitrotoluene-d3	81.936	74.97	71.859	74.068	71.742	65.946	73.420	7.115	
2-Amino-4,6-dinitrotoluene	.512	.517	.511	.541	.579	.59	0.542	6.497	
3,4-Dinitrotoluene	1.042	1.016	1.039	1.03	1.094	1.119	1.057	3.803	
4-Amino-2,6-dinitrotoluene	.335	.346	.353	.372	.375	.387	0.361	5.49	
HMX	3.747	4.083	4.192	4.118	4.21	4.068	4.070	4.135	
Nitrobenzene	.556	.662	.612	.599	.607	.587	0.604	5.783	
RDX	3.028	2.628	3.066	2.999	3.174	3.062	2.993	6.292	
Tetryl	1.276	1.143	1.091	1.068	1.015	1.095	1.115	8.025	
m-Dinitrobenzene	1.288	1.4	1.346	1.33	1.319	1.316	1.333	2.846	
m-Nitrotoluene	.061	.047	.05	.046	.047	.048	0.050	10.805	
o-Nitrotoluene	.075	.079	.073	.073	.075	.075	0.075	2.741	
p-Nitrotoluene	.046	.037	.039	.036	.037	.038	0.039	9.274	

Q column used to flag RSD values outside of Limit (>20%)
* Values outside of QC Limit

Explosives Initial Calibration

Form 6

Lab Name: GEL Laboratories LLC

GEL Job No: 10-1861

Lab Code: GEL

Run Date: 05-MAR-10,26-MAR-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:	EXP0326003a	EXP0326004a	EXP0326005a	EXP0326006a	EXP0326007a	EXP0326008a					
Parmname:											
PETN	3881.38	6983.93	24078.2	43389.9	71210.3	80631.3	1.527	-.0003435	21.839	.9983	

Quadradic 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

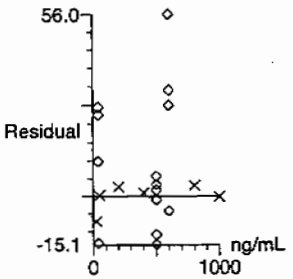
Q column used to flag COD outside of Limit (<0.990)
* Values outside of QC Limit

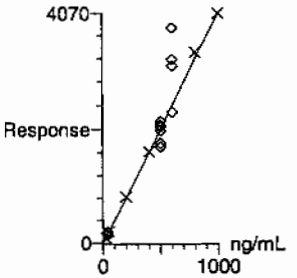
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

Method: C:\MASSLYNX\New_Exp.PRO\MethDB\032610expa.mdb, Time: Sat Mar 27 11:54:14 2010
Calibration: Untitled, Time: Sat Mar 27 12:12:14 2010

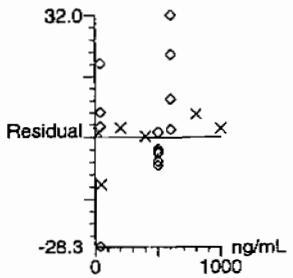
Compound name: HMX
Response Factor: 4.06966
RRF SD: 0.168281, % Relative SD: 4.13501
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF

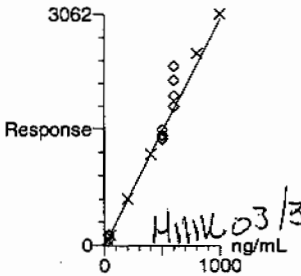




MM
3/27/10

Compound name: RDX
Response Factor: 2.99284
RRF SD: 0.188296, % Relative SD: 6.29154
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





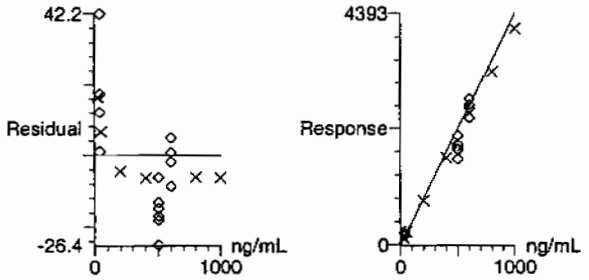
MMK 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

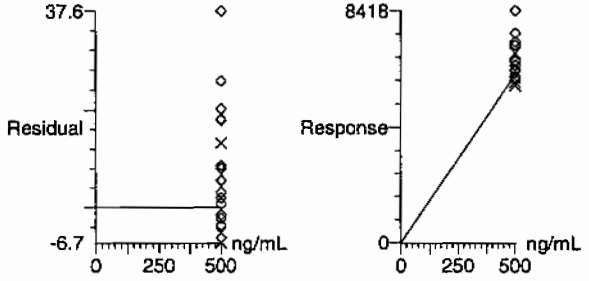
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

Compound name: 135-Trinitrobenzene
Response Factor: 4.39307
RRF SD: 0.437472, % Relative SD: 9.95823
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



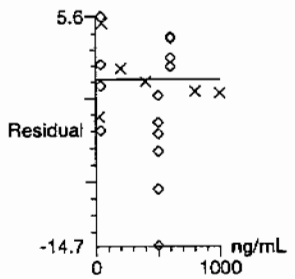
Compound name: 13-Dinitrobenzene-d4
Response Factor: 12.2348
RRF SD: 0.834472, % Relative SD: 6.82049
Response type: External Std, Area
Curve type: RF

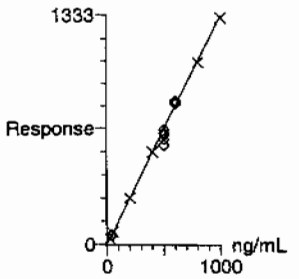


Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

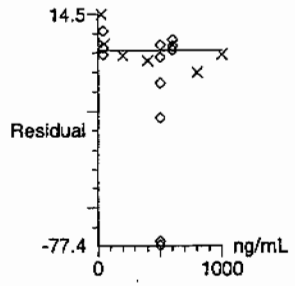
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

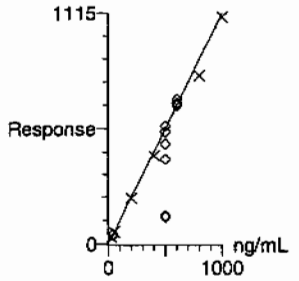
Compound name: 13-Dinitrobenzene
Response Factor: 1.33318
RRF SD: 0.037939, % Relative SD: 2.84576
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



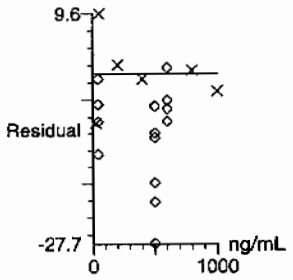


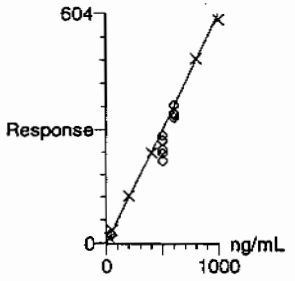
Compound name: Tetryl
Response Factor: 1.11477
RRF SD: 0.0894587, % Relative SD: 8.02487
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF



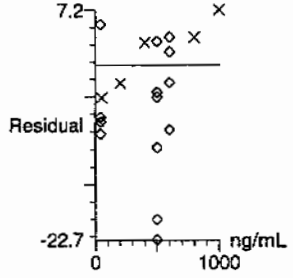


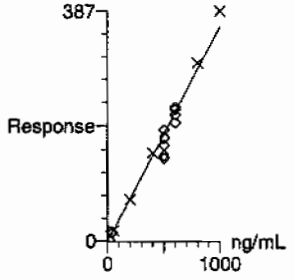
Compound name: Nitrobenzene
Response Factor: 0.603553
RRF SD: 0.0349025, % Relative SD: 5.78284
Response type: Internal Std (Ref 4), Area * (IS Conc. / IS Area)
Curve type: RF





Compound name: 4-Amino-26-dinitrotoluene
Response Factor: 0.361323
RRF SD: 0.0198354, % Relative SD: 5.48967
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

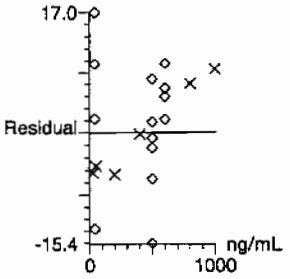


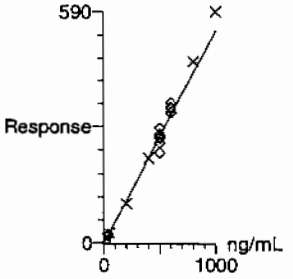


Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

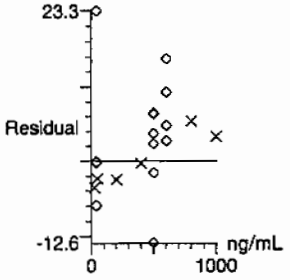
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

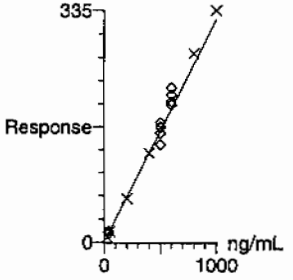
Compound name: 2-Amino-46-dinitrotoluene
Response Factor: 0.541633
RRF SD: 0.03519, % Relative SD: 6.49701
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



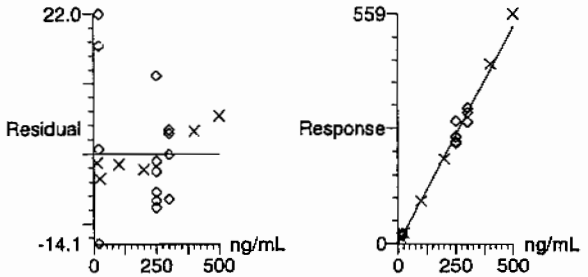


Compound name: 246-Trinitrotoluene
Response Factor: 0.322112
RRF SD: 0.0135193, % Relative SD: 4.19708
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF

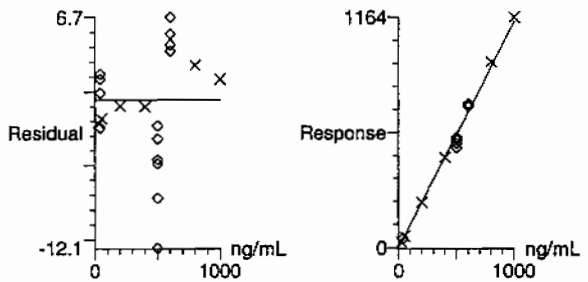




Compound name: 34-dinitrotoluene
Response Factor: 1.0567
RRF SD: 0.0401844, % Relative SD: 3.80282
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



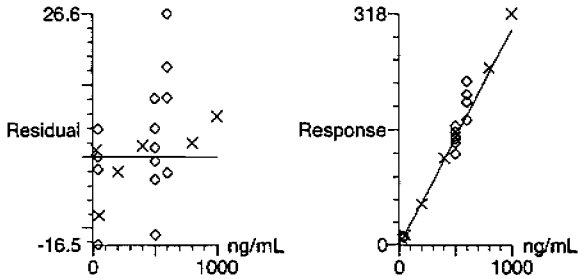
Compound name: 26-dinitrotoluene
Response Factor: 1.14374
RRF SD: 0.0214355, % Relative SD: 1.87416
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



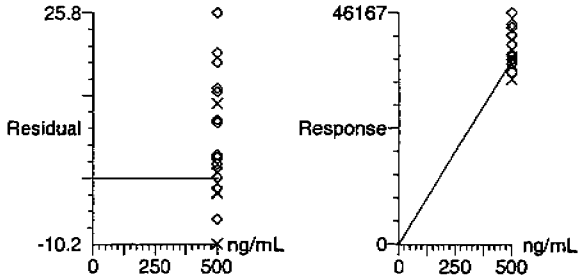
Quantify Calibration Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

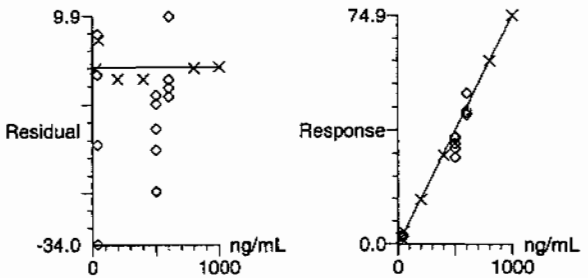
Compound name: 24-dinitrotoluene
Response Factor: 0.296113
RRF SD: 0.0185613, % Relative SD: 6.26834
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



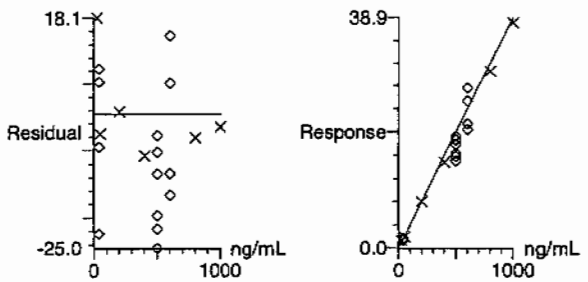
Compound name: 26-dinitrotoluene-d3
Response Factor: 73.4203
RRF SD: 5.22416, % Relative SD: 7.11541
Response type: External Std, Area
Curve type: RF



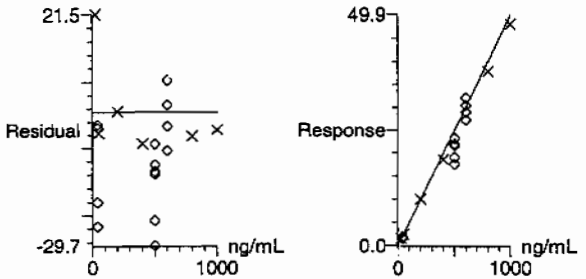
Compound name: 2-Nitrotoluene
Response Factor: 0.0748676
RRF SD: 0.00205235, % Relative SD: 2.74131
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



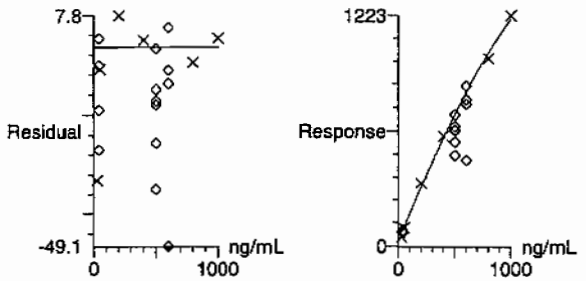
Compound name: 4-Nitrotoluene
Response Factor: 0.0389048
RRF SD: 0.00360807, % Relative SD: 9.2741
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: 3-Nitrotoluene
Response Factor: 0.0498696
RRF SD: 0.00538833, % Relative SD: 10.8048
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: RF



Compound name: PETN
Coefficient of Determination: 0.998301
Calibration curve: -0.000343492 * x^2 + 1.52676 * x + 21.8393
Response type: Internal Std (Ref 14), Area * (IS Conc. / IS Area)
Curve type: 2nd Order, Origin: Exclude, Weighting: Null, Axis trans: None



7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1861

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXP0326017a

Analysis Date: 26-MAR-10 22:35

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	588.78	98	
1,3-Dinitrobenzene-d4	500	483.17	97	
2,4,6-Trinitrotoluene	600	665.267	111	
2,4-Dinitrotoluene	600	666.086	111	
2,6-Dinitrotoluene	600	640.076	107	
2,6-Dinitrotoluene-d3	500	468.146	94	
2-Amino-4,6-dinitrotoluene	600	630.436	105	
3,4-Dinitrotoluene	300	309.471	103	
4-Amino-2,6-dinitrotoluene	600	622.152	104	
HMX	600	768.146	128	*
Nitrobenzene	600	605.515	101	
PETN	600	628.899	105	
RDX	600	659.983	110	
Tetryl	600	610.521	102	
m-Dinitrobenzene	600	622.034	104	
m-Nitrotoluene	600	642.113	107	
o-Nitrotoluene	600	659.419	110	
p-Nitrotoluene	600	688.85	115	

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%
OtherTarget 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

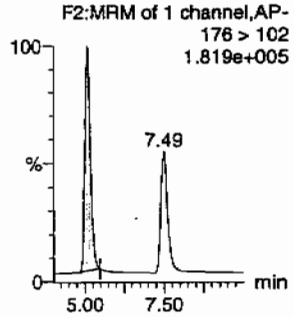
Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326017a
Date: 26-Mar-2010
Time: 22:35:12
ID: WXX100326-07 ~~CCV~~ Rev
Vial: 1:1,B

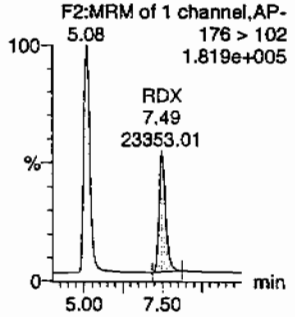
MM 3/27/10

MM 3/27/10

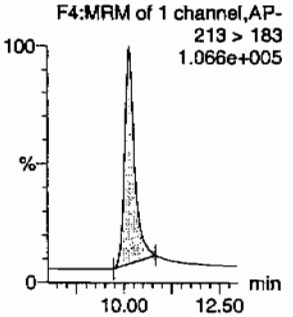
HMX



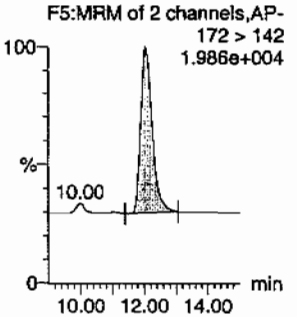
RDX



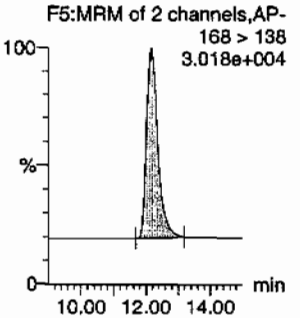
135-Trinitrobenzene



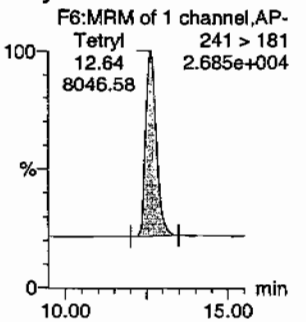
13-Dinitrobenzene-d4



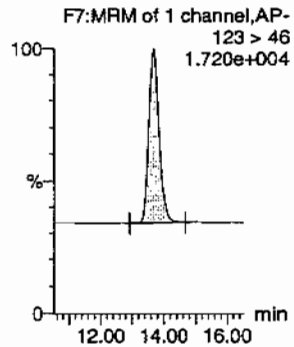
13-Dinitrobenzene



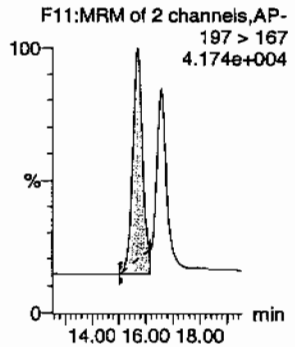
Tetryl



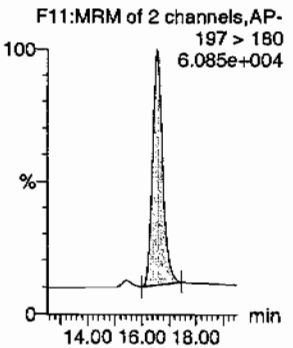
Nitrobenzene



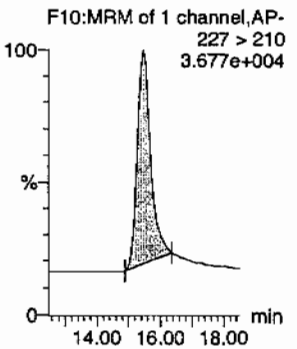
4-Amino-26-dinitrotoluene



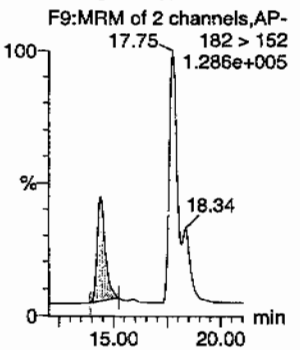
2-Amino-46-dinitrotoluene



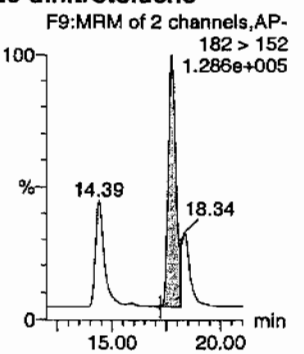
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

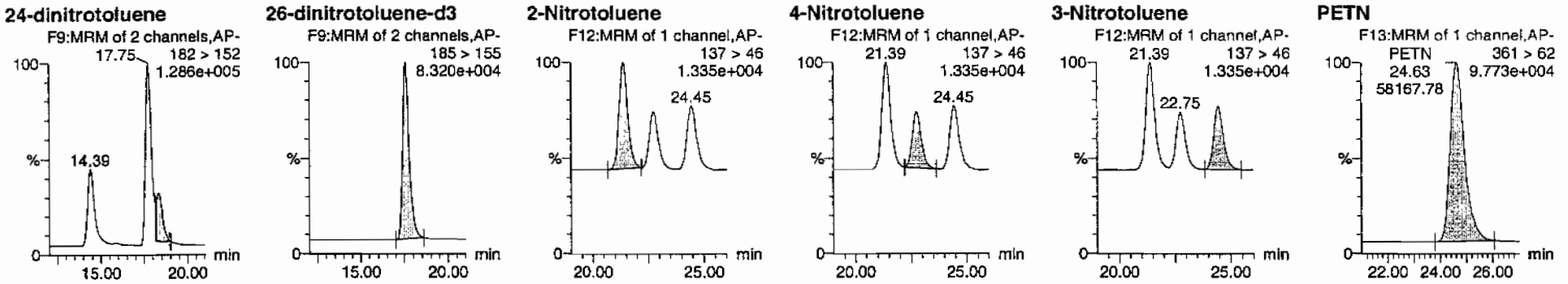


Hmm 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.08	36959.711	5911.484	36959.711	3126.094	bb			768.1459	128.0	28.0	3417.7
WXX100326-07CCV	RDX	176 > 102	7.49	23353.014	5911.484	23353.014	1975.224	bb			659.9825	110.0	10.0	1834.1
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.13	30580.680	5911.484	30580.680	2586.548	bb			588.7796	98.1	-1.9	1714.1
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.04	5911.484		5911.484	5911.484	bb			483.1704	96.6	-3.4	262.7
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.18	9804.582	5911.484	9804.582	829.283	bb			622.0344	103.7	3.7	679.0
WXX100326-07CCV	Tetryl	241 > 181	12.64	8046.581	5911.484	8046.581	680.589	bb			610.5206	101.8	1.8	452.7
WXX100326-07CCV	Nitrobenzene	123 > 46	13.68	4320.831	5911.484	4320.831	365.461	bb			605.5153	100.9	0.9	397.2
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	15453.233	34371.445	15453.233	224.798	MM	27-Mar-10	12:00:28	622.1521	103.7	3.7	328.6
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.58	23473.307	34371.445	23473.307	341.465	bb			630.4362	105.1	5.1	1710.7
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.45	14730.935	34371.445	14730.935	214.290	bb			665.2675	110.9	10.9	302.3
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.39	22480.182	34371.445	22480.182	327.018	bb			309.4713	103.2	3.2	515.0
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.75	50325.426	34371.445	50325.426	732.082	MM	27-Mar-10	12:06:15	640.0759	106.7	6.7	1239.1
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.34	13558.617	34371.445	13558.617	197.237	MM	27-Mar-10	12:10:01	666.0861	111.0	11.0	337.2
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.57	34371.445		34371.445	34371.445	bb			468.1463	93.6	-6.4	2762.5
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.39	3393.775	34371.445	3393.775	49.369	bb			659.4192	109.9	9.9	1182.8
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.75	1842.281	34371.445	1842.281	26.800	bb			688.8500	114.8	14.8	617.1
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.45	2201.281	34371.445	2201.281	32.022	bb			642.1130	107.0	7.0	698.3
WXX100326-07CCV	PETN	361 > 62	24.63	58167.781	34371.445	58167.781	846.164	bb			628.8992	104.8	4.8	11341.7

WXX100326-07ICV

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/26/10
Time of Injection: 2235
Standard Number: WXX100326-07ICV
Data File: EXP0326017a

HMX	128.0
RDX	110.0
135-TNB	98.1
13-DNB	103.7
Tetryl	101.8
Nitrobenzene	100.9
4A-26-DNT	103.7
2A-46-DNT	105.1
246-TNT	110.9
34-DNT(surr)	103.2
26-DNT	106.7
24-DNT	111.0
2-NT	109.9
4-NT	114.8
3-NT	107.0
PETN	104.8
Total	1719.6
Average	107.5

HMX 03/30/10

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: 10-1861

Lab Code: GEL

Run Date: 05-MAR-10,26-MAR-10

LCMSMS Instrument ID: LCMSMS4

Method: 8321A Modified

HPLC Column: YMC J-Sphere ODS-H8O

Calibration Type: 2nd Order

Calibration Level:	19	20	21	22	23	24	25	X	X^2	Intercept	COD	Q
Data File:	EXS03050003.wifl	EXS03050004.wifl	EXS03050005.wifl	EXS03050006.wifl	EXS03050007.wifl	EXS03050008.wifl	EXS03050009.wifl					
Parmname:												
2,4-Diamino-6-nitrotoluene	85600	188000	436000	918000	1500000	1790000	3780000	-5040	1860	.016	.9992	
2,6-Diamino-4-nitrotoluene	126000	257000	638000	1300000	2090000	2570000	5220000	-13200	2690	-.037	.9996	
3,4-Dinitrotoluene	307000	593000	1470000	2930000	4500000	5680000	10400000	-66800	13500	-3.11	.9976	
3,5-Dinitroaniline	462000	868000	2040000	4020000	6030000	7500000	12600000	-18600	8840	-1.27	.9999	
TATB	63200	132000	333000	729000	1100000	1480000	3120000	-13200	1430	.069	1	
tris(o-cresyl) phosphate	950000	1920000	4370000	8500000	12200000	15100000	25100000	123000	17900	-2.71	.9999	

Quadradic 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

Peak Name: TATB
No Internal Standard
Q1/Q3 Masses: 257.20/204.90 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.32e+004			
a1	1.43e+003			
a2	0.0686			

Correlation coefficient 1.0000
Use Area

Peak Name: 35-Dinitroaniline
No Internal Standard
Q1/Q3 Masses: 182.00/46.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	-1.86e+004			
a1	8.84e+003			
a2	-1.27			

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	-6.68e+004			
a1	1.35e+004			
a2	-3.11			

Correlation coefficient 0.9976
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	-1.32e+004			
a1	2.69e+003			
a2	-0.0366			

Correlation coefficient 0.9996
Use Area

LCen 3/9/10

Hnne 03/09/10

Peak Name: 24-Diamino-6-nitrotoluene
No Internal Standard
Q1/Q3 Masses: 165.97/46.00 amu

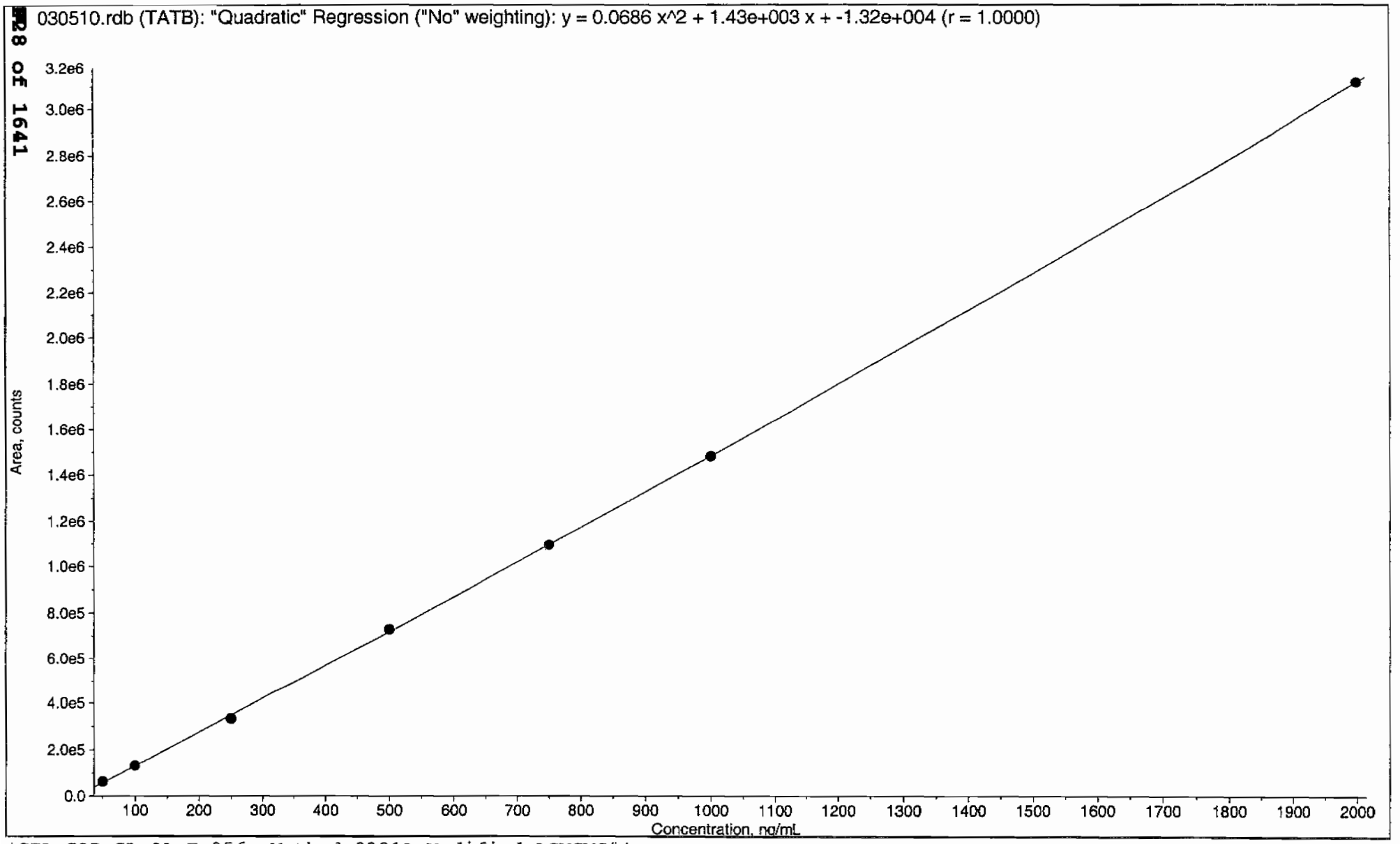
Fit	Quadratic	Weighting	None	Iterate No
a0	-5.04e+003			
a1	1.86e+003			
a2	0.0157			

Correlation coefficient 0.9992
Use Area

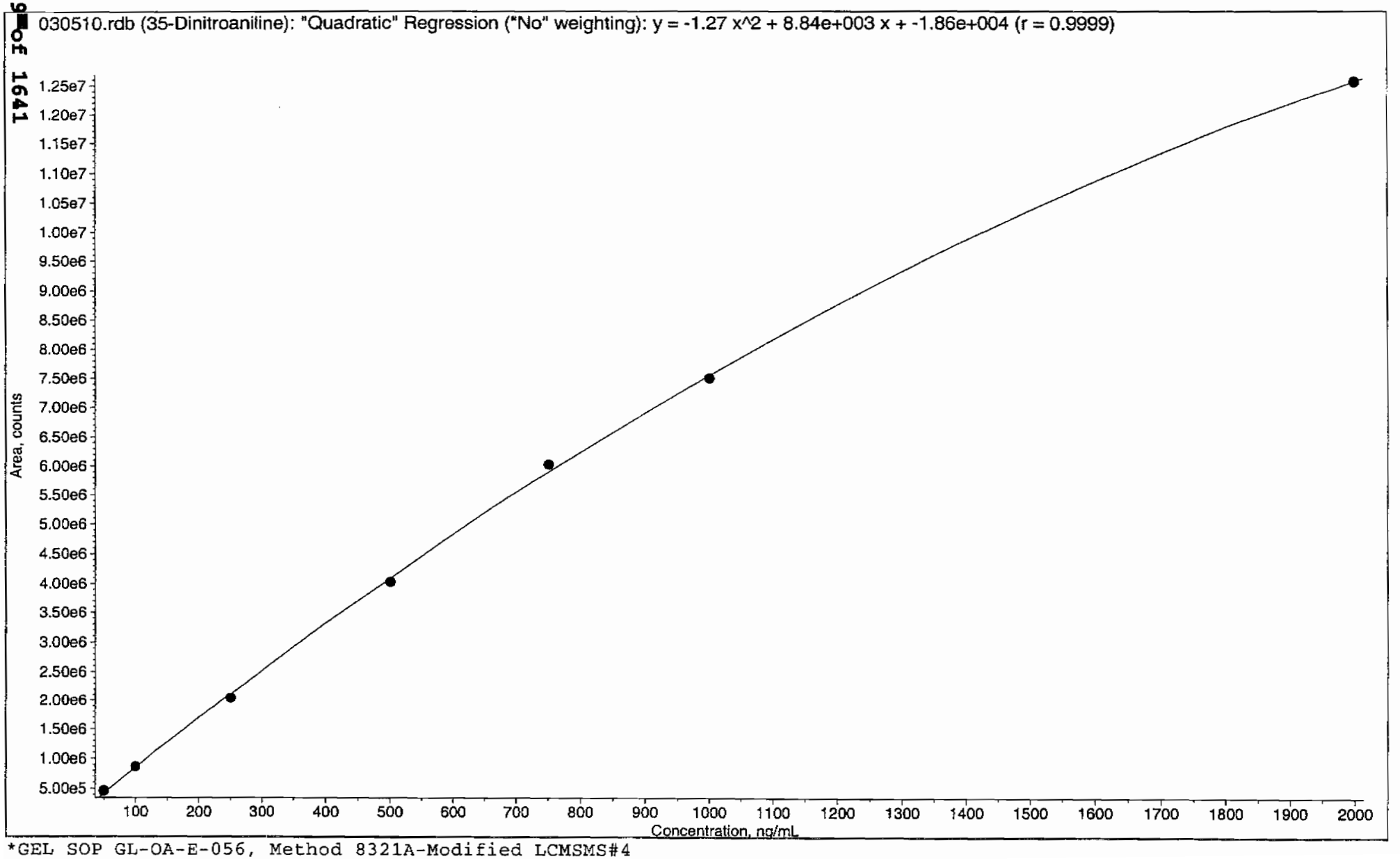
Peak Name: tris(o-cresyl) phosphate
No Internal Standard
Q1/Q3 Masses: 369.15/91.00 amu

Fit	Quadratic	Weighting	None	Iterate No
a0	1.23e+005			
a1	1.79e+004			
a2	-2.71			

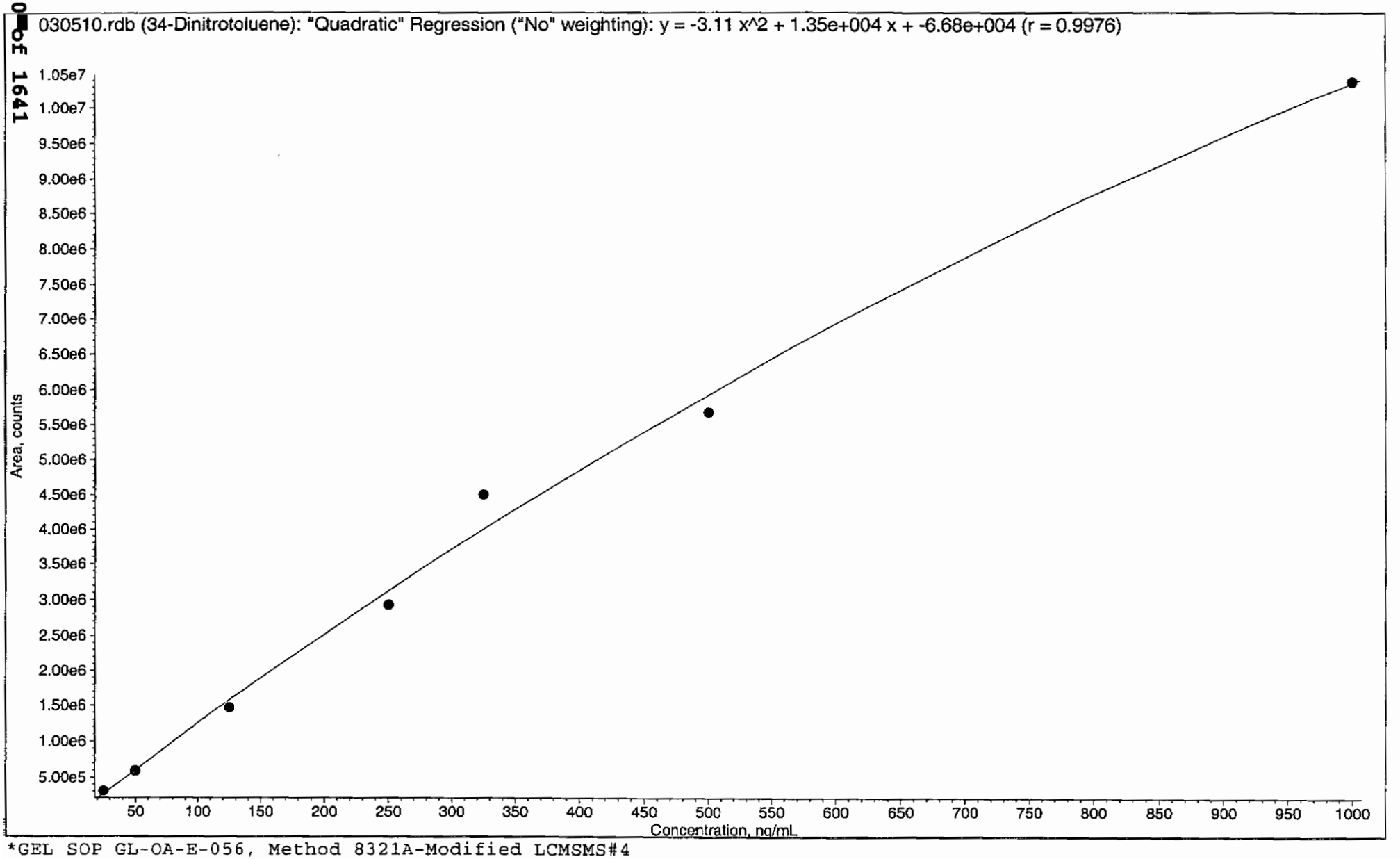
Correlation coefficient 0.9999
Use Area



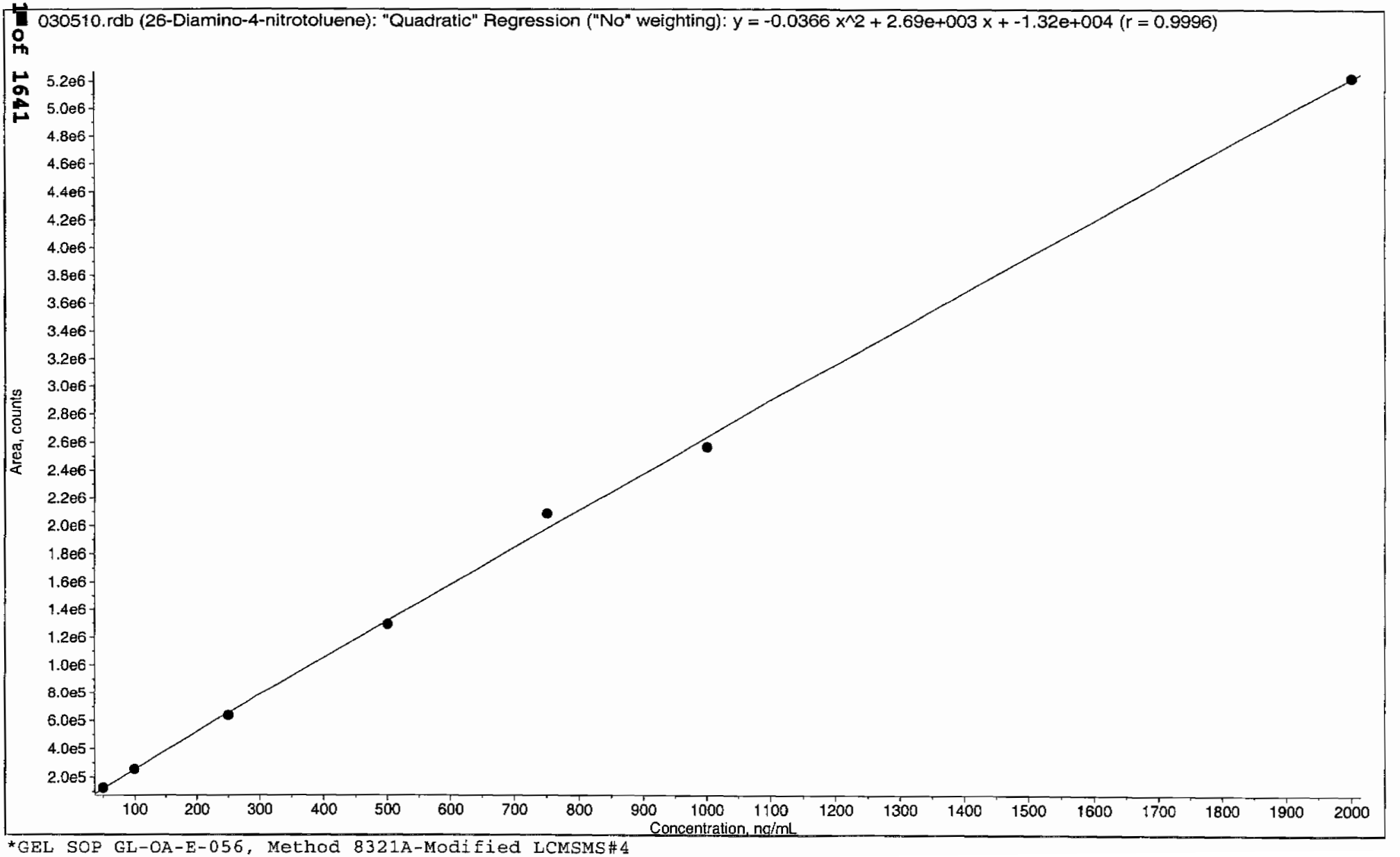
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



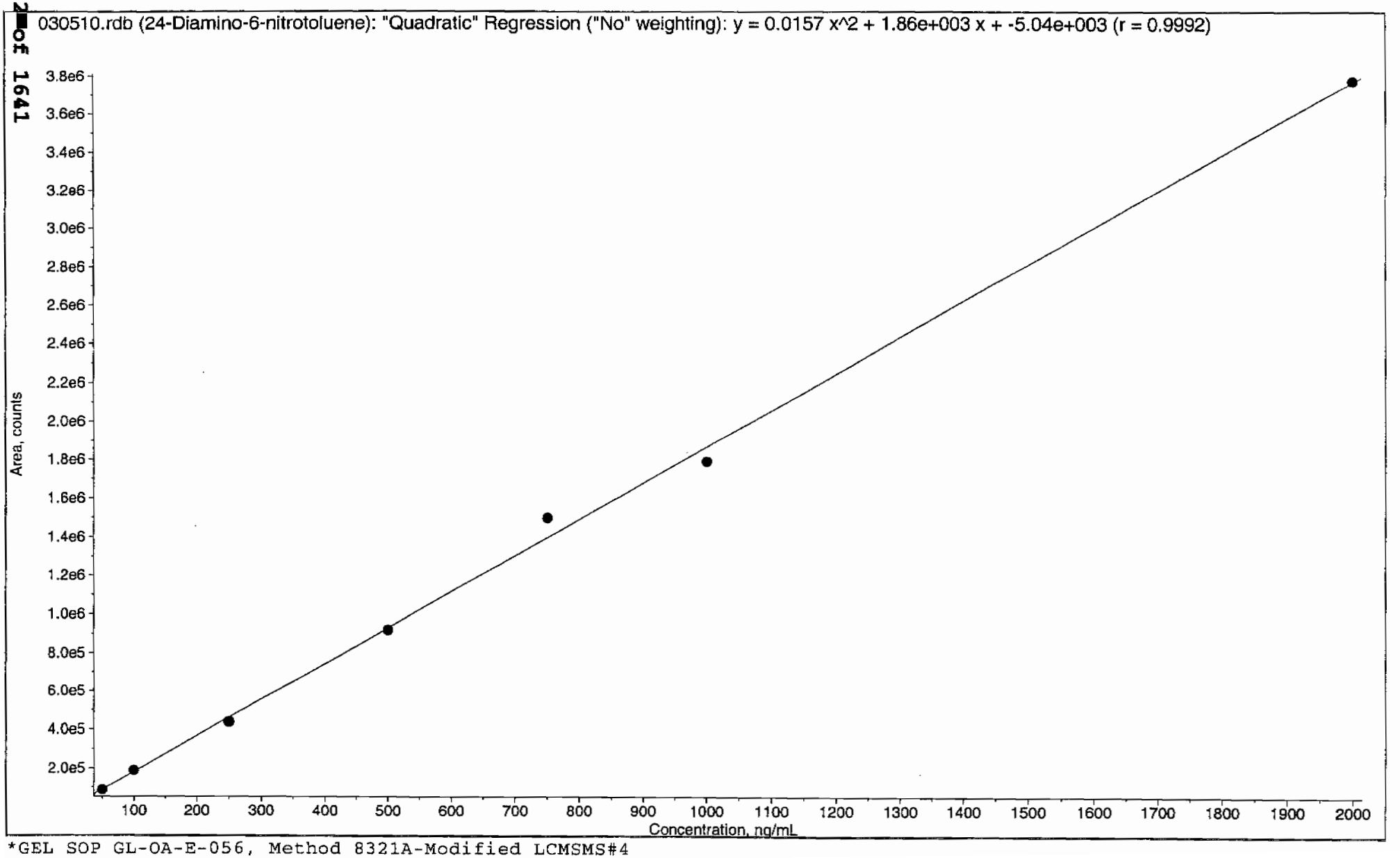
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



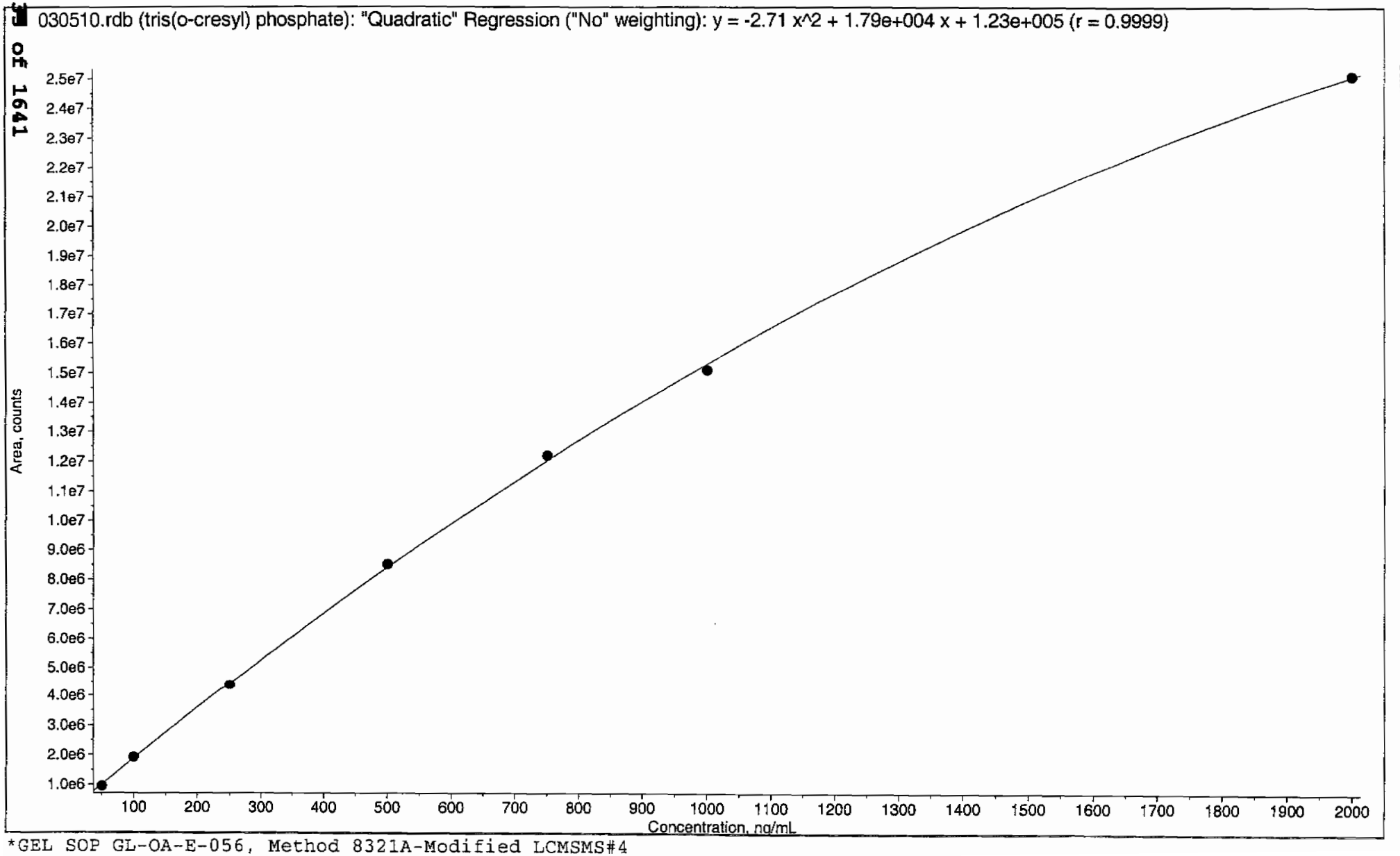
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4



*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

7

Explosives Initial Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1861

Lab Code: GEL

GEL Sample ID: WXXICV

GEL Data File EXS03050011.wiff

Analysis Date: 05-MAR-10 19:44

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	484	97	
2,6-Diamino-4-nitrotoluene	500	507	101	
3,4-Dinitrotoluene	250	230	92	
3,5-Dinitroaniline	500	502	100	
TATB	500	503	101	
tris(o-cresyl) phosphate	500	506	101	

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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

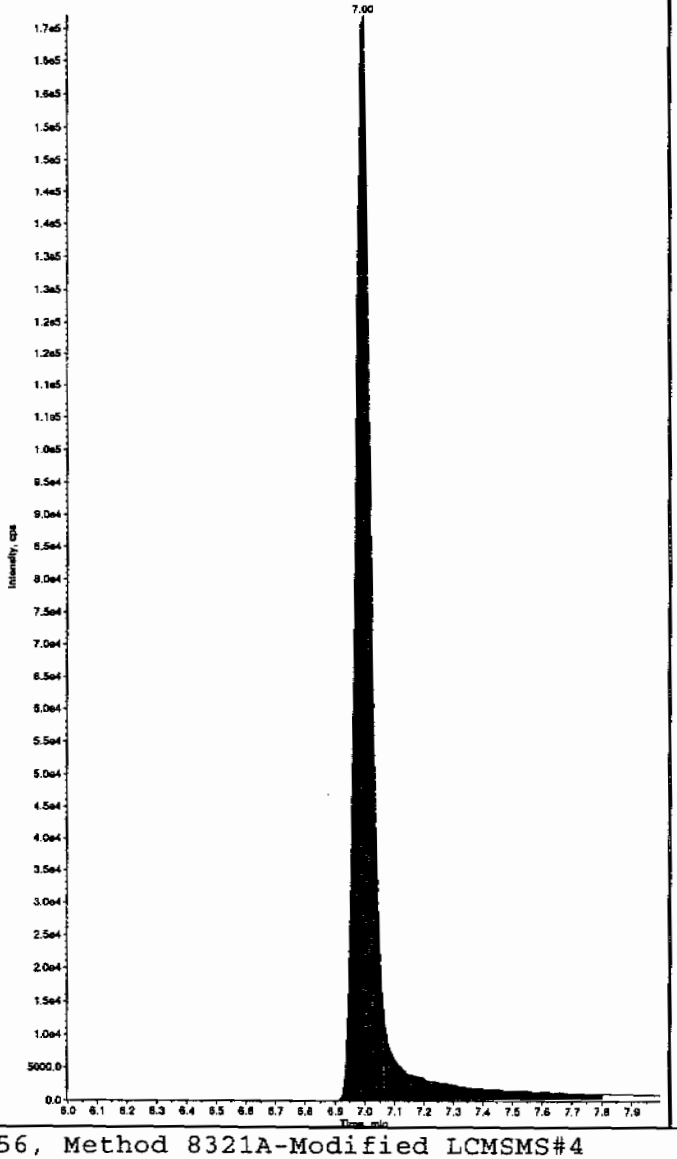
Before Run 3/9/10

Sample Name: "WXX100305-26ICV" Sample ID: "|1|LER" File: "EXS03050011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 503. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing 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: 7.23e+005 counts
Height: 166982.193 cps
Start Time: 6.89 min
End Time: 7.80 min

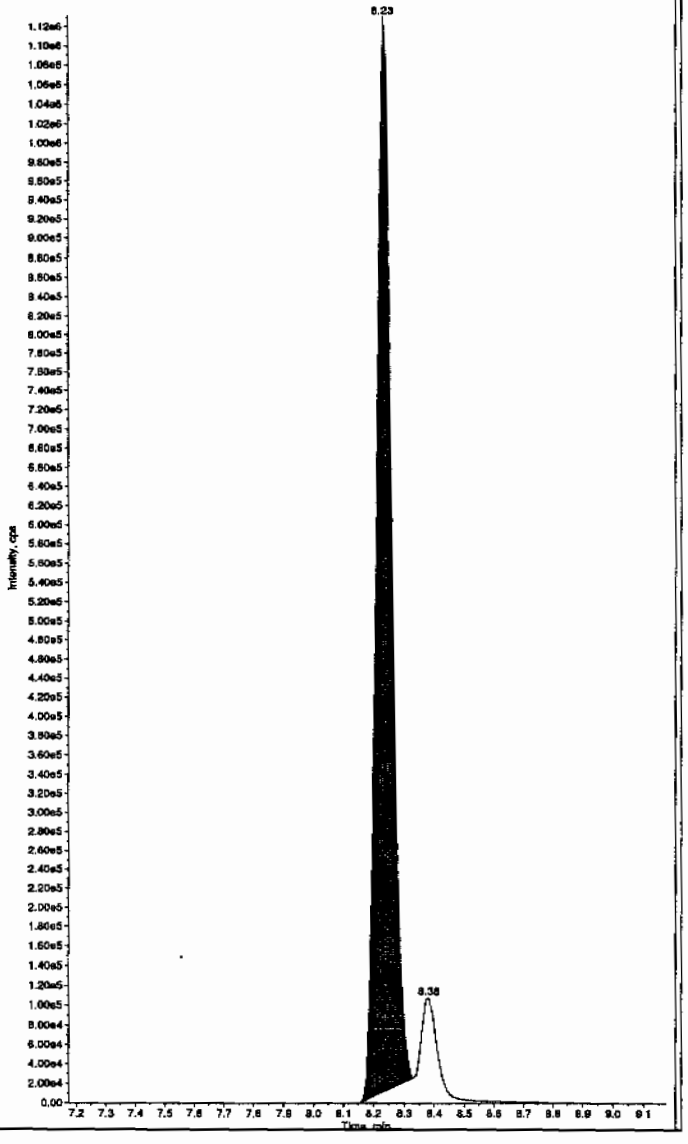


Sample Name: "WXX100305-26ICV" Sample ID: "|1|LER" File: "EXS03050011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 487. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 PM

Modified: Yes
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.17 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.23 min
Area: 3.99e+006 counts
Height: 1121243.164 cps
Start Time: 8.15 min
End Time: 8.33 min



Hmm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

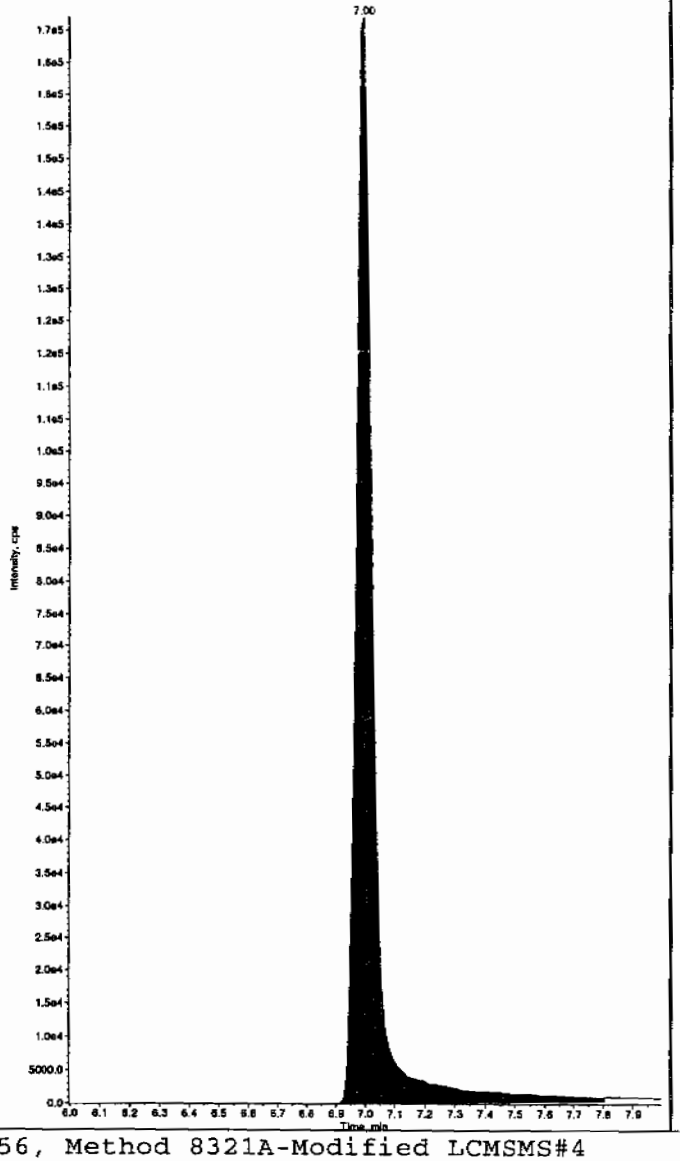
after Dan 3/9/10

Sample Name: "WXX100305-26ICV" Sample ID: "|1|LER" File: "EXS03050011.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 503. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing 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: 7.23e+005 counts
Height: 165982.193 cps
Start Time: 6.89 min
End Time: 7.80 min

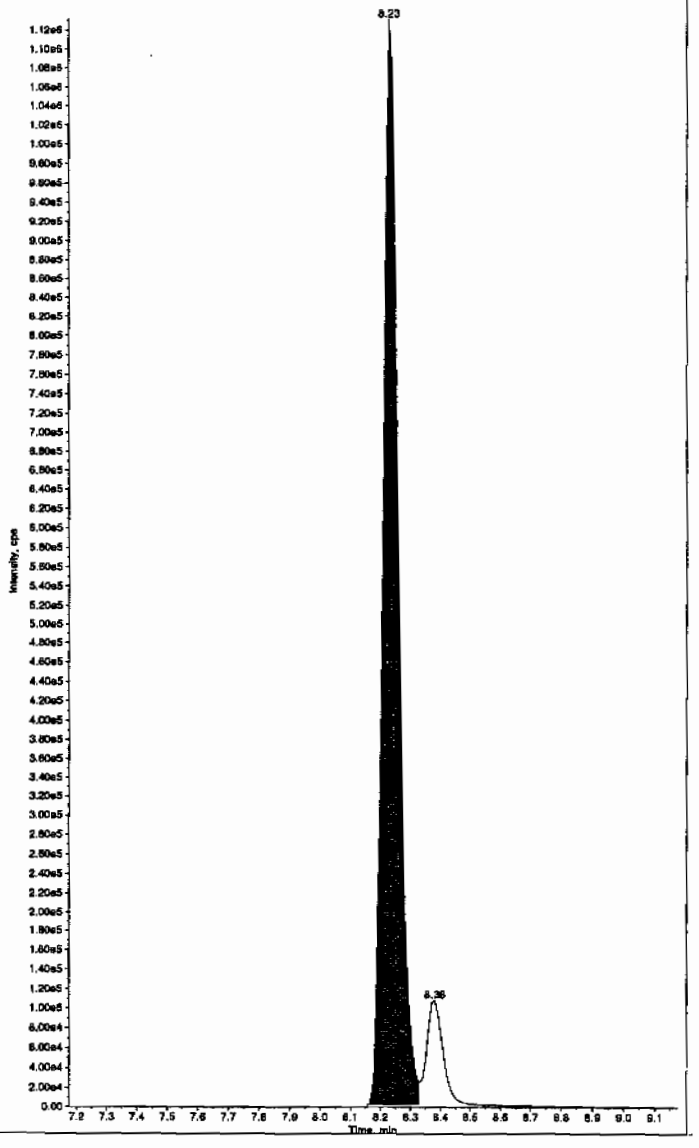


Sample Name: "WXX100305-26ICV" Sample ID: "|1|LER" File: "EXS03050011.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 502. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 PM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.17 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.23 min
Area: 4.10e+006 counts
Height: 1140995.391 cps
Start Time: 8.15 min
End Time: 8.33 min



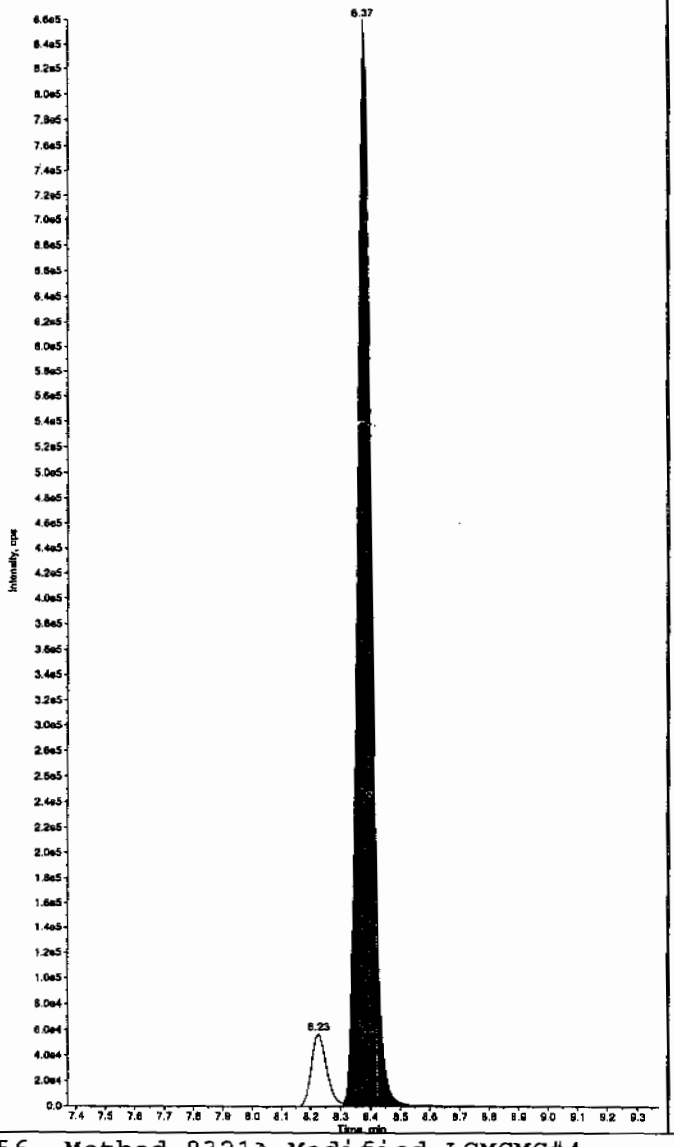
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-26ICV" Sample ID: "|1|LER" File: "EXS03050011.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 250. ng/mL
Calculated Conc: 230. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.37 min
Area: 2.89e+006 counts
Height: 860204.163 cps
Start Time: 8.31 min
End Time: 8.71 min

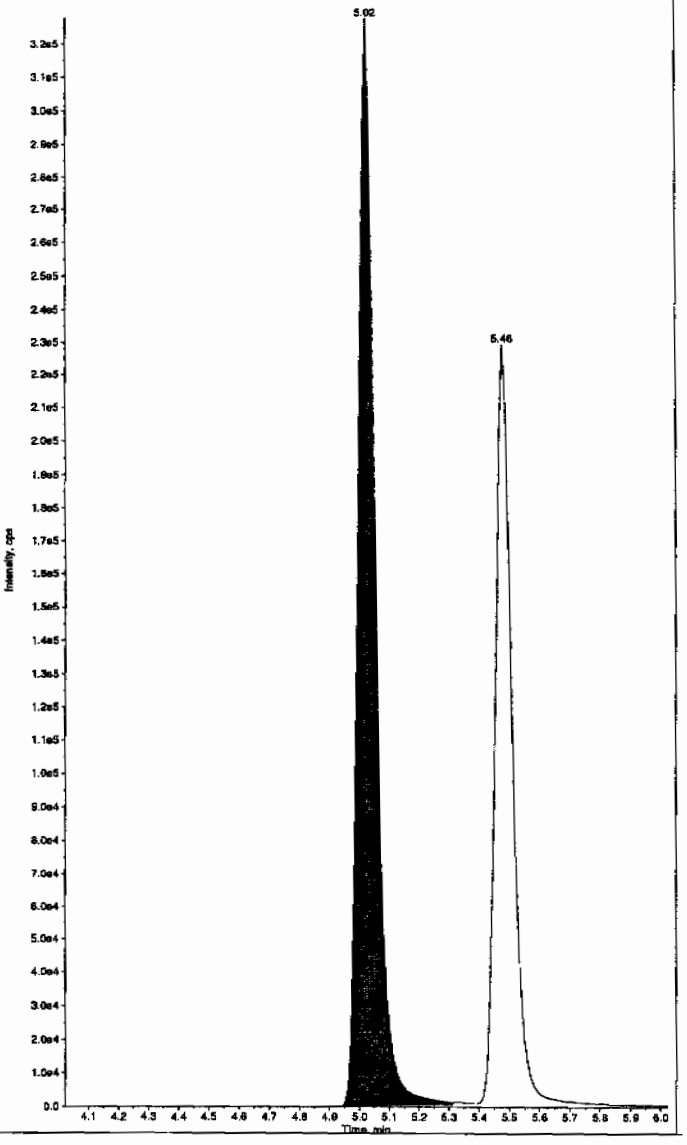


Sample Name: "WXX100305-26ICV" Sample ID: "|1|LER" File: "EXS03050011.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 507. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.02 min
Area: 1.34e+006 counts
Height: 328203.613 cps
Start Time: 4.93 min
End Time: 5.31 min



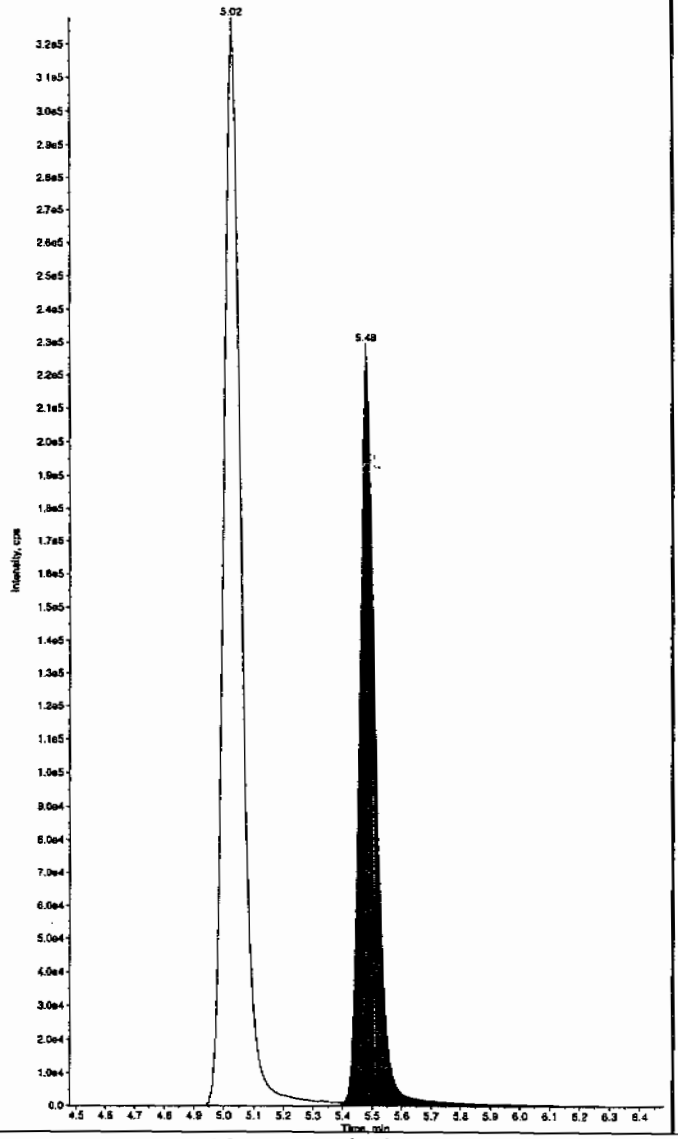
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-26ICV" Sample ID: "[1]LER" File: "EXS03050011.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 484. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 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: 5.48 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.48 min
Area: 8.98e+005 counts
Height: 229511.749 cps
Start Time: 5.39 min
End Time: 5.99 min

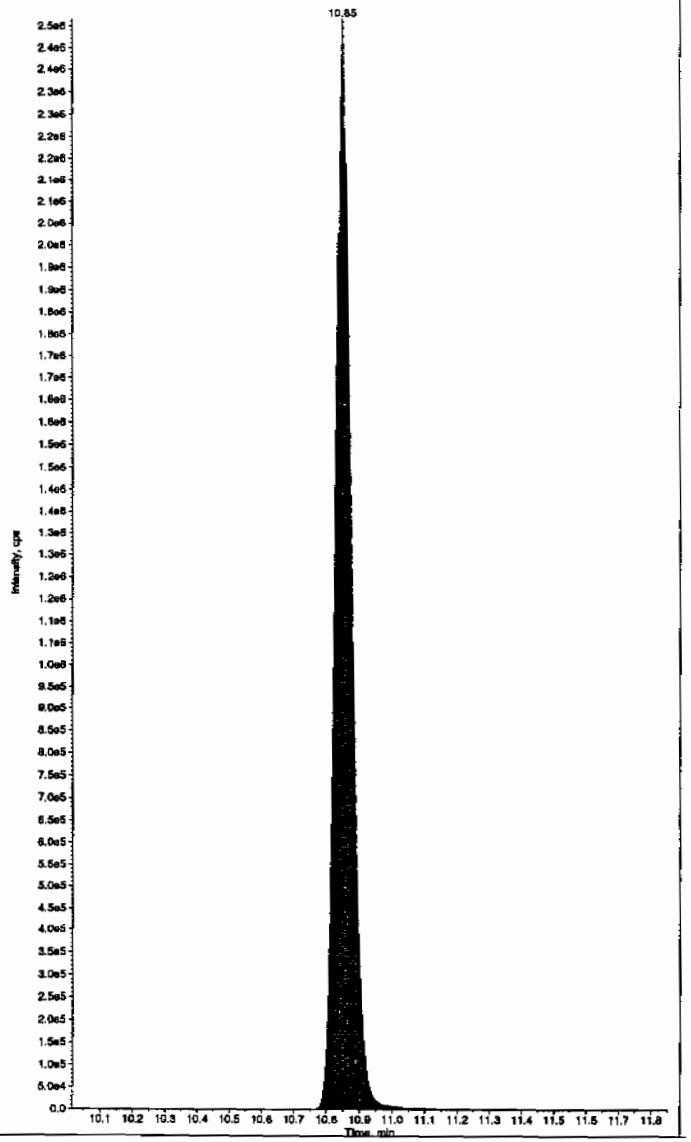


Sample Name: "WXX100305-26ICV" Sample ID: "[1]LER" File: "EXS03050011.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 7:44:43 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: 8.48e+006 counts
Height: 2465937.256 cps
Start Time: 10.7 min
End Time: 11.2 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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0326019a

Analysis Date: 26-MAR-10 23:34

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
3,4-Dinitrotoluene	20	17.189	86	
4-Amino-2,6-dinitrotoluene	40	36.441	91	
HMX	40	44.408	111	
Nitrobenzene	40	39.662	99	
PETN	40	40.827	102	
RDX	40	41.109	103	
Tetryl	40	40.361	101	
m-Dinitrobenzene	40	38.14	95	
m-Nitrotoluene	40	29.765	74	
o-Nitrotoluene	40	42.558	106	
p-Nitrotoluene	40	43.398	108	
1,3,5-Trinitrobenzene	40	45.108	113	
1,3-Dinitrobenzene-d4	500	525.708	105	
2,4,6-Trinitrotoluene	40	37.244	93	
2,4-Dinitrotoluene	40	39.101	98	
2,6-Dinitrotoluene	40	40.678	102	
2,6-Dinitrotoluene-d3	500	517.939	104	
2-Amino-4,6-dinitrotoluene	40	40.775	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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

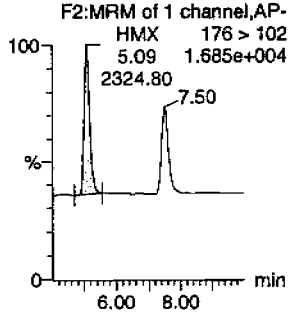
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

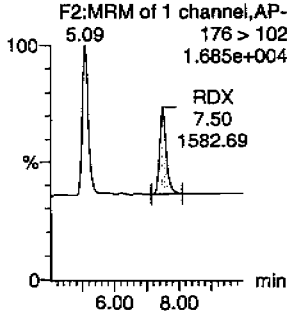
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326019a
Date: 26-Mar-2010
Time: 23:34:10
ID: WXX100326-08CRI
Vial: 1:1,C

MMT 3/27/10

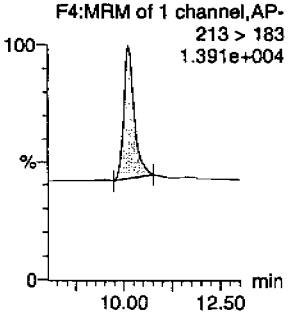
HMX



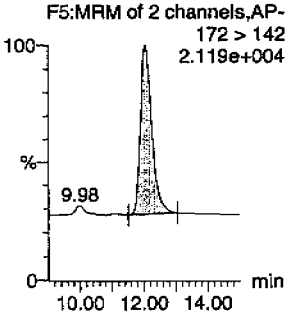
RDX



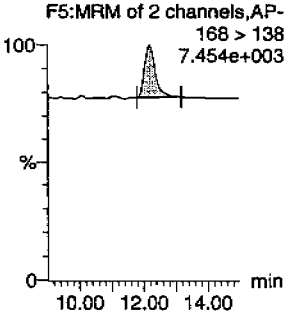
135-Trinitrobenzene



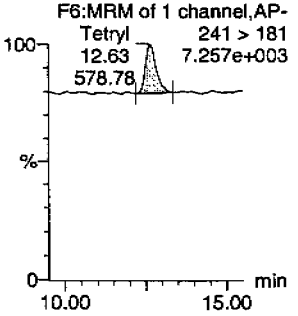
13-Dinitrobenzene-d4



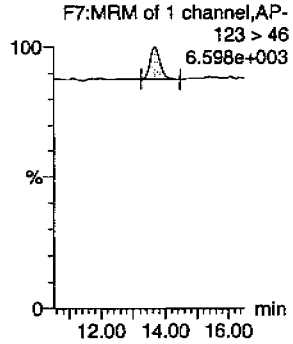
13-Dinitrobenzene



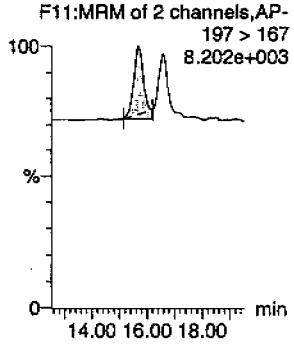
Tetryl



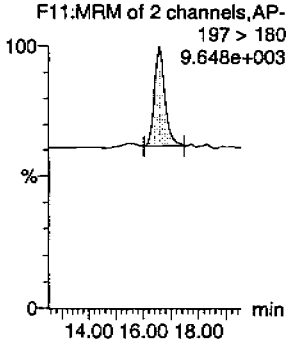
Nitrobenzene



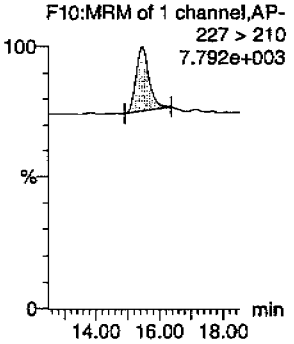
4-Amino-26-dinitrotoluene



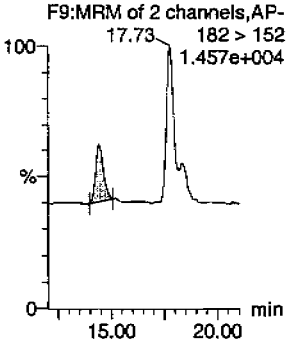
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

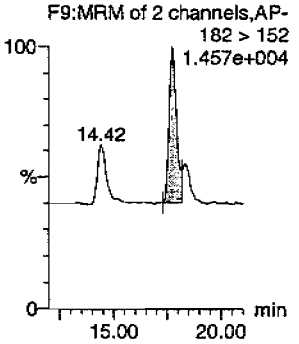


34-dinitrotoluene



Hmc 03/30/10

26-dinitrotoluene

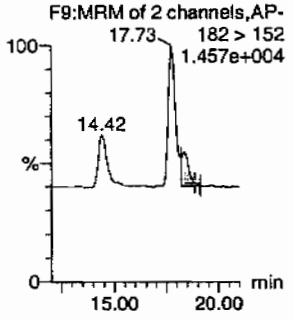


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

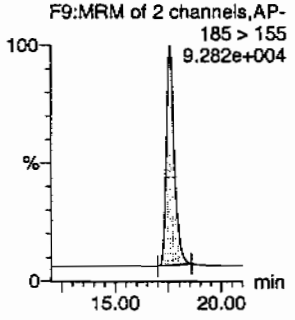
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

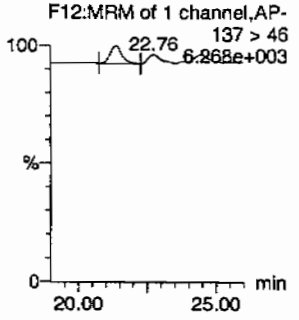
24-dinitrotoluene



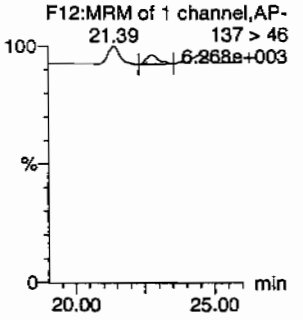
26-dinitrotoluene-d3



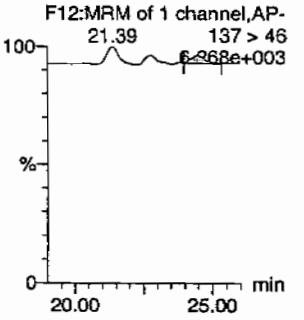
2-Nitrotoluene



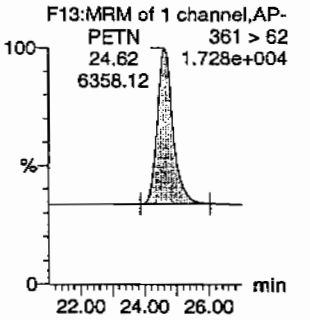
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.09	2324.802	6431.926	2324.802	180.724	bb			44.4075	111.0	11.0	235.2
WXX100326-08CRI	RDX	176 > 102	7.50	1582.686	6431.926	1582.686	123.034	bb			41.1093	102.8	2.8	137.4
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.13	2549.114	6431.926	2549.114	198.161	bb			45.1077	112.8	12.8	163.3
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.04	6431.926		6431.926	6431.926	bb			525.7083	105.1	5.1	847.4
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	654.090	6431.926	654.090	50.847	bb			38.1398	95.3	-4.7	108.0
WXX100326-08CRI	Tetryl	241 > 181	12.63	578.782	6431.926	578.782	44.993	bb			40.3608	100.9	0.9	33.7
WXX100326-08CRI	Nitrobenzene	123 > 46	13.67	307.940	6431.926	307.940	23.938	bb			39.6624	99.2	-0.8	32.1
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	1001.411	38027.207	1001.411	13.167	MM	27-Mar-10	12:00:41	36.4412	91.1	-8.9	78.4
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.58	1679.657	38027.207	1679.657	22.085	bb			40.7747	101.9	1.9	107.0
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.45	912.399	38027.207	912.399	11.997	bb			37.2438	93.1	-6.9	42.4
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.42	1381.449	38027.207	1381.449	18.164	bb			17.1893	85.9	-14.1	40.2
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.73	3538.466	38027.207	3538.466	46.525	MM	27-Mar-10	12:06:25	40.6783	101.7	1.7	110.6
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.32	880.569	38027.207	880.569	11.578	MM	27-Mar-10	12:10:12	39.1005	97.8	-2.2	27.2
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.58	38027.207		38027.207	38027.207	bb			517.9385	103.6	3.6	2725.3
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.39	242.326	38027.207	242.326	3.186	bb			42.5581	106.4	6.4	36.5
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.76	128.410	38027.207	128.410	1.688	bb			43.3981	108.5	8.5	18.0
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.47	112.891	38027.207	112.891	1.484	bb			29.7645	74.4	-25.6	15.2
WXX100326-08CRI	PETN	361 > 62	24.62	6358.124	38027.207	6358.124	83.600	bb			40.8268	102.1	2.1	945.6

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/26/10
Time of Injection	2334
Standard Number	WXX100326-08CRI
Data File	EXP0326019a

HMX	111.0
RDX	102.8
135-TNB	112.8
13-DNB	95.3
Tetryl	100.9
Nitrobenzene	99.2
4A-26-DNT	91.1
2A-46-DNT	101.9
246-TNT	93.1
34-DNT(surr)	85.9
26-DNT	101.7
24-DNT	97.8
2-NT	106.4
4-NT	108.5
3-NT	74.4
PETN	102.1
Total	1584.9
Average	99.1

HMM 03/30/10

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): 10–1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0326028a

Analysis Date: 27–MAR–10 03:59

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4,6–Trinitrotoluene	600	633.785	106	
2,4–Dinitrotoluene	600	582.934	97	
2,6–Dinitrotoluene	600	623.749	104	
2,6–Dinitrotoluene–d3	500	543.091	109	
2–Amino–4,6–dinitrotoluene	600	637.505	106	
3,4–Dinitrotoluene	300	278.856	93	
4–Amino–2,6–dinitrotoluene	600	549.864	92	
HMX	600	936.104	156	*
Nitrobenzene	600	554.309	92	
PETN	600	305.449	51	*
RDX	600	792.141	132	*
Tetryl	600	611.131	102	
m–Dinitrobenzene	600	606.83	101	
m–Nitrotoluene	600	580.488	97	
o–Nitrotoluene	600	567.052	95	
p–Nitrotoluene	600	533.581	89	
1,3,5–Trinitrobenzene	600	604.583	101	
1,3–Dinitrobenzene–d4	500	509.392	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 70–130%
OtherTarget 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\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326028a
Date: 27-Mar-2010
Time: 03:59:34
ID: WXX100326-07CCV
Vial: 1:1,B

MM 3/27/10

HMX
F2:MRM of 1 channel,AP-
176 > 102
2.312e+005
7.51

RDX
F2:MRM of 1 channel,AP-
176 > 102
2.312e+005
5.10
RDX
7.51
29550.48

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.140e+005

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.062e+004
9.96

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
3.104e+004

Tetryl
F6:MRM of 1 channel,AP-
241 > 181
2.806e+004
Tetryl
12.63
8491.74

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.708e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
4.266e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.789e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
3.997e+004

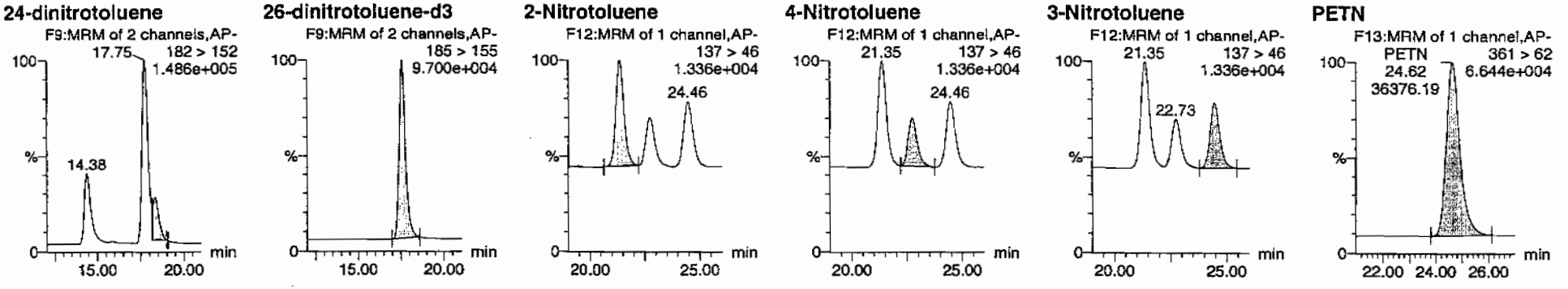
34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.486e+005
17.75
18.34

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.486e+005
14.38
18.34

tnm 03/30/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.10	47485.457	6232.297	47485.457	3809.627	bb			936.1041	156.0	56.0	861.5
WXX100326-07CCV	RDX	176 > 102	7.51	29550.480	6232.297	29550.480	2370.754	bb			792.1409	132.0	32.0	449.9
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.13	33105.637	6232.297	33105.637	2655.974	bb			604.5830	100.8	0.8	3687.7
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	6232.297		6232.297	6232.297	bb			509.3918	101.9	1.9	758.1
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.17	10084.007	6232.297	10084.007	809.012	bb			606.8297	101.1	1.1	666.5
WXX100326-07CCV	Tetryl	241 > 181	12.63	8491.740	6232.297	8491.740	681.269	bb			611.1306	101.9	1.9	384.9
WXX100326-07CCV	Nitrobenzene	123 > 46	13.67	4170.093	6232.297	4170.093	334.555	bb			554.3090	92.4	-7.6	420.8
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.71	15844.163	39873.941	15844.163	198.678	MM	27-Mar-10	12:01:16	549.8638	91.6	-8.4	515.4
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.57	27536.469	39873.941	27536.469	345.294	bb			637.5052	106.3	6.3	1557.3
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.45	16280.493	39873.941	16280.493	204.150	bb			633.7853	105.6	5.6	838.3
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.38	23499.070	39873.941	23499.070	294.667	bb			278.8559	93.0	-7.0	328.4
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.75	56892.805	39873.941	56892.805	713.408	MM	27-Mar-10	12:07:11	623.7492	104.0	4.0	865.9
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.34	13765.627	39873.941	13765.627	172.614	MM	27-Mar-10	12:10:56	582.9343	97.2	-2.8	202.3
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.57	39873.941		39873.941	39873.941	bb			543.0914	108.6	8.6	2274.0
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.35	3385.602	39873.941	3385.602	42.454	bb			567.0523	94.5	-5.5	569.9
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.73	1655.477	39873.941	1655.477	20.759	bb			533.5813	88.9	-11.1	260.1
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.46	2308.599	39873.941	2308.599	28.949	bb			580.4879	96.7	-3.3	352.9
WXX100326-07CCV	PETN	361 > 62	24.62	36376.191	39873.941	36376.191	456.140	bb			305.4485	50.9	-49.1	1876.6

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/27/10
Time of Injection: 0359
Standard Number: WXX100326-07CCV
Data File: EXP0326028a

HMX		156.0
RDX		132.0
135-TNB		100.8
13-DNB		101.1
Tetryl		101.9
Nitrobenzene		92.4
4A-26-DNT		91.6
2A-46-DNT		106.3
246-TNT		105.6
34-DNT(surr)		93.0
26-DNT		104.0
24-DNT		97.2
2-NT		94.5
4-NT		88.9
3-NT		96.7
PETN		50.9
Total		1612.9
Average		100.8

HMM 3/27/10

HMM 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0326030a

Analysis Date: 27-MAR-10 04:58

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	56.861	142	*
1,3-Dinitrobenzene-d4	500	540.854	108	
2,4,6-Trinitrotoluene	40	39.882	100	
2,4-Dinitrotoluene	40	33.381	83	
2,6-Dinitrotoluene	40	40.837	102	
2,6-Dinitrotoluene-d3	500	628.424	126	
2-Amino-4,6-dinitrotoluene	40	43.903	110	
3,4-Dinitrotoluene	20	20.144	101	
4-Amino-2,6-dinitrotoluene	40	37.3	93	
HMX	40	50.984	127	
Nitrobenzene	40	36.928	92	
PETN	40	29.885	75	
RDX	40	47.794	119	
Tetryl	40	39.327	98	
m-Dinitrobenzene	40	39.765	99	
m-Nitrotoluene	40	31.952	80	
o-Nitrotoluene	40	26.39	66	*
p-Nitrotoluene	40	31.061	78	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

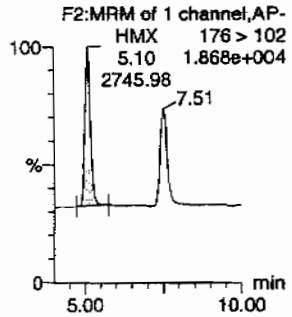
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

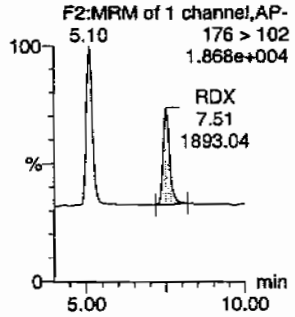
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326030a
Date: 27-Mar-2010
Time: 04:58:32
ID: WXX100326-08CRI
Vial: 1:1,C

MHT 3/27/10

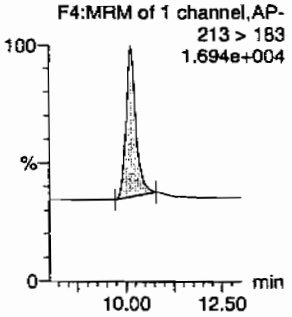
HMX



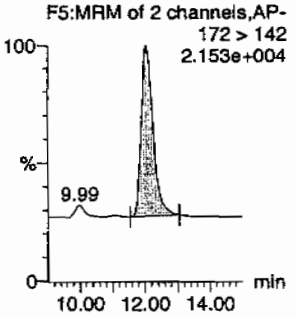
RDX



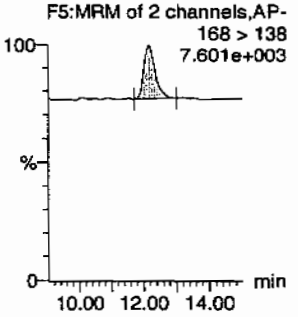
135-Trinitrobenzene



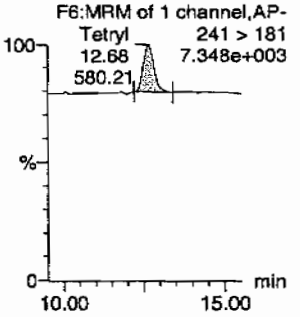
13-Dinitrobenzene-d4



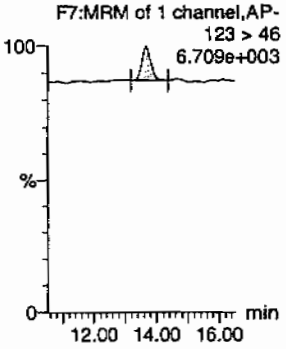
13-Dinitrobenzene



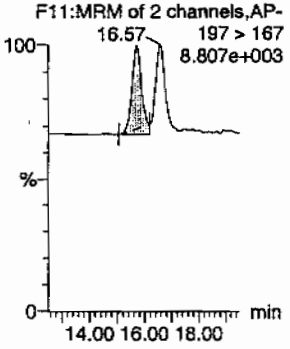
Tetryl



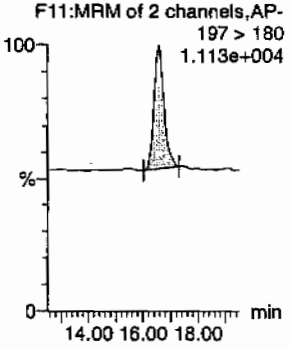
Nitrobenzene



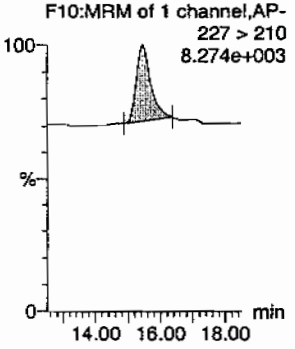
4-Amino-26-dinitrotoluene



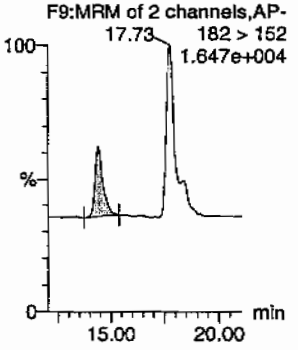
2-Amino-46-dinitrotoluene



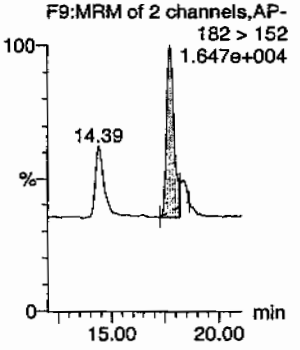
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

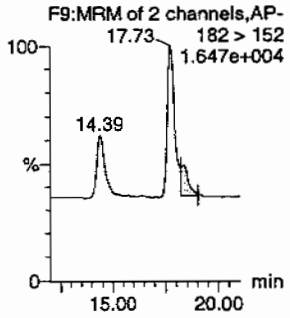


tmm 03/30/10

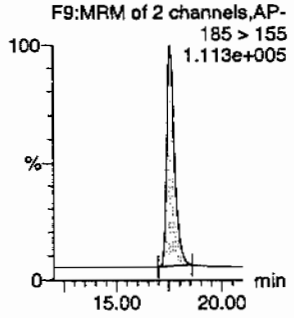
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

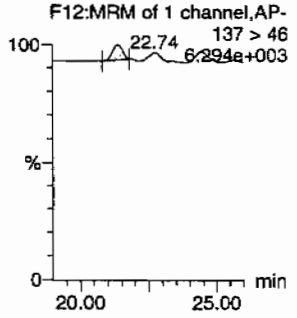
24-dinitrotoluene



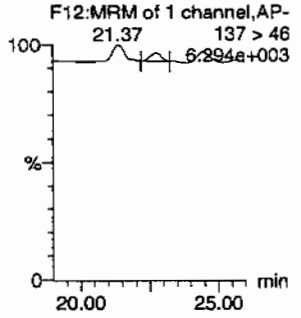
26-dinitrotoluene-d3



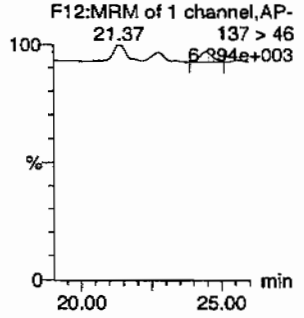
2-Nitrotoluene



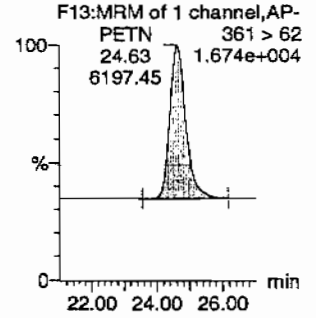
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.10	2745.978	6617.233	2745.978	207.487	bb			50.9838	127.5	27.5	317.4
WXX100326-08CRI	RDX	176 > 102	7.51	1893.044	6617.233	1893.044	143.039	bb			47.7937	119.5	19.5	192.1
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.13	3305.876	6617.233	3305.876	249.793	bb			56.8607	142.2	42.2	192.2
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	6617.233		6617.233	6617.233	bb			540.8543	108.2	8.2	347.6
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	701.616	6617.233	701.616	53.014	bb			39.7654	99.4	-0.6	42.9
WXX100326-08CRI	Tetryl	241 > 181	12.68	580.207	6617.233	580.207	43.841	bb			39.3271	98.3	-1.7	52.3
WXX100326-08CRI	Nitrobenzene	123 > 46	13.67	294.972	6617.233	294.972	22.288	bb			36.9282	92.3	-7.7	30.8
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	1243.658	46139.051	1243.658	13.477	MM	27-Mar-10	12:01:24	37.2999	93.2	-6.8	104.4
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.57	2194.320	46139.051	2194.320	23.779	bb			43.9032	109.8	9.8	209.8
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.45	1185.446	46139.051	1185.446	12.846	bb			39.8820	99.7	-0.3	119.1
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.39	1964.288	46139.051	1964.288	21.287	bb			20.1444	100.7	0.7	75.8
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.73	4310.071	46139.051	4310.071	46.707	MM	27-Mar-10	12:07:19	40.8374	102.1	2.1	183.3
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.38	912.113	46139.051	912.113	9.884	MM	27-Mar-10	12:11:13	33.3805	83.5	-16.5	38.1
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.57	46139.051		46139.051	46139.051	bb			628.4235	125.7	25.7	2150.3
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.37	182.320	46139.051	182.320	1.976	bb			26.3902	66.0	-34.0	43.0
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.74	111.509	46139.051	111.509	1.208	bb			31.0605	77.7	-22.3	24.4
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.45	147.037	46139.051	147.037	1.593	bb			31.9515	79.9	-20.1	29.7
WXX100326-08CRI	PETN	361 > 62	24.63	6197.449	46139.051	6197.449	67.161	bb			29.8854	74.7	-25.3	1023.3

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/27/10
Time of Injection	0458
Standard Number	WXX100326-08CRI
Data File	EXP0326030a

HMX		127.5
RDX		119.5
135-TNB		142.2
13-DNB		99.4
Tetryl		98.3
Nitrobenzene		92.3
4A-26-DNT		93.2
2A-46-DNT		109.8
246-TNT		99.7
34-DNT(surr)		100.7
26-DNT		102.1
24-DNT		83.5
2-NT		66.0
4-NT		77.7
3-NT		79.9
PETN		74.7
Total		1566.5
Average		97.9

MTP 3/27/10

Hmc 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0326041a

Analysis Date: 27-MAR-10 10:23

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
RDX	600	730.369	122	*
Tetryl	600	626.26	104	
m-Dinitrobenzene	600	611.628	102	
m-Nitrotoluene	600	546.951	91	
o-Nitrotoluene	600	576.433	96	
p-Nitrotoluene	600	509.31	85	
1,3,5-Trinitrobenzene	600	630.46	105	
1,3-Dinitrobenzene-d4	500	489.658	98	
2,4,6-Trinitrotoluene	600	696.07	116	
2,4-Dinitrotoluene	600	699.667	117	
2,6-Dinitrotoluene	600	626.833	104	
2,6-Dinitrotoluene-d3	500	491.847	98	
2-Amino-4,6-dinitrotoluene	600	658.816	110	
3,4-Dinitrotoluene	300	311.225	104	
4-Amino-2,6-dinitrotoluene	600	610.592	102	
HMX	600	795.562	133	*
Nitrobenzene	600	566.36	94	
PETN	600	545.257	91	

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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

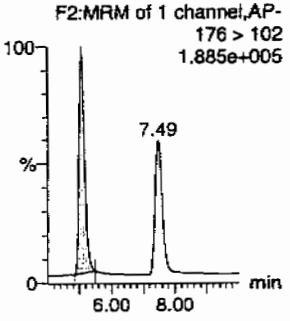
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

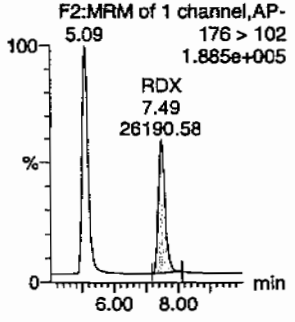
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326041a
Date: 27-Mar-2010
Time: 10:23:03
ID: WXX100326-07CCV
Vial: 1:1,B

MATP 3/27/10

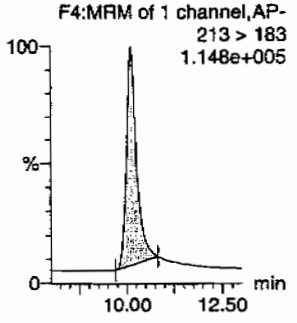
HMX



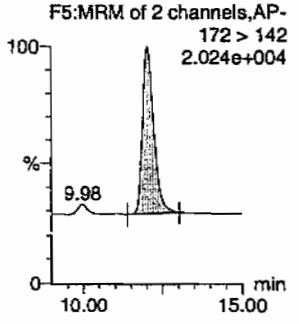
RDX



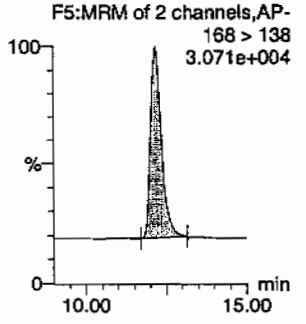
135-Trinitrobenzene



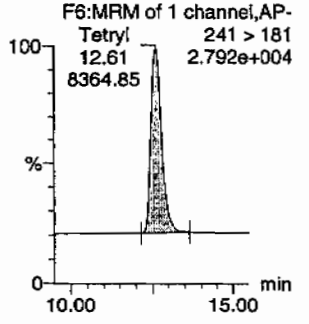
13-Dinitrobenzene-d4



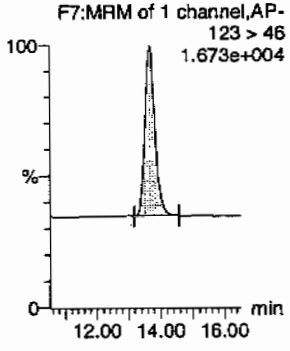
13-Dinitrobenzene



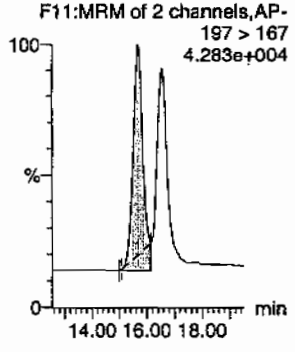
Tetryl



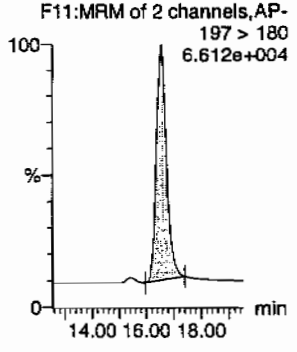
Nitrobenzene



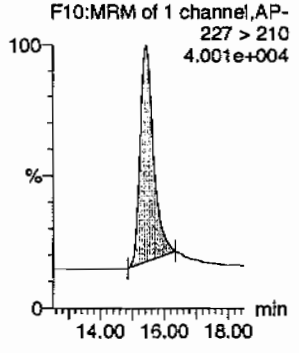
4-Amino-26-dinitrotoluene



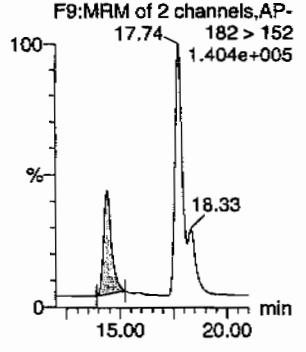
2-Amino-46-dinitrotoluene



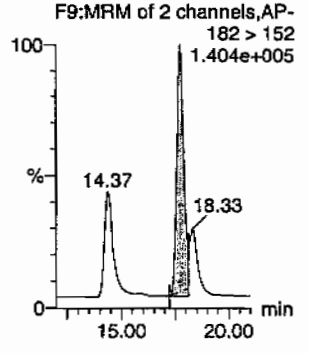
246-Trinitrotoluene



34-dinitrotoluene



26-dinitrotoluene

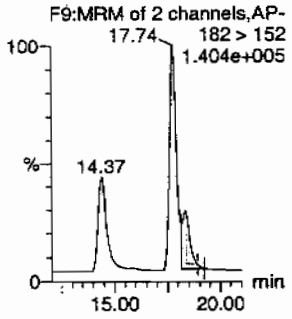


HMM 03/30/10

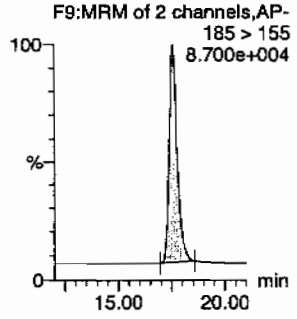
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

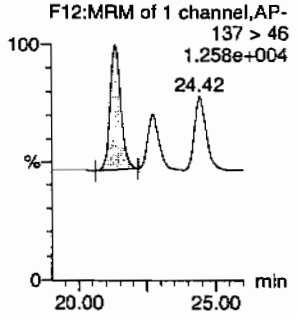
24-dinitrotoluene



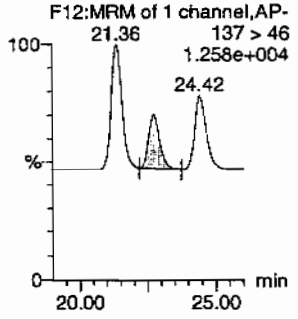
26-dinitrotoluene-d3



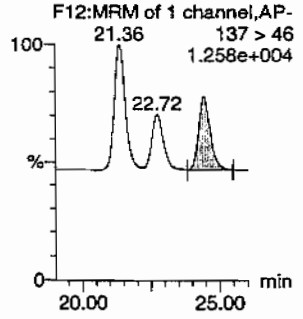
2-Nitrotoluene



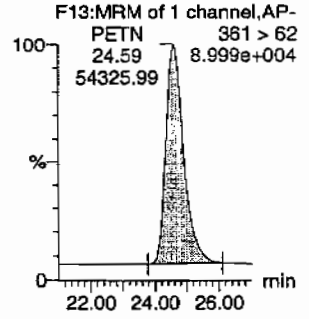
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.09	38792.820	5990.857	38792.820	3237.669	bb			795.5621	132.6	32.6	1646.0
WXX100326-07CCV	RDX	176 > 102	7.49	26190.578	5990.857	26190.578	2185.879	bb			730.3687	121.7	21.7	961.9
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.12	33185.188	5990.857	33185.188	2769.653	bb			630.4598	105.1	5.1	2690.2
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	5990.857		5990.857	5990.857	bb			489.6579	97.9	-2.1	334.0
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.17	9769.997	5990.857	9769.997	815.409	bb			611.6279	101.9	1.9	516.8
WXX100326-07CCV	Tetryl	241 > 181	12.61	8364.854	5990.857	8364.854	698.135	bb			626.2603	104.4	4.4	680.1
WXX100326-07CCV	Nitrobenzene	123 > 46	13.66	4095.694	5990.857	4095.694	341.829	bb			566.3604	94.4	-5.6	378.7
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	15933.900	36111.559	15933.900	220.620	MM	27-Mar-10	12:02:07	610.5916	101.8	1.8	168.3
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.54	25771.863	36111.559	25771.863	356.837	bb			658.8161	109.8	9.8	603.3
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.44	16193.311	36111.559	16193.311	224.212	bb			696.0704	116.0	16.0	660.6
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.37	23752.105	36111.559	23752.105	328.871	bb			311.2248	103.7	3.7	861.5
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.74	51779.316	36111.559	51779.316	716.935	MM	27-Mar-10	12:07:55	626.8330	104.5	4.5	2100.8
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.33	14963.203	36111.559	14963.203	207.180	MM	27-Mar-10	12:11:52	699.6666	116.6	16.6	540.3
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.57	36111.559		36111.559	36111.559	bb			491.8470	98.4	-1.6	2956.5
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.36	3116.871	36111.559	3116.871	43.156	bb			576.4331	96.1	-3.9	380.7
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.72	1431.072	36111.559	1431.072	19.815	bb			509.3096	84.9	-15.1	168.6
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.42	1969.974	36111.559	1969.974	27.276	bb			546.9505	91.2	-8.8	227.0
WXX100326-07CCV	PETN	361 > 62	24.59	54325.988	36111.559	54325.988	752.197	bb			545.2572	90.9	-9.1	227.7

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/27/10
Time of Injection: 1023
Standard Number: WXX100326-07CCV
Data File: EXP0326041a

HMX	132.6
RDX	121.7
135-TNB	105.1
13-DNB	101.9
Tetryl	104.4
Nitrobenzene	94.4
4A-26-DNT	101.8
2A-46-DNT	109.8
246-TNT	116.0
34-DNT(surr)	103.7
26-DNT	104.5
24-DNT	116.6
2-NT	96.1
4-NT	84.9
3-NT	91.2
PETN	90.9
Total	1675.6
Average	104.7

HMT 3/27/10

Hmm 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0326043a

Analysis Date: 27-MAR-10 11:22

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	47.359	118	
1,3-Dinitrobenzene-d4	500	621.166	124	
2,4,6-Trinitrotoluene	40	49.323	123	
2,4-Dinitrotoluene	40	40.005	100	
2,6-Dinitrotoluene	40	40.218	101	
2,6-Dinitrotoluene-d3	500	570.159	114	
2-Amino-4,6-dinitrotoluene	40	46.794	117	
3,4-Dinitrotoluene	20	23.4	117	
4-Amino-2,6-dinitrotoluene	40	42.151	105	
HMX	40	50.078	125	
Nitrobenzene	40	34.756	87	
PETN	40	33.801	85	
RDX	40	42.629	107	
Tetryl	40	40.422	101	
m-Dinitrobenzene	40	42.239	106	
m-Nitrotoluene	40	38.564	96	
o-Nitrotoluene	40	34.106	85	
p-Nitrotoluene	40	37.536	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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

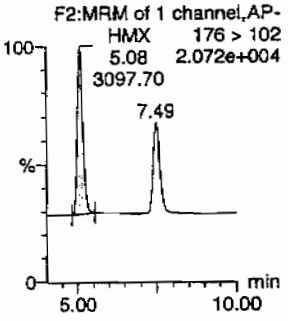
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

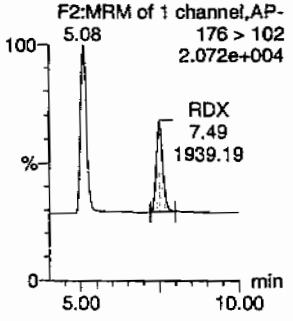
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326043a
Date: 27-Mar-2010
Time: 11:22:07
ID: WXX100326-08CRI
Vial: 1:1,C

MATT 3/27/10

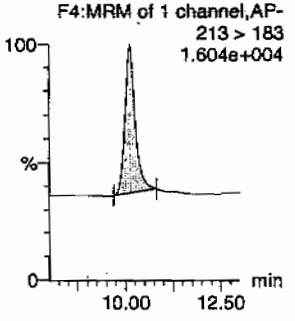
HMX



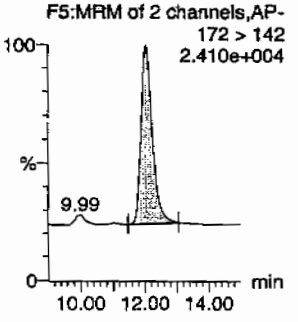
RDX



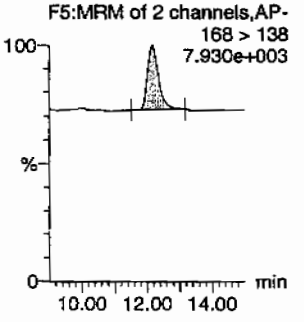
135-Trinitrobenzene



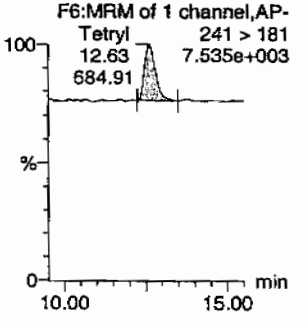
13-Dinitrobenzene-d4



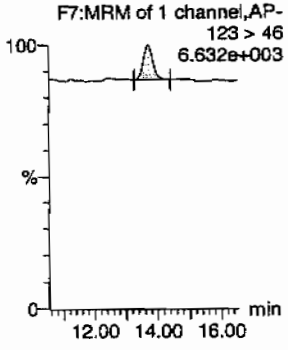
13-Dinitrobenzene



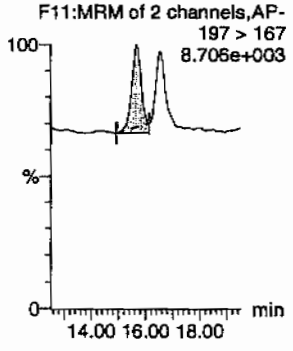
Tetryl



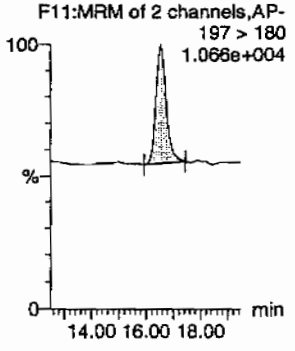
Nitrobenzene



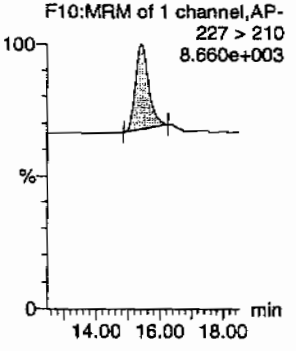
4-Amino-26-dinitrotoluene



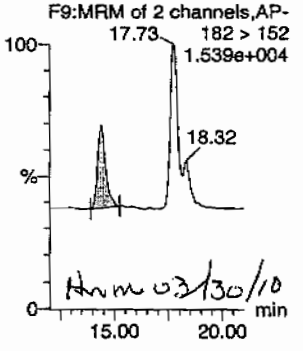
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

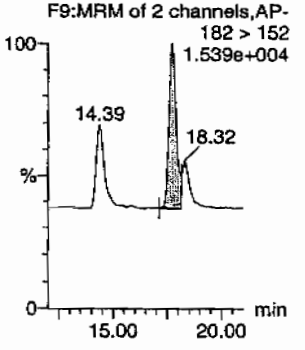


34-dinitrotoluene



Hm m 03/30/10

26-dinitrotoluene

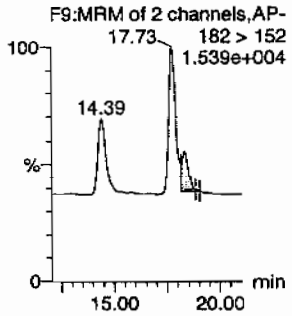


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

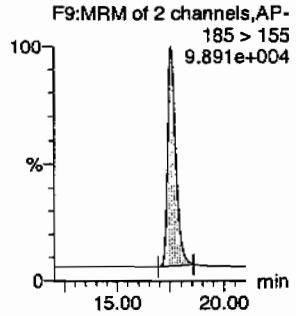
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA.qld, Time: Sat Mar 27 12:12:14 2010

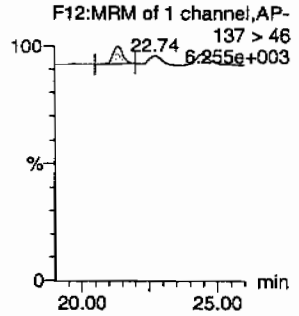
24-dinitrotoluene



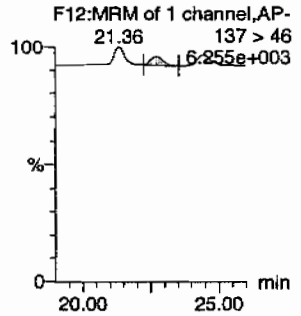
26-dinitrotoluene-d3



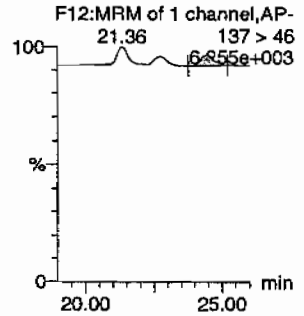
2-Nitrotoluene



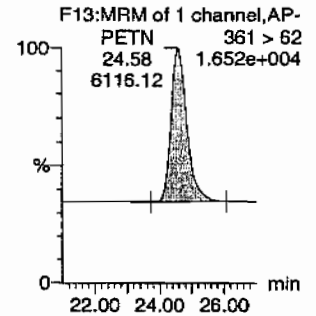
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.08	3097.696	7599.829	3097.696	203.800	bb			50.0780	125.2	25.2	466.0
WXX100326-08CRI	RDX	176 > 102	7.49	1939.190	7599.829	1939.190	127.581	bb			42.6287	106.6	6.6	252.5
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.13	3162.277	7599.829	3162.277	208.049	bb			47.3585	118.4	18.4	251.4
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	7599.829		7599.829	7599.829	bb			621.1660	124.2	24.2	1006.7
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	855.914	7599.829	855.914	56.311	bb			42.2385	105.6	5.6	79.8
WXX100326-08CRI	Tetryl	241 > 181	12.63	684.907	7599.829	684.907	45.061	bb			40.4216	101.1	1.1	67.8
WXX100326-08CRI	Nitrobenzene	123 > 46	13.67	318.846	7599.829	318.846	20.977	bb			34.7561	86.9	-13.1	30.1
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	1275.088	41861.277	1275.088	15.230	MM	27-Mar-10	12:02:17	42.1505	105.4	5.4	69.6
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.55	2121.964	41861.277	2121.964	25.345	bb			46.7940	117.0	17.0	191.7
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.42	1330.145	41861.277	1330.145	15.888	bb			49.3231	123.3	23.3	155.0
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.39	2070.170	41861.277	2070.170	24.727	bb			23.3998	117.0	17.0	75.9
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.73	3851.188	41861.277	3851.188	45.999	MM	27-Mar-10	12:08:08	40.2183	100.5	0.5	150.8
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.32	991.781	41861.277	991.781	11.846	MM	27-Mar-10	12:12:02	40.0052	100.0	0.0	41.7
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.55	41861.277		41861.277	41861.277	bb			570.1593	114.0	14.0	2787.0
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.36	213.778	41861.277	213.778	2.553	bb			34.1057	85.3	-14.7	44.0
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.74	122.263	41861.277	122.263	1.460	bb			37.5361	93.8	-6.2	21.3
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.46	161.014	41861.277	161.014	1.923	bb			38.5643	96.4	-3.6	25.6
WXX100326-08CRI	PETN	361 > 62	24.58	6116.122	41861.277	6116.122	73.052	bb			33.8005	84.5	-15.5	2317.2

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/27/10
Time of Injection	1122
Standard Number	WXX100326-08CRI
Data File	EXP0326043a

HMX	125.2
RDX	106.6
135-TNB	118.4
13-DNB	105.6
Tetryl	101.1
Nitrobenzene	86.9
4A-26-DNT	105.4
2A-46-DNT	117.0
246-TNT	123.3
34-DNT(surr)	117.0
26-DNT	100.5
24-DNT	100.0
2-NT	85.3
4-NT	93.8
3-NT	96.4
PETN	84.5
Total	1667.0
Average	104.2

MDT 3/29/10

Hmm 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0326053a

Analysis Date: 27-MAR-10 16:17

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,6-Dinitrotoluene	600	607.871	101	
2,6-Dinitrotoluene-d3	500	537.88	108	
2-Amino-4,6-dinitrotoluene	600	639.102	107	
3,4-Dinitrotoluene	300	316.939	106	
4-Amino-2,6-dinitrotoluene	600	614.773	102	
HMX	600	804.739	134	*
Nitrobenzene	600	559.587	93	
PETN	600	479.388	80	*
RDX	600	701.875	117	
Tetryl	600	648.214	108	
m-Dinitrobenzene	600	633.047	106	
m-Nitrotoluene	600	552.103	92	
o-Nitrotoluene	600	513.047	86	
p-Nitrotoluene	600	506.357	84	
1,3,5-Trinitrobenzene	600	568.424	95	
1,3-Dinitrobenzene-d4	500	467.398	93	
2,4,6-Trinitrotoluene	600	808.509	135	*
2,4-Dinitrotoluene	600	622.322	104	

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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

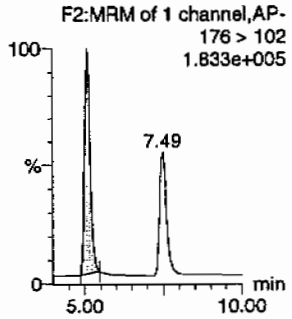
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

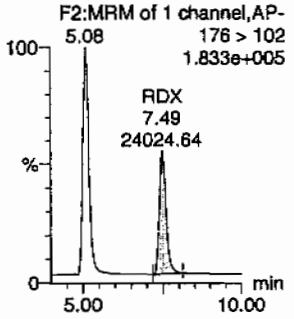
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326053a
Date: 27-Mar-2010
Time: 16:17:19
ID: WXX100326-07CCV
Vial: 1:1,B

MM 3/29/10

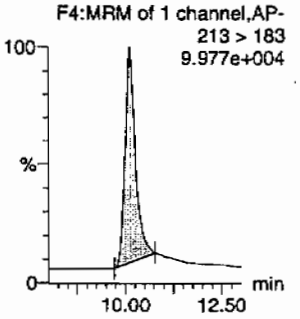
HMX



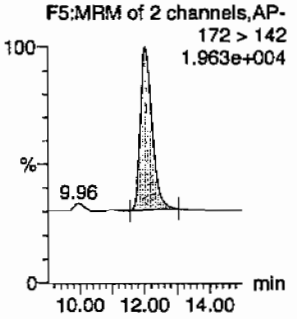
RDX



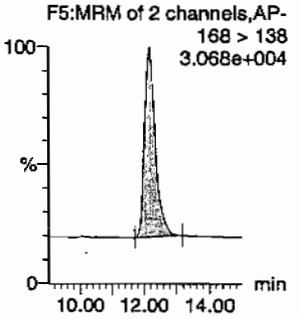
135-Trinitrobenzene



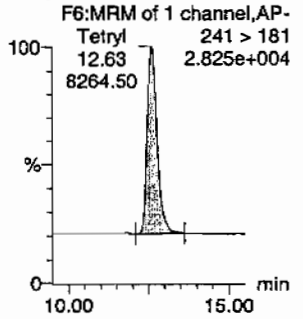
13-Dinitrobenzene-d4



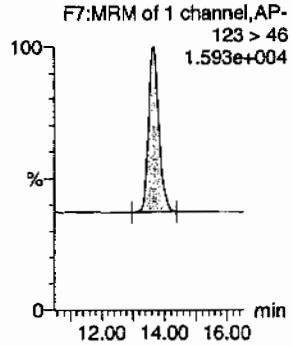
13-Dinitrobenzene



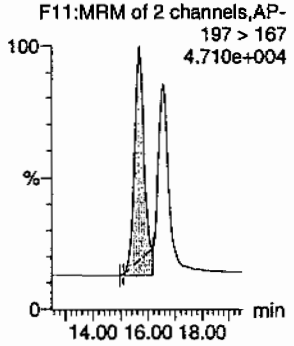
Tetryl



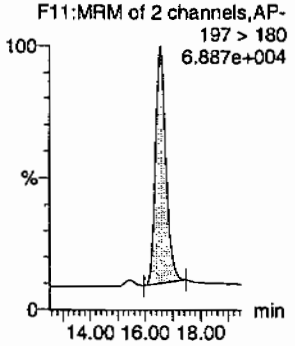
Nitrobenzene



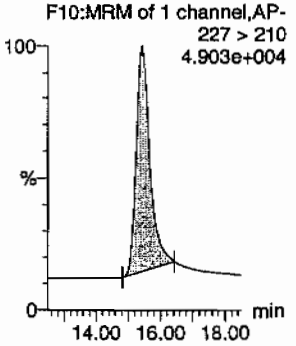
4-Amino-26-dinitrotoluene



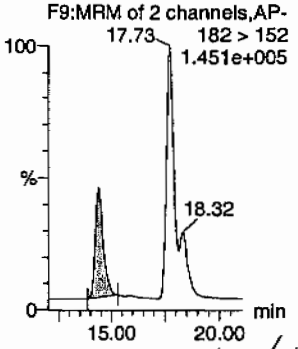
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

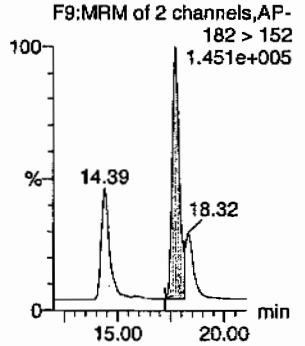


34-dinitrotoluene



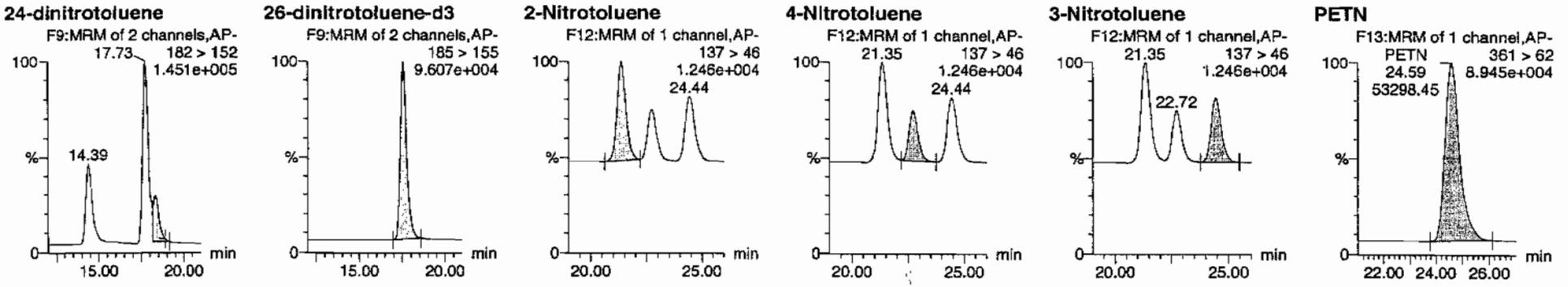
Hnm 03/30/10

26-dinitrotoluene



Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.08	37456.445	5718.515	37456.445	3275.015	bb			804.7389	134.1	34.1	4697.8
WXX100326-07CCV	RDX	176 > 102	7.49	24024.641	5718.515	24024.641	2100.601	bb			701.8748	117.0	17.0	2558.9
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.13	28559.672	5718.515	28559.672	2497.123	bb			568.4235	94.7	-5.3	2037.1
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	5718.515		5718.515	5718.515	bb			467.3983	93.5	-6.5	762.7
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.17	9652.442	5718.515	9652.442	843.964	bb			633.0467	105.5	5.5	775.5
WXX100326-07CCV	Tetryl	241 > 181	12.63	8264.497	5718.515	8264.497	722.609	bb			648.2143	108.0	8.0	530.5
WXX100326-07CCV	Nitrobenzene	123 > 46	13.67	3862.752	5718.515	3862.752	337.741	bb			559.5874	93.3	-6.7	257.5
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.68	17544.523	39491.301	17544.523	222.131	MM	28-Mar-10	12:40:48	614.7734	102.5	2.5	297.1
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.55	27340.551	39491.301	27340.551	346.159	bb			639.1024	106.5	6.5	888.0
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.45	20569.443	39491.301	20569.443	260.430	bb			808.5090	134.8	34.8	828.9
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.39	26452.053	39491.301	26452.053	334.910	bb			316.9394	105.6	5.6	942.5
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.73	54912.477	39491.301	54912.477	695.248	MM	28-Mar-10	12:47:14	607.8710	101.3	1.3	2154.8
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.32	14554.724	39491.301	14554.724	184.278	MM	28-Mar-10	12:48:14	622.3222	103.7	3.7	540.8
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.55	39491.301		39491.301	39491.301	bb			537.8798	107.6	7.6	2274.8
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.35	3033.765	39491.301	3033.765	38.411	bb			513.0466	85.5	-14.5	397.3
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.72	1555.937	39491.301	1555.937	19.700	bb			506.3574	84.4	-15.6	201.2
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.44	2174.640	39491.301	2174.640	27.533	bb			552.1025	92.0	-8.0	255.8
WXX100326-07CCV	PETN	361 > 62	24.59	53298.449	39491.301	53298.449	674.813	bb			479.3876	79.9	-20.1	9454.2

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/27/10
Time of Injection: 1617
Standard Number: WXX100326-07CCV
Data File: EXP0326053a

HMX		134.1
RDX		117.0
135-TNB		94.7
13-DNB		105.5
Tetryl		108.0
Nitrobenzene		93.3
4A-26-DNT		102.5
2A-46-DNT		106.5
246-TNT		134.8
34-DNT(surr)		105.6
26-DNT		101.3
24-DNT		103.7
2-NT		85.5
4-NT		84.4
3-NT		92.0
PETN		79.9
Total		1648.8
Average		103.1

MJP 3/29/10

HMM 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0326055a

Analysis Date: 27-MAR-10 17:16

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
Nitrobenzene	40	39.118	98	
PETN	40	38.2	95	
RDX	40	42.526	106	
Tetryl	40	35.619	89	
m-Dinitrobenzene	40	36.714	92	
m-Nitrotoluene	40	43.246	108	
o-Nitrotoluene	40	32.775	82	
p-Nitrotoluene	40	39.073	98	
1,3,5-Trinitrobenzene	40	54.285	136	*
1,3-Dinitrobenzene-d4	500	478.149	96	
2,4,6-Trinitrotoluene	40	63.902	160	*
2,4-Dinitrotoluene	40	41.275	103	
2,6-Dinitrotoluene	40	42.993	107	
2,6-Dinitrotoluene-d3	500	465.23	93	
2-Amino-4,6-dinitrotoluene	40	37.97	95	
3,4-Dinitrotoluene	20	26.105	131	*
4-Amino-2,6-dinitrotoluene	40	48.685	122	
HMX	40	48.8	122	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

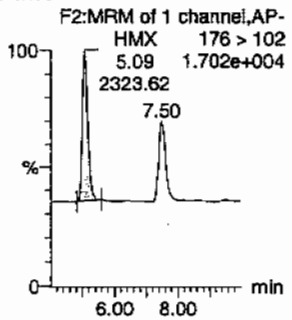
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

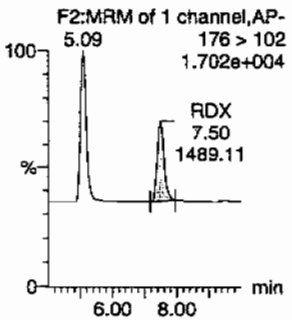
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326055a
Date: 27-Mar-2010
Time: 17:16:23
ID: WXX100326-08CRI
Vial: 1:1,C

MMP 3/29/10

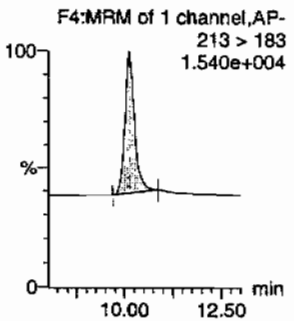
HMX



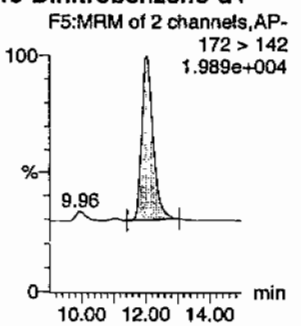
RDX



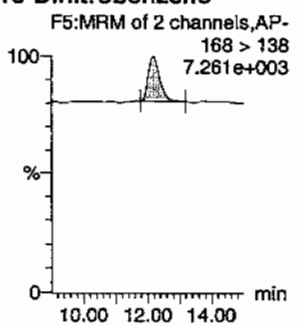
135-Trinitrobenzene



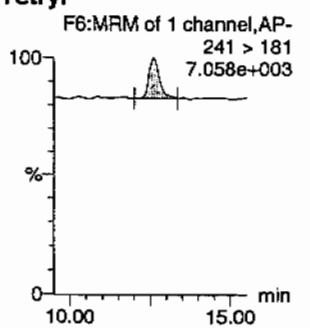
13-Dinitrobenzene-d4



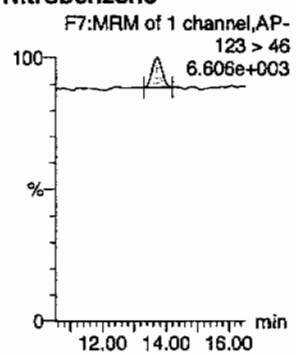
13-Dinitrobenzene



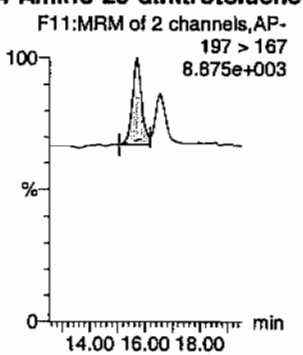
Tetryl



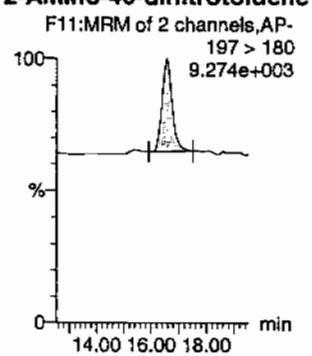
Nitrobenzene



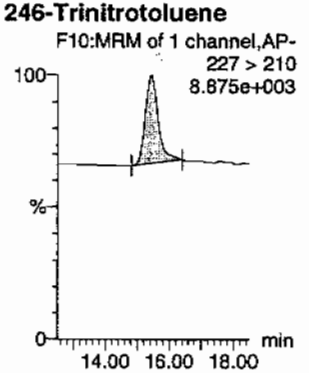
4-Amino-26-dinitrotoluene



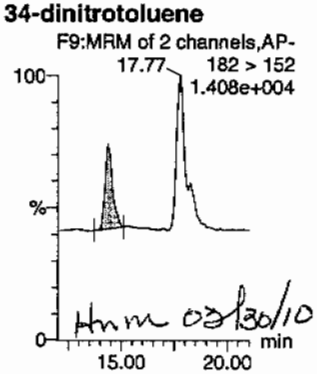
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

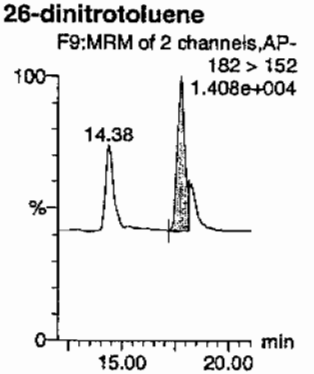


34-dinitrotoluene



Hmm 03/30/10

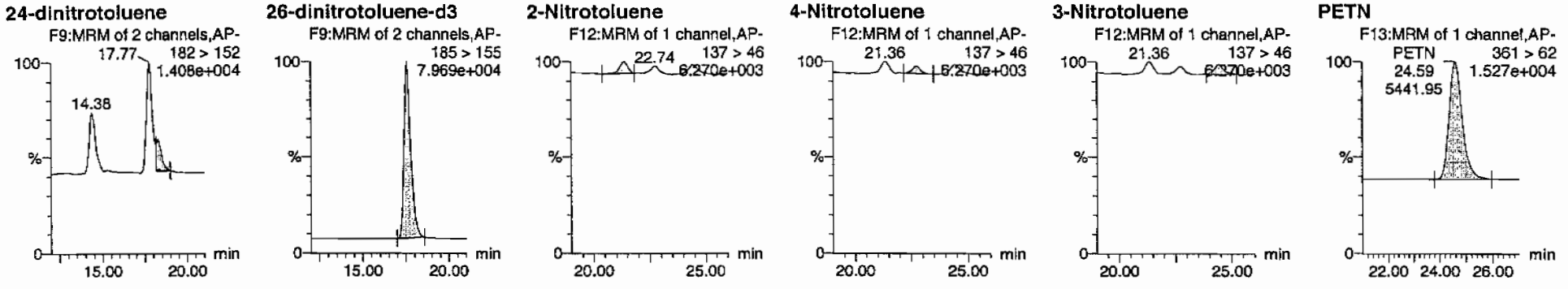
26-dinitrotoluene



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



ID	Name	Trace	RT	Area	IS Area	Abs.Resp	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.09	2323.620	5850.045	2323.620	198.598	bb			48.7997	122.0	22.0	691.8
WXX100326-08CRI	RDX	176 > 102	7.50	1489.109	5850.045	1489.109	127.273	bb			42.5259	106.3	6.3	370.8
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.12	2790.205	5850.045	2790.205	238.477	bb			54.2849	135.7	35.7	229.0
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.04	5850.045		5850.045	5850.045	bb			478.1488	95.6	-4.4	574.5
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	572.677	5850.045	572.677	48.946	bb			36.7141	91.8	-8.2	40.9
WXX100326-08CRI	Tetryl	241 > 181	12.58	464.576	5850.045	464.576	39.707	bb			35.6191	89.0	-11.0	28.7
WXX100326-08CRI	Nitrobenzene	123 > 46	13.71	276.234	5850.045	276.234	23.610	bb			39.1176	97.8	-2.2	15.8
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	1201.730	34157.301	1201.730	17.591	MM	28-Mar-10	12:41:02	48.6854	121.7	21.7	63.2
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.55	1404.938	34157.301	1404.938	20.566	bb			37.9698	94.9	-5.1	128.7
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.45	1406.158	34157.301	1406.158	20.584	bb			63.9020	159.8	59.8	139.3
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.38	1884.489	34157.301	1884.489	27.585	bb			26.1053	130.5	30.5	47.6
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.77	3359.211	34157.301	3359.211	49.173	MM	28-Mar-10	12:47:04	42.9928	107.5	7.5	87.0
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.25	834.942	34157.301	834.942	12.222	MM	28-Mar-10	12:48:25	41.2749	103.2	3.2	24.7
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.55	34157.301		34157.301	34157.301	bb			465.2296	93.0	-7.0	1605.2
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.36	167.629	34157.301	167.629	2.454	bb			32.7749	81.9	-18.1	45.7
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.74	103.846	34157.301	103.846	1.520	bb			39.0726	97.7	-2.3	28.3
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.43	147.330	34157.301	147.330	2.157	bb			43.2456	108.1	8.1	36.1
WXX100326-08CRI	PETN	361 > 62	24.59	5441.954	34157.301	5441.954	79.660	bb			38.1998	95.5	-4.5	961.4

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/27/10
Time of Injection	1716
Standard Number	WXX100326-08CRI
Data File	EXP0326055a

HMX	122.0
RDX	106.3
135-TNB	135.7
13-DNB	91.8
Tetryl	89.0
Nitrobenzene	97.8
4A-26-DNT	121.7
2A-46-DNT	94.9
246-TNT	159.8
34-DNT(surr)	130.5
26-DNT	107.5
24-DNT	103.2
2-NT	81.9
4-NT	97.7
3-NT	108.1
PETN	95.5
Total	1743.4
Average	109.0

HMR 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0326060a

Analysis Date: 27-MAR-10 19:43

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	600	612.368	102	
m-Nitrotoluene	600	501.175	84	
o-Nitrotoluene	600	506.66	84	
p-Nitrotoluene	600	586.486	98	
1,3,5-Trinitrobenzene	600	592.839	99	
1,3-Dinitrobenzene-d4	500	447.898	90	
2,4,6-Trinitrotoluene	600	723.904	121	*
2,4-Dinitrotoluene	600	582.664	97	
2,6-Dinitrotoluene	600	610.55	102	
2,6-Dinitrotoluene-d3	500	449.56	90	
2-Amino-4,6-dinitrotoluene	600	633.856	106	
3,4-Dinitrotoluene	300	303.007	101	
4-Amino-2,6-dinitrotoluene	600	638.97	106	
HMX	600	777.225	130	*
Nitrobenzene	600	534.64	89	
PETN	600	584.848	97	
RDX	600	694.693	116	
Tetryl	600	607.601	101	

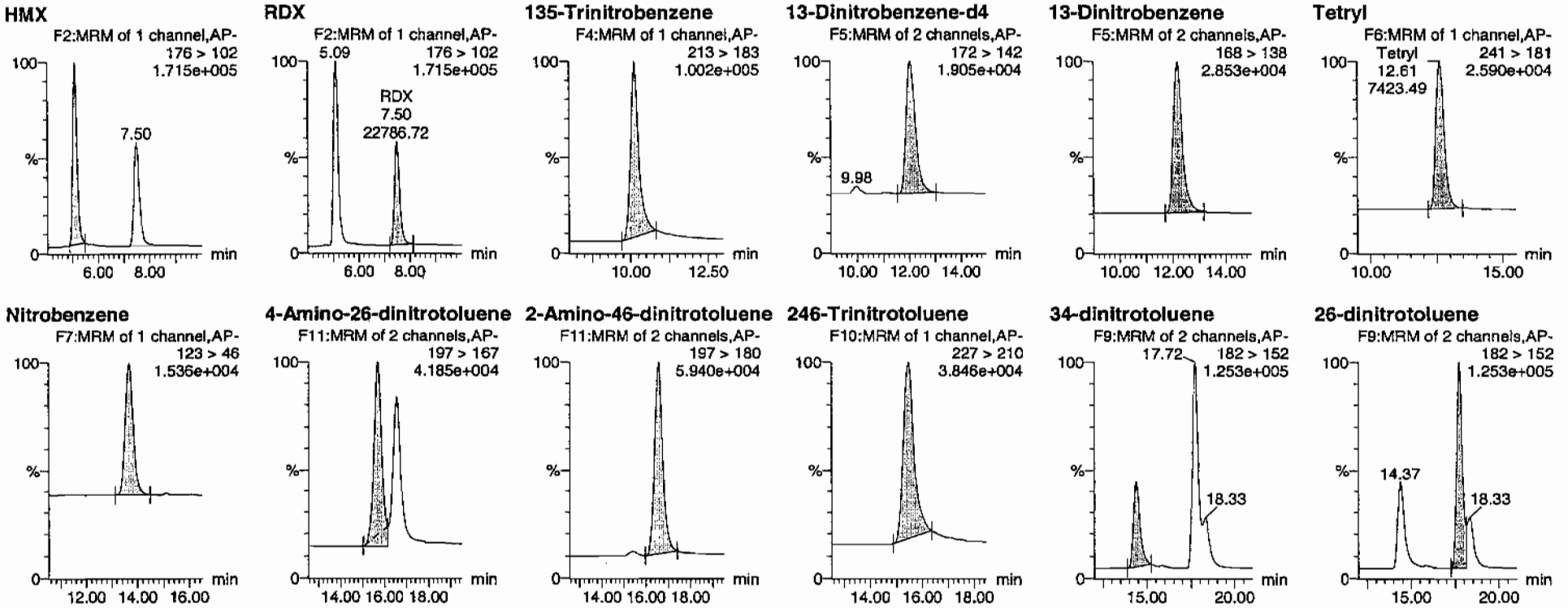
Recovery Limits:
3,4-Dinitrotoluene (Surrogate),TATB, tris(o-cresyl)phosphate, 3,5-Dinitroaniline, 2,6-Diamino-4-nitrotoluene , 2,4-Diamino-6-nitrotoluene 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326060a
Date: 27-Mar-2010
Time: 19:43:57
ID: WXX100326-07CCV
Vial: 1:1,B

MMT 3/29/10

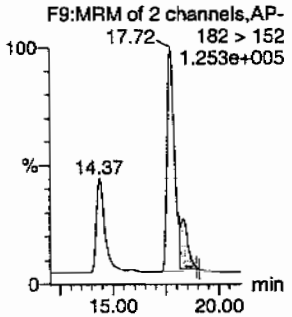


HMM 03/30/10

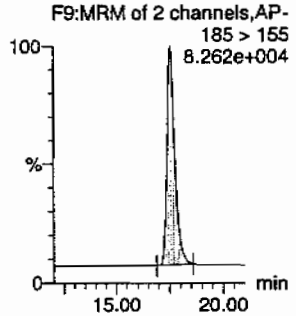
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

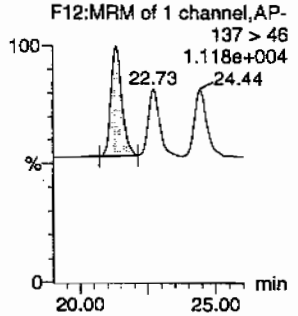
24-dinitrotoluene



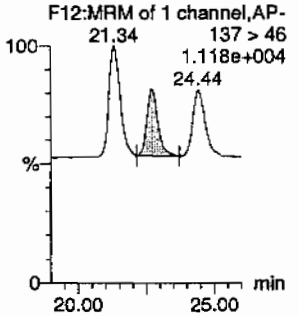
26-dinitrotoluene-d3



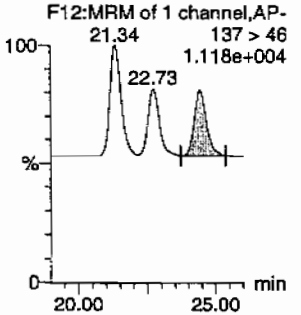
2-Nitrotoluene



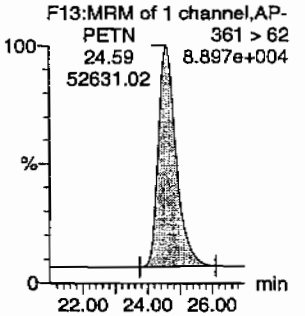
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	S Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.09	34666.508	5479.929	34666.508	3163.044	bb			777.2251	129.5	29.5	1293.4
WXX100326-07CCV	RDX	176 > 102	7.50	22786.715	5479.929	22786.715	2079.107	bb			694.6928	115.8	15.8	735.4
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.12	28543.680	5479.929	28543.680	2604.384	bb			592.8395	98.8	-1.2	1697.3
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	5479.929		5479.929	5479.929	bb			447.8976	89.6	-10.4	131.5
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.17	8947.584	5479.929	8947.584	816.396	bb			612.3683	102.1	2.1	592.8
WXX100326-07CCV	Tetryl	241 > 181	12.61	7423.490	5479.929	7423.490	677.335	bb			607.6013	101.3	1.3	524.7
WXX100326-07CCV	Nitrobenzene	123 > 46	13.66	3536.566	5479.929	3536.566	322.684	bb			534.6397	89.1	-10.9	297.0
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	15240.878	33006.859	15240.878	230.874	MM	28-Mar-10	12:41:25	638.9704	106.5	6.5	668.9
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.54	22663.676	33006.859	22663.676	343.318	bb			633.8563	105.6	5.6	768.8
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.44	15392.934	33006.859	15392.934	233.178	bb			723.9040	120.7	20.7	861.7
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.37	21136.768	33006.859	21136.768	320.188	bb			303.0071	101.0	1.0	268.9
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.72	46098.133	33006.859	46098.133	698.311	MM	28-Mar-10	12:46:44	610.5496	101.8	1.8	654.3
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.33	11389.622	33006.859	11389.622	172.534	MM	28-Mar-10	12:48:46	582.6636	97.1	-2.9	146.1
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.57	33006.859		33006.859	33006.859	bb			449.5603	89.9	-10.1	1833.3
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.34	2504.060	33006.859	2504.060	37.932	bb			506.6603	84.4	-15.6	413.7
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.73	1506.245	33006.859	1506.245	22.817	bb			586.4865	97.7	-2.3	250.4
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.44	1649.908	33006.859	1649.908	24.993	bb			501.1749	83.5	-16.5	249.4
WXX100326-07CCV	PETN	361 > 62	24.59	52631.023	33006.859	52631.023	797.274	bb			584.8480	97.5	-2.5	916.9

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/27/10
Time of Injection: 1943
Standard Number: WXX100326-07CCV
Data File: EXP0326060a

HMX		129.5
RDX		115.8
135-TNB		98.8
13-DNB		102.1
Tetryl		101.3
Nitrobenzene		89.1
4A-26-DNT		106.5
2A-46-DNT		105.6
246-TNT		120.7
34-DNT(surr)		101.0
26-DNT		101.8
24-DNT		97.1
2-NT		84.4
4-NT		97.7
3-NT		83.5
PETN		97.5
Total		1632.4
Average		102.0

MTP 3/29/10

HMM 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0326062a

Analysis Date: 27-MAR-10 20:42

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	40	58.744	147	*
1,3-Dinitrobenzene-d4	500	423.056	85	
2,4,6-Trinitrotoluene	40	39.807	100	
2,4-Dinitrotoluene	40	47.549	119	
2,6-Dinitrotoluene	40	41.725	104	
2,6-Dinitrotoluene-d3	500	461.371	92	
2-Amino-4,6-dinitrotoluene	40	47.807	120	
3,4-Dinitrotoluene	20	19.387	97	
4-Amino-2,6-dinitrotoluene	40	36.678	92	
HMX	40	53.859	135	*
Nitrobenzene	40	46.418	116	
PETN	40	40.098	100	
RDX	40	52.946	132	*
Tetryl	40	39.526	99	
m-Dinitrobenzene	40	41.563	104	
m-Nitrotoluene	40	35.636	89	
o-Nitrotoluene	40	45.612	114	
p-Nitrotoluene	40	40.532	101	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

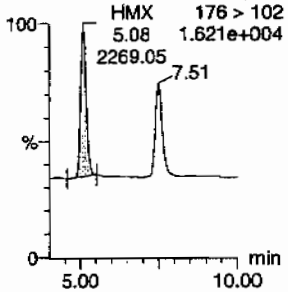
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

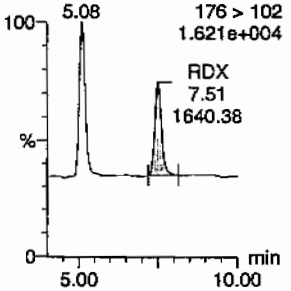
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326062a
Date: 27-Mar-2010
Time: 20:42:55
ID: WXX100326-08CRI
Vial: 1:1,C

MMT 3/30/10

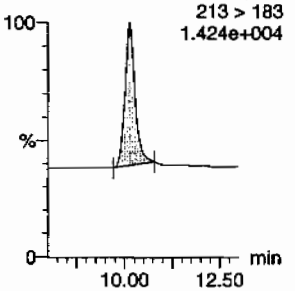
HMX
F2:MRM of 1 channel,AP-
HMX 176 > 102
5.08 1.621e+004
2269.05
7.51



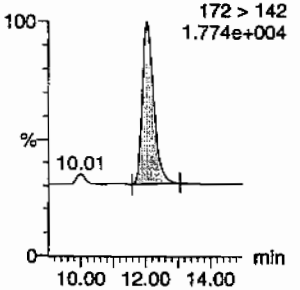
RDX
F2:MRM of 1 channel,AP-
5.08 176 > 102
1.621e+004
RDX
7.51
1640.38



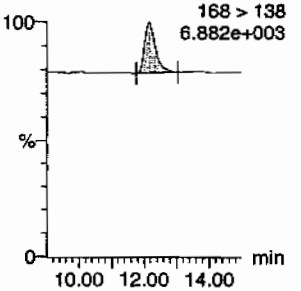
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.424e+004



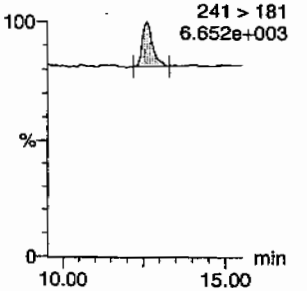
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.774e+004



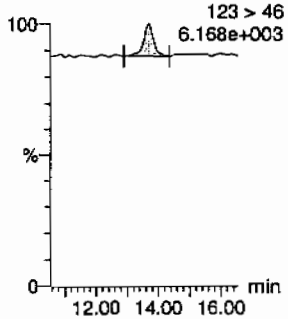
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
6.882e+003



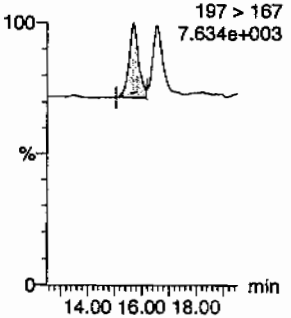
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
6.652e+003



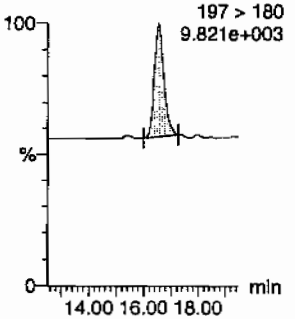
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
6.168e+003



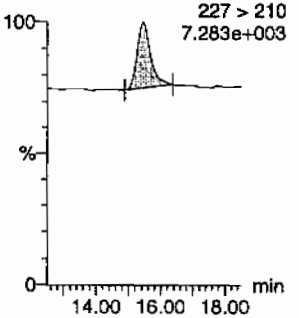
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
7.634e+003



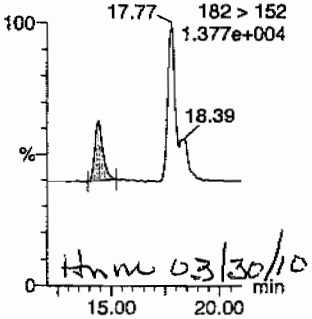
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
9.821e+003



246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
7.283e+003

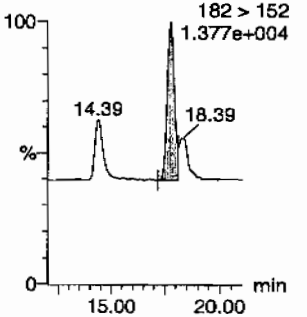


34-dinitrotoluene
F9:MRM of 2 channels,AP-
17.77 182 > 152
1.377e+004
18.39



HMM 03/30/10

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.377e+004
14.39
18.39

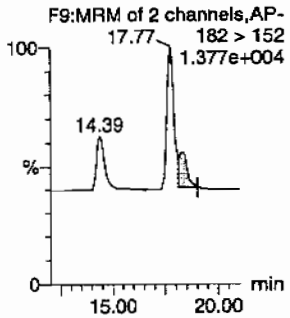


GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

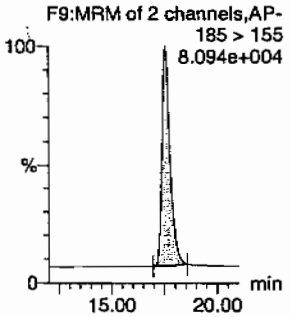
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

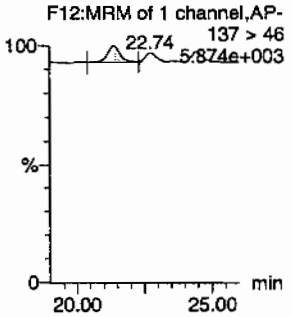
24-dinitrotoluene



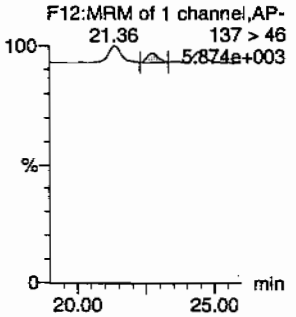
26-dinitrotoluene-d3



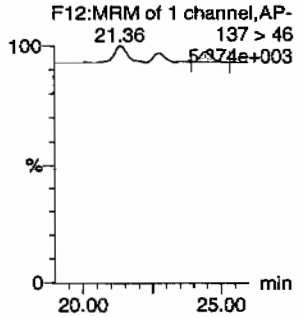
2-Nitrotoluene



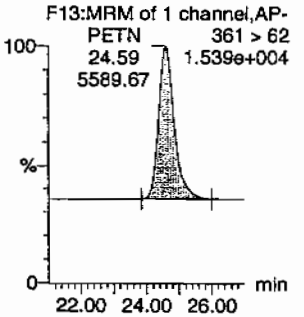
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.08	2269.050	5176.002	2269.050	219.189	bb			53.8594	134.6	34.6	232.9
WXX100326-08CRI	RDX	176 > 102	7.51	1640.378	5176.002	1640.378	158.460	bb			52.9463	132.4	32.4	142.1
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.13	2671.480	5176.002	2671.480	258.064	bb			58.7435	146.9	46.9	257.7
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	5176.002		5176.002	5176.002	bb			423.0564	84.6	-15.4	323.7
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	573.608	5176.002	573.608	55.410	bb			41.5626	103.9	3.9	56.4
WXX100326-08CRI	Tetryl	241 > 181	12.63	456.136	5176.002	456.136	44.063	bb			39.5262	98.8	-1.2	47.2
WXX100326-08CRI	Nitrobenzene	123 > 46	13.67	290.020	5176.002	290.020	28.016	bb			46.4182	116.0	16.0	19.5
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	897.823	33873.980	897.823	13.252	MM	28-Mar-10	12:41:34	36.6775	91.7	-8.3	42.3
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.55	1754.246	33873.980	1754.246	25.894	bb			47.8067	119.5	19.5	60.9
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.45	868.682	33873.980	868.682	12.822	bb			39.8069	99.5	-0.5	89.2
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.39	1387.915	33873.980	1387.915	20.486	bb			19.3872	96.9	-3.1	51.0
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.77	3233.085	33873.980	3233.085	47.722	MM	28-Mar-10	12:46:04	41.7246	104.3	4.3	132.6
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.39	953.886	33873.980	953.886	14.080	MM	28-Mar-10	12:48:54	47.5492	118.9	18.9	33.5
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.58	33873.980		33873.980	33873.980	bb			461.3707	92.3	-7.7	2518.8
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.36	231.352	33873.980	231.352	3.415	bb			45.6124	114.0	14.0	45.0
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.74	106.832	33873.980	106.832	1.577	bb			40.5323	101.3	1.3	23.7
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.44	120.400	33873.980	120.400	1.777	bb			35.6364	89.1	-10.9	27.4
WXX100326-08CRI	PETN	361 > 62	24.59	5589.669	33873.980	5589.669	82.507	bb			40.0977	100.2	0.2	1295.4

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/27/10
Time of Injection	2042
Standard Number	WXX100326-08CRI
Data File	EXP0326062a

HMX	134.6
RDX	132.4
135-TNB	146.9
13-DNB	103.9
Tetryl	98.8
Nitrobenzene	116.0
4A-26-DNT	91.7
2A-46-DNT	119.5
246-TNT	99.5
34-DNT(surr)	96.9
26-DNT	104.3
24-DNT	118.9
2-NT	114.0
4-NT	101.3
3-NT	89.1
PETN	100.2
Total	1768.0
Average	110.5

MJT 3/29/10

HMM 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0326073a

Analysis Date: 28-MAR-10 02:07

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	689.56	115	
1,3-Dinitrobenzene-d4	500	409.693	82	
2,4,6-Trinitrotoluene	600	673.652	112	
2,4-Dinitrotoluene	600	610.791	102	
2,6-Dinitrotoluene	600	621.332	104	
2,6-Dinitrotoluene-d3	500	382.101	76	*
2-Amino-4,6-dinitrotoluene	600	645.377	108	
3,4-Dinitrotoluene	300	326.782	109	
4-Amino-2,6-dinitrotoluene	600	589.246	98	
HMX	600	717.077	120	
Nitrobenzene	600	534.557	89	
PETN	600	627.53	105	
RDX	600	679.203	113	
Tetryl	600	632.437	105	
m-Dinitrobenzene	600	608.36	101	
m-Nitrotoluene	600	616.172	103	
o-Nitrotoluene	600	607.04	101	
p-Nitrotoluene	600	694.614	116	

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%
OtherTarget 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\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326073a
Date: 28-Mar-2010
Time: 02:07:26
ID: WXX100326-07CCV
Vial: 1:1,B

MMT 3/30/10

HMX
F2:MRM of 1 channel,AP-
176 > 102
1.442e+005
7.49

RDX
F2:MRM of 1 channel,AP-
176 > 102
1.442e+005
5.08
RDX
7.49
20378.30

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.053e+005

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.762e+004
10.00

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
2.573e+004

Tetryl
F6:MRM of 1 channel,AP-
241 > 181
2.427e+004
Tetryl
12.59
7067.83

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.427e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
3.349e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.109e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
3.053e+004

34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.059e+005
17.73
18.34

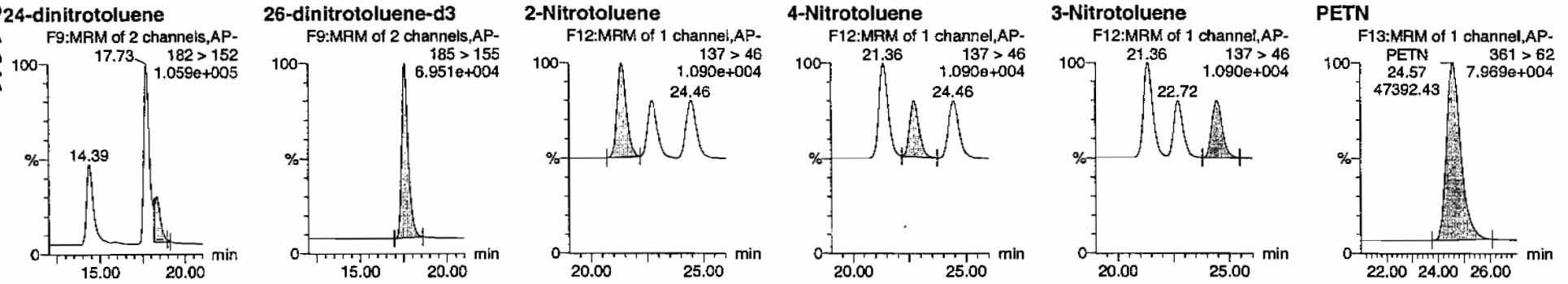
26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.059e+005
14.39
18.34

HMM 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.08	29255.580	5012.500	29255.580	2918.262	bb			717.0774	119.5	19.5	1871.1
WXX100326-07CCV	RDX	176 > 102	7.49	20378.303	5012.500	20378.303	2032.748	bb			679.2031	113.2	13.2	1135.0
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.13	30368.586	5012.500	30368.586	3029.285	bb			689.5604	114.9	14.9	1256.8
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.04	5012.500		5012.500	5012.500	bb			409.6927	81.9	-18.1	497.8
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.18	8130.803	5012.500	8130.803	811.053	bb			608.3603	101.4	1.4	833.6
WXX100326-07CCV	Tetryl	241 > 181	12.59	7067.828	5012.500	7067.828	705.020	bb			632.4367	105.4	5.4	591.5
WXX100326-07CCV	Nitrobenzene	123 > 46	13.68	3234.401	5012.500	3234.401	322.634	bb			534.5568	89.1	-10.9	396.3
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.68	11945.827	28053.980	11945.827	212.908	MM	28-Mar-10	12:42:31	589.2461	98.2	-1.8	360.4
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.55	19612.957	28053.980	19612.957	349.557	bb			645.3766	107.6	7.6	545.6
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.45	12174.927	28053.980	12174.927	216.991	bb			673.6521	112.3	12.3	391.6
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.39	19374.688	28053.980	19374.688	345.311	bb			326.7823	108.9	8.9	337.9
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.73	39872.781	28053.980	39872.781	710.644	MM	28-Mar-10	12:43:57	621.3322	103.6	3.6	768.7
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.34	10147.850	28053.980	10147.850	180.863	MM	28-Mar-10	12:49:54	610.7906	101.8	1.8	195.4
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.55	28053.980		28053.980	28053.980	bb			382.1011	76.4	-23.6	3270.7
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.36	2549.974	28053.980	2549.974	45.448	bb			607.0404	101.2	1.2	214.8
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.72	1516.253	28053.980	1516.253	27.024	bb			694.6144	115.8	15.8	126.8
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.46	1724.102	28053.980	1724.102	30.728	bb			616.1724	102.7	2.7	129.5
WXX100326-07CCV	PETN	361 > 62	24.57	47392.430	28053.980	47392.430	844.665	bb			627.5302	104.6	4.6	5399.9

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/28/10
Time of Injection: 0207
Standard Number: WXX100326-07CCV
Data File: EXP0326073a

HMX	119.5
RDX	113.2
135-TNB	114.9
13-DNB	101.4
Tetryl	105.4
Nitrobenzene	89.1
4A-26-DNT	98.2
2A-46-DNT	107.6
246-TNT	112.3
34-DNT(surr)	108.9
26-DNT	103.6
24-DNT	101.8
2-NT	101.2
4-NT	115.8
3-NT	102.7
PETN	104.6
Total	1700.2
Average	106.3

KATP 3/29/10

Hmm 03/30/10

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): 10-1861

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXP0326075a

Analysis Date: 28-MAR-10 03:06

LCMSMS ID: 903

Column ID Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
2,4-Dinitrotoluene	40	42.735	107	
2,6-Dinitrotoluene	40	38.133	95	
2,6-Dinitrotoluene-d3	500	520.525	104	
2-Amino-4,6-dinitrotoluene	40	38.644	97	
3,4-Dinitrotoluene	20	18.71	94	
4-Amino-2,6-dinitrotoluene	40	34.603	87	
HMX	40	52.825	132	*
Nitrobenzene	40	31.987	80	
PETN	40	30.607	77	
RDX	40	41.221	103	
Tetryl	40	38.351	96	
m-Dinitrobenzene	40	34.361	86	
m-Nitrotoluene	40	36.096	90	
o-Nitrotoluene	40	33.105	83	
p-Nitrotoluene	40	30.205	76	
1,3,5-Trinitrobenzene	40	48.855	122	
1,3-Dinitrobenzene-d4	500	464.224	93	
2,4,6-Trinitrotoluene	40	45.738	114	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

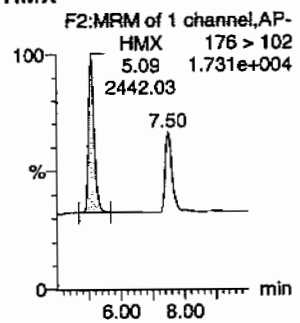
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

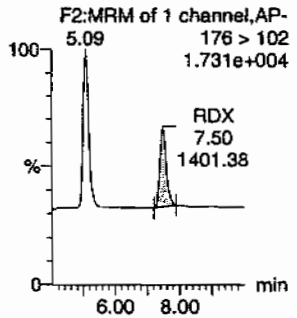
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326075a
Date: 28-Mar-2010
Time: 03:06:23
ID: WXX100326-08CRI
Vial: 1:1,C

MM 3/29/10

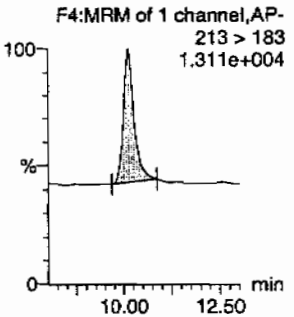
HMX



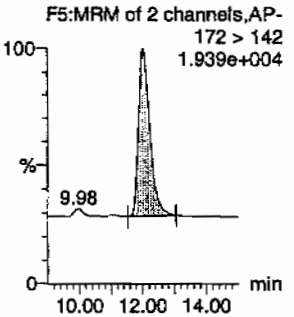
RDX



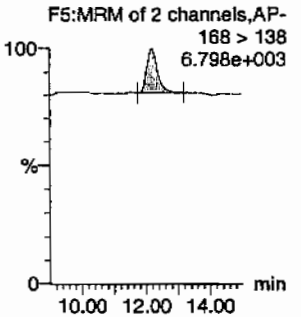
135-Trinitrobenzene



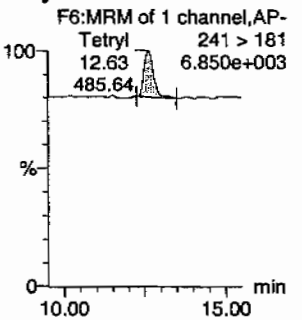
13-Dinitrobenzene-d4



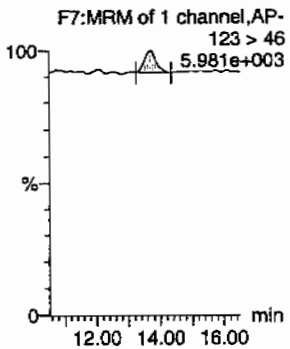
13-Dinitrobenzene



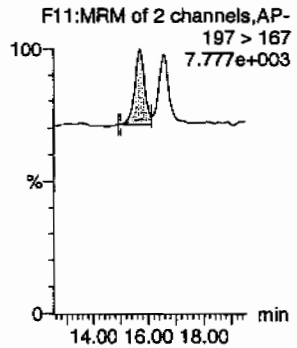
Tetryl



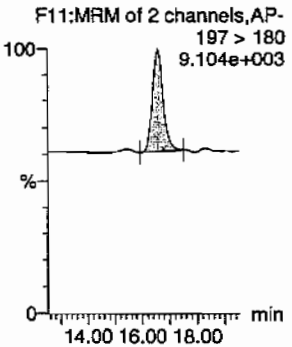
Nitrobenzene



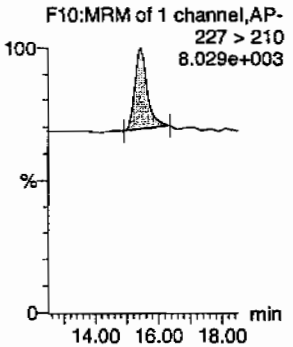
4-Amino-26-dinitrotoluene



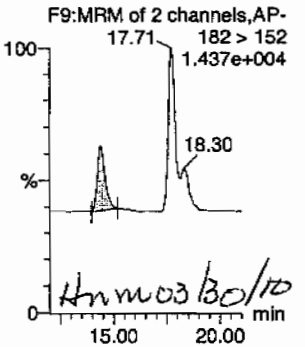
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

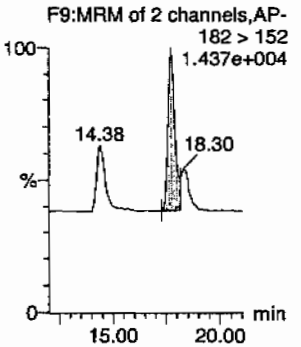


34-dinitrotoluene



Hnm03/30/10

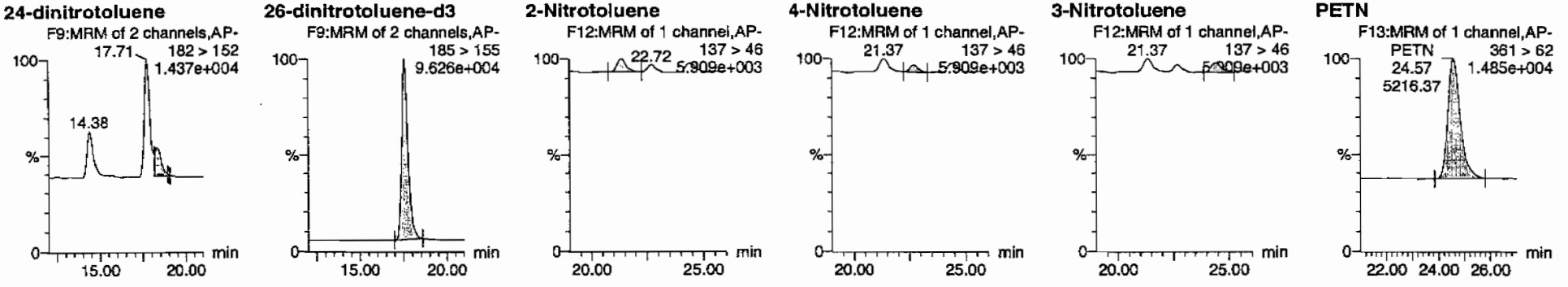
26-dinitrotoluene



GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/ml	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.09	2442.025	5679.679	2442.025	214.979	bb			52.8248	132.1	32.1	318.7
WXX100326-08CRI	RDX	176 > 102	7.50	1401.381	5679.679	1401.381	123.368	bb			41.2210	103.1	3.1	160.7
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.12	2437.993	5679.679	2437.993	214.624	bb			48.8552	122.1	22.1	250.2
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	5679.679		5679.679	5679.679	bb			464.2240	92.8	-7.2	926.9
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	520.370	5679.679	520.370	45.810	bb			34.3614	85.9	-14.1	48.2
WXX100326-08CRI	Tetryl	241 > 181	12.63	485.642	5679.679	485.642	42.753	bb			38.3511	95.9	-4.1	49.9
WXX100326-08CRI	Nitrobenzene	123 > 46	13.67	219.300	5679.679	219.300	19.306	bb			31.9867	80.0	-20.0	10.2
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.71	955.641	38217.082	955.641	12.503	MM	28-Mar-10	12:42:42	34.6029	86.5	-13.5	89.8
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.55	1599.821	38217.082	1599.821	20.931	bb			38.6437	96.6	-3.4	136.4
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.45	1126.088	38217.082	1126.088	14.733	bb			45.7381	114.3	14.3	265.8
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.38	1511.145	38217.082	1511.145	19.771	bb			18.7097	93.5	-6.5	58.1
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.71	3333.606	38217.082	3333.606	43.614	MM	28-Mar-10	12:43:42	38.1328	95.3	-4.7	144.7
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.30	967.236	38217.082	967.236	12.654	MM	28-Mar-10	12:50:04	42.7354	106.8	6.8	36.6
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.55	38217.082		38217.082	38217.082	bb			520.5246	104.1	4.1	2269.7
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.37	189.441	38217.082	189.441	2.478	bb			33.1049	82.8	-17.2	59.6
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.72	89.818	38217.082	89.818	1.175	bb			30.2046	75.5	-24.5	30.9
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.41	137.589	38217.082	137.589	1.800	bb			36.0961	90.2	-9.8	39.1
WXX100326-08CRI	PETN	361 > 62	24.57	5216.367	38217.082	5216.367	68.247	bb			30.6065	76.5	-23.5	1488.7

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/28/10
Time of Injection	0306
Standard Number	WXX100326-08CRI
Data File	EXP0326075a

HMX		132.1
RDX		103.1
135-TNB		122.1
13-DNB		85.9
Tetryl		95.9
Nitrobenzene		80.0
4A-26-DNT		86.5
2A-46-DNT		96.6
246-TNT		114.3
34-DNT(surr)		93.5
26-DNT		95.3
24-DNT		106.8
2-NT		82.8
4-NT		75.5
3-NT		90.2
PETN		76.5
Total		1537.1
Average		96.1

MJT 3/29/10

Hmm 03/30/10

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--1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXP0326084a

Analysis Date: 28-MAR-10 07:31

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
1,3,5-Trinitrobenzene	600	575.131	96	
1,3-Dinitrobenzene-d4	500	462.698	93	
2,4,6-Trinitrotoluene	600	695.596	116	
2,4-Dinitrotoluene	600	645.168	108	
2,6--Dinitrotoluene	600	613.729	102	
2,6-Dinitrotoluene-d3	500	425.752	85	
2-Amino-4,6-dinitrotoluene	600	684.313	114	
3,4-Dinitrotoluene	300	323.797	108	
4-Amino-2,6-dinitrotoluene	600	603.673	101	
HMX	600	696.189	116	
Nitrobenzene	600	541.349	90	
PETN	600	543.088	91	
RDX	600	672.239	112	
Tetryl	600	554.488	92	
m-Dinitrobenzene	600	600.083	100	
m--Nitrotoluene	600	627.232	105	
o-Nitrotoluene	600	519.967	87	
p-Nitrotoluene	600	557.432	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%
OtherTarget 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\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326084a
Date: 28-Mar-2010
Time: 07:31:54
ID: WXX100326-07CCV
Vial: 1:1,B

MM 3/30/10

HMX
F2:MRM of 1 channel,AP-
176 > 102
1.593e+005
7.50

RDX
F2:MRM of 1 channel,AP-
176 > 102
1.593e+005
5.09
RDX
7.50
22778.83

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
1.001e+005

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.905e+004
9.98

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
2.852e+004

Tetryl
F6:MRM of 1 channel,AP-
241 > 181
2.447e+004
Tetryl
12.61
6998.43

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.542e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
3.789e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.056e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
3.554e+004

34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.189e+005
17.72
18.33

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.189e+005
14.37
18.33

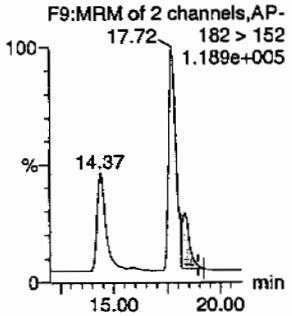
HMW 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

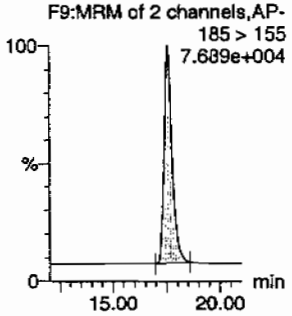
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

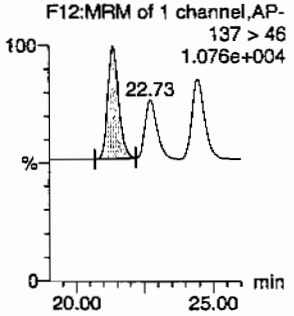
24-dinitrotoluene



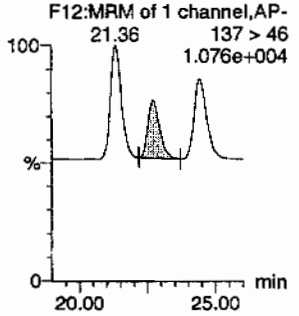
26-dinitrotoluene-d3



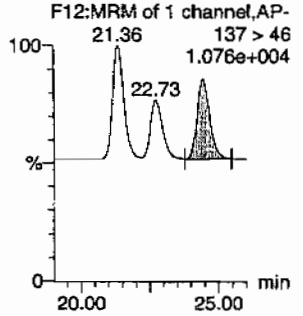
2-Nitrotoluene



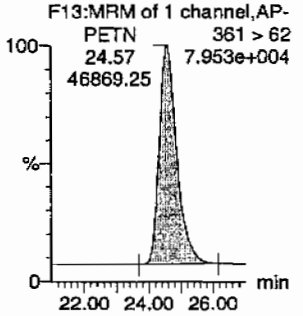
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-07CCV	HMX	176 > 102	5.09	32078.164	5661.012	32078.164	2833.253	bb			696.1889	116.0	16.0	2950.2
WXX100326-07CCV	RDX	176 > 102	7.50	22778.832	5661.012	22778.832	2011.905	bb			672.2385	112.0	12.0	1805.6
WXX100326-07CCV	135-Trinitrobenzene	213 > 183	10.12	28606.092	5661.012	28606.092	2526.588	bb			575.1307	95.9	-4.1	520.9
WXX100326-07CCV	13-Dinitrobenzene-d4	172 > 142	12.03	5661.012		5661.012	5661.012	bb			462.6983	92.5	-7.5	488.1
WXX100326-07CCV	13-Dinitrobenzene	168 > 138	12.17	9057.810	5661.012	9057.810	800.017	bb			600.0825	100.0	0.0	552.1
WXX100326-07CCV	Tetryl	241 > 181	12.61	6998.430	5661.012	6998.430	618.125	bb			554.4878	92.4	-7.6	461.0
WXX100326-07CCV	Nitrobenzene	123 > 46	13.66	3699.278	5661.012	3699.278	326.733	bb			541.3489	90.2	-9.8	339.8
WXX100326-07CCV	4-Amino-26-dinitrotoluene	197 > 167	15.67	13636.413	31258.869	13636.413	218.121	MM	28-Mar-10	12:42:52	603.6732	100.6	0.6	323.4
WXX100326-07CCV	2-Amino-46-dinitrotoluene	197 > 180	16.54	23171.998	31258.869	23171.998	370.647	bb			684.3131	114.1	14.1	1379.8
WXX100326-07CCV	246-Trinitrotoluene	227 > 210	15.44	14007.686	31258.869	14007.686	224.059	bb			695.5957	115.9	15.9	475.5
WXX100326-07CCV	34-dinitrotoluene	182 > 152	14.37	21390.820	31258.869	21390.820	342.156	bb			323.7968	107.9	7.9	427.7
WXX100326-07CCV	26-dinitrotoluene	182 > 152	17.72	43884.211	31258.869	43884.211	701.948	MM	28-Mar-10	12:43:24	613.7293	102.3	2.3	983.3
WXX100326-07CCV	24-dinitrotoluene	182 > 152	18.33	11943.544	31258.869	11943.544	191.042	MM	28-Mar-10	12:50:21	645.1679	107.5	7.5	244.2
WXX100326-07CCV	26-dinitrotoluene-d3	185 > 155	17.54	31258.869		31258.869	31258.869	bb			425.7523	85.2	-14.8	1427.4
WXX100326-07CCV	2-Nitrotoluene	137 > 46	21.36	2433.730	31258.869	2433.730	38.929	bb			519.9667	86.7	-13.3	236.2
WXX100326-07CCV	4-Nitrotoluene	137 > 46	22.73	1355.808	31258.869	1355.808	21.687	bb			557.4315	92.9	-7.1	122.2
WXX100326-07CCV	3-Nitrotoluene	137 > 46	24.43	1955.544	31258.869	1955.544	31.280	bb			627.2319	104.5	4.5	167.4
WXX100326-07CCV	PETN	361 > 62	24.57	46869.254	31258.869	46869.254	749.695	bb			543.0877	90.5	-9.5	506.8

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

GRAND MEAN AVERAGE

Vendor: Restek
Date of Analysis: 03/28/10
Time of Injection: 0731
Standard Number: WXX100326-07CCV
Data File: EXP0326084a

HMX	116.0
RDX	112.0
135-TNB	95.9
13-DNB	100.0
Tetryl	92.4
Nitrobenzene	90.2
4A-26-DNT	100.6
2A-46-DNT	114.1
246-TNT	115.9
34-DNT(surr)	107.9
26-DNT	102.3
24-DNT	107.5
2-NT	86.7
4-NT	92.9
3-NT	104.5
PETN	90.5
Total	1629.4
Average	101.8

AMT 3/28/10

Hmm 03/30/10

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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXP0326086a

Analysis Date: 28-MAR-10 08:30

LCMSMS ID: 903

Column ID: Phenomenex Ultracarb 5u ODS(20)

Compound	True	Found	Recovery	Q
m-Dinitrobenzene	40	36.214	91	
m-Nitrotoluene	40	33.207	83	
o-Nitrotoluene	40	37.706	94	
p-Nitrotoluene	40	33.123	83	
1,3,5-Trinitrobenzene	40	51.086	128	
1,3-Dinitrobenzene-d4	500	464.724	93	
2,4,6-Trinitrotoluene	40	41.631	104	
2,4-Dinitrotoluene	40	39.937	100	
2,6-Dinitrotoluene	40	39.672	99	
2,6-Dinitrotoluene-d3	500	535.624	107	
2-Amino-4,6-dinitrotoluene	40	34.263	86	
3,4-Dinitrotoluene	20	19.236	96	
4-Amino-2,6-dinitrotoluene	40	34.027	85	
HMX	40	48.089	120	
Nitrobenzene	40	36.742	92	
PETN	40	29.072	73	
RDX	40	39.266	98	
Tetryl	40	29.148	73	

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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

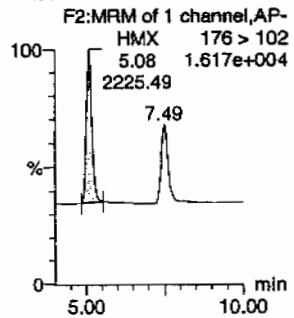
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

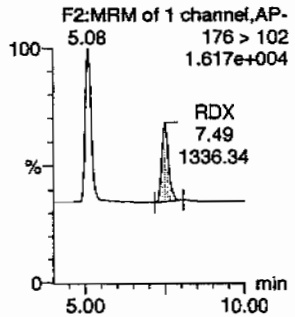
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326086a
Date: 28-Mar-2010
Time: 08:30:51
ID: WXX100326-08CRI
Vial: 1:1,C

MTT 3/29/10

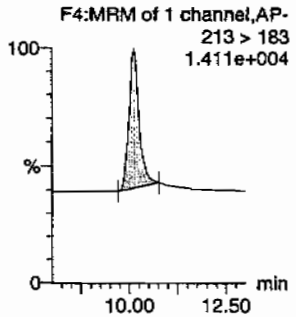
HMX



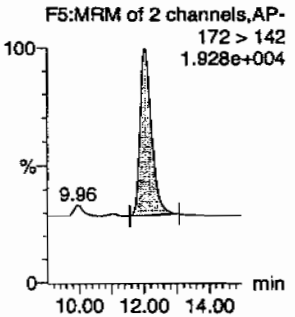
RDX



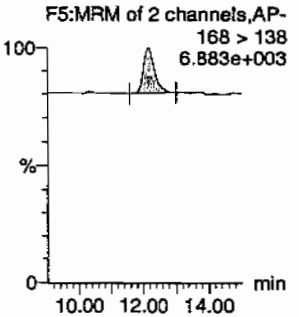
135-Trinitrobenzene



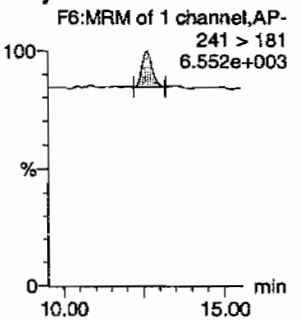
13-Dinitrobenzene-d4



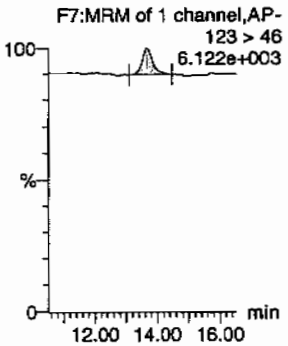
13-Dinitrobenzene



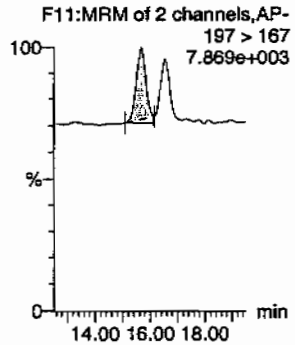
Tetryl



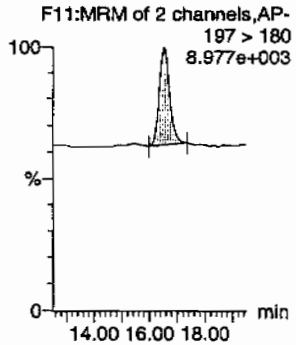
Nitrobenzene



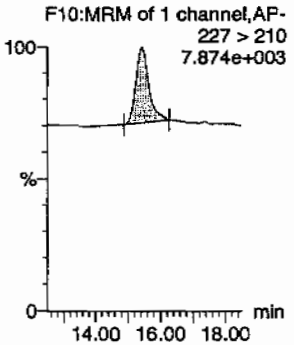
4-Amino-26-dinitrotoluene



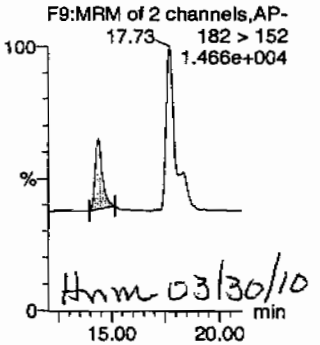
2-Amino-46-dinitrotoluene



246-Trinitrotoluene

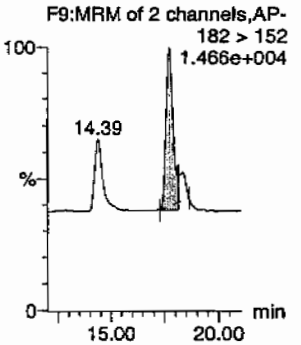


34-dinitrotoluene



Hmm 03/30/10

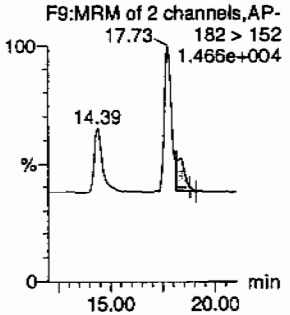
26-dinitrotoluene



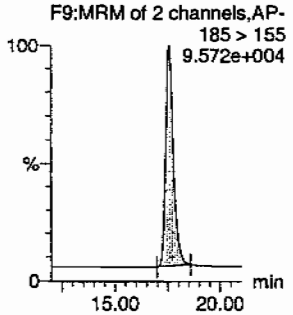
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

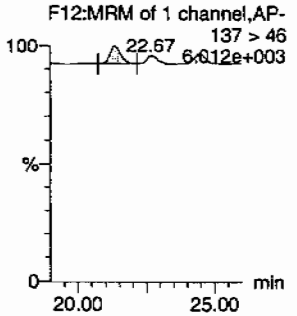
24-dinitrotoluene



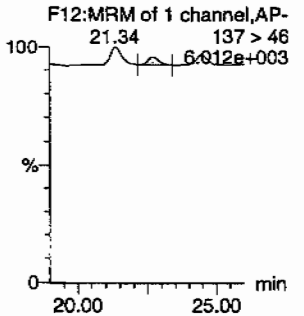
26-dinitrotoluene-d3



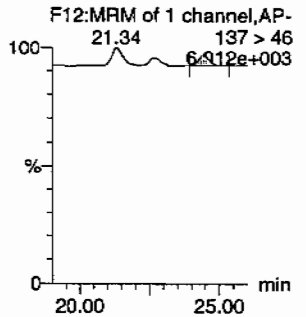
2-Nitrotoluene



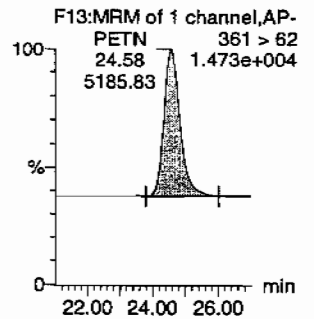
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	% Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
WXX100326-08CRI	HMX	176 > 102	5.08	2225.489	5685.795	2225.489	195.706	bb			48.0890	120.2	20.2	292.8
WXX100326-08CRI	RDX	176 > 102	7.49	1336.341	5685.795	1336.341	117.516	bb			39.2656	98.2	-1.8	148.7
WXX100326-08CRI	135-Trinitrobenzene	213 > 183	10.13	2552.045	5685.795	2552.045	224.423	bb			51.0857	127.7	27.7	329.5
WXX100326-08CRI	13-Dinitrobenzene-d4	172 > 142	12.03	5685.795		5685.795	5685.795	bb			464.7239	92.9	-7.1	506.6
WXX100326-08CRI	13-Dinitrobenzene	168 > 138	12.17	549.019	5685.795	549.019	48.280	bb			36.2141	90.5	-9.5	48.0
WXX100326-08CRI	Tetryl	241 > 181	12.63	369.503	5685.795	369.503	32.494	bb			29.1482	72.9	-27.1	39.0
WXX100326-08CRI	Nitrobenzene	123 > 46	13.63	252.173	5685.795	252.173	22.176	bb			36.7419	91.9	-8.1	19.9
WXX100326-08CRI	4-Amino-26-dinitrotoluene	197 > 167	15.68	966.992	39325.699	966.992	12.295	MM	28-Mar-10	12:43:01	34.0268	85.1	-14.9	70.5
WXX100326-08CRI	2-Amino-46-dinitrotoluene	197 > 180	16.53	1459.609	39325.699	1459.609	18.558	bb			34.2629	85.7	-14.3	257.5
WXX100326-08CRI	246-Trinitrotoluene	227 > 210	15.42	1054.701	39325.699	1054.701	13.410	bb			41.6310	104.1	4.1	91.5
WXX100326-08CRI	34-dinitrotoluene	182 > 152	14.39	1598.688	39325.699	1598.688	20.326	bb			19.2356	96.2	-3.8	93.0
WXX100326-08CRI	26-dinitrotoluene	182 > 152	17.73	3568.763	39325.699	3568.763	45.374	MM	28-Mar-10	12:43:17	39.6719	99.2	-0.8	215.3
WXX100326-08CRI	24-dinitrotoluene	182 > 152	18.36	930.129	39325.699	930.129	11.826	MM	28-Mar-10	12:50:31	39.9374	99.8	-0.2	50.2
WXX100326-08CRI	26-dinitrotoluene-d3	185 > 155	17.55	39325.699		39325.699	39325.699	bb			535.6242	107.1	7.1	2965.5
WXX100326-08CRI	2-Nitrotoluene	137 > 46	21.34	222.027	39325.699	222.027	2.823	bb			37.7056	94.3	-5.7	42.7
WXX100326-08CRI	4-Nitrotoluene	137 > 46	22.67	101.353	39325.699	101.353	1.289	bb			33.1228	82.8	-17.2	18.8
WXX100326-08CRI	3-Nitrotoluene	137 > 46	24.46	130.247	39325.699	130.247	1.656	bb			33.2067	83.0	-17.0	24.0
WXX100326-08CRI	PETN	361 > 62	24.58	5185.827	39325.699	5185.827	65.934	bb			29.0715	72.7	-27.3	1169.8

✓

GRAND MEAN AVERAGE

Vendor:	UltraScientific
Date of Analysis	03/28/10
Time of Injection	0830
Standard Number	WXX100326-08CRI
Data File	EXP0326086a

HMX	120.2
RDX	98.2
135-TNB	127.7
13-DNB	90.5
Tetryl	72.9
Nitrobenzene	91.9
4A-26-DNT	85.1
2A-46-DNT	85.7
246-TNT	104.1
34-DNT(surr)	96.2
26-DNT	99.2
24-DNT	99.8
2-NT	94.3
4-NT	82.8
3-NT	83.0
PETN	72.7
Total	1504.3
Average	94.0

HMM 03/30/10

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): 10-1861

Lab Code: GEI

GEL Sample ID: WXXCRI

GEL Data File EXS03050013.wiff

Analysis Date: 05-MAR-10 20:16

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	102	102	
2,6-Diamino-4-nitrotoluene	100	104	104	
3,4-Dinitrotoluene	50	52	104	
3,5-Dinitroaniline	100	104	104	
TATB	100	108	108	
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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

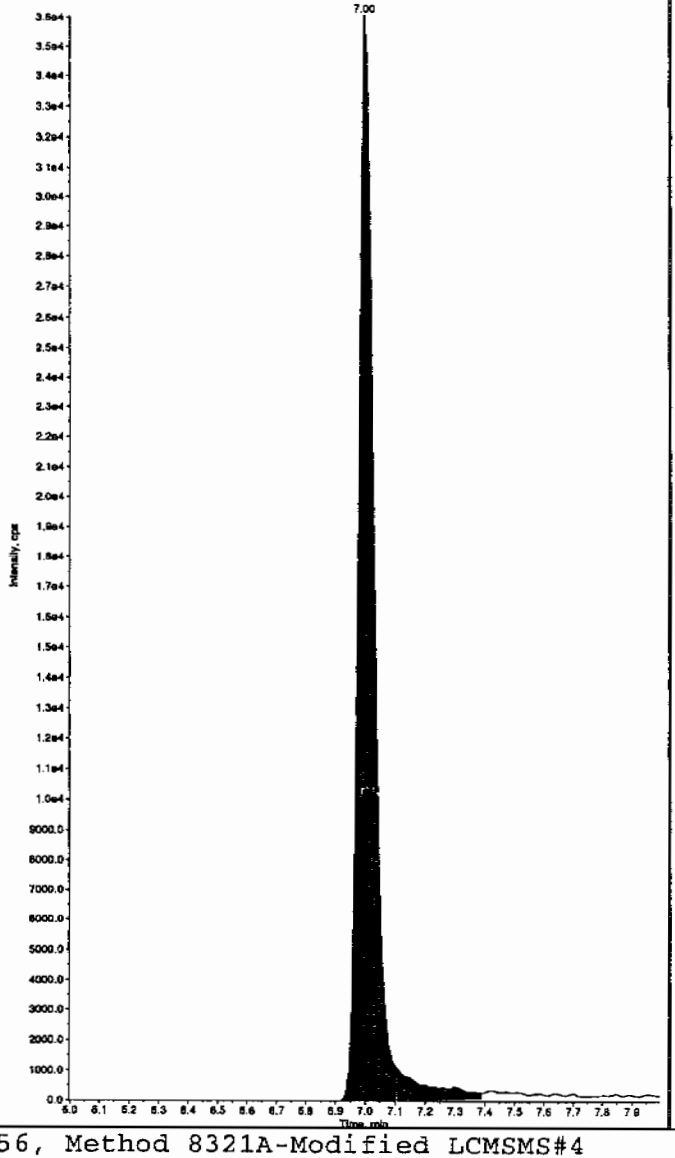
Scan 3/9/10

Sample Name: "WXX100305-27CRI" Sample ID: "|1|LER" File: "EXS03050013.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 108. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:16:04 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing 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: 1.42e+005 counts
Height: 36071.091 cps
Start Time: 6.89 min
End Time: 7.39 min

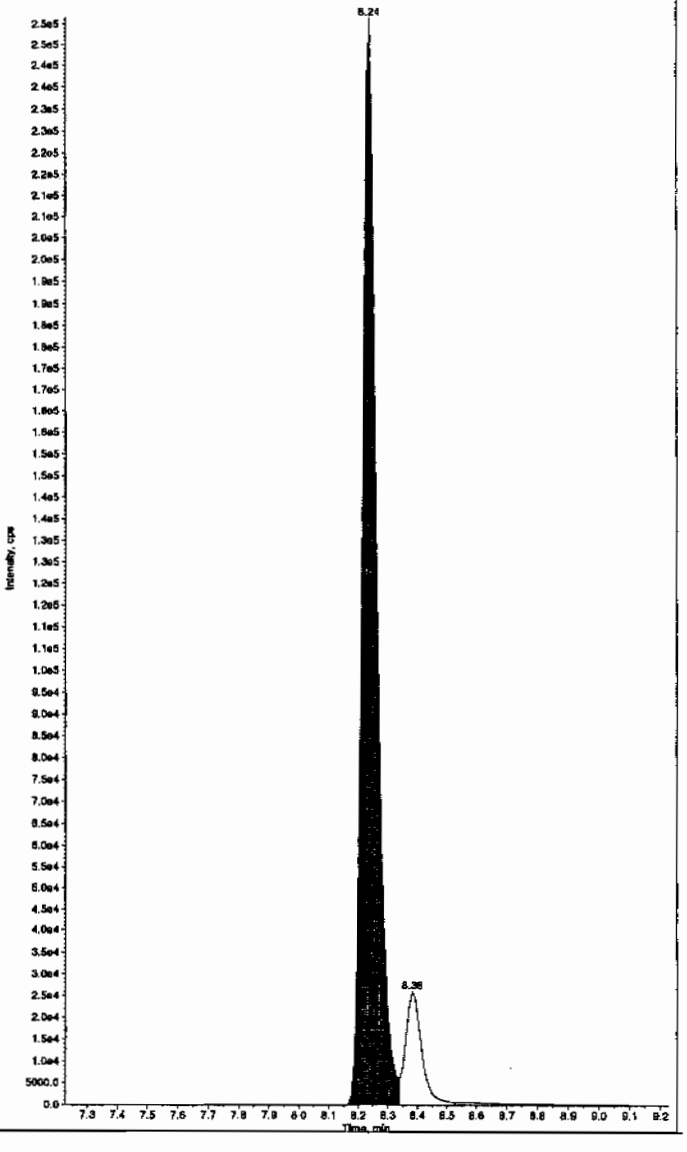


Sample Name: "WXX100305-27CRI" Sample ID: "|1|LER" File: "EXS03050013.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 104. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:16:04 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 8.89e+005 counts
Height: 251687.103 cps
Start Time: 8.14 min
End Time: 8.34 min



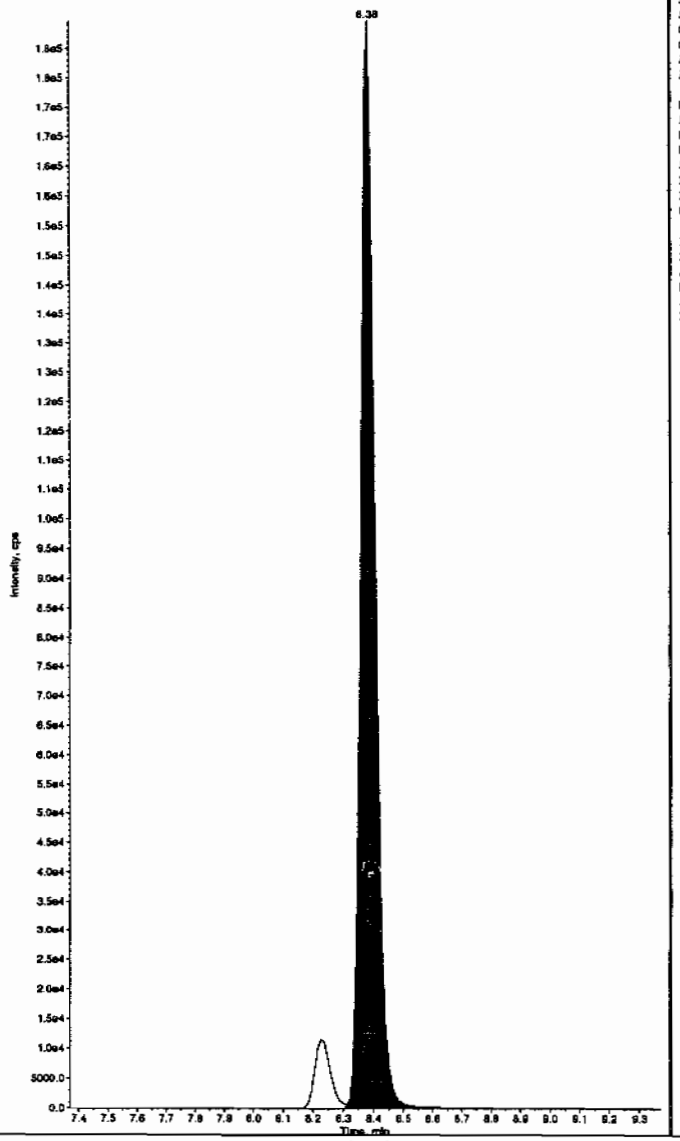
Hmm 03/09/10

Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050013.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 50.0 ng/mL
Calculated Conc: 52.0 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:16:04 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 1450.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 6.29e+005 counts
Height: 184561.255 cps
Start Time: 8.31 min
End Time: 8.69 min

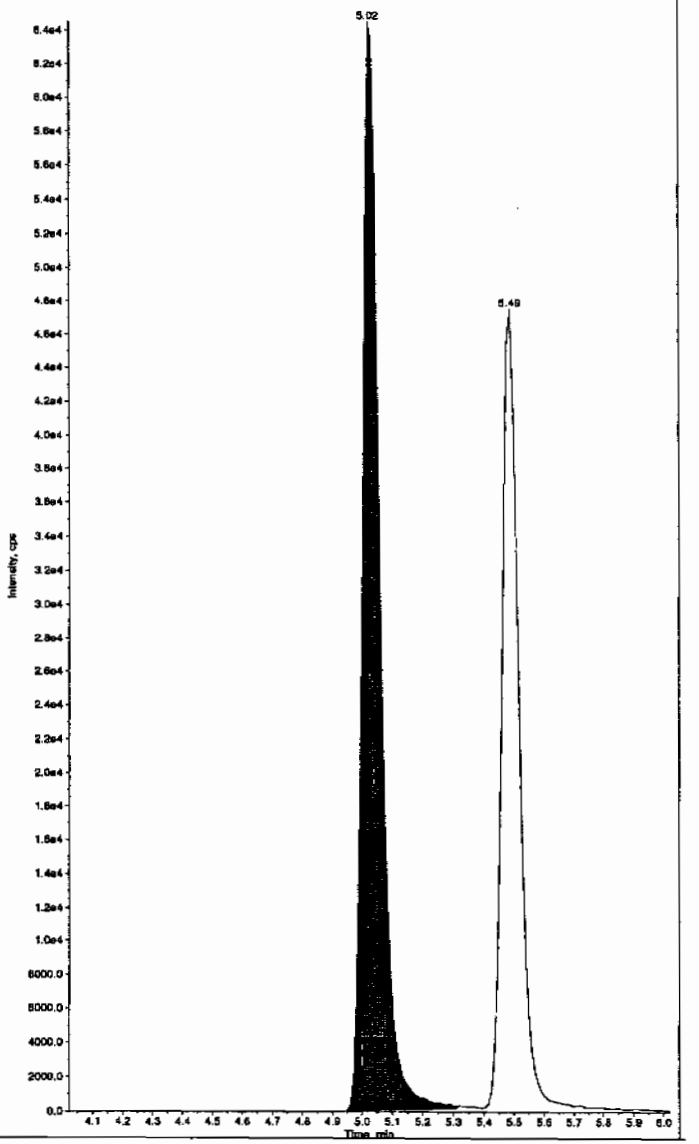


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050013.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 104. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:16:04 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.02 min
Area: 2.66e+005 counts
Height: 64472.961 cps
Start Time: 4.93 min
End Time: 5.31 min



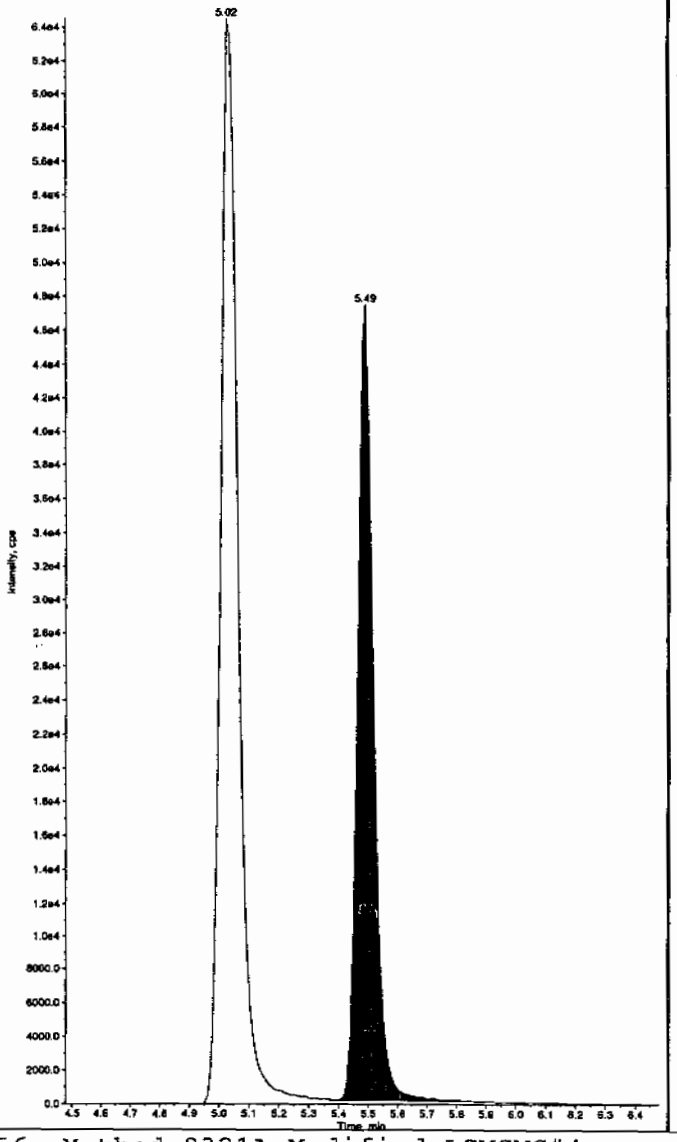
GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050013.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 102. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:16:04 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: 1.85e+005 counts
Height: 47318.394 cps
Start Time: 5.38 min
End Time: 5.83 min

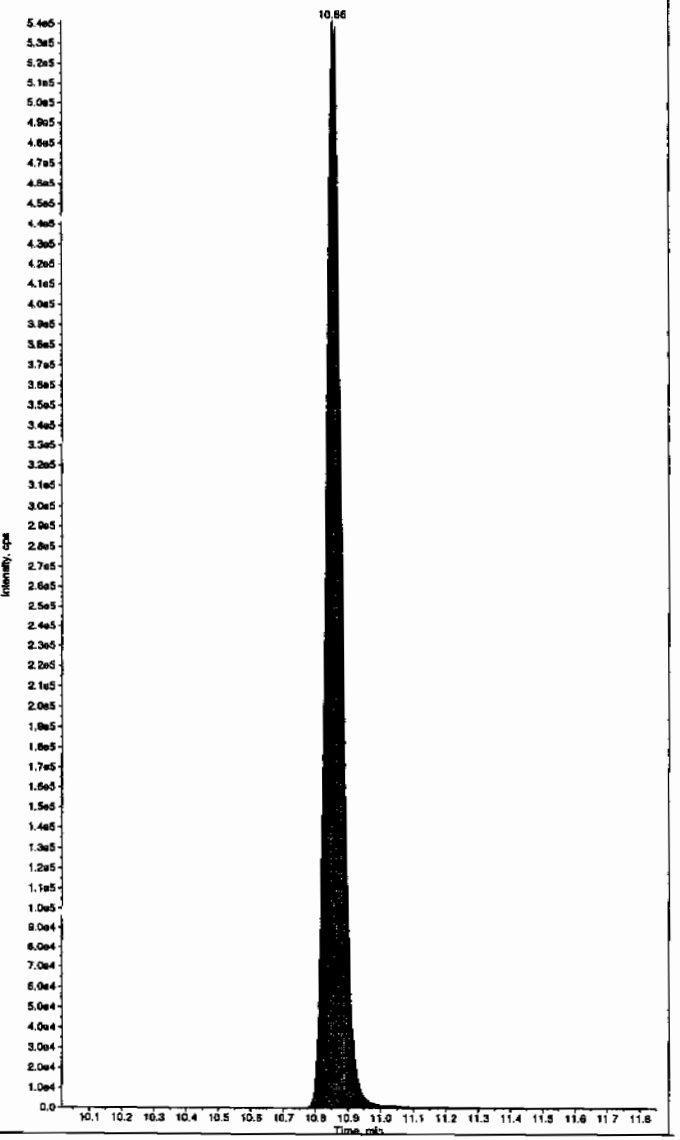


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050013.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 100. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:16:04 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: 1.89e+006 counts
Height: 541194.153 cps
Start Time: 10.8 min
End Time: 11.1 min



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050024.wiff

Analysis Date: 05-MAR-10 23:08

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	500	507	101	
2,6-Diamino-4-nitrotoluene	500	520	104	
3,4-Dinitrotoluene	250	237	95	
3,5-Dinitroaniline	500	509	102	
TATB	500	506	101	
tris(o-cresyl) phosphate	500	505	101	

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%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

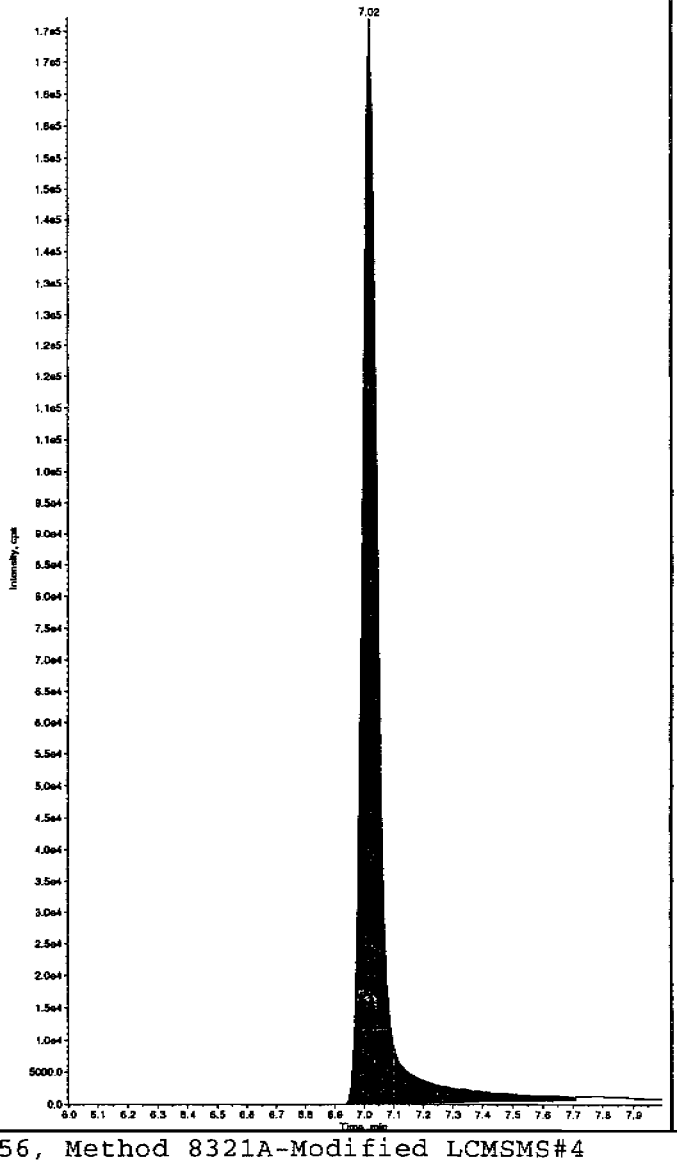
Before Lem 3/9/10

Sample Name: "WXX100305-26CCV" Sample ID: "[1]LER" File: "EXS03050024.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.02 min
Area: 7.28e+005 counts
Height: 172189.423 cps
Start Time: 6.92 min
End Time: 7.71 min

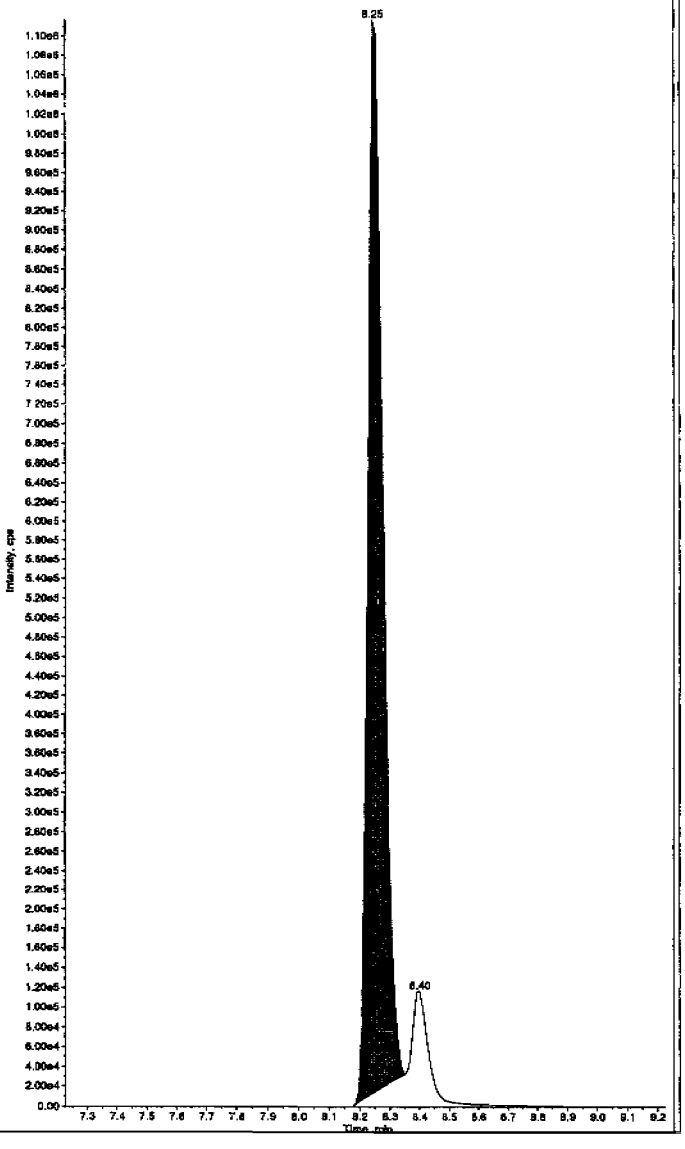


Sample Name: "WXX100305-26CCV" Sample ID: "[1]LER" File: "EXS03050024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 489. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.25 min
Area: 4.00e+006 counts
Height: 1103983.643 cps
Start Time: 8.19 min
End Time: 8.35 min



Hrm 03/09/10

*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

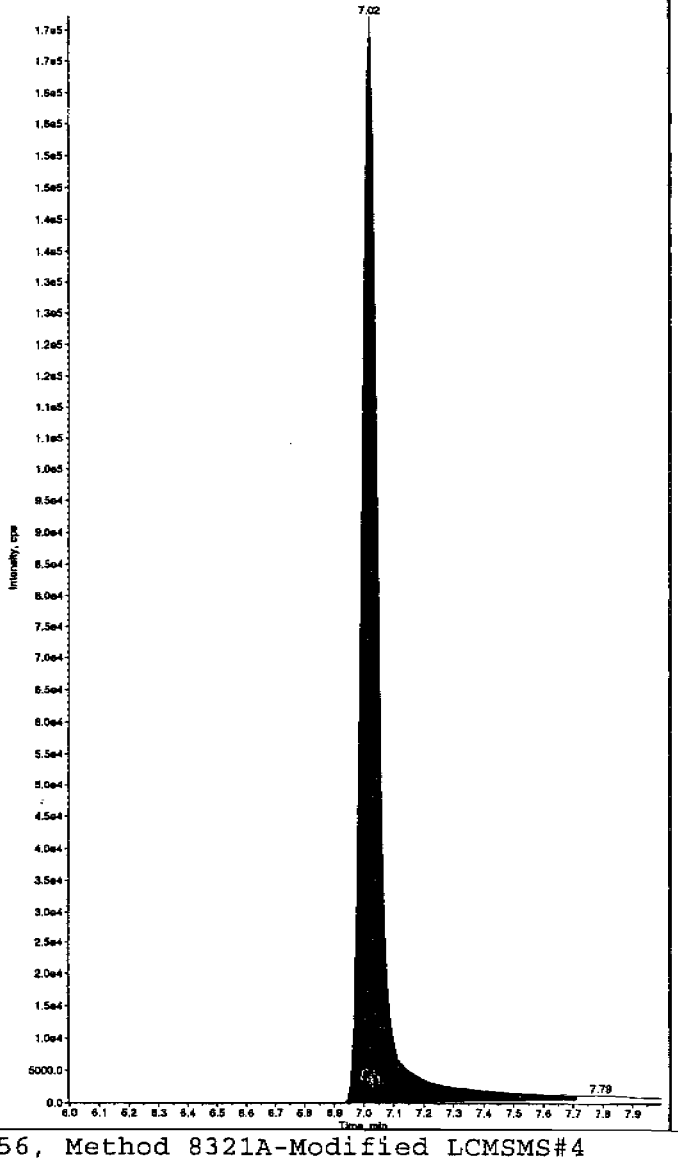
after Lan 3/9/10

Sample Name: "WXX100305-26CCV" Sample ID: "1|LER" File: "EXS03050024.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 506. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.02 min
Area: 7.28e+005 counts
Height: 172189.423 cps
Start Time: 6.92 min
End Time: 7.71 min

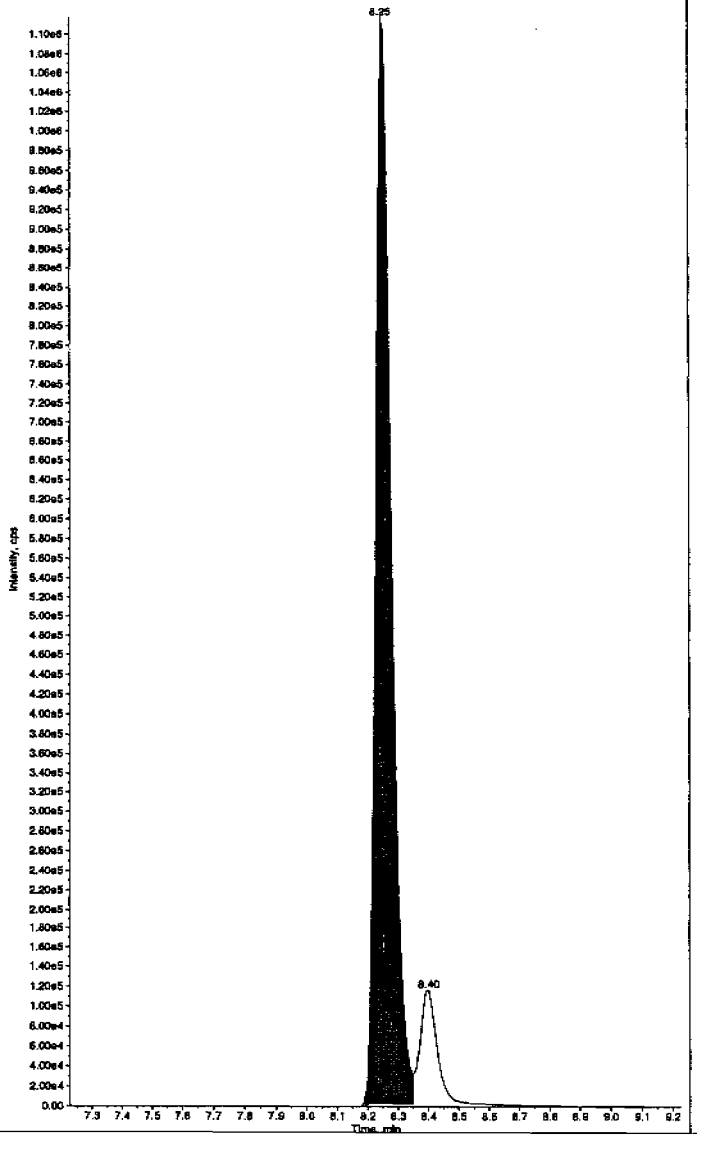


Sample Name: "WXX100305-26CCV" Sample ID: "1|LER" File: "EXS03050024.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 509. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 PM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.25 min
Area: 4.15e+006 counts
Height: 1137952.652 cps
Start Time: 8.19 min
End Time: 8.35 min

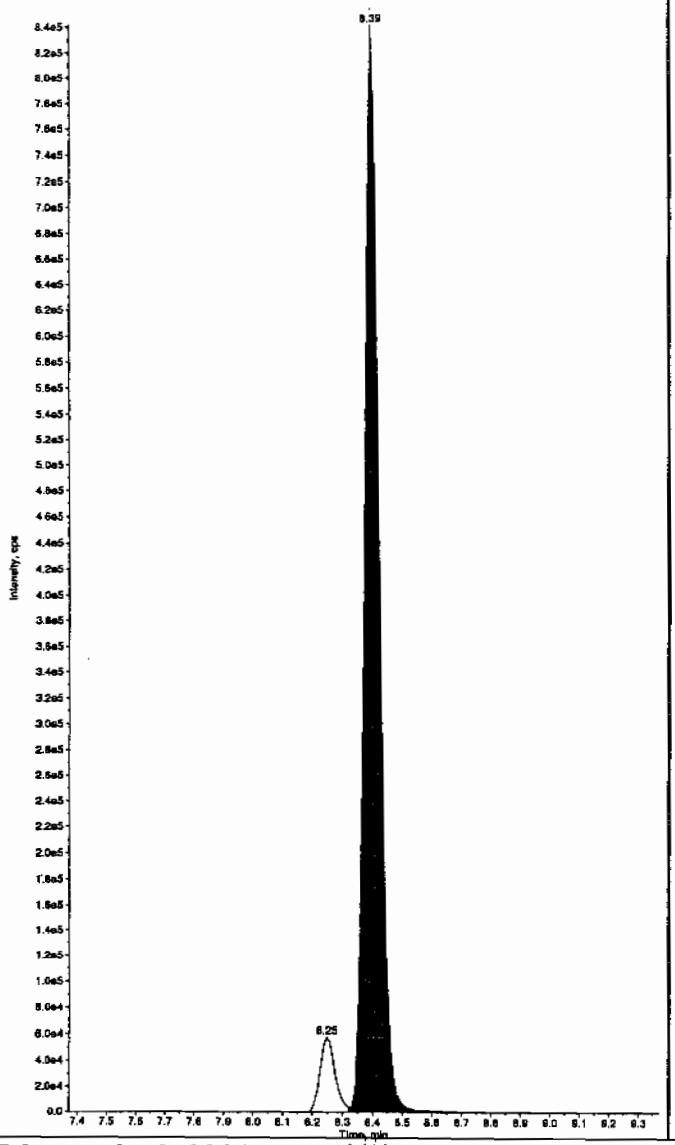


Sample Name: "WXX100305-26CCV" Sample ID: "1|LER" File: "EXS03050024.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 250. ng/mL
Calculated Conc: 237. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.39 min
Area: 2.96e+006 counts
Height: 841921.204 cps
Start Time: 8.32 min
End Time: 8.74 min

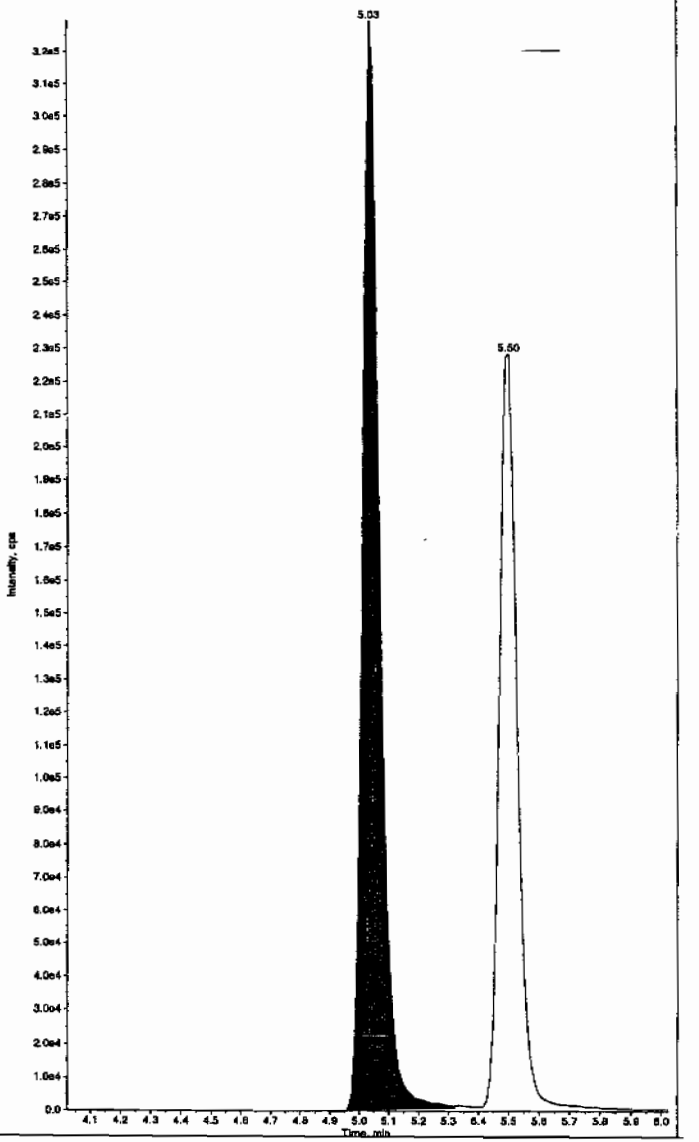


Sample Name: "WXX100305-26CCV" Sample ID: "1|LER" File: "EXS03050024.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 520. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.03 min
Area: 1.37e+006 counts
Height: 329270.813 cps
Start Time: 4.94 min
End Time: 5.32 min



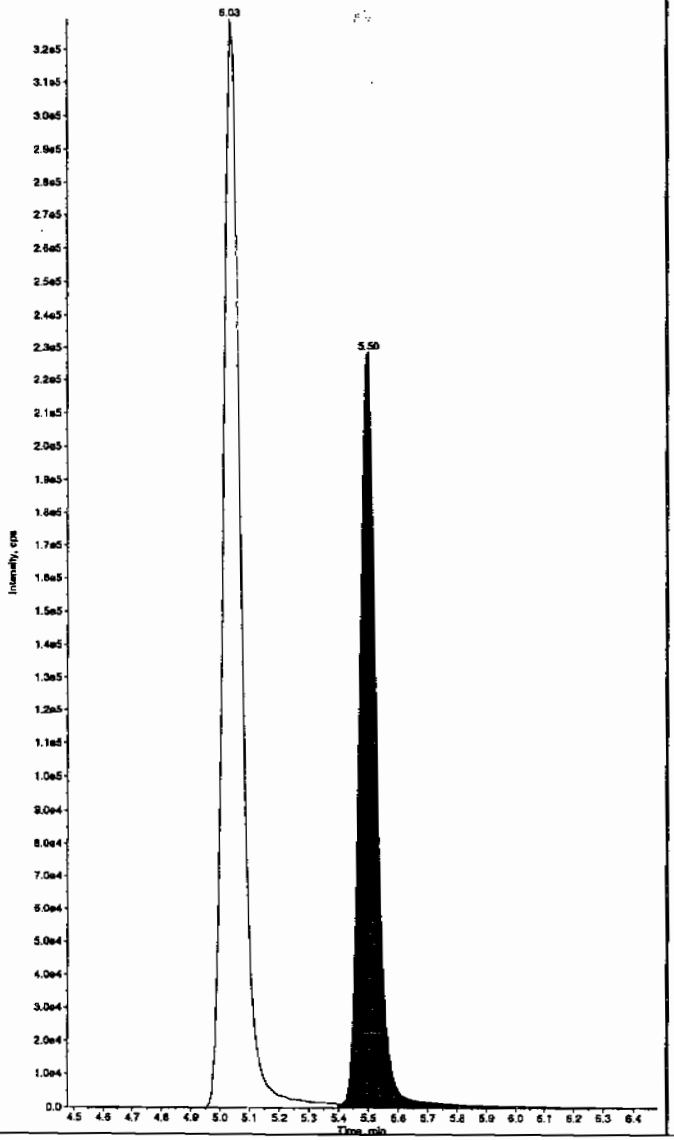
GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-26CCV" Sample ID: "|1|LER" File: "EXS03050024.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 507. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 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: 5.50 min
Area: 9.40e+005 counts
Height: 228285.080 cps
Start Time: 5.39 min
End Time: 6.00 min

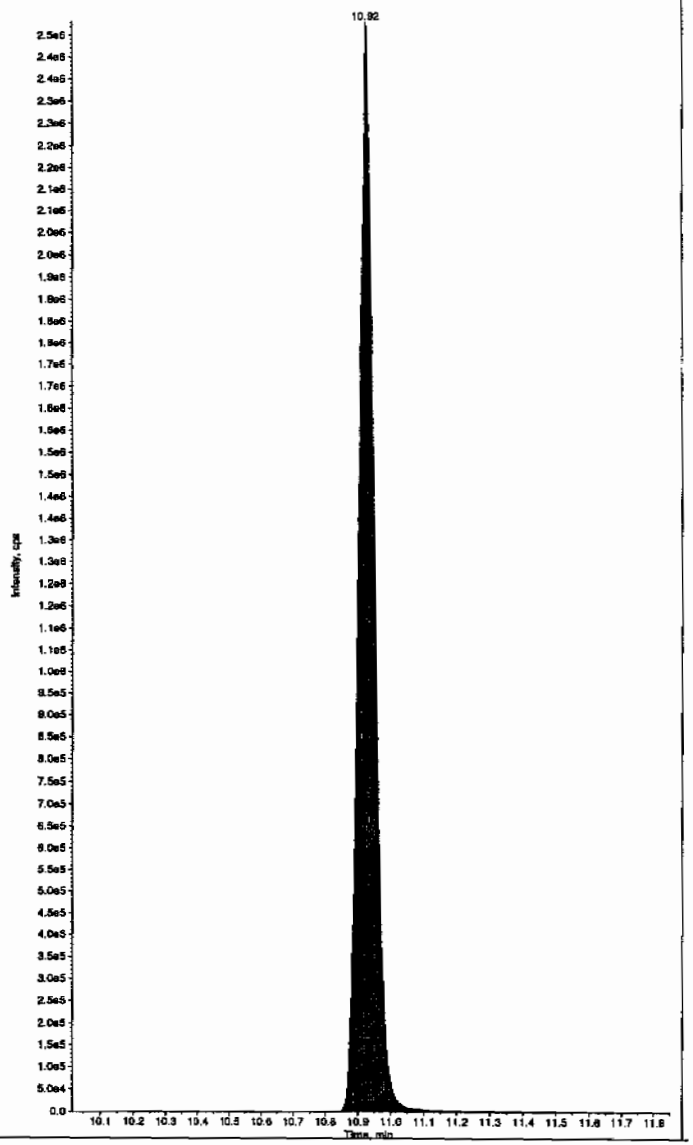


Sample Name: "WXX100305-26CCV" Sample ID: "|1|LER" File: "EXS03050024.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 505. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:08:44 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: 8.48e+006 counts
Height: 2484763.184 cps
Start Time: 10.8 min
End Time: 11.3 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): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050026.wiff

Analysis Date: 05-MAR-10 23:40

LCMSMS ID: 1358

Column ID: JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,4-Diamino-6-nitrotoluene	100	102	102	
2,6-Diamino-4-nitrotoluene	100	109	109	
3,4-Dinitrotoluene	50	51.8	104	
3,5-Dinitroaniline	100	105	105	
TATB	100	112	112	
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%
OtherTarget Analytes 70-130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

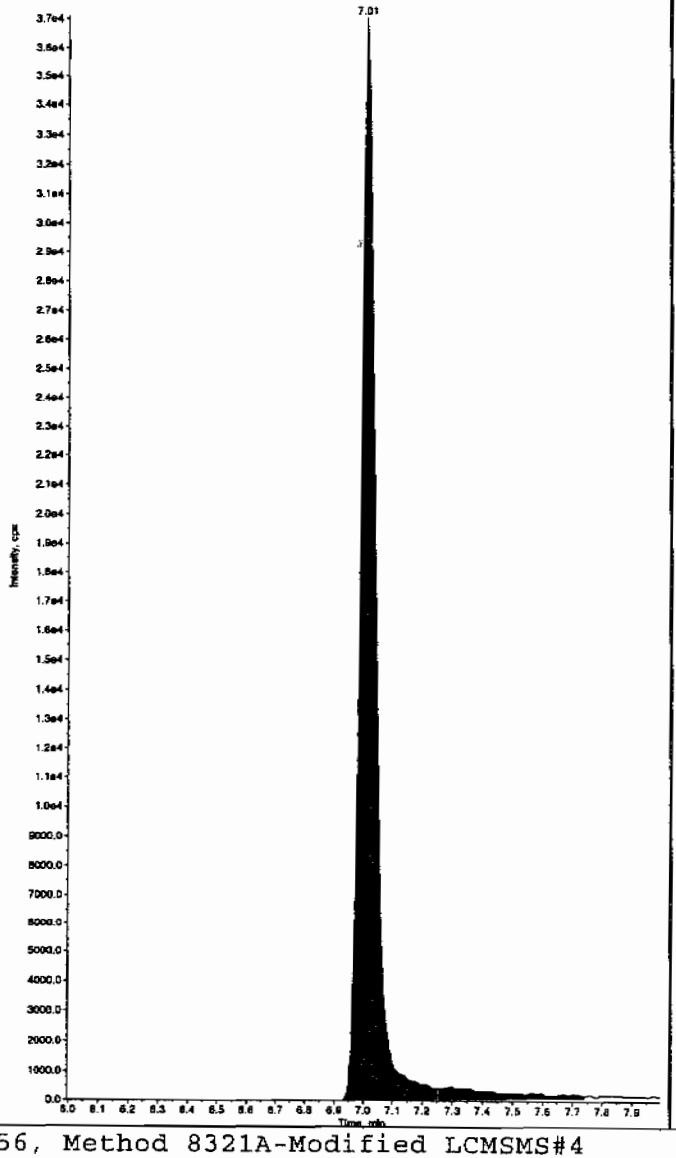
Lcm 3/9/10

Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050026.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 112. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:40:09 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 1.47e+005 counts
Height: 37090.164 cps
Start Time: 6.90 min
End Time: 7.74 min

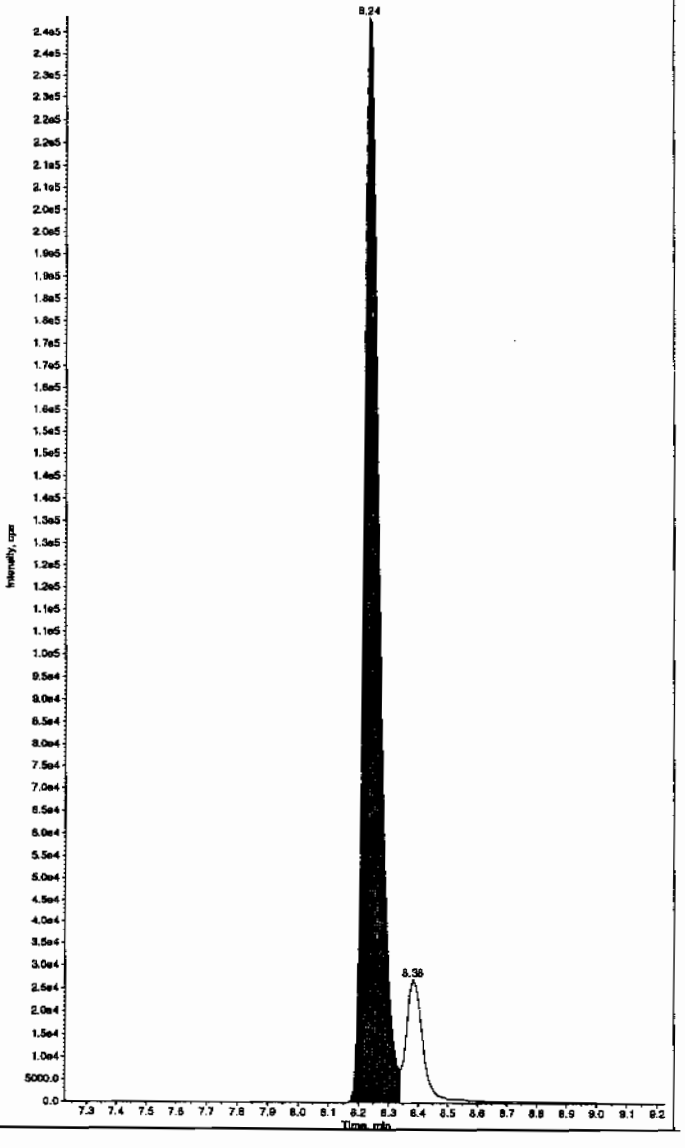


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050026.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 105. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:40:09 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 8.94e+005 counts
Height: 243688.553 cps
Start Time: 8.13 min
End Time: 8.34 min



Hzm 03/09/10

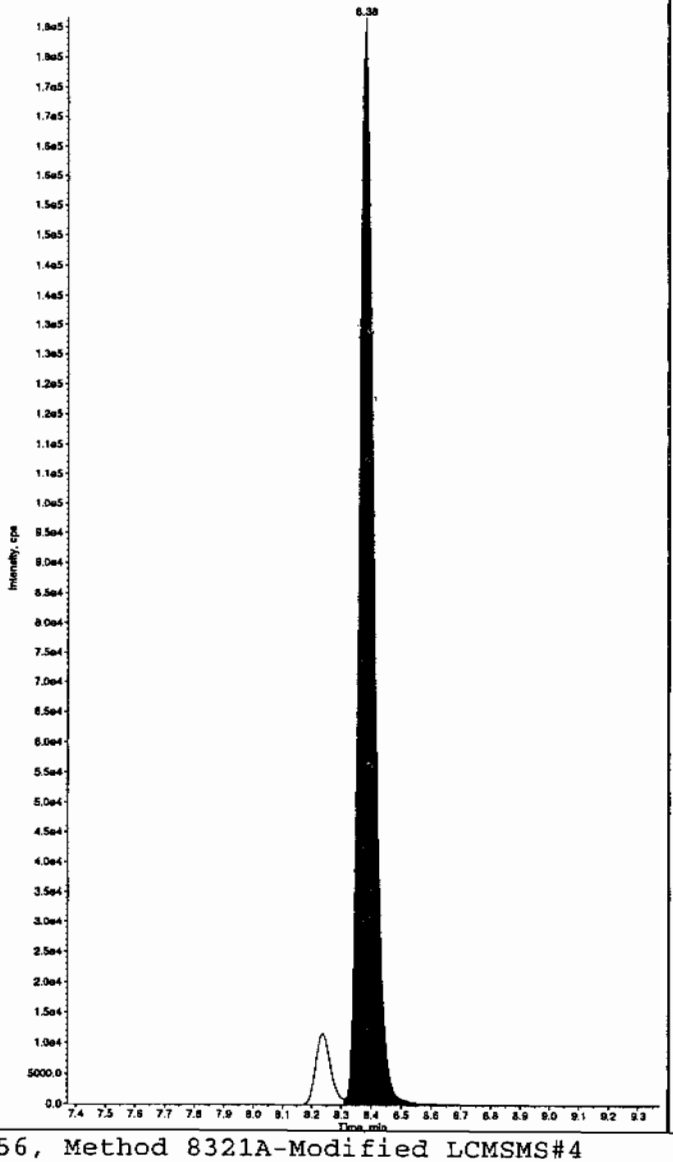
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050026.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 50.0 ng/mL
Calculated Conc: 51.8 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:40:09 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 6.26e+005 counts
Height: 181524.170 cps
Start Time: 8.31 min
End Time: 8.73 min

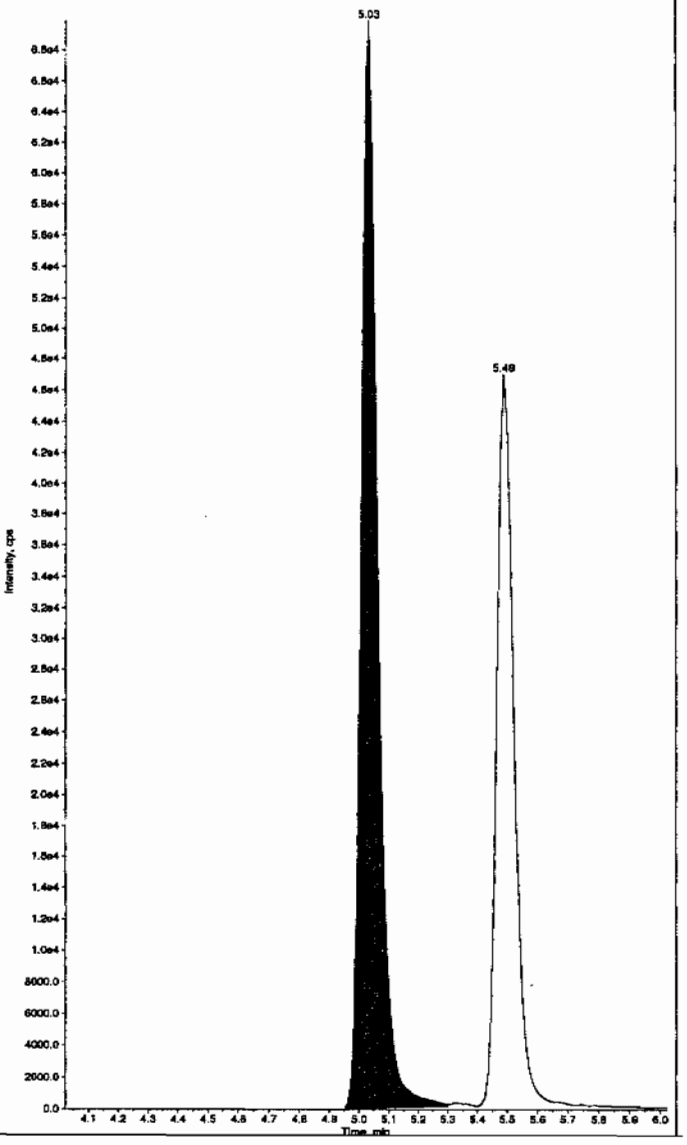


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050026.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 109. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:40:09 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.03 min
Area: 2.80e+005 counts
Height: 69851.128 cps
Start Time: 4.94 min
End Time: 5.30 min

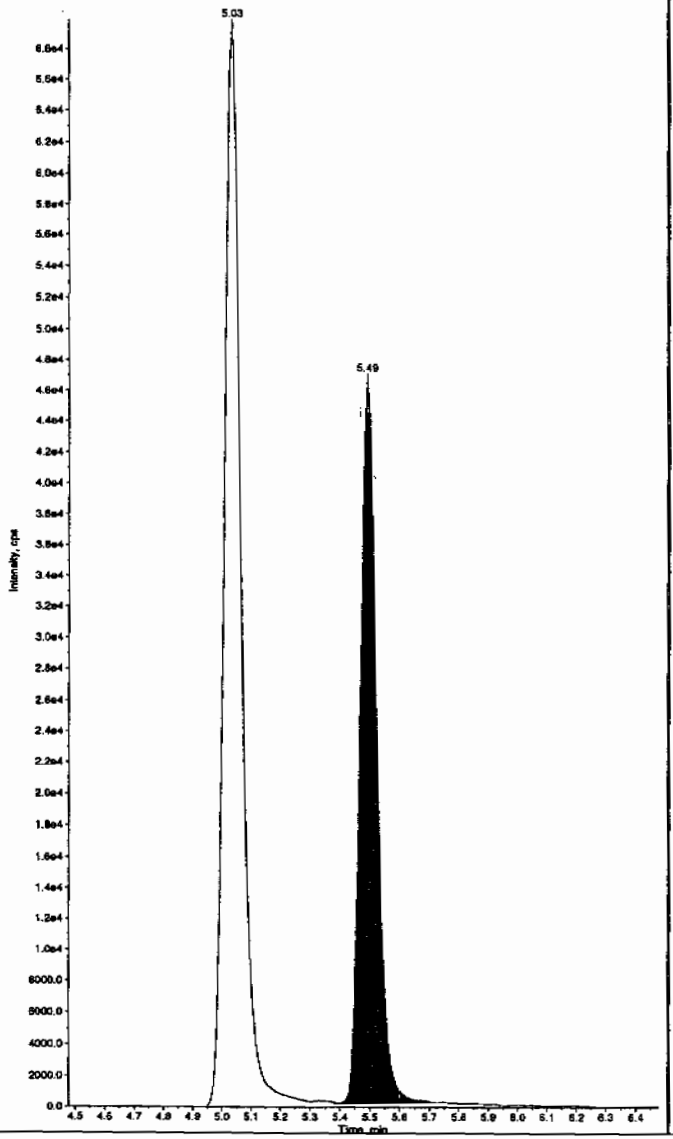


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050026.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 102. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:40:09 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: 1.85e+005 counts
Height: 46813.030 cps
Start Time: 5.39 min
End Time: 5.73 min

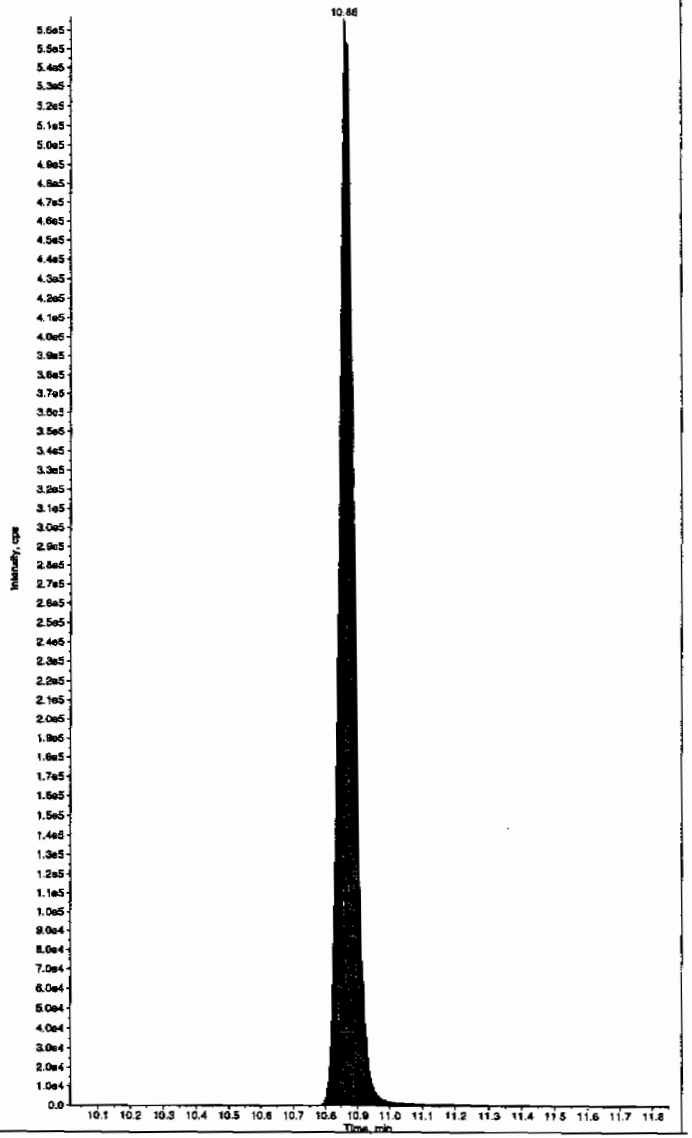


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050026.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 103. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 11:40:09 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 6000.00 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: 1.95e+006 counts
Height: 567113.281 cps
Start Time: 10.8 min
End Time: 11.1 min



7A
Explosives Continuing Calibration Verification

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10-1861

Lab Code: GEL

GEL Sample ID: WXXCCV

GEL Data File EXS03050035.wiff

Analysis Date: 06-MAR-10 02:01

LCMSMS ID: 1358

Column ID JSphere ODS-H80

Compound	True	Found	Recovery	Q
2,6-Diamino-4-nitrotoluene	500	531	106	
3,4-Dinitrotoluene	250	246	98	
3,5-Dinitroaniline	500	529	106	
TATB	500	534	107	
tris(o-cresyl) phosphate	500	503	101	
2,4-Diamino-6-nitrotoluene	500	509	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 70-130%
OtherTarget Analytes 80-120%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

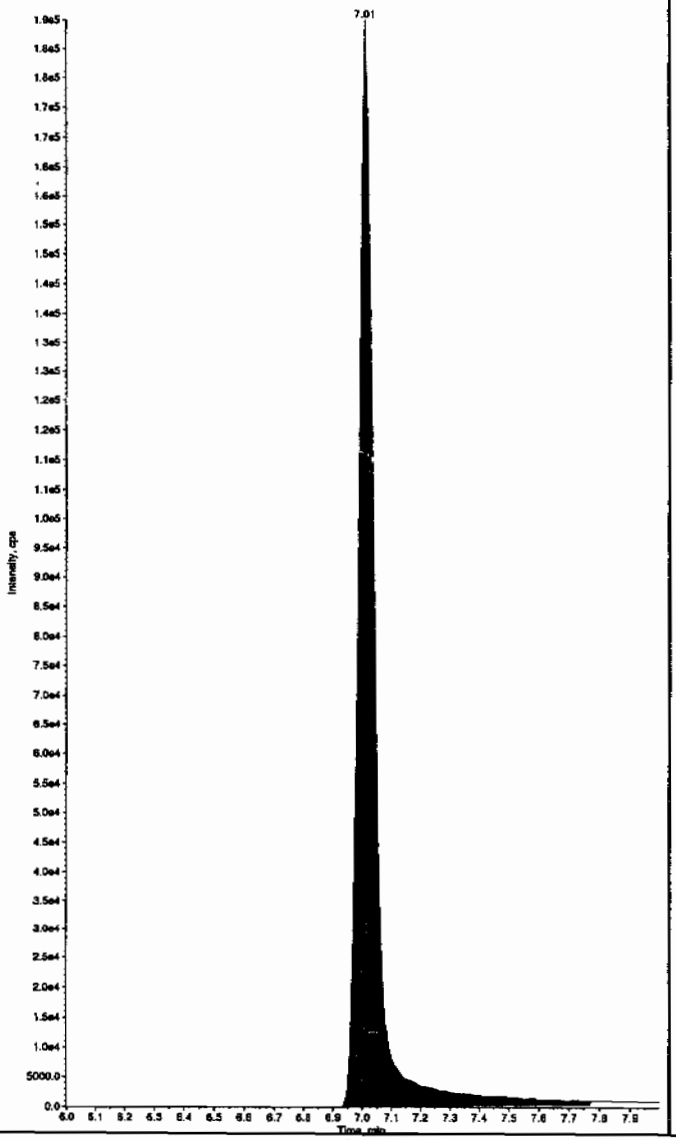
Before Scan 3/9/10

Sample Name: "WXX100305-26CCV" Sample ID: "[1]LER" File: "EXS03050035.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 534. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 7.70e+005 counts
Height: 184983.658 cps
Start Time: 6.91 min
End Time: 7.77 min

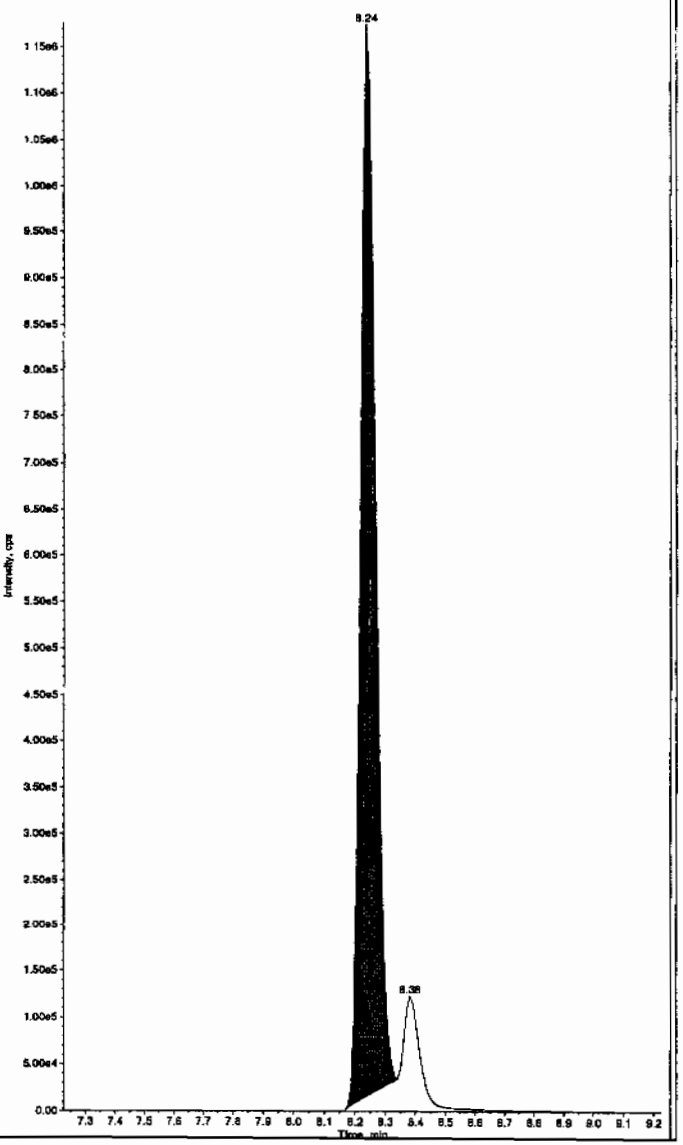


Sample Name: "WXX100305-26CCV" Sample ID: "[1]LER" File: "EXS03050035.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 507. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 4.14e+006 counts
Height: 1161526.001 cps
Start Time: 8.17 min
End Time: 8.34 min



Hmm 03/09/10

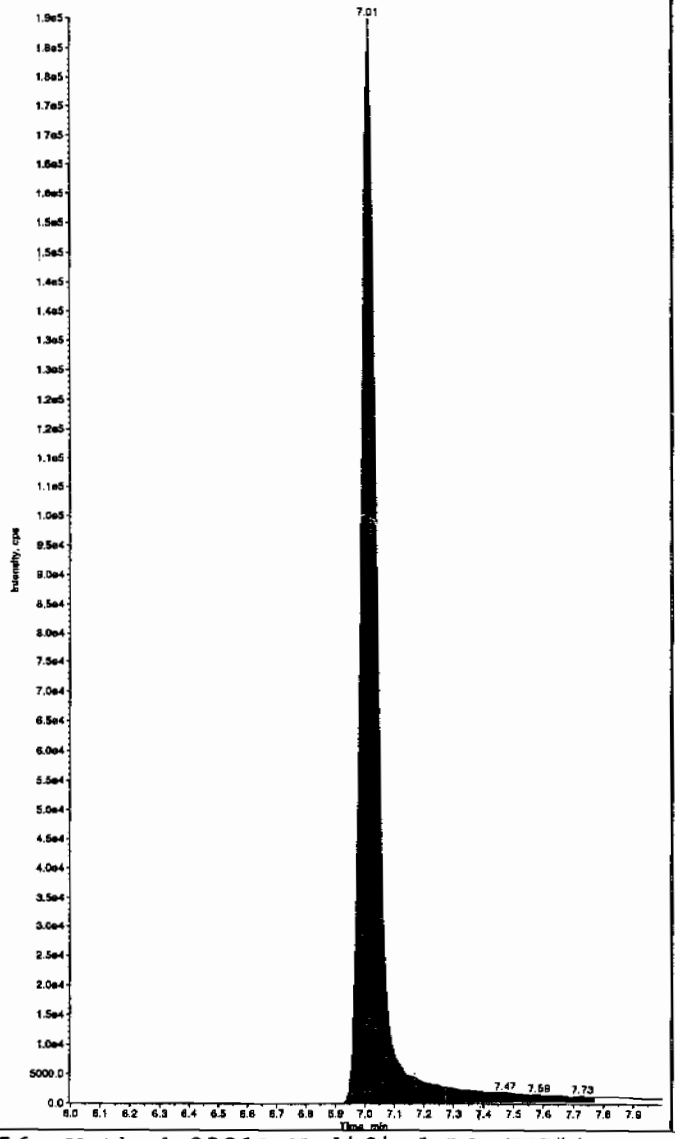
after Scan 3/9/10

Sample Name: "WXX100305-26CCV" Sample ID: "[1]LER" File: "EXS03050035.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 534. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 7.70e+005 counts
Height: 184983.658 cps
Start Time: 6.91 min
End Time: 7.77 min

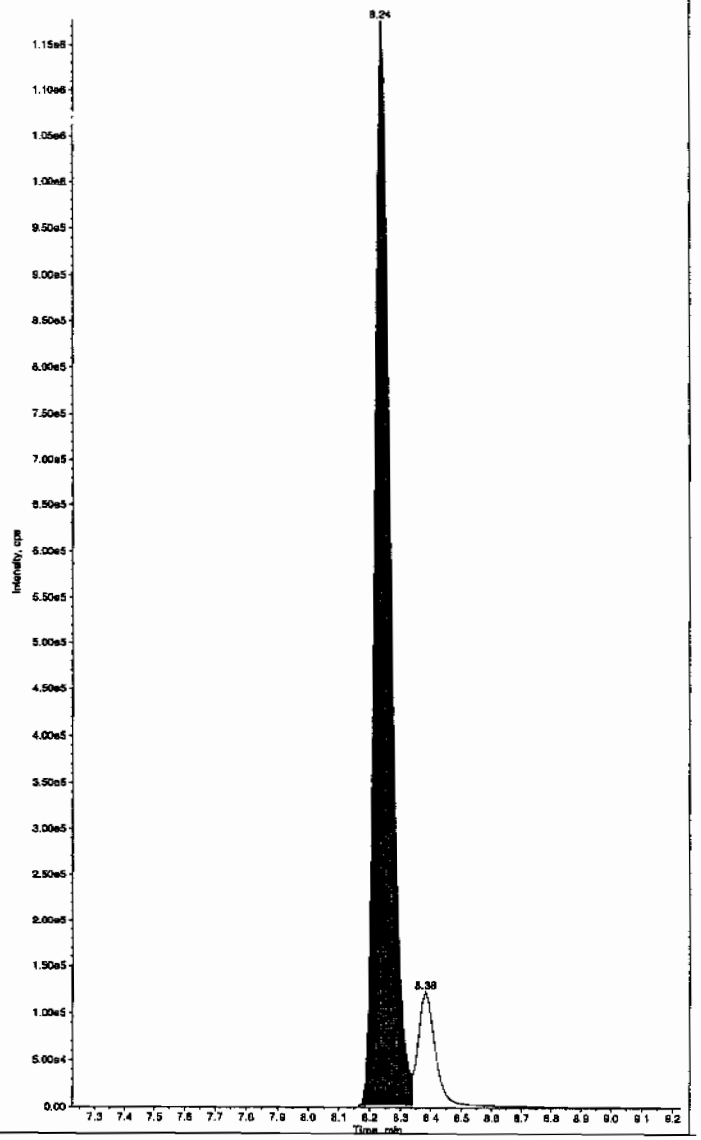


Sample Name: "WXX100305-26CCV" Sample ID: "[1]LER" File: "EXS03050035.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 529. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 AM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.24 min
Area: 4.30e+006 counts
Height: 1181932.758 cps
Start Time: 8.16 min
End Time: 8.34 min



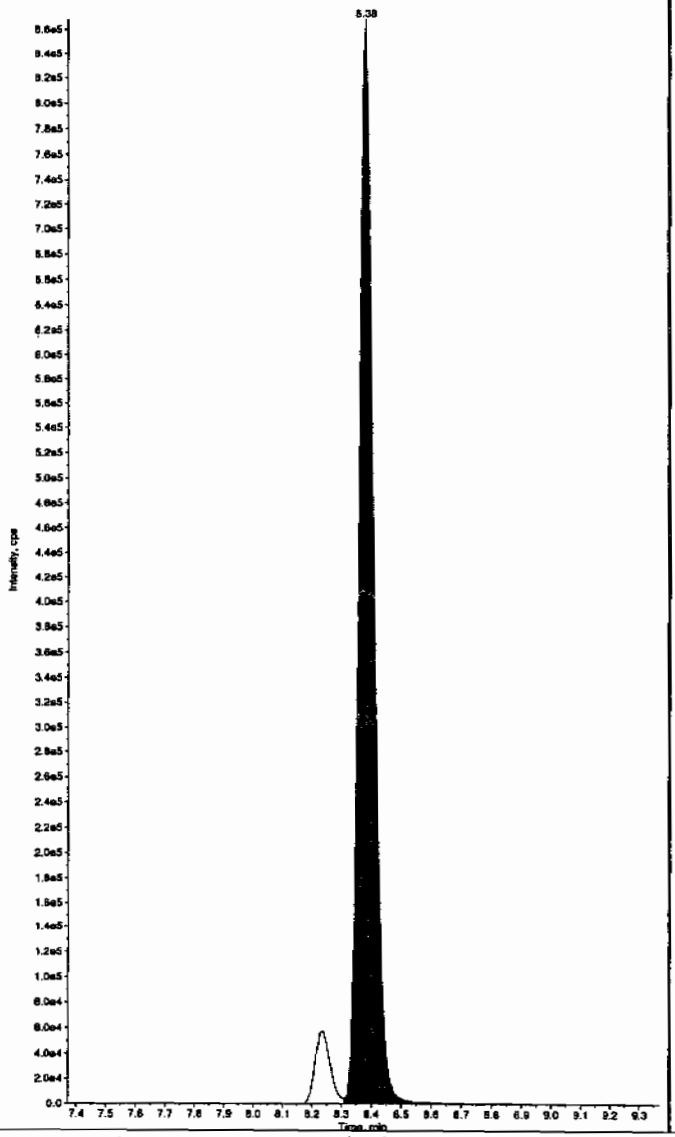
GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-26CCV" Sample ID: "|1|LER" File: "EXS03050035.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 250. ng/mL
Calculated Conc: 246. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 3.07e+006 counts
Height: 867922.485 cps
Start Time: 8.31 min
End Time: 8.71 min

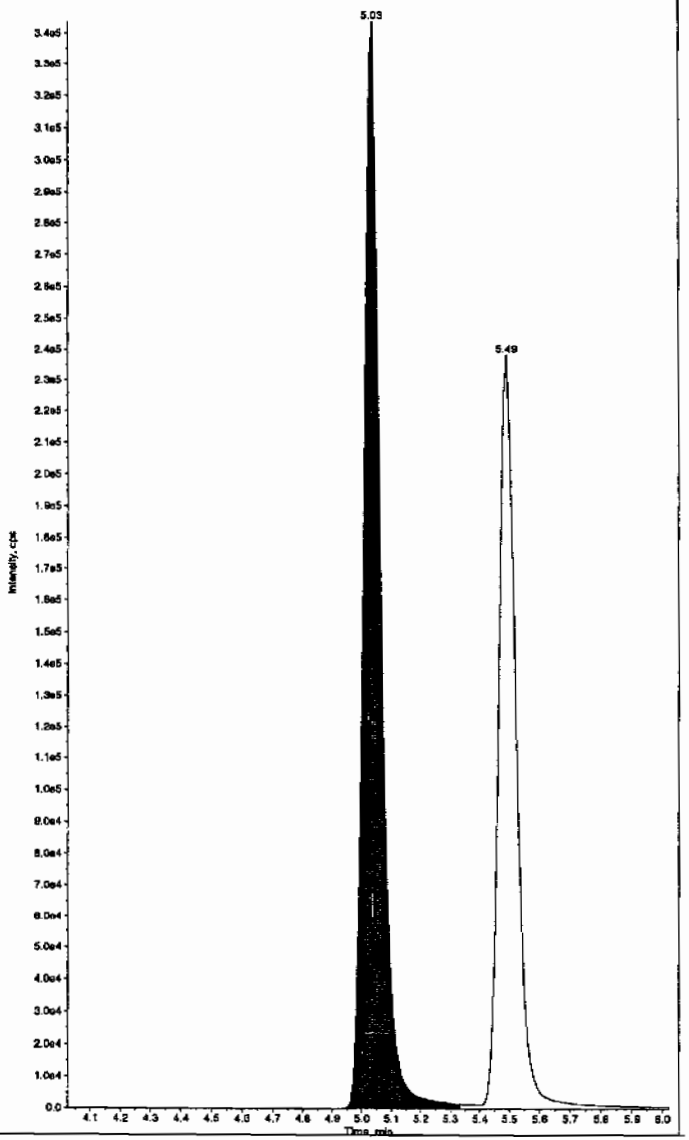


Sample Name: "WXX100305-26CCV" Sample ID: "|1|LER" File: "EXS03050035.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 531. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 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: 1.40e+006 counts
Height: 343806.885 cps
Start Time: 4.91 min
End Time: 5.33 min



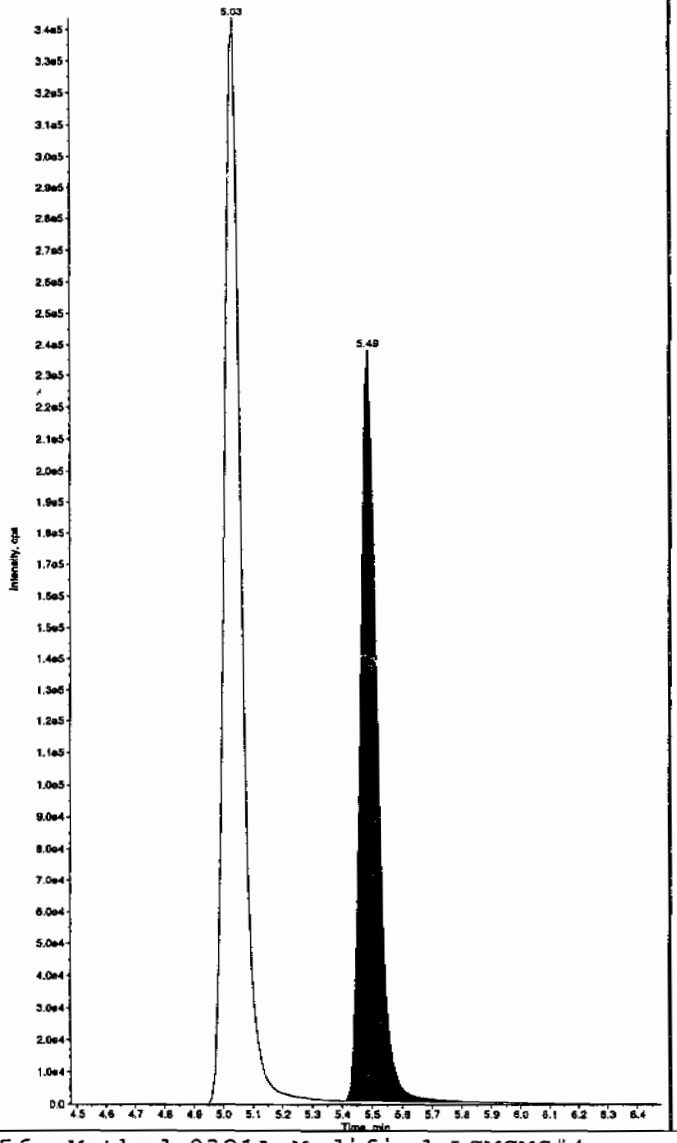
GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "WXX100305-25CCV" Sample ID: "[1]LER" File: "EXS03050035.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 509. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 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: 9.45e+005 counts
Height: 237291.595 cps
Start Time: 5.41 min
End Time: 5.81 min

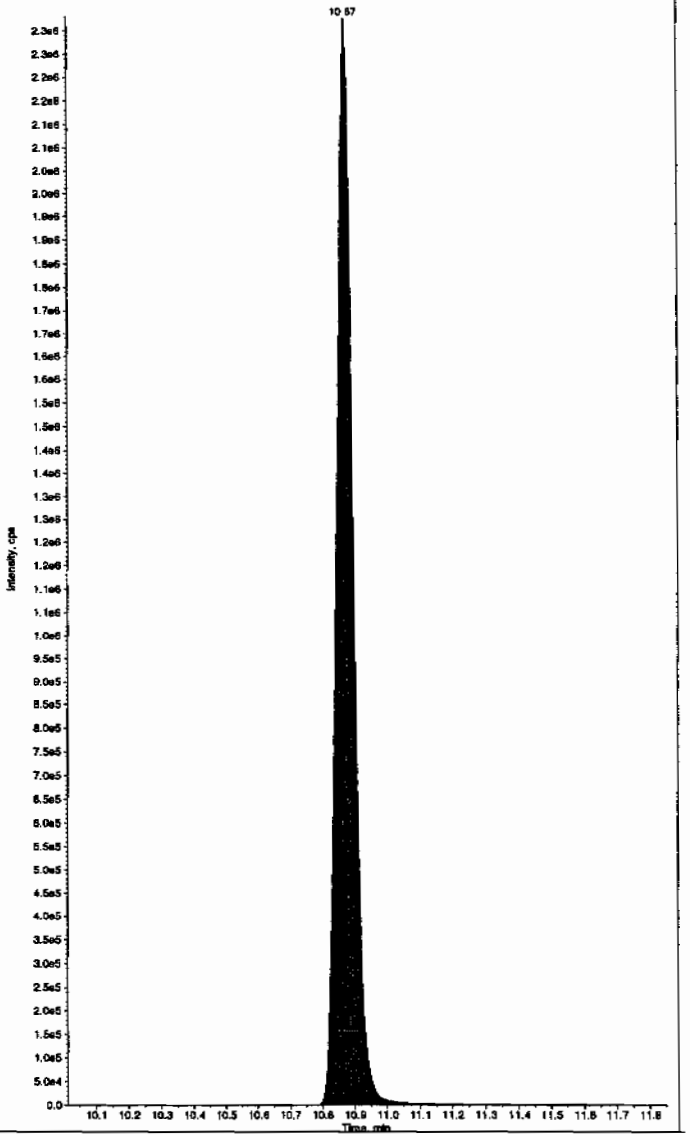


Sample Name: "WXX100305-25CCV" Sample ID: "[1]LER" File: "EXS03050035.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 500. ng/mL
Calculated Conc: 503. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:01:27 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: 8.44e+006 counts
Height: 2329935.791 cps
Start Time: 10.8 min
End Time: 11.2 min



Done applied

7B
Explosives CRI Standard

Lab Name: GEL Laboratories LLC

GEL Job No (SDG): 10–1861

Lab Code: GEL

GEL Sample ID: WXXCRI

GEL Data File EXS03050037.wiff

Analysis Date: 06–MAR–10 02:32

LCMSMS ID: 1358

Column ID: JSphere ODS–H80

Compound	True	Found	Recovery	Q
2,4–Diamino–6–nitrotoluene	100	110	110	
2,6–Diamino–4–nitrotoluene	100	113	113	
3,4–Dinitrotoluene	50	52.5	105	
3,5–Dinitroaniline	100	110	110	
TATB	100	112	112	
tris(o–cresyl) phosphate	100	97.2	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 50–150%
OtherTarget Analytes 70–130%
Column used to flag Recovery outside of Limits
* Value outside of Recovery Limits

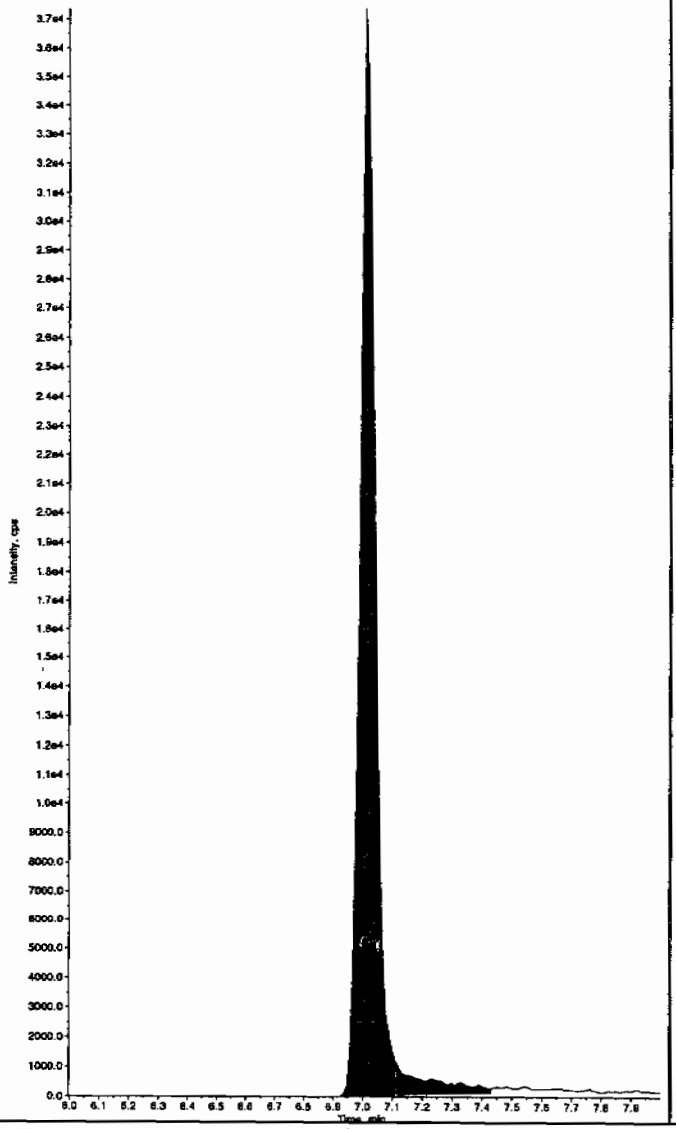
Before Scan 3/9/10

Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050037.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 112. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 1.47e+005 counts
Height: 37346.008 cps
Start Time: 6.91 min
End Time: 7.43 min

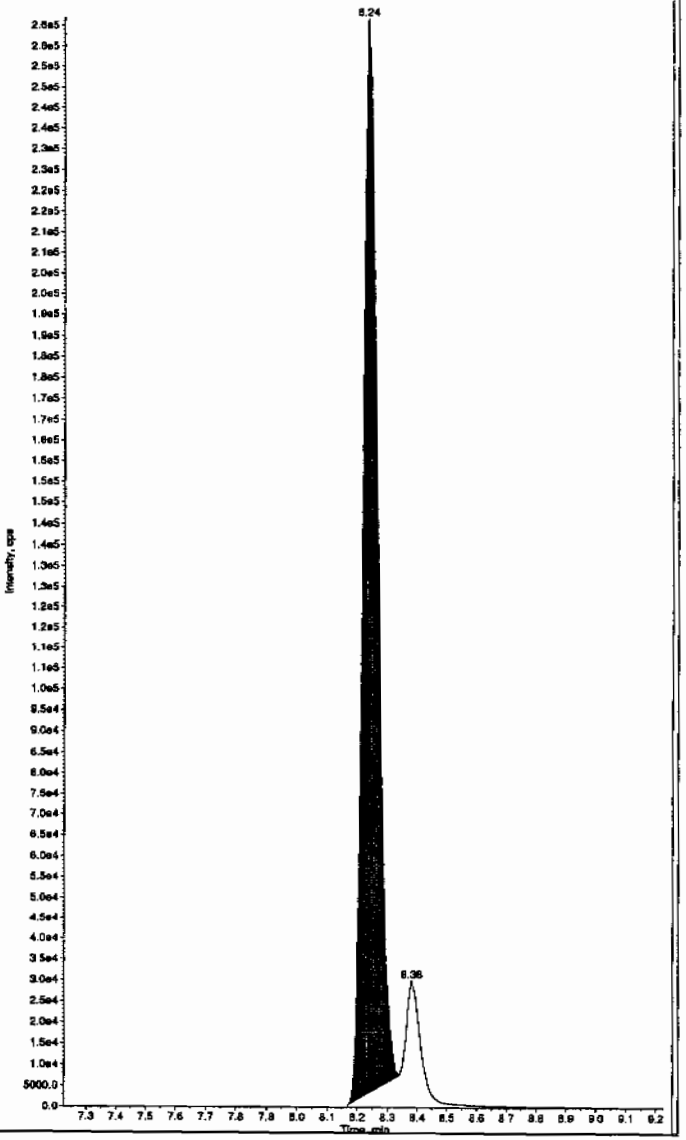


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050037.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 105. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 8.98e+005 counts
Height: 258527.130 cps
Start Time: 8.17 min
End Time: 8.34 min



dhm 03/09/10

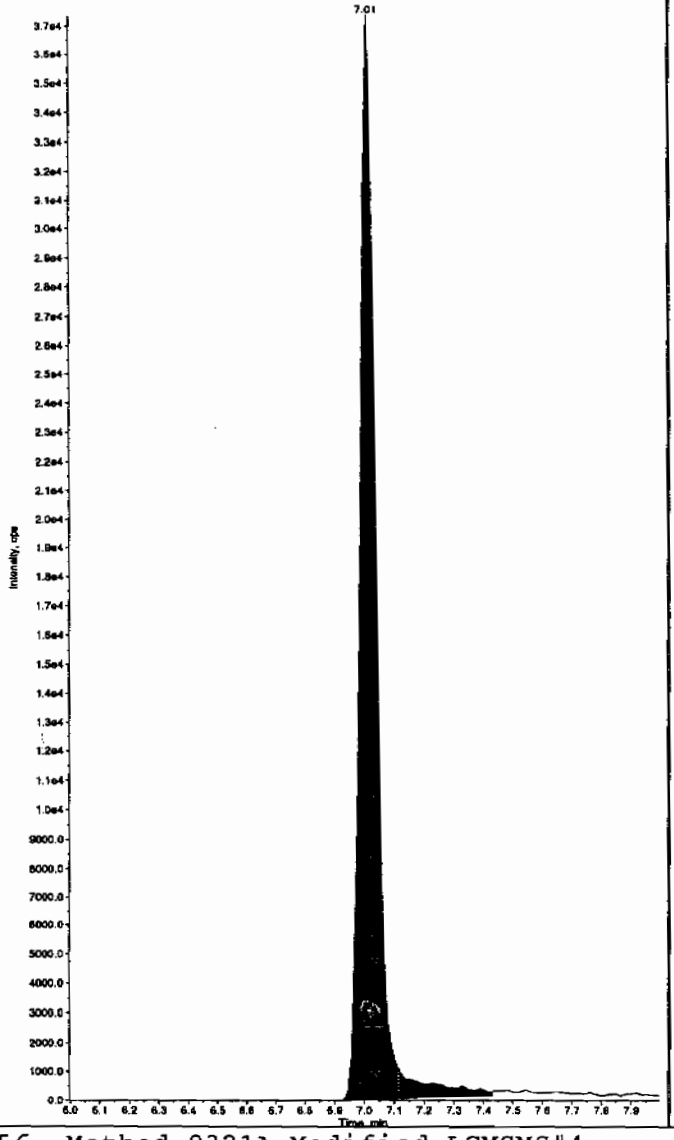
after Scan 3/9/10

Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050037.wiff"
Peak Name: "TATB" Mass(as): "257.2/204.9 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 112. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 AM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 1.47e+005 counts
Height: 37346.008 cps
Start Time: 6.91 min
End Time: 7.43 min

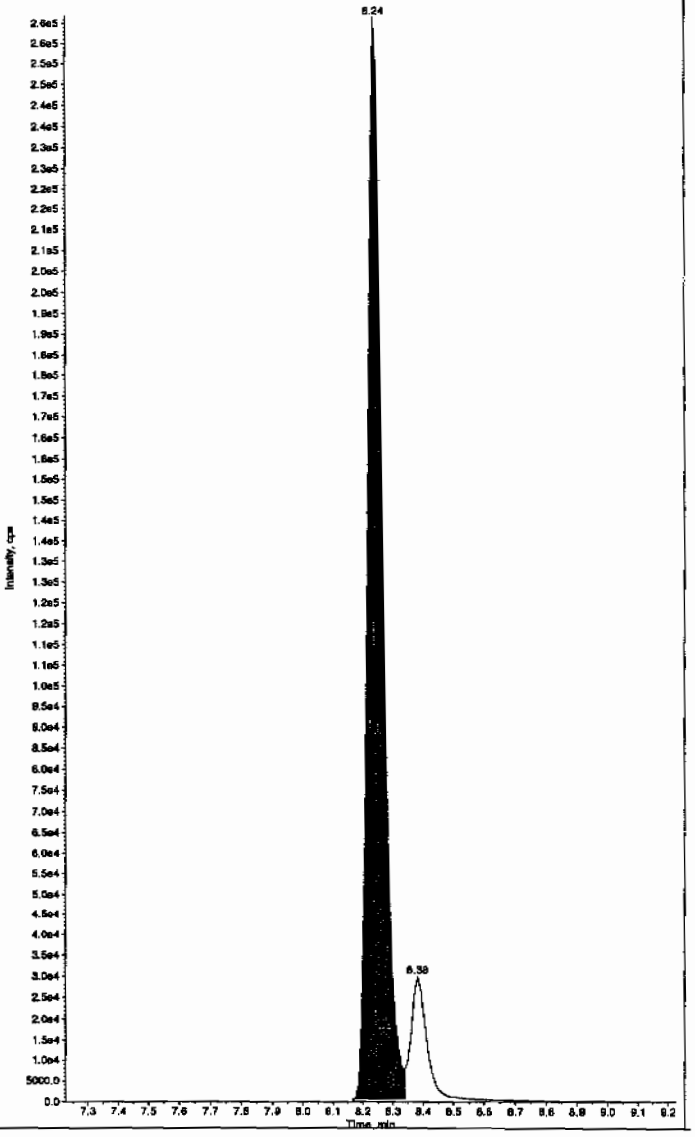


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050037.wiff"
Peak Name: "35-Dinitroaniline" Mass(as): "182.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 110. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 AM

Modified: Yes
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Manual
Retention Time: 8.24 min
Area: 9.35e+005 counts
Height: 263004.667 cps
Start Time: 8.16 min
End Time: 8.34 min

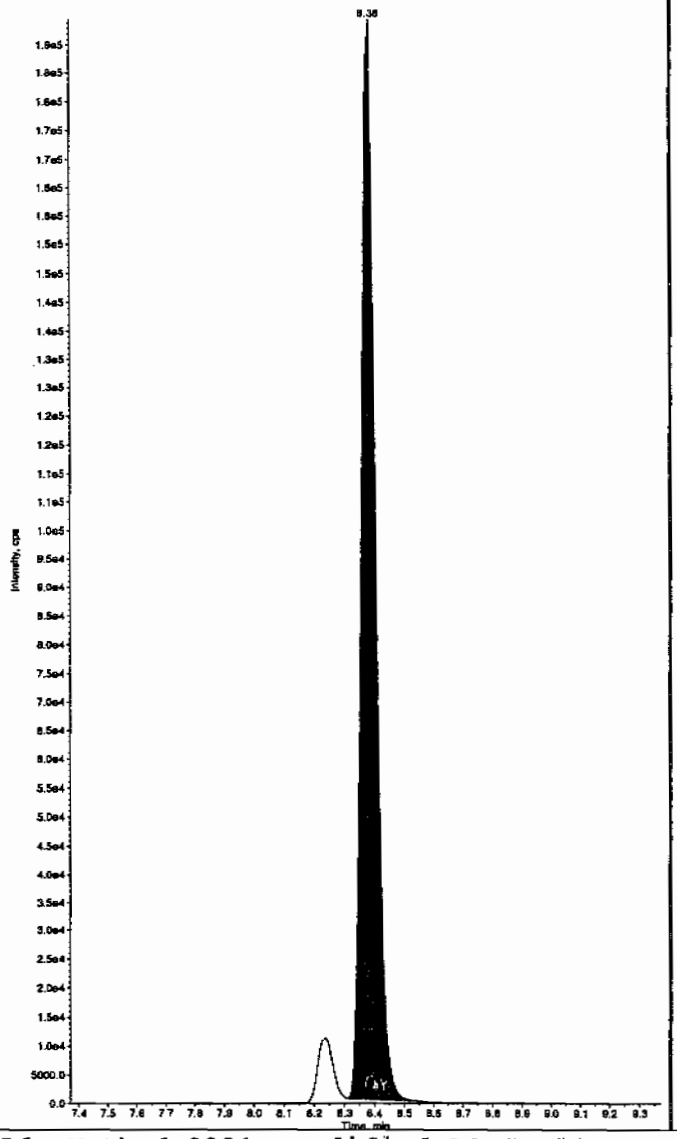


Sample Name: "WXX100305-27CRI" Sample ID: "1|LER" File: "EXS03050037.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 50.0 ng/mL
Calculated Conc: 52.5 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 6.35e+005 counts
Height: 189075.043 cps
Start Time: 8.31 min
End Time: 8.59 min

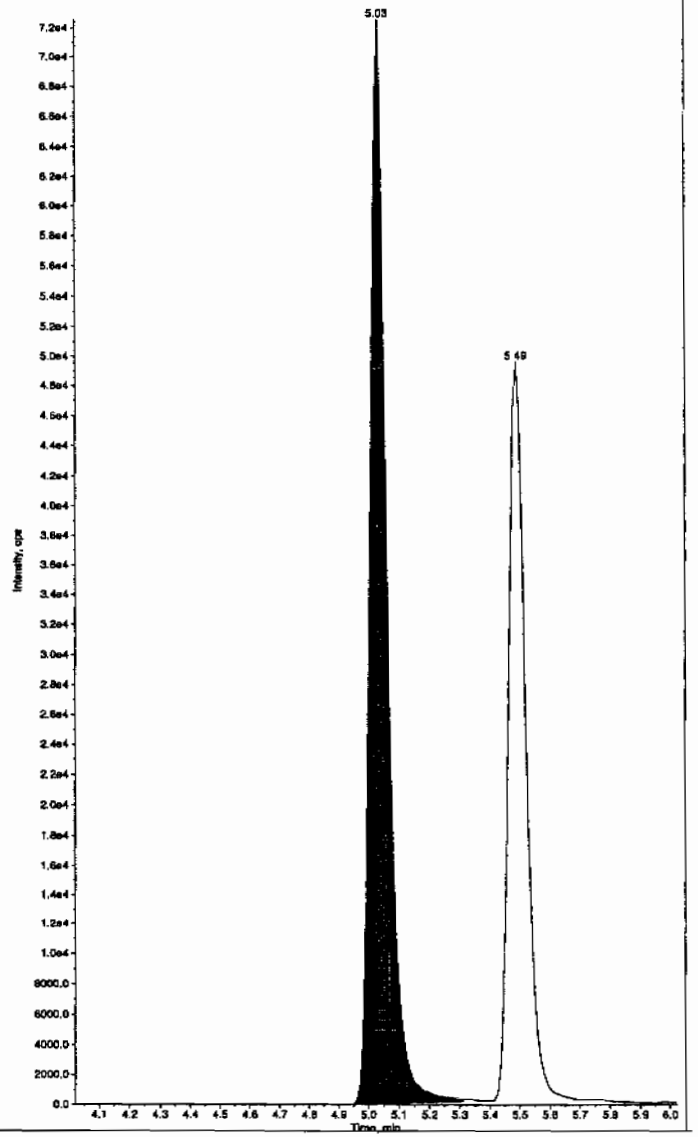


Sample Name: "WXX100305-27CRI" Sample ID: "1|LER" File: "EXS03050037.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: "

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 113. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 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: 2.89e+005 counts
Height: 72523.758 cps
Start Time: 4.94 min
End Time: 5.31 min

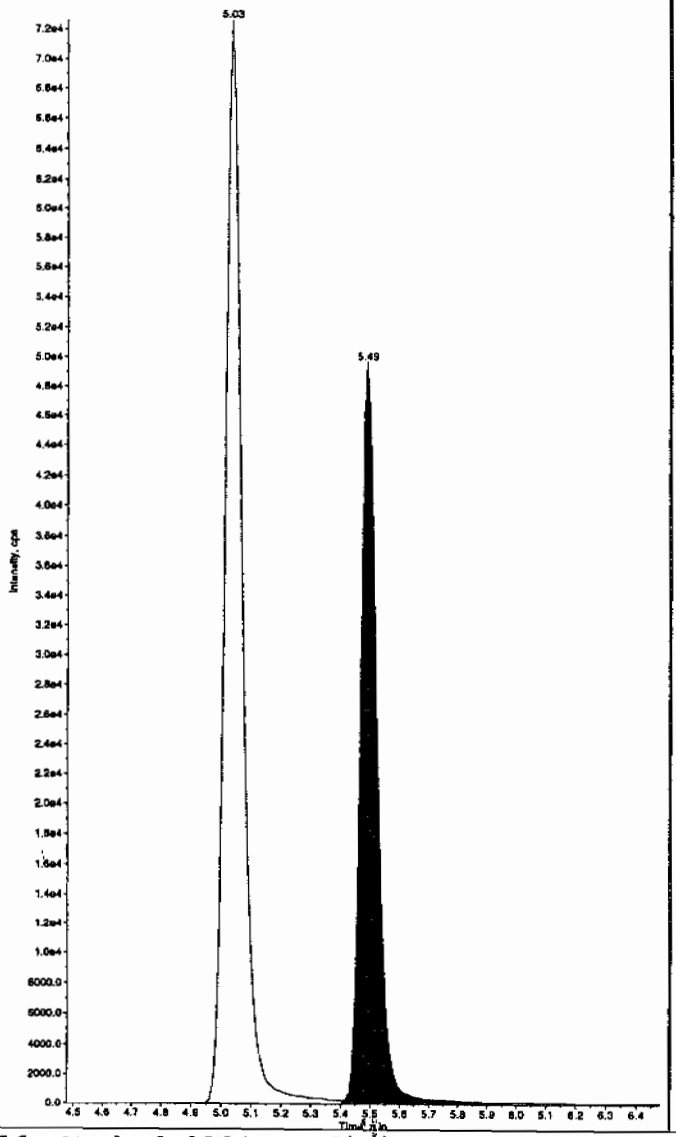


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050037.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 110. ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 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: 1.99e+005 counts
Height: 49546.009 cps
Start Time: 5.41 min
End Time: 5.94 min

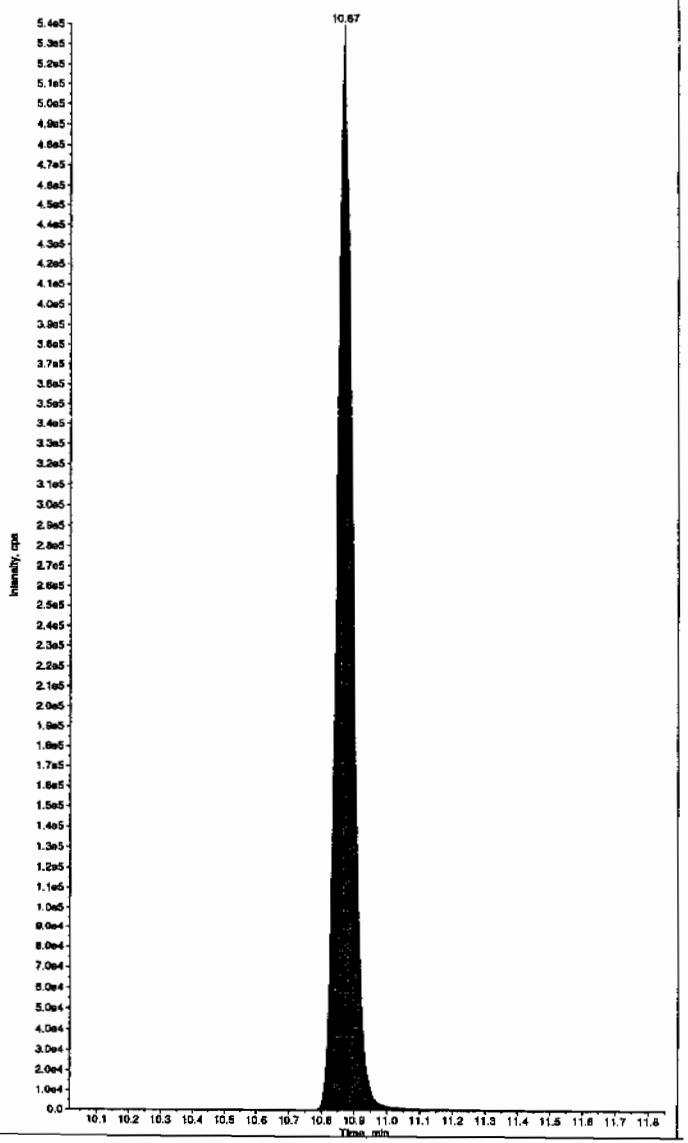


Sample Name: "WXX100305-27CRI" Sample ID: "[1]LER" File: "EXS03050037.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCMSEXP_C" Annotation: ""

Sample Index: 1
Sample Type: QC
Concentration: 100. ng/mL
Calculated Conc: 97.2 ng/mL
Acq. Date: 3/6/2010
Acq. Time: 2:32:52 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: 1.84e+006 counts
Height: 539893.494 cps
Start Time: 10.8 min
End Time: 11.2 min



QUALITY CONTROL DATA

1

High Explosives Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Client Sample ID: MB for batch 954282

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 1202045735

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326063a

Date Analyzed: 27-MAR-10 21:12

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 =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

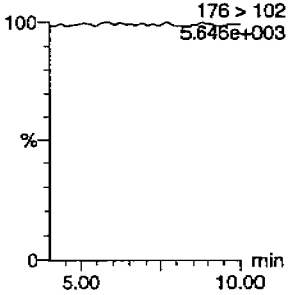
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

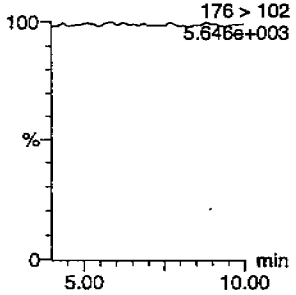
Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326063a
Date: 27-Mar-2010
Time: 21:12:25
ID: 1202045735 | LANCL | 95432 | SOLID | MB | 21
Vial: 1:6,A

HMT 3/29/10

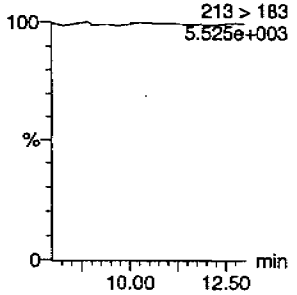
HMX
F2:MRM of 1 channel,AP-
176 > 102
5.646e+003



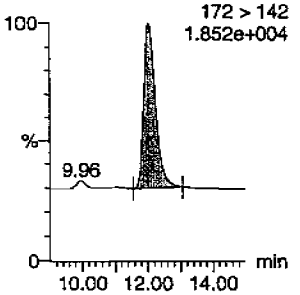
RDX
F2:MRM of 1 channel,AP-
176 > 102
5.646e+003



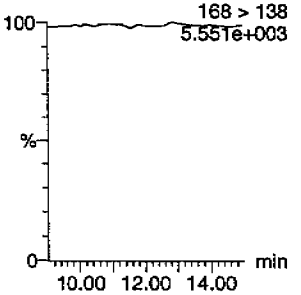
135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
5.525e+003



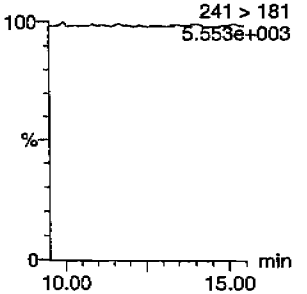
13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.852e+004



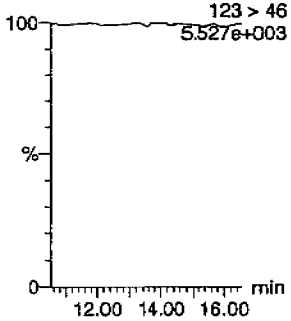
13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
5.551e+003



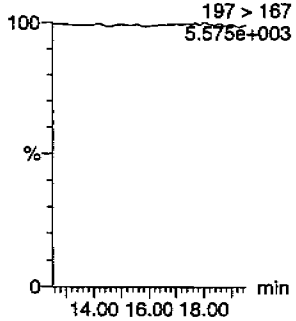
Tetryl
F6:MRM of 1 channel,AP-
241 > 181
5.553e+003



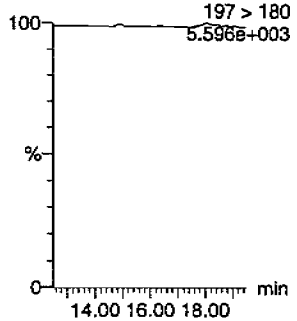
Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
5.527e+003



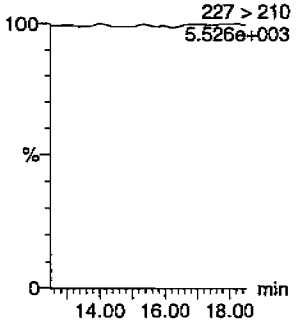
4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
5.575e+003



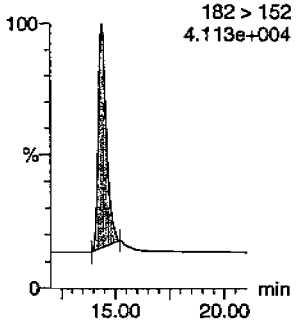
2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.596e+003



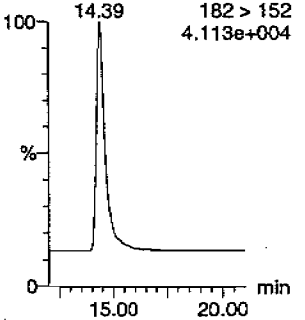
246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
5.526e+003



34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
4.113e+004



26-dinitrotoluene
F9:MRM of 2 channels,AP-
14.39
182 > 152
4.113e+004

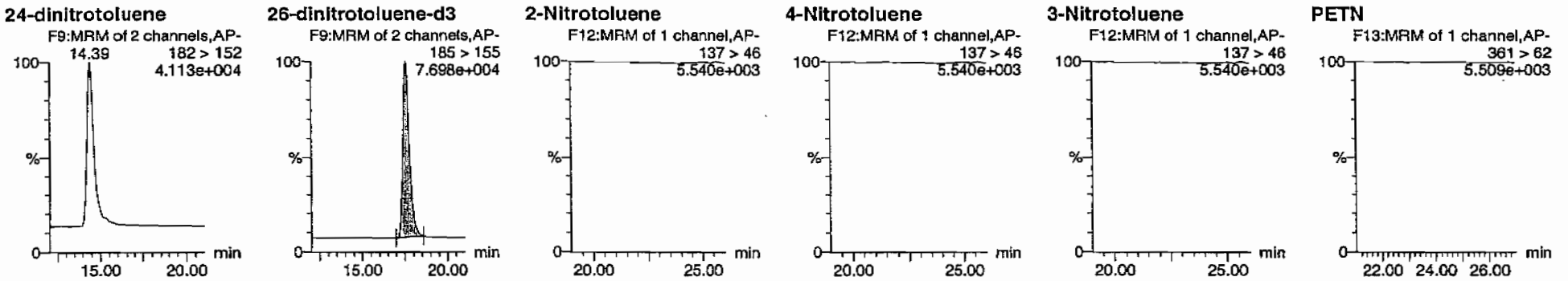


HMM 03-30-10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	%Dev	S/N
1202045735	HMX	176 > 102			5387.967									
1202045735	RDX	176 > 102			5387.967									
1202045735	135-Trinitrobenzene	213 > 183			5387.967									
1202045735	13-Dinitrobenzene-d4	172 > 142	12.03	5387.967		5387.967	5387.967	bb			440.3812	88.1	-11.9	369.7
1202045735	13-Dinitrobenzene	168 > 138			5387.967									
1202045735	Tetryl	241 > 181			5387.967									
1202045735	Nitrobenzene	123 > 46			5387.967									
1202045735	4-Amino-26-dinitrotoluene	197 > 167			31786.072									
1202045735	2-Amino-46-dinitrotoluene	197 > 180			31786.072									
1202045735	246-Trinitrotoluene	227 > 210			31786.072									
1202045735	34-dinitrotoluene	182 > 152	14.39	15033.037	31786.072	15033.037	236.472	bb			223.7836	89.5	-10.5	702.1
1202045735	26-dinitrotoluene	182 > 152			31786.072									
1202045735	24-dinitrotoluene	182 > 152			31786.072									
1202045735	26-dinitrotoluene-d3	185 > 155	17.58	31786.072		31786.072	31786.072	bb			432.9329	86.6	-13.4	2560.1
1202045735	2-Nitrotoluene	137 > 46			31786.072									
1202045735	4-Nitrotoluene	137 > 46			31786.072									
1202045735	3-Nitrotoluene	137 > 46			31786.072									
1202045735	PETN	361 > 62			31786.072									

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: MB for batch 954282

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 1202045735

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050014.wiff

Date Analyzed: 05-MAR-10 20:31

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 =

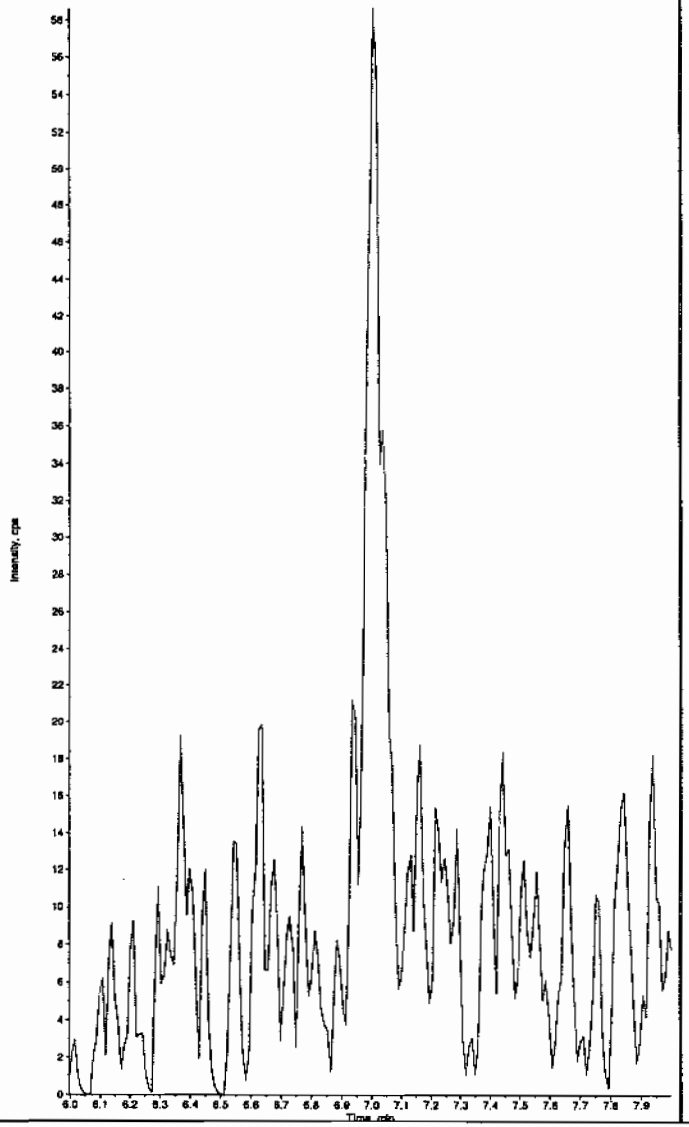
$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Lan 3/9/10

Sample Name: "1202045735" Sample ID: "954321|2|LER" File: "EXS03050014.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:31:45 PM

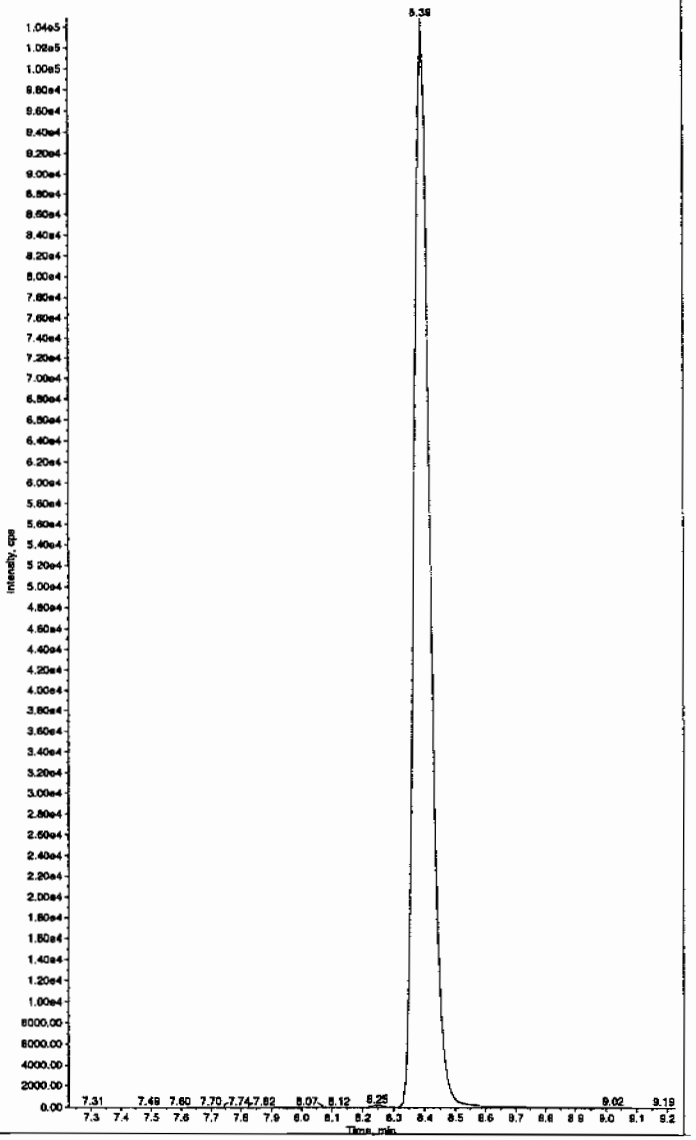
Modified: No



Sample Name: "1202045735" Sample ID: "954321|2|LER" File: "EXS03050014.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 0.00 ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:31:45 PM

Modified: No



Hmw 03/09/10

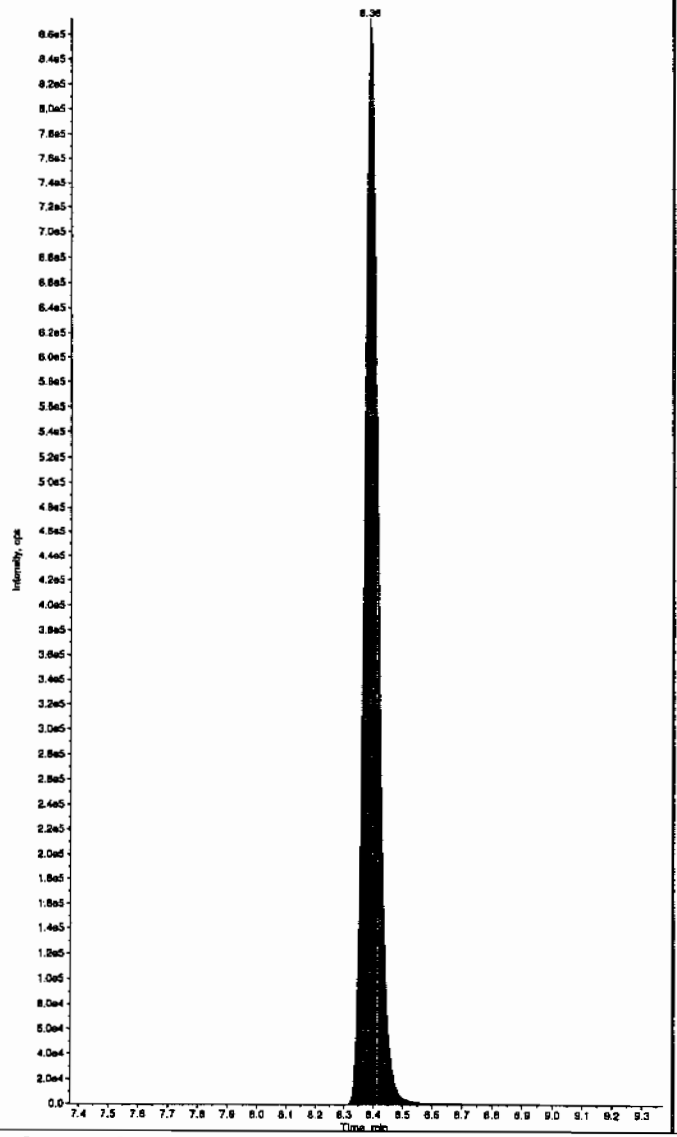
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045735" Sample ID: "954321|2|LER" File: "EXS03050014.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 241. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:31:45 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

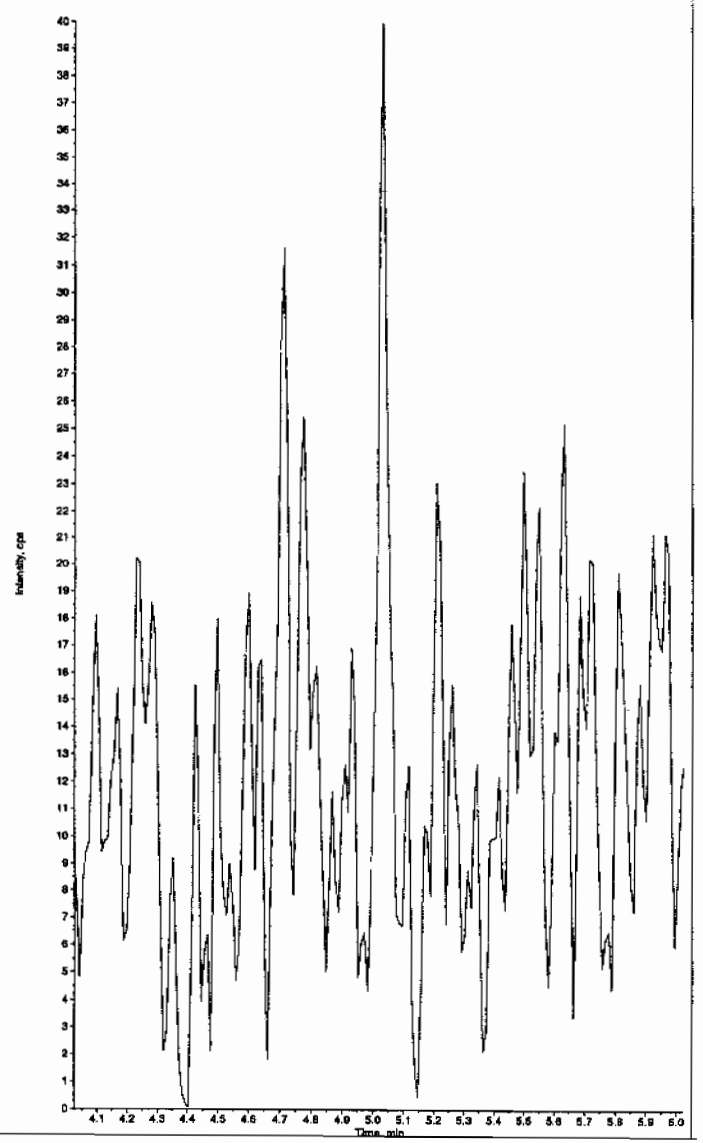
Int. Type: Valley
Retention Time: 8.38 min
Area: 3.02e+006 counts
Height: 873343.628 cps
Start Time: 8.28 min
End Time: 8.77 min



Sample Name: "1202045735" Sample ID: "954321|2|LER" File: "EXS03050014.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" 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: 3/5/2010
Acq. Time: 8:31:45 PM

Modified: No

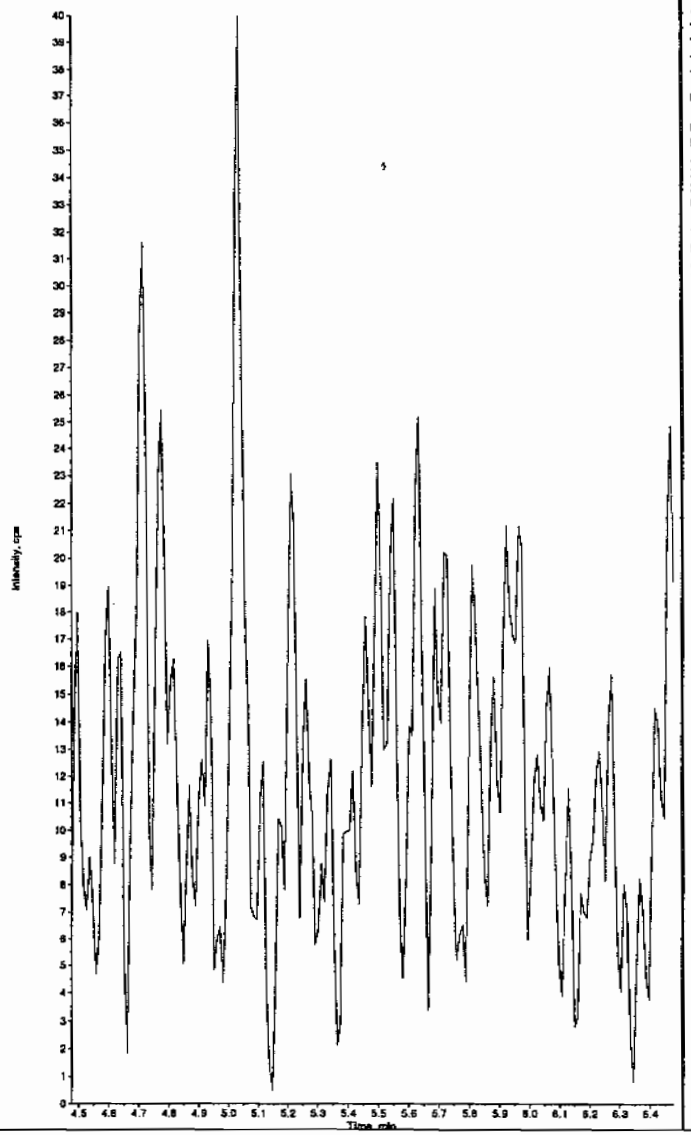


*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045735" Sample ID: "954321|2|LER" File: "EXS03050014.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" 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: 3/5/2010
Acq. Time: 8:31:45 PM

Modified: No

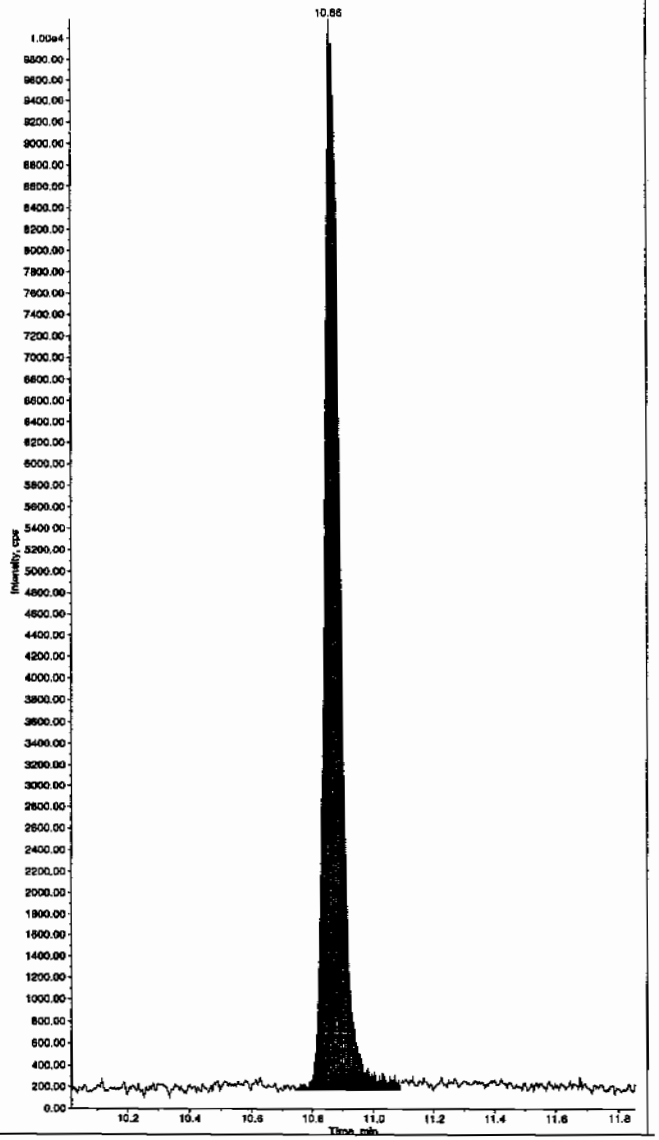


Sample Name: "1202045735" Sample ID: "954321|2|LER" File: "EXS03050014.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: No Intercept
Acq. Date: 3/5/2010
Acq. Time: 8:31:45 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: 3.65e+004 counts
Height: 10013.045 cps
Start Time: 10.7 min
End Time: 11.1 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: LCS for batch 954282

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 1202045736

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXP0326064a

Date Analyzed: 27-MAR-10 21:41

Units: ug/kg

Cas No.	Compound	Concentration*	Q
118-96-7	2,4,6-Trinitrotoluene	6100	
121-14-2	2,4-Dinitrotoluene	5190	
121-82-4	RDX	5250	
19406-51-0	4-Amino-2,6-dinitrotoluene	6150	
2691-41-0	HMX	5270	
35572-78-2	2-Amino-4,6-dinitrotoluene	6820	
479-45-8	Tetryl	1870	
606-20-2	2,6-Dinitrotoluene	4720	
78-11-5	PETN	4580	
88-72-2	o-Nitrotoluene	4710	
98-95-3	Nitrobenzene	3880	
99-08-1	m-Nitrotoluene	5170	
99-35-4	1,3,5-Trinitrobenzene	5320	
99-65-0	m-Dinitrobenzene	4540	
99-99-0	p-Nitrotoluene	4580	

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326064a
Date: 27-Mar-2010
Time: 21:41:56
ID: 1202045736
Vial: 1:6,B

LANU | 934321 | Solids | LCS | 21

MMT 3/29/10

HMX
F2:MRM of 1 channel,AP-
176 > 102
1.238e+005
7.50

RDX
F2:MRM of 1 channel,AP-
176 > 102
1.238e+005
5.09
RDX
7.50
18793.99

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
9.905e+004

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
1.981e+004
9.98

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
2.364e+004

Tetryl
F6:MRM of 1 channel,AP-
241 > 181
1.211e+004
Tetryl
12.63
2495.16

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.286e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
4.103e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
6.495e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
3.341e+004

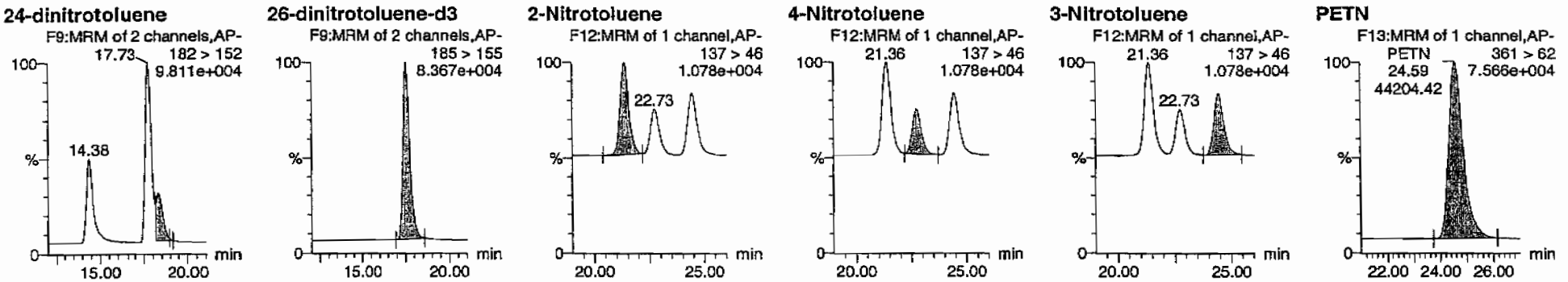
34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
9.811e+004
17.73
18.32

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
9.811e+004
14.38
18.32

HMN 03/30/10

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010



D	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	Conc	%Rec	%Dev	S/N
1202045736	HMX	176 > 102	5.09	25676.467	5980.447	25676.467	2146.701	bb			527.4889	105.5	5.5	2431.3
1202045736	RDX	176 > 102	7.50	18793.994	5980.447	18793.994	1571.287	bb			525.0147	105.0	5.0	1573.8
1202045736	135-Trinitrobenzene	213 > 183	10.12	27964.209	5980.447	27964.209	2337.970	bb			532.1952	106.4	6.4	1658.1
1202045736	13-Dinitrobenzene-d4	172 > 142	12.04	5980.447		5980.447	5980.447	bb			488.8071	97.8	-2.2	149.4
1202045736	13-Dinitrobenzene	168 > 138	12.17	7232.992	5980.447	7232.992	604.720	bb			453.5928	90.7	-9.3	447.6
1202045736	Tetryl	241 > 181	12.63	2495.160	5980.447	2495.160	208.610	bb			187.1329	37.4	-62.6	150.3
1202045736	Nitrobenzene	123 > 46	13.67	2799.025	5980.447	2799.025	234.015	bb			387.7283	77.5	-22.5	275.0
1202045736	4-Amino-26-dinitrotoluene	197 > 167	15.68	15130.140	34038.672	15130.140	222.249	MM	28-Mar-10	12:41:50	615.0994	123.0	23.0	609.9
1202045736	2-Amino-46-dinitrotoluene	197 > 180	16.55	25143.859	34038.672	25143.859	369.343	bb			681.9051	136.4	36.4	1411.2
1202045736	246-Trinitrotoluene	227 > 210	15.45	13376.969	34038.672	13376.969	196.497	bb			610.0267	122.0	22.0	484.6
1202045736	34-dinitrotoluene	182 > 152	14.38	18237.672	34038.672	18237.672	267.896	bb			253.5217	101.4	1.4	752.4
1202045736	26-dinitrotoluene	182 > 152	17.73	36737.031	34038.672	36737.031	539.637	MM	28-Mar-10	12:45:33	471.8166	94.4	-5.6	1623.0
1202045736	24-dinitrotoluene	182 > 152	18.32	10461.529	34038.672	10461.529	153.671	MM	28-Mar-10	12:49:06	518.9617	103.8	3.8	427.3
1202045736	26-dinitrotoluene-d3	185 > 155	17.55	34038.672		34038.672	34038.672	bb			463.6138	92.7	-7.3	2156.5
1202045736	2-Nitrotoluene	137 > 46	21.36	2399.156	34038.672	2399.156	35.242	bb			470.7195	94.1	-5.9	291.2
1202045736	4-Nitrotoluene	137 > 46	22.73	1213.463	34038.672	1213.463	17.825	bb			458.1635	91.6	-8.4	142.8
1202045736	3-Nitrotoluene	137 > 46	24.45	1755.055	34038.672	1755.055	25.780	bb			516.9540	103.4	3.4	194.1
1202045736	PETN	361 > 62	24.59	44204.422	34038.672	44204.422	649.326	bb			458.2321	91.6	-8.4	8164.9

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: LCS for batch 954282

Lab Code: GEL

GEL Job No (SDG) 10-1861

Matrix: SOIL

GEL Sample ID: 1202045736

Sample Amount 2

Moisture:

Amount Units g

Date Received: 17-FEB-10

Extraction Type Sonication

Extraction Batch ID: 954282

Concentrated Extract Volume (mL) 10

Date Extracted: 23-FEB-10

Dilution Factor: 2

Injection Volume (uL): 50

GEL data file: EXS03050015.wiff

Date Analyzed: 05-MAR-10 20:47

Units: ug/kg

Cas No.	Compound	Concentration*	Q
3058-38-6	TATB	5550	
59229-75-3	2,6-Diamino-4-nitrotoluene	5060	
618-87-1	3,5-Dinitroaniline	5140	
6629-29-4	2,4-Diamino-6-nitrotoluene	4820	
78-30-8	tris(o-cresyl) phosphate	5300	

*Concentration =

$$\text{Instrument Value} \times \frac{\text{Concentrated Extract Volume}}{\text{Sample Amoun}} \times \text{Dilution Factor}$$

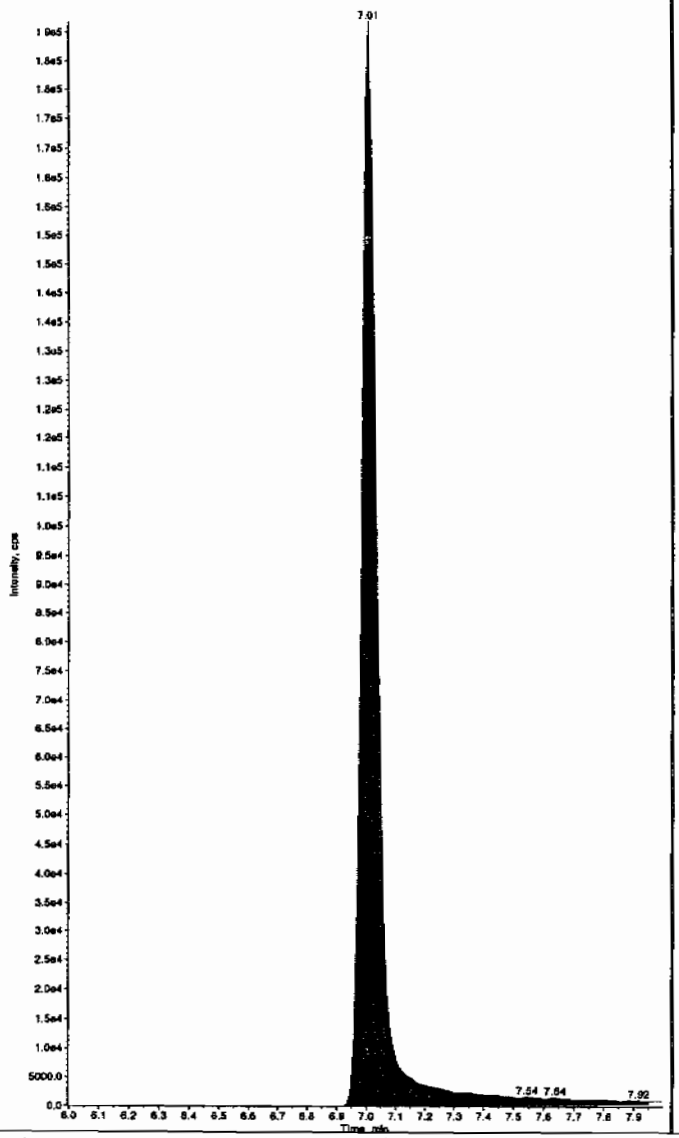
LEN 3/9/10

Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050015.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 555. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:47:27 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 8.01e+005 counts
Height: 186809.128 cps
Start Time: 6.91 min
End Time: 7.95 min

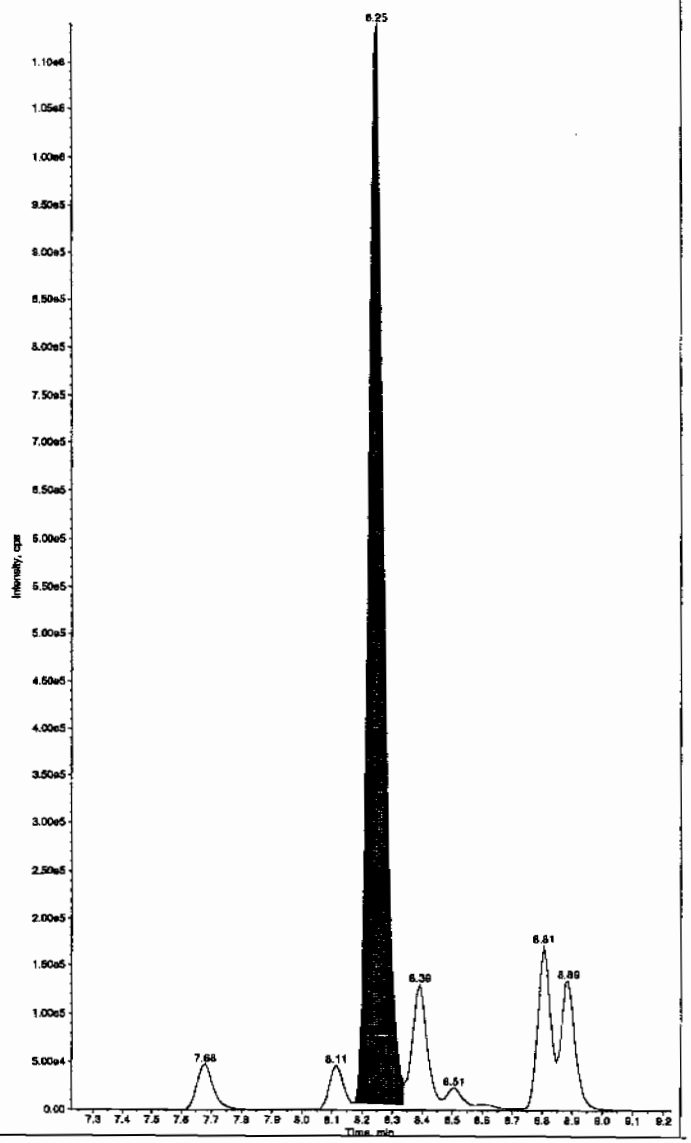


Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050015.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 514. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:47:27 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.25 min
Area: 4.19e+006 counts
Height: 1135066.895 cps
Start Time: 8.16 min
End Time: 8.34 min



HMM 03/09/10

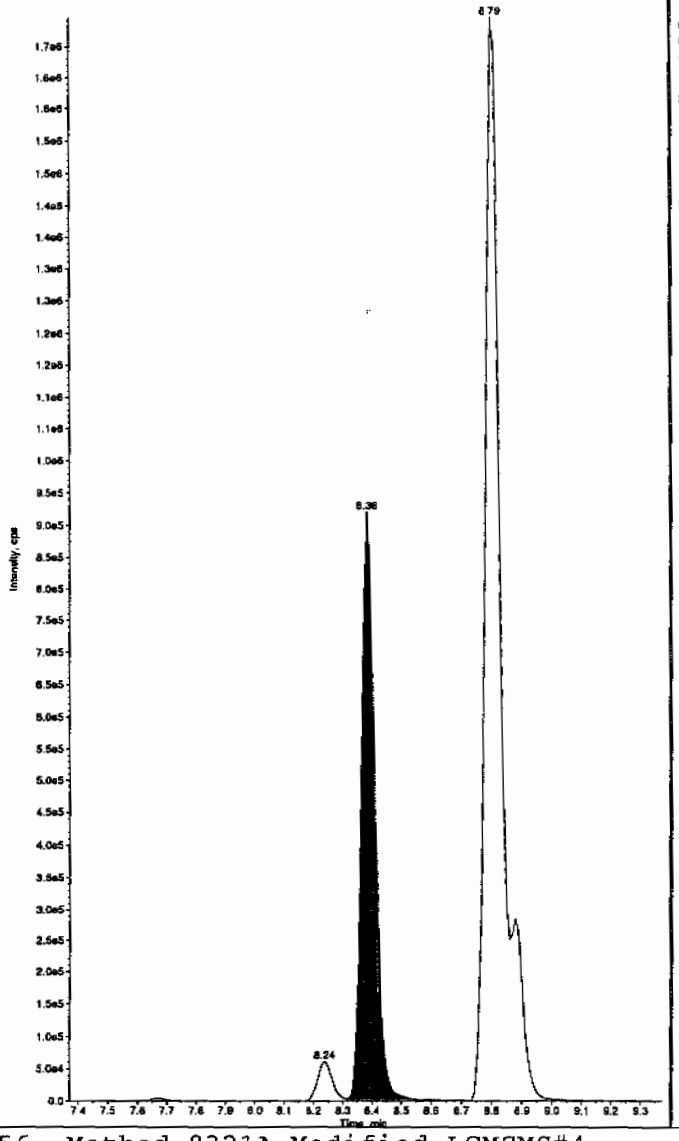
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050015.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 247. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:47:27 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 3.09e+006 counts
Height: 918227.539 cps
Start Time: 8.31 min
End Time: 8.55 min

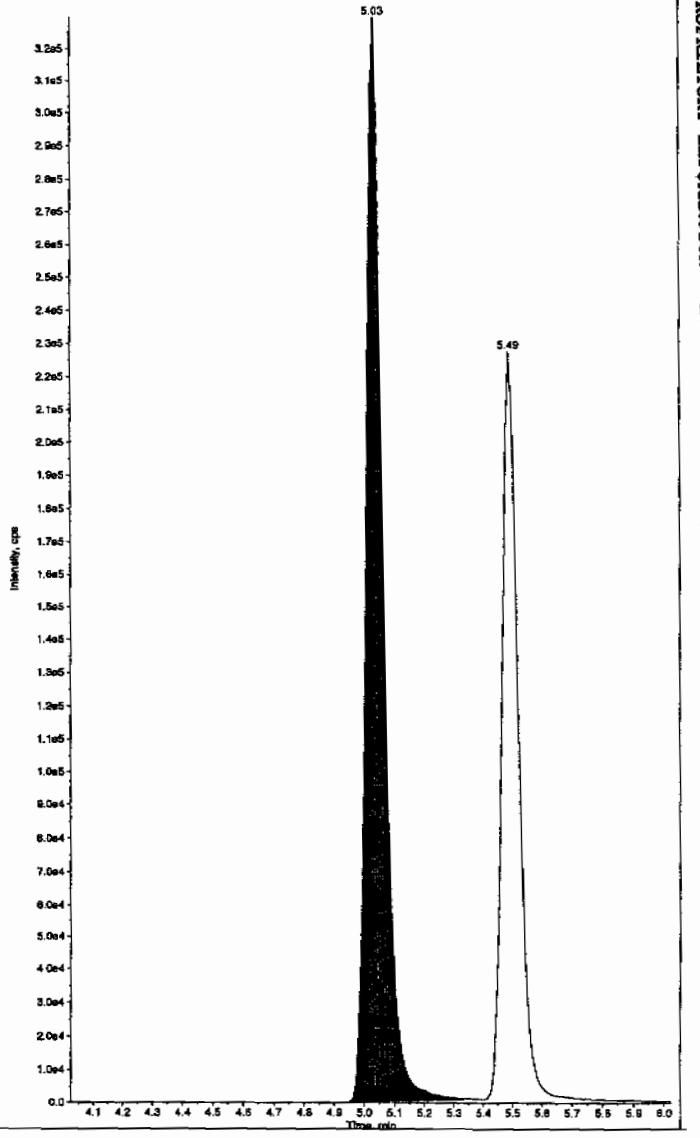


Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050015.wiff"
Peak Name: "25-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 506. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:47:27 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.03 min
Area: 1.34e+006 counts
Height: 329474.091 cps
Start Time: 4.94 min
End Time: 5.33 min



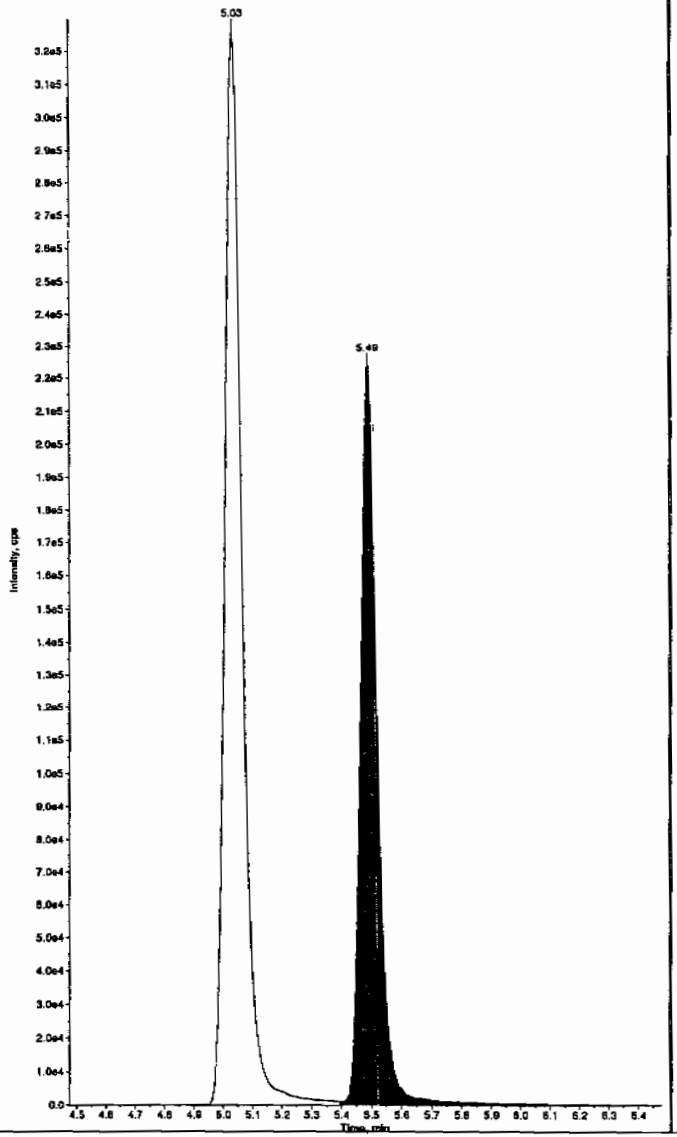
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050015.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 482. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:47:27 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: 8.94e+005 counts
Height: 227427.872 cps
Start Time: 5.39 min
End Time: 5.94 min

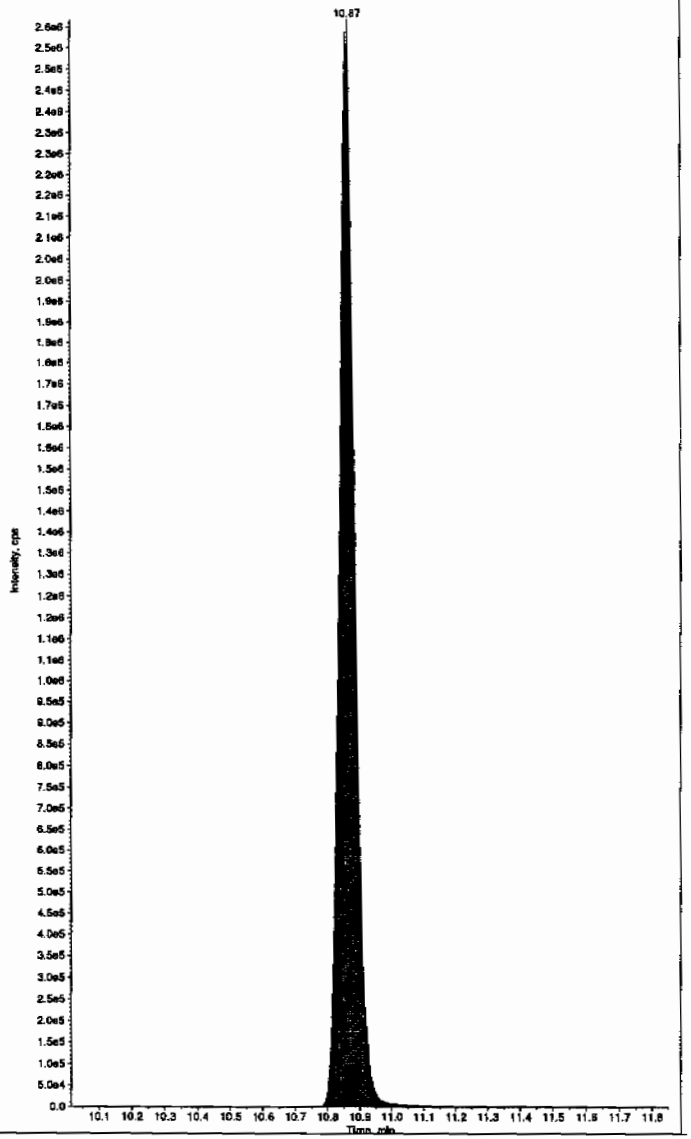


Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050015.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 530. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 8:47:27 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: 8.85e+006 counts
Height: 2566689.697 cps
Start Time: 10.8 min
End Time: 11.2 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

MISCELLANEOUS DATA

Prep Logbook

Nitroaromatics and Nitramines by High Performance Liquid Chromatography (HPLC)

Batch ID: 954282 **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)
1202045735 MB	23-FEB-2010 16:30:00	2	10	5
1202045736 LCS	23-FEB-2010 16:30:00	2	10	5
247126001	23-FEB-2010 16:30:00	2	10	5
1202045737 MS (247126001)	23-FEB-2010 16:30:00	2	10	5
1202045738 MSD (247126001)	23-FEB-2010 16:30:00	2	10	5
247126002	23-FEB-2010 16:30:00	2	10	5
247126003	23-FEB-2010 16:30:00	2	10	5
247178001	23-FEB-2010 16:30:00	2	10	5
247178002	23-FEB-2010 16:30:00	2	10	5
247178003	23-FEB-2010 16:30:00	2	10	5
247178004	23-FEB-2010 16:30:00	2	10	5
247178005	23-FEB-2010 16:30:00	2	10	5
247178006	23-FEB-2010 16:30:00	2	10	5
247178007	23-FEB-2010 16:30:00	2	10	5
247178008	23-FEB-2010 16:30:00	2	10	5
247178009	23-FEB-2010 16:30:00	2	10	5
247178010	23-FEB-2010 16:30:00	2	10	5
247178011	23-FEB-2010 16:30:00	2	10	5

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202045736	8321 Explosives LCS	IXX100208-03	.1	mL
LCS	1202045736	8321 LANL Explosives Mix 10mg/L	UXX100210-02.3	1	mL
MS	1202045737	8321 Explosives LCS	IXX100208-03	.1	mL
MS	1202045737	8321 LANL Explosives Mix 10mg/L	UXX100210-02.3	1	mL
MSD	1202045738	8321 Explosives LCS	IXX100208-03	.1	mL
MSD	1202045738	8321 LANL Explosives Mix 10mg/L	UXX100210-02.3	1	mL
SURR	All	3,4-Dinitrotoluene (8330 Surr.) 100ppm	IXP100218-02	.05	mL

Comments:

Final Solvent: ACN

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS #1

Date: 03/26/10
Extr. Injection Volume: 50uL
Sequence Number: 032610expA
Initial Calibration Date: 03/26/10

Method: SW846 8321A-Modified
Int. Std.: UXX100309-01.3
Mobile Phase Lot#: 1290941, 1281642
Standard-Samp Reagent Lot#: 1283379, 1284736

Reviewed BY: mm
Date: 03/30/10
SOP: GL-OA-E-056 Rev.12
Alt Check Std. ID: WXX100326-07

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
EXP0326001a	XIBLK01	MAP	3/26/10 14:43			1		USE	B
EXP0326002a	XIBLK01	MAP	3/26/10 15:12			1		USE	B
EXP0326003a	WXXICAL-01	MAP	3/26/10 15:42			1		USE	I
EXP0326004a	WXXICAL-02	MAP	3/26/10 16:11			1		USE	I
EXP0326005a	WXXICAL-03	MAP	3/26/10 16:41			1		USE	I
EXP0326006a	WXXICAL-04	MAP	3/26/10 17:10			1		USE	I
EXP0326007a	WXXICAL-05	MAP	3/26/10 17:40			1		USE	I
EXP0326008a	WXXICAL-06	MAP	3/26/10 18:09			1		USE	I
EXP0326009a	XIBLK02	MAP	3/26/10 18:39			1		USE	B
EXP0326010a	WXXICV	MAP	3/26/10 19:08			1		DUSE	C
EXP0326011a	XIBLK03	MAP	3/26/10 19:38			1		USE	B
EXP0326012a	WXXCRI	MAP	3/26/10 20:07			1		DUSE	C
EXP0326013a	248234004	MAP	3/26/10 20:37	959334	10-2131	10	LANL	DUSE-RA	S
EXP0326014a	248234005	MAP	3/26/10 21:06	959334	10-2131	2	LANL	DUSE-RA	S
EXP0326015a	248197002	MAP	3/26/10 21:36	958640	10-2121	2	LANL	DUSE-RA	S
EXP0326016a	1202055943	MAP	3/26/10 22:05	958640	10-2121	2	LANL	DUSE-RA	S
EXP0326017a	WXXICV	MAP	3/26/10 22:35			1		USE	C
EXP0326018a	XIBLK04	MAP	3/26/10 23:04			1		USE	B
EXP0326019a	WXXCRI	MAP	3/26/10 23:34			1		USE	C
EXP0326020a	1202076336	MAP	3/27/10 0:03	967392	10-2491	2	LANL	USE	S
EXP0326021a	1202076337	MAP	3/27/10 0:33	967392	10-2491	2	LANL	USE	S
EXP0326022a	249611006	MAP	3/27/10 1:02	967392	10-2491	2	LANL	USE	S
EXP0326023a	XIBLK05	MAP	3/27/10 1:32			1		USE	B
EXP0326024a	1202076338	MAP	3/27/10 2:01	967392	10-2491	2	LANL	USE	S
EXP0326025a	XIBLK06	MAP	3/27/10 2:31			1		USE	B
EXP0326026a	1202076339	MAP	3/27/10 3:00	967392	10-2491	2	LANL	USE	S
EXP0326027a	XIBLK07	MAP	3/27/10 3:30			1		USE	B
EXP0326028a	WXXCCV	MAP	3/27/10 3:59			1		USE	C
EXP0326029a	XIBLK08	MAP	3/27/10 4:29			1		USE	B

EXP0326030a	WXXCRI	MAP	3/27/10 4:58			1		USE	C
EXP0326031a	1202059959	MAP	3/27/10 5:28	960370	Various	2	LANL	USE	S
EXP0326032a	1202059960	MAP	3/27/10 5:57	960370	Various	2	LANL	USE	S
EXP0326033a	248377002	MAP	3/27/10 6:27	960370	10-2157	2	LANL	USE	S
EXP0326034a	248377003	MAP	3/27/10 6:56	960370	10-2157	2	LANL	USE	S
EXP0326035a	248377004	MAP	3/27/10 7:26	960370	10-2157	2	LANL	USE	S
EXP0326036a	248377005	MAP	3/27/10 7:55	960370	10-2157	2	LANL	USE	S
EXP0326037a	248377006	MAP	3/27/10 8:25	960370	10-2157	2	LANL	USE	S
EXP0326038a	248377007	MAP	3/27/10 8:54	960370	10-2157	2	LANL	USE	S
EXP0326039a	248420001	MAP	3/27/10 9:24	960370	10-2190	2	LANL	USE	S
EXP0326040a	1202059961	MAP	3/27/10 9:53	960370	10-2190	2	LANL	USE	S
EXP0326041a	WXXCCV	MAP	3/27/10 10:23			1		USE	C
EXP0326042a	XIBLK09	MAP	3/27/10 10:52			1		USE	B
EXP0326043a	WXXCRI	MAP	3/27/10 11:22			1		USE	C
EXP0326044a	1202059962	MAP	3/27/10 11:51	960370	10-2190	2	LANL	USE	S
EXP0326045a	248420002	MAP	3/27/10 12:21	960370	10-2190	2	LANL	USE	S
EXP0326046a	248420003	MAP	3/27/10 12:50	960370	10-2190	2	LANL	USE	S
EXP0326047a	248420004	MAP	3/27/10 13:20	960370	10-2190	2	LANL	USE	S
EXP0326048a	248420005	MAP	3/27/10 13:49	960370	10-2190	2	LANL	USE	S
EXP0326049a	248420006	MAP	3/27/10 14:19	960370	10-2190	2	LANL	USE	S
EXP0326050a	248420007	MAP	3/27/10 14:48	960370	10-2190	2	LANL	USE	S
EXP0326051a	248420008	MAP	3/27/10 15:18	960370	10-2190	2	LANL	USE	S
EXP0326052a	248420009	MAP	3/27/10 15:47	960370	10-2190	2	LANL	USE	S
EXP0326053a	WXXCCV	MAP	3/27/10 16:17			1		USE	C
EXP0326054a	XIBLK10	MAP	3/27/10 16:46			1		USE	B
EXP0326055a	WXXCRI	MAP	3/27/10 17:16			1		USE	C
EXP0326056a	248234004	MAP	3/27/10 17:45	959334	10-2131	10	LANL	USE	S
EXP0326057a	248234005	MAP	3/27/10 18:15	959334	10-2131	2	LANL	USE	S
EXP0326058a	248197002	MAP	3/27/10 18:44	958640	10-2121	2	LANL	USE	S
EXP0326059a	1202055943	MAP	3/27/10 19:14	958640	10-2121	2	LANL	USE	S
EXP0326060a	WXXCCV	MAP	3/27/10 19:43			1		USE	C
EXP0326061a	XIBLK11	MAP	3/27/10 20:13			1		USE	B
EXP0326062a	WXXCRI	MAP	3/27/10 20:42			1		USE	C
EXP0326063a	1202045735	MAP	3/27/10 21:12	954321	Various	2	LANL	USE	S
EXP0326064a	1202045736	MAP	3/27/10 21:41	954321	Various	2	LANL	USE	S
EXP0326065a	247126001	MAP	3/27/10 22:11	954321	10-1849	2	LANL	USE	S
EXP0326066a	1202045737	MAP	3/27/10 22:40	954321	10-1849	2	LANL	USE	S

EXP0326067a	1202045738	MAP	3/27/10 23:10	954321	10-1849	2	LANL	USE	S
EXP0326068a	247126002	MAP	3/27/10 23:39	954321	10-1849	2	LANL	USE	S
EXP0326069a	247126003	MAP	3/28/10 0:09	954321	10-1849	2	LANL	USE	S
EXP0326070a	247178001	MAP	3/28/10 0:38	954321	10-1861	2	LANL	USE	S
EXP0326071a	247178002	MAP	3/28/10 1:08	954321	10-1861	2	LANL	USE	S
EXP0326072a	247178003	MAP	3/28/10 1:37	954321	10-1861	2	LANL	USE	S
EXP0326073a	WXXCCV	MAP	3/28/10 2:07			1		USE	C
EXP0326074a	XIBLK12	MAP	3/28/10 2:36			1		USE	B
EXP0326075a	WXXCRI	MAP	3/28/10 3:06			1		USE	C
EXP0326076a	247178004	MAP	3/28/10 3:35	954321	10-1861	2	LANL	USE	S
EXP0326077a	247178005	MAP	3/28/10 4:05	954321	10-1861	2	LANL	USE	S
EXP0326078a	247178006	MAP	3/28/10 4:34	954321	10-1861	2	LANL	USE	S
EXP0326079a	247178007	MAP	3/28/10 5:04	954321	10-1861	2	LANL	USE	S
EXP0326080a	247178008	MAP	3/28/10 5:33	954321	10-1861	2	LANL	USE	S
EXP0326081a	247178009	MAP	3/28/10 6:03	954321	10-1861	2	LANL	USE	S
EXP0326082a	247178010	MAP	3/28/10 6:32	954321	10-1861	2	LANL	USE	S
EXP0326083a	247178011	MAP	3/28/10 7:02	954321	10-1861	2	LANL	USE	S
EXP0326084a	WXXCCV	MAP	3/28/10 7:31			1		USE	C
EXP0326085a	XIBLK13	MAP	3/28/10 8:01			1		USE	B
EXP0326086a	WXXCRI	MAP	3/28/10 8:30			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS4

Date: 03/05/10
Extr. Injection Volume: 10uL
Sequence Number: 030510exs
Initial Calibration Date: 030510

Method: 8321A-Modified
Int. Std.: N/A
Mobile Phase Lot#:1268566, 1268568
Standard-Samp Reagent Lot# :1274562, 1261217

Reviewed By: Hmc
Date: 12/09/10
SOP: GL-OA-E-056 Rev.12
Alt Check Std. ID: WXX100305-26

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC Flag
EXS03050001.wiff	XIBLK01	LER	3/5/2010 17:07			1		USE	B
EXS03050002.wiff	XIBLK01	LER	3/5/2010 17:23			1		USE	B
EXS03050003.wiff	WXXICAL-19	LER	3/5/2010 17:39			1		USE	I
EXS03050004.wiff	WXXICAL-20	LER	3/5/2010 17:54			1		USE	I
EXS03050005.wiff	WXXICAL-21	LER	3/5/2010 18:10			1		USE	I
EXS03050006.wiff	WXXICAL-22	LER	3/5/2010 18:26			1		USE	I
EXS03050007.wiff	WXXICAL-23	LER	3/5/2010 18:41			1		USE	I
EXS03050008.wiff	WXXICAL-24	LER	3/5/2010 18:57			1		USE	I
EXS03050009.wiff	WXXICAL-25	LER	3/5/2010 19:13			1		USE	I
EXS03050010.wiff	XIBLK02	LER	3/5/2010 19:29			1		USE	B
EXS03050011.wiff	WXXICV	LER	3/5/2010 19:44			1		USE	C
EXS03050012.wiff	XIBLK03	LER	3/5/2010 20:00			1		USE	B
EXS03050013.wiff	WXXCRI	LER	3/5/2010 20:16			1		USE	C
EXS03050014.wiff	1202045735	LER	3/5/2010 20:31	954321	VARIOUS	2	LANL	USE	S
EXS03050015.wiff	1202045736	LER	3/5/2010 20:47	954321	VARIOUS	2	LANL	USE	S
EXS03050016.wiff	247126001	LER	3/5/2010 21:03	954321	10-1849	2	LANL	USE	S
EXS03050017.wiff	1202045737	LER	3/5/2010 21:18	954321	10-1849	2	LANL	USE	S
EXS03050018.wiff	1202045738	LER	3/5/2010 21:34	954321	10-1849	2	LANL	USE	S
EXS03050019.wiff	247126002	LER	3/5/2010 21:50	954321	10-1849	2	LANL	USE	S
EXS03050020.wiff	247126003	LER	3/5/2010 22:05	954321	10-1849	2	LANL	USE	S
EXS03050021.wiff	247178001	LER	3/5/2010 22:21	954321	10-1861	2	LANL	USE	S
EXS03050022.wiff	247178002	LER	3/5/2010 22:37	954321	10-1861	2	LANL	USE	S
EXS03050023.wiff	247178003	LER	3/5/2010 22:53	954321	10-1861	2	LANL	USE	S
EXS03050024.wiff	WXXCCV	LER	3/5/2010 23:08			1		USE	C
EXS03050025.wiff	XIBLK04	LER	3/5/2010 23:24			1		USE	B
EXS03050026.wiff	WXXCRI	LER	3/5/2010 23:40			1		USE	C
EXS03050027.wiff	247178004	LER	3/5/2010 23:55	954321	10-1861	2	LANL	USE	S
EXS03050028.wiff	247178005	LER	3/6/2010 0:11	954321	10-1861	2	LANL	USE	S
EXS03050029.wiff	247178006	LER	3/6/2010 0:27	954321	10-1861	2	LANL	USE	S
EXS03050030.wiff	247178007	LER	3/6/2010 0:42	954321	10-1861	2	LANL	USE	S

EXS03050031.wiff	247178008	LER	3/6/2010 0:58	954321	10-1861	2	LANL	USE	S
EXS03050032.wiff	247178009	LER	3/6/2010 1:14	954321	10-1861	2	LANL	USE	S
EXS03050033.wiff	247178010	LER	3/6/2010 1:30	954321	10-1861	2	LANL	USE	S
EXS03050034.wiff	247178011	LER	3/6/2010 1:45	954321	10-1861	2	LANL	USE	S
EXS03050035.wiff	WXXCCV	LER	3/6/2010 2:01			1		USE	C
EXS03050036.wiff	XIBLK05	LER	3/6/2010 2:17			1		USE	B
EXS03050037.wiff	WXXCRI	LER	3/6/2010 2:32			1		USE	C
EXS03050038.wiff	1202052406	LER	3/6/2010 2:48	957200	VARIOUS	2	LANL	USE	S
EXS03050039.wiff	1202052407	LER	3/6/2010 3:04	957200	VARIOUS	2	LANL	USE	S
EXS03050040.wiff	247784002	LER	3/6/2010 3:19	957200	10-1979	2	LANL	USE	S
EXS03050041.wiff	247790002	LER	3/6/2010 3:35	957200	10-1981	2	LANL	USE	S
EXS03050042.wiff	247790003	LER	3/6/2010 3:51	957200	10-1981	2	LANL	USE	S
EXS03050043.wiff	247791002	LER	3/6/2010 4:07	957200	10-1982	2	LANL	USE	S
EXS03050044.wiff	247791003	LER	3/6/2010 4:22	957200	10-1982	2	LANL	USE	S
EXS03050045.wiff	247791004	LER	3/6/2010 4:38	957200	10-1982	2	LANL	USE	S
EXS03050046.wiff	247791005	LER	3/6/2010 4:54	957200	10-1982	2	LANL	USE	S
EXS03050047.wiff	247791006	LER	3/6/2010 5:09	957200	10-1982	2	LANL	USE	S
EXS03050048.wiff	WXXCCV	LER	3/6/2010 5:25			1		USE	C
EXS03050049.wiff	XIBLK06	LER	3/6/2010 5:41			1		USE	B
EXS03050050.wiff	WXXCRI	LER	3/6/2010 5:56			1		USE	C
EXS03050051.wiff	247799001	LER	3/6/2010 6:12	957200	10-1990	2	LANL	USE	S
EXS03050052.wiff	1202052408	LER	3/6/2010 6:28	957200	10-1990	2	LANL	USE	S
EXS03050053.wiff	1202052409	LER	3/6/2010 6:44	957200	10-1990	2	LANL	USE	S
EXS03050054.wiff	247799002	LER	3/6/2010 6:59	957200	10-1990	2	LANL	USE	S
EXS03050055.wiff	247799003	LER	3/6/2010 7:15	957200	10-1990	2	LANL	USE	S
EXS03050056.wiff	247799004	LER	3/6/2010 7:31	957200	10-1990	2	LANL	USE	S
EXS03050057.wiff	247799005	LER	3/6/2010 7:46	957200	10-1990	2	LANL	USE	S
EXS03050058.wiff	247799006	LER	3/6/2010 8:02	957200	10-1990	2	LANL	USE	S
EXS03050059.wiff	247799007	LER	3/6/2010 8:18	957200	10-1990	2	LANL	USE	S
EXS03050060.wiff	WXXCCV	LER	3/6/2010 8:34			1		USE	C
EXS03050061.wiff	XIBLK07	LER	3/6/2010 8:49			1		USE	B
EXS03050062.wiff	WXXCRI	LER	3/6/2010 9:05			1		USE	C
EXS03050063.wiff	247799008	LER	3/6/2010 9:21	957200	10-1990	2	LANL	USE	S
EXS03050064.wiff	247799009	LER	3/6/2010 9:36	957200	10-1990	2	LANL	USE	S
EXS03050065.wiff	247799010	LER	3/6/2010 9:52	957200	10-1990	2	LANL	USE	S
EXS03050066.wiff	WXXCCV	LER	3/6/2010 10:08			1		USE	C
EXS03050067.wiff	XIBLK08	LER	3/6/2010 10:23			1		USE	B

EXS03050068.wiff	WXXCRI	LER	3/6/2010 10:39			1		USE	C
EXS03050069.wiff	1202041953	LER	3/6/2010 10:55	952706	10-1758	2	LANL	USE	S
EXS03050070.wiff	1202041954	LER	3/6/2010 11:11	952706	10-1758	2	LANL	USE	S
EXS03050071.wiff	246866002	LER	3/6/2010 11:26	952706	10-1758	2	LANL	USE	S
EXS03050072.wiff	1202041955	LER	3/6/2010 11:42	952706	10-1758	2	LANL	USE	S
EXS03050073.wiff	1202041956	LER	3/6/2010 11:58	952706	10-1758	2	LANL	USE	S
EXS03050074.wiff	246866003	LER	3/6/2010 12:14	952706	10-1758	2	LANL	USE	S
EXS03050075.wiff	246866004	LER	3/6/2010 12:29	952706	10-1758	2	LANL	USE	S
EXS03050076.wiff	246866005	LER	3/6/2010 12:45	952706	10-1758	2	LANL	USE	S
EXS03050077.wiff	246866006	LER	3/6/2010 13:01	952706	10-1758	2	LANL	USE	S
EXS03050078.wiff	246866007	LER	3/6/2010 13:16	952706	10-1758	2	LANL	USE	S
EXS03050079.wiff	WXXCCV	LER	3/6/2010 13:32			1		USE	C
EXS03050080.wiff	XIBLK09	LER	3/6/2010 13:48			1		USE	B
EXS03050081.wiff	WXXCRI	LER	3/6/2010 14:03			1		USE	C
EXS03050082.wiff	246866008	LER	3/6/2010 14:19	952706	10-1758	2	LANL	USE	S
EXS03050083.wiff	246866009	LER	3/6/2010 14:35	952706	10-1758	2	LANL	USE	S
EXS03050084.wiff	WXXCCV	LER	3/6/2010 14:50			1		USE	C
EXS03050085.wiff	XIBLK10	LER	3/6/2010 15:06			1		USE	B
EXS03050086.wiff	WXXCRI	LER	3/6/2010 15:22			1		USE	C
EXS03050087.wiff	1202055082	LER	3/6/2010 15:38	958286	VARIOUS	2	LANL	USE	S
EXS03050088.wiff	1202055083	LER	3/6/2010 15:53	958286	VARIOUS	2	LANL	USE	S
EXS03050089.wiff	248040007	LER	3/6/2010 16:09	958286	10-2051	2	LANL	USE	S
EXS03050090.wiff	1202055084	LER	3/6/2010 16:25	958286	10-2051	2	LANL	USE	S
EXS03050091.wiff	1202055085	LER	3/6/2010 16:40	958286	10-2051	2	LANL	USE	S
EXS03050092.wiff	248259006	LER	3/6/2010 16:56	958286	10-2148	2	LANL	USE	S
EXS03050093.wiff	WXXCCV	LER	3/6/2010 17:12			1		USE	C
EXS03050094.wiff	XIBLK11	LER	3/6/2010 17:28			1		USE	B
EXS03050095.wiff	WXXCRI	LER	3/6/2010 17:43			1		USE	C
EXS03050096.wiff	UXX100210-02.4	LER	3/6/2010 17:59	SCREEN	SOLID	2	O2SI	USE	S
EXS03050097.wiff	XIBLK12	LER	3/6/2010 18:15			1		USE	B
EXS03050098.wiff	1202047529	LER	3/6/2010 18:30	955065	VARIOUS	2	LANL	USE	S
EXS03050099.wiff	1202047530	LER	3/6/2010 18:46	955065	VARIOUS	2	LANL	USE	S
EXS03050100.wiff	247327002	LER	3/6/2010 19:02	955065	10-1898	2	LANL	USE	S
EXS03050101.wiff	1202047531	LER	3/6/2010 19:17	955065	10-1898	2	LANL	USE	S
EXS03050102.wiff	1202047532	LER	3/6/2010 19:33	955065	10-1898	2	LANL	USE	S
EXS03050103.wiff	247346001	LER	3/6/2010 19:49	955065	10-1911	2	LANL	USE	S
EXS03050104.wiff	247346002	LER	3/6/2010 20:04	955065	10-1911	2	LANL	USE	S

EXS03050105.wiff	247346003	LER	3/6/2010 20:20	955065	10-1911	2	LANL	USE	S
EXS03050106.wiff	WXXCCV	LER	3/6/2010 20:36			1		USE	C
EXS03050107.wiff	XIBLK13	LER	3/6/2010 20:52			1		USE	B
EXS03050108.wiff	WXXCRI	LER	3/6/2010 21:07			1		USE	C
EXS03050109.wiff	247346004	LER	3/6/2010 21:23	955065	10-1911	2	LANL	USE	S
EXS03050110.wiff	247346005	LER	3/6/2010 21:39	955065	10-1911	2	LANL	USE	S
EXS03050111.wiff	247346006	LER	3/6/2010 21:54	955065	10-1911	2	LANL	USE	S
EXS03050112.wiff	247346007	LER	3/6/2010 22:10	955065	10-1911	2	LANL	USE	S
EXS03050113.wiff	247346008	LER	3/6/2010 22:26	955065	10-1911	2	LANL	USE	S
EXS03050114.wiff	247358001	LER	3/6/2010 22:41	955065	10-1914	2	LANL	USE	S
EXS03050115.wiff	247358002	LER	3/6/2010 22:57	955065	10-1914	2	LANL	USE	S
EXS03050116.wiff	247358003	LER	3/6/2010 23:13	955065	10-1914	2	LANL	USE	S
EXS03050117.wiff	247358004	LER	3/6/2010 23:29	955065	10-1914	2	LANL	USE	S
EXS03050118.wiff	WXXCCV	LER	3/6/2010 23:44			1		USE	C
EXS03050119.wiff	XIBLK14	LER	3/7/2010 0:00			1		USE	B
EXS03050120.wiff	WXXCRI	LER	3/7/2010 0:16			1		USE	C

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326066a
Date: 27-Mar-2010
Time: 22:40:56
ID: 1202045737 | LANL | 954321 | Solid | 247126001MS | 2 |
Vial: 1:6,D

MT 3/29/10

HMX
F2:MRM of 1 channel,AP-
176 > 102
1.295e+005
7.49

RDX
F2:MRM of 1 channel,AP-
176 > 102
1.295e+005
5.08
RDX
7.49
18647.22

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
7.181e+004

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.020e+004
9.99

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
2.412e+004

Tetryl
F6:MRM of 1 channel,AP-
241 > 181
6.711e+003

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.403e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
3.486e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
5.109e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
2.604e+004

34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.191e+005
17.73
18.32

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
1.191e+005
14.39
18.32

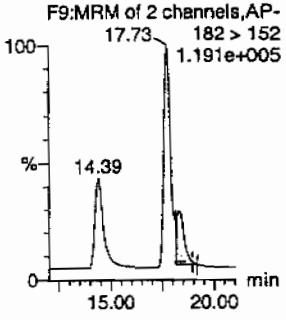
HMM 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

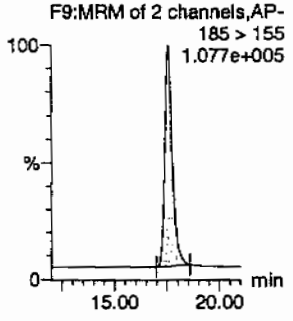
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

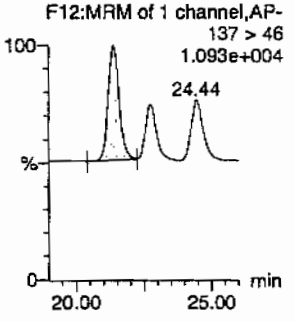
24-dinitrotoluene



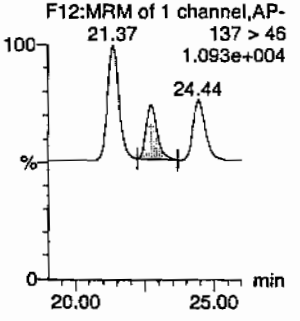
26-dinitrotoluene-d3



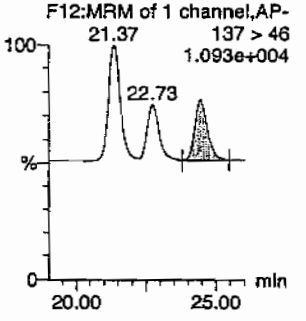
2-Nitrotoluene



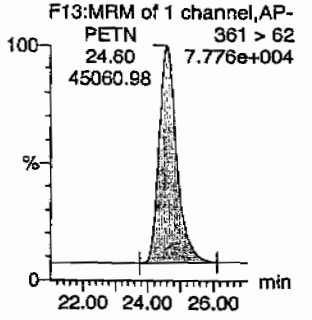
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202045737	HMX	176 > 102	5.08	26082.057	6168.313	26082.057	2114.197	bb			519.5019	103.9	3.9	2030.4
1202045737	RDX	176 > 102	7.49	18647.221	6168.313	18647.221	1511.533	bb			505.0493	101.0	1.0	1232.6
1202045737	135-Trinitrobenzene	213 > 183	10.13	20170.410	6168.313	20170.410	1635.002	bb			372.1778	74.4	-25.6	2634.8
1202045737	13-Dinitrobenzene-d4	172 > 142	12.03	6168.313		6168.313	6168.313	bb			504.1621	100.8	0.8	622.9
1202045737	13-Dinitrobenzene	168 > 138	12.17	7463.125	6168.313	7463.125	604.957	bb			453.7704	90.8	-9.2	346.0
1202045737	Tetryl	241 > 181	12.63	430.996	6168.313	430.996	34.936	bb			31.3395	6.3	-93.7	28.8
1202045737	Nitrobenzene	123 > 46	13.67	3171.654	6168.313	3171.654	257.092	bb			425.9648	85.2	-14.8	254.4
1202045737	4-Amino-26-dinitrotoluene	197 > 167	15.68	12284.780	43886.398	12284.780	139.961	MM	28-Mar-10	12:41:59	387.3579	77.5	-22.5	325.3
1202045737	2-Amino-46-dinitrotoluene	197 > 180	16.55	19436.529	43886.398	19436.529	221.441	bb			408.8400	81.8	-18.2	611.6
1202045737	246-Trinitrotoluene	227 > 210	15.45	9963.024	43886.398	9963.024	113.509	bb			352.3912	70.5	-29.5	397.8
1202045737	34-dinitrotoluene	182 > 152	14.39	20105.096	43886.398	20105.096	229.058	bb			216.7677	86.7	-13.3	695.6
1202045737	26-dinitrotoluene	182 > 152	17.73	44825.242	43886.398	44825.242	510.696	MM	28-Mar-10	12:45:56	446.5134	89.3	-10.7	1718.9
1202045737	24-dinitrotoluene	182 > 152	18.32	12349.803	43886.398	12349.803	140.702	MM	28-Mar-10	12:49:24	475.1633	95.0	-5.0	416.8
1202045737	26-dinitrotoluene-d3	185 > 155	17.55	43886.398		43886.398	43886.398	bb			597.7419	119.5	19.5	1808.3
1202045737	2-Nitrotoluene	137 > 46	21.37	2552.499	43886.398	2552.499	29.081	bb			388.4293	77.7	-22.3	465.1
1202045737	4-Nitrotoluene	137 > 46	22.73	1221.832	43886.398	1221.832	13.920	bb			357.8064	71.6	-28.4	222.8
1202045737	3-Nitrotoluene	137 > 46	24.44	1475.933	43886.398	1475.933	16.815	bb			337.1868	67.4	-32.6	244.3
1202045737	PETN	361 > 62	24.60	45060.980	43886.398	45060.980	513.382	bb			349.4193	69.9	-30.1	10517.6

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

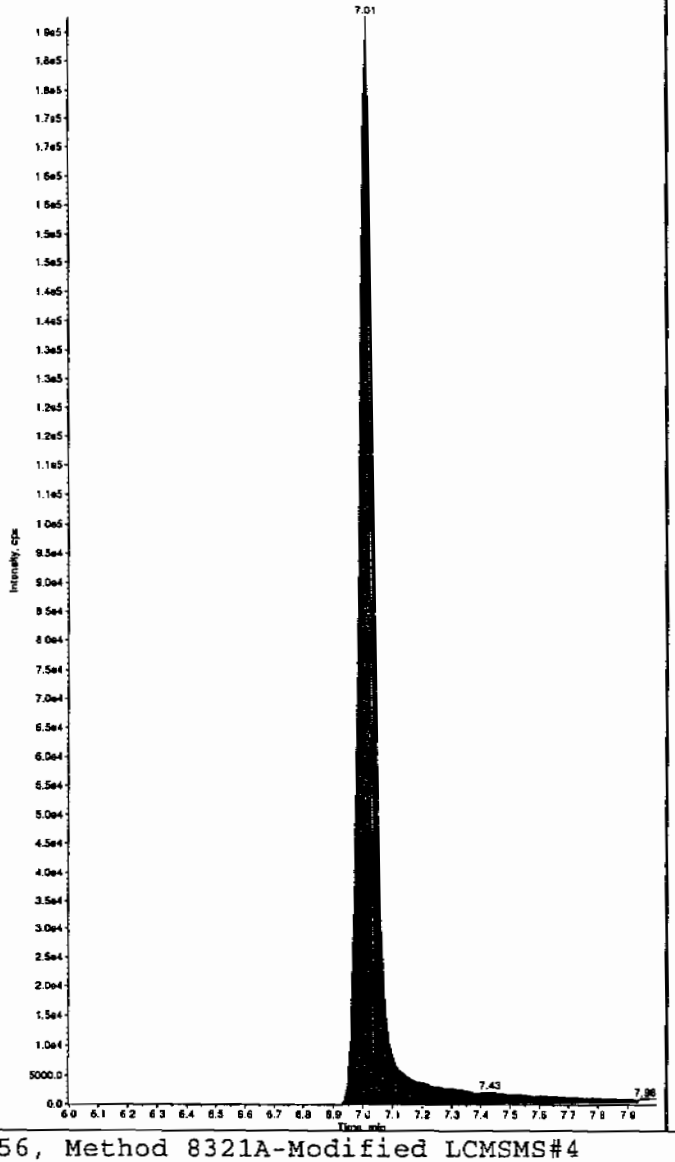
Ran 3/9/10

Sample Name: "1202045737" Sample ID: "954321|2|LER" File: "EXS03050017.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 550. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:18:52 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 7.93e+005 counts
Height: 187674.667 cps
Start Time: 6.90 min
End Time: 7.94 min

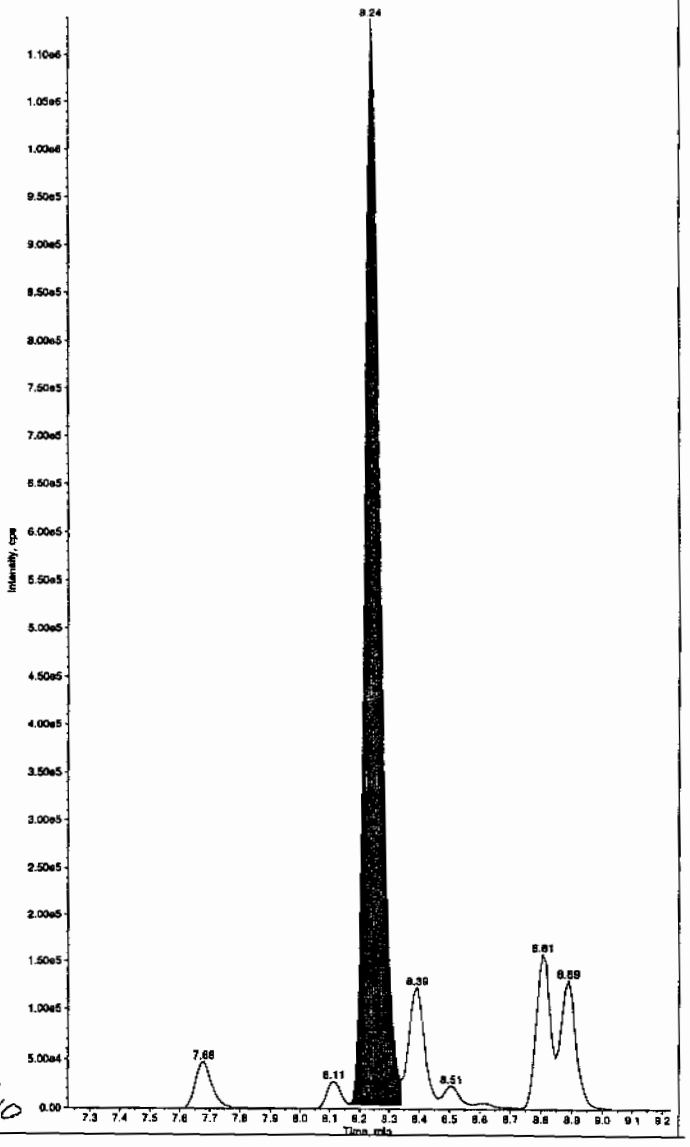


Sample Name: "1202045737" Sample ID: "954321|2|LER" File: "EXS03050017.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 513. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:18:52 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 4.18e+006 counts
Height: 1136705.200 cps
Start Time: 8.16 min
End Time: 8.34 min



Hmk 03/09/10

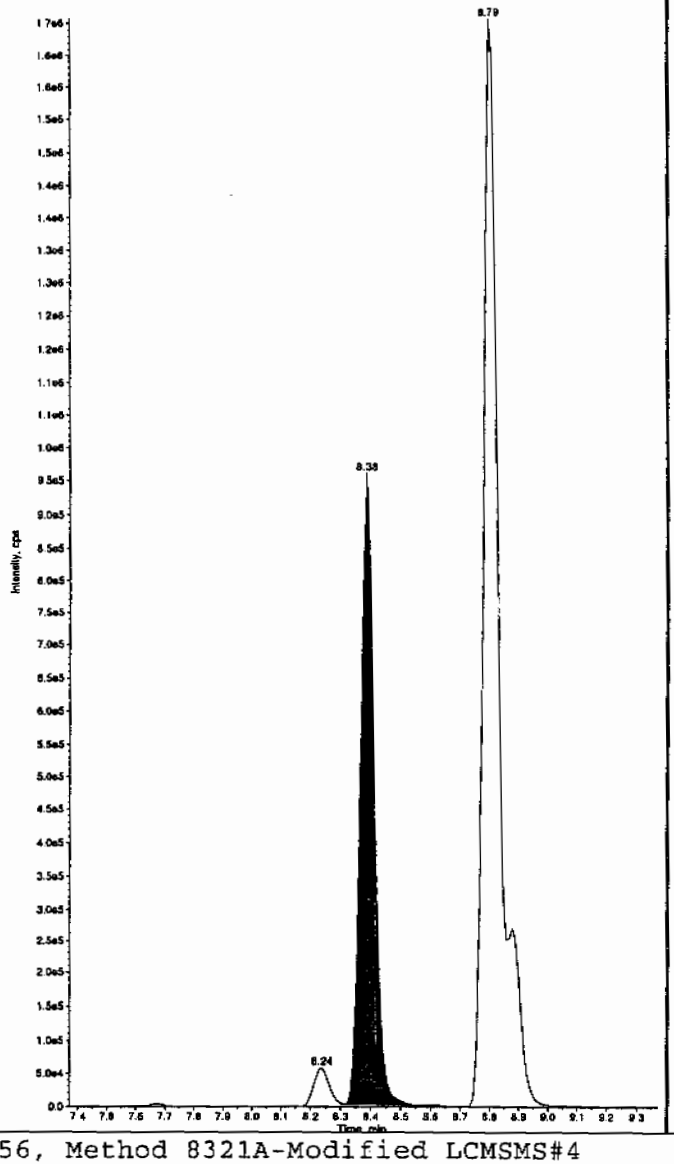
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045737" Sample ID: "954321(2)LER" File: "EXS03050017.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 253. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:18:52 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 3.16e+006 counts
Height: 959041.504 cps
Start Time: 8.31 min
End Time: 8.57 min

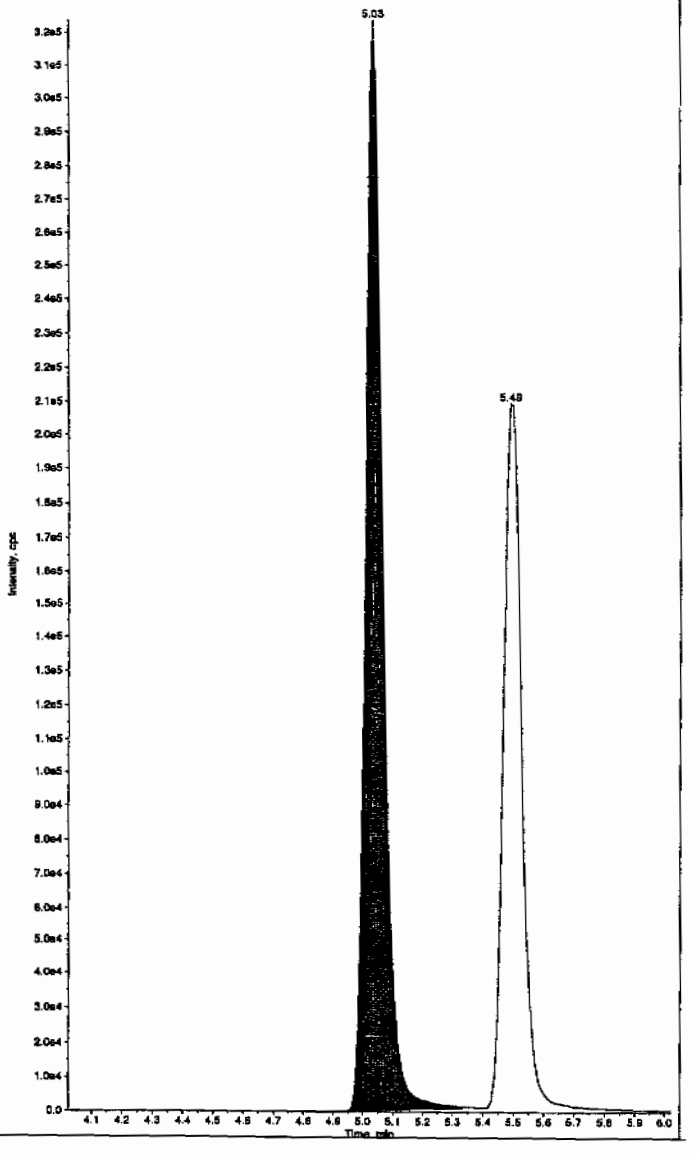


Sample Name: "1202045737" Sample ID: "954321(2)LER" File: "EXS03050017.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 506. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:18:52 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.03 min
Area: 1.34e+006 counts
Height: 323623.688 cps
Start Time: 4.94 min
End Time: 5.33 min



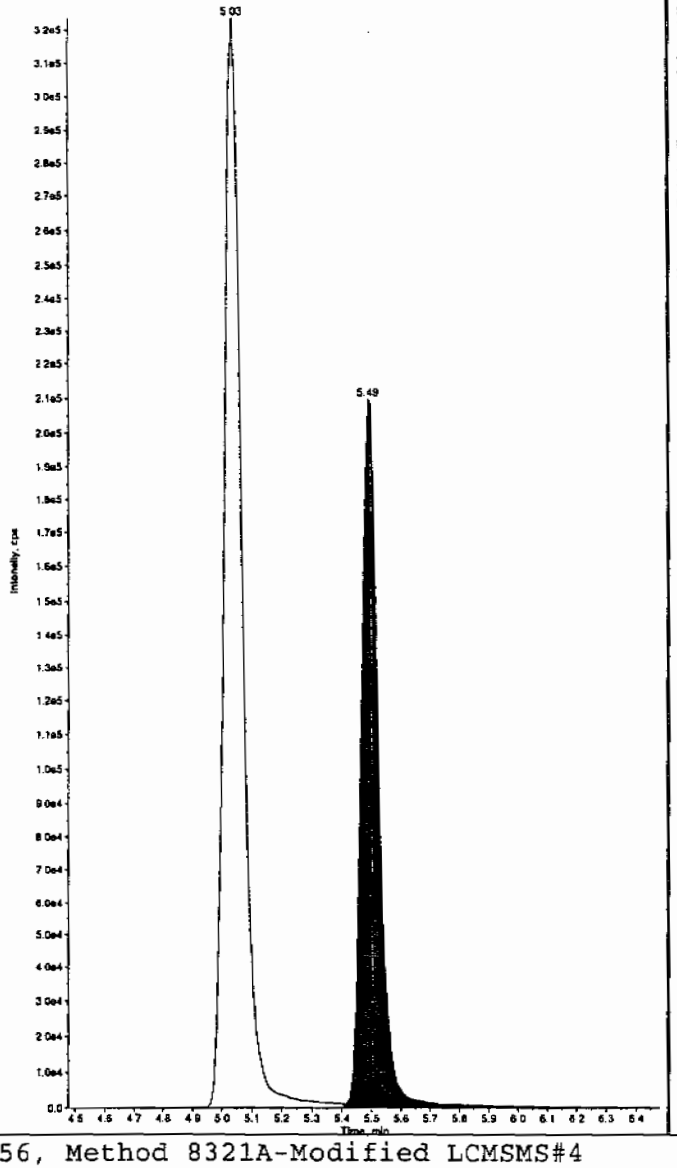
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045737" Sample ID: "954321|2|LER" File: "EXS03050017.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 485. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:18:52 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: 8.99e+005 counts
Height: 209609.268 cps
Start Time: 5.41 min
End Time: 6.17 min

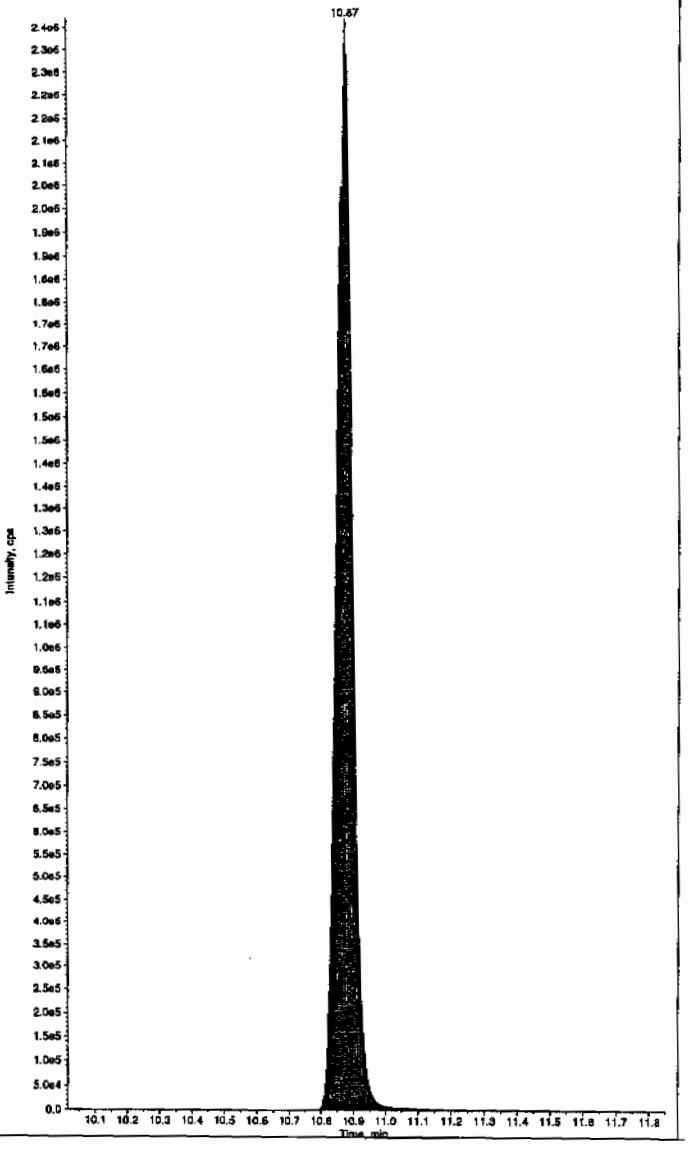


Sample Name: "1202045737" Sample ID: "954321|2|LER" File: "EXS03050017.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "369.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 501. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:18:52 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: 8.41e+006 counts
Height: 2372194.336 cps
Start Time: 10.8 min
End Time: 11.2 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

Name: C:\MASSLYNX\NEW_EXP.PRO\Data\EXP0326067a
Date: 27-Mar-2010
Time: 23:10:25
ID: 1202045738 | LANL | 954321 | Solids | 247126001 MSD | 2 |
Vial: 1:6,E

MSD 6/29/10

HMX
F2:MRM of 1 channel,AP-
176 > 102
1.190e+005
7.50

RDX
F2:MRM of 1 channel,AP-
176 > 102
1.190e+005
5.09
RDX
7.50
16976.45

135-Trinitrobenzene
F4:MRM of 1 channel,AP-
213 > 183
7.087e+004

13-Dinitrobenzene-d4
F5:MRM of 2 channels,AP-
172 > 142
2.230e+004
9.96

13-Dinitrobenzene
F5:MRM of 2 channels,AP-
168 > 138
2.705e+004

Tetryl
F6:MRM of 1 channel,AP-
241 > 181
6.041e+003

Nitrobenzene
F7:MRM of 1 channel,AP-
123 > 46
1.497e+004

4-Amino-26-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 167
3.277e+004

2-Amino-46-dinitrotoluene
F11:MRM of 2 channels,AP-
197 > 180
4.674e+004

246-Trinitrotoluene
F10:MRM of 1 channel,AP-
227 > 210
2.468e+004

34-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
9.686e+004
17.73
18.34

26-dinitrotoluene
F9:MRM of 2 channels,AP-
182 > 152
9.686e+004
14.38
18.34

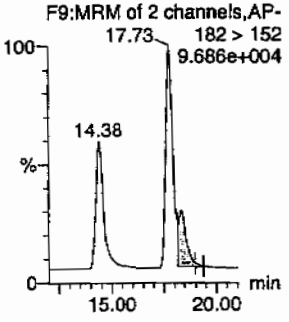
Hmm 03/30/10

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

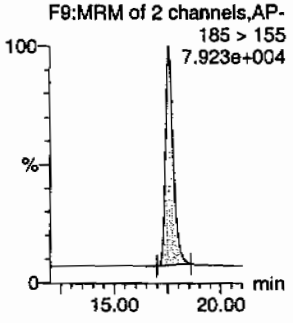
Quantify Sample Report
GEL Laboratories, LLC / Analyst : Michael A. Penny

Dataset: C:\MASSLYNX\New_Exp.PRO\032610expA1.qld, Time: Sun Mar 28 12:50:31 2010

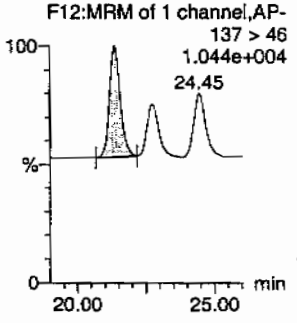
24-dinitrotoluene



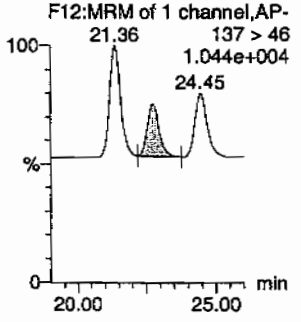
26-dinitrotoluene-d3



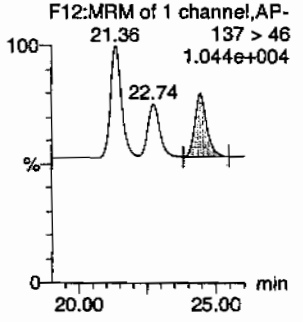
2-Nitrotoluene



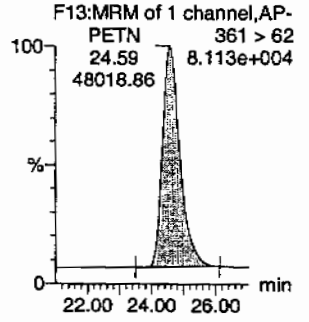
4-Nitrotoluene



3-Nitrotoluene



PETN



ID	Name	Trace	RT	Area	IS Area	Abs Resp	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N
1202045738	HMX	176 > 102	5.09	23804.631	6801.780	23804.631	1749.882	bb			429.9823	86.0	-14.0	1569.0
1202045738	RDX	176 > 102	7.50	16976.449	6801.780	16976.449	1247.942	bb			416.9753	83.4	-16.6	957.3
1202045738	135-Trinitrobenzene	213 > 183	10.12	19320.314	6801.780	19320.314	1420.240	bb			323.2911	64.7	-35.3	1930.1
1202045738	13-Dinitrobenzene-d4	172 > 142	12.04	6801.780		6801.780	6801.780	bb			555.9381	111.2	11.2	808.5
1202045738	13-Dinitrobenzene	168 > 138	12.17	8251.251	6801.780	8251.251	606.551	bb			454.9661	91.0	-9.0	1337.5
1202045738	Tetryl	241 > 181	12.63	218.172	6801.780	218.172	16.038	bb			14.3867	2.9	-97.1	10.7
1202045738	Nitrobenzene	123 > 46	13.67	3577.425	6801.780	3577.425	262.977	bb			435.7148	87.1	-12.9	427.6
1202045738	4-Amino-26-dinitrotoluene	197 > 167	15.68	11476.457	32176.066	11476.457	178.338	MM	28-Mar-10	12:42:11	493.5713	98.7	-1.3	724.3
1202045738	2-Amino-46-dinitrotoluene	197 > 180	16.55	17498.742	32176.066	17498.742	271.922	bb			502.0402	100.4	0.4	920.3
1202045738	246-Trinitrotoluene	227 > 210	15.45	9120.684	32176.066	9120.684	141.731	bb			440.0056	88.0	-12.0	578.6
1202045738	34-dinitrotoluene	182 > 152	14.38	21408.299	32176.066	21408.299	332.674	bb			314.8238	125.9	25.9	611.9
1202045738	26-dinitrotoluene	182 > 152	17.73	35325.656	32176.066	35325.656	548.943	MM	28-Mar-10	12:44:09	479.9534	96.0	-4.0	1076.5
1202045738	24-dinitrotoluene	182 > 152	18.34	10449.654	32176.066	10449.654	162.382	MM	28-Mar-10	12:49:33	548.3802	109.7	9.7	271.9
1202045738	26-dinitrotoluene-d3	185 > 155	17.57	32176.066		32176.066	32176.066	bb			438.2447	87.6	-12.4	3208.7
1202045738	2-Nitrotoluene	137 > 46	21.36	2265.485	32176.066	2265.485	35.205	bb			470.2238	94.0	-6.0	207.5
1202045738	4-Nitrotoluene	137 > 46	22.74	1131.160	32176.066	1131.160	17.578	bb			451.8119	90.4	-9.6	98.2
1202045738	3-Nitrotoluene	137 > 46	24.45	1407.952	32176.066	1407.952	21.879	bb			438.7213	87.7	-12.3	118.7
1202045738	PETN	361 > 62	24.59	48018.859	32176.066	48018.859	746.189	bb			540.0512	108.0	8.0	4253.1

GEL SOP GL-OA-E-056, Method 8321A-Modified / MM = Manual Modification

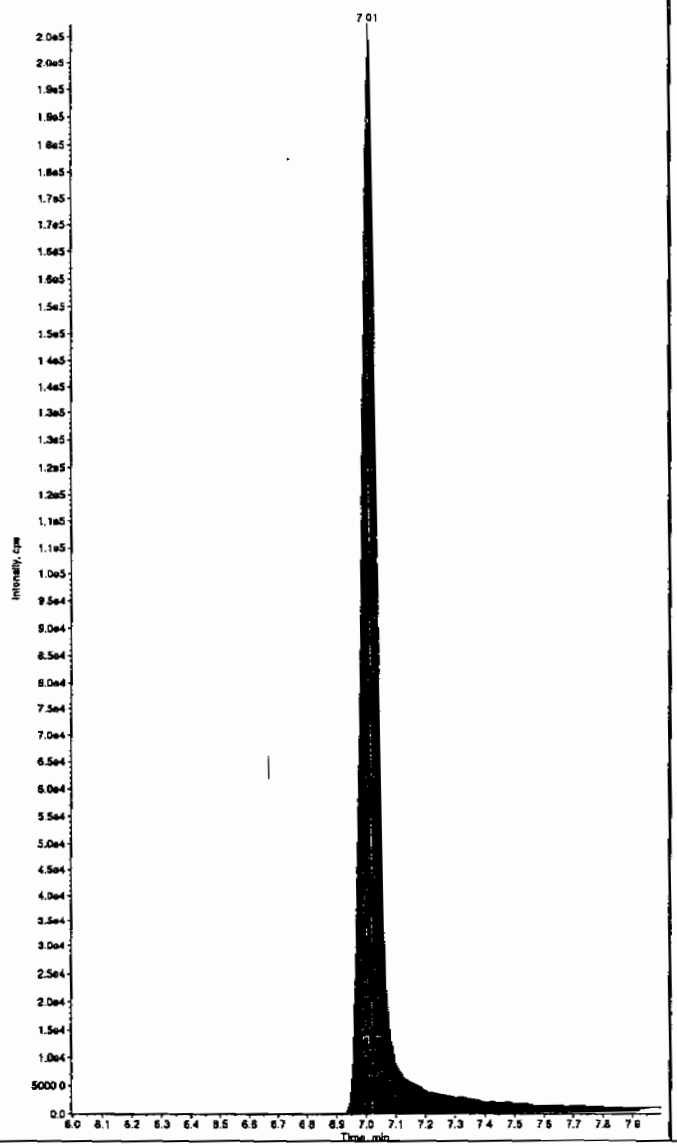
Sam 3/9/10

Sample Name: "1202045736" Sample ID: "9543212|2|LER" File: "EXS03050018.wiff"
Peak Name: "TATB" Mass(es): "257.2/204.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 601. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:34:34 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2500.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 30.0 sec
Expected RT: 7.00 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 7.01 min
Area: 8.71e+005 counts
Height: 202440.918 cps
Start Time: 6.90 min
End Time: 7.93 min

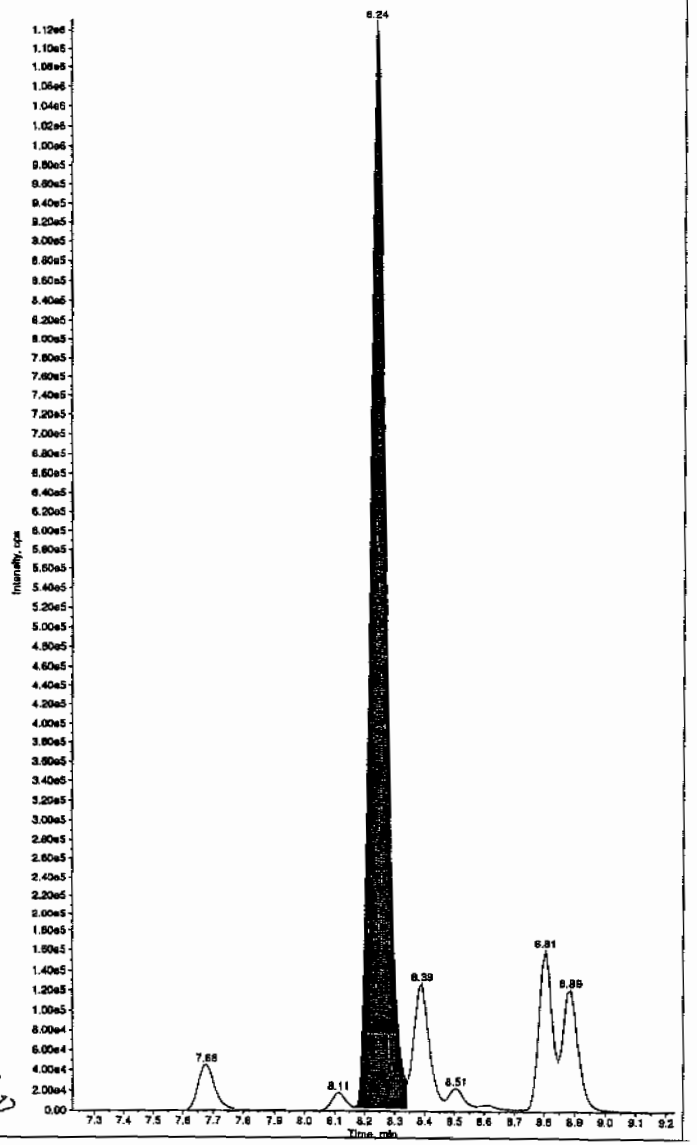


Sample Name: "1202045736" Sample ID: "9543212|2|LER" File: "EXS03050018.wiff"
Peak Name: "35-Dinitroaniline" Mass(es): "182.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 516. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:34:34 PM

Modified: No
Proc. Algorithm: IntelliQuan - IQA
Min. Peak Height: 2000.00 cps
Min. Peak Width: 0.00 sec
Smoothing Width: 3 points
RT Window: 15.0 sec
Expected RT: 8.23 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.24 min
Area: 4.21e+006 counts
Height: 1129817.139 cps
Start Time: 8.16 min
End Time: 8.34 min



Hmm 03/09/10

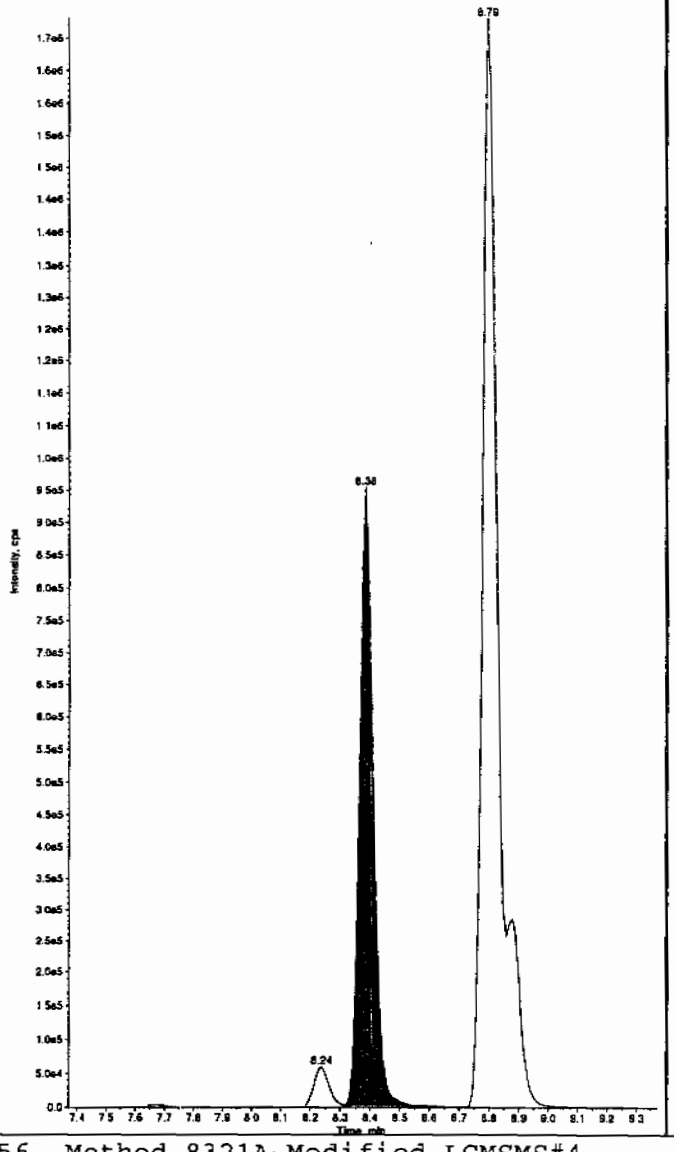
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050018.wiff"
Peak Name: "34-Dinitrotoluene" Mass(es): "182.1/151.9 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 255. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:34:34 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: 30.0 sec
Expected RT: 8.37 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 8.38 min
Area: 3.19e+006 counts
Height: 953642.700 cps
Start Time: 8.31 min
End Time: 8.56 min

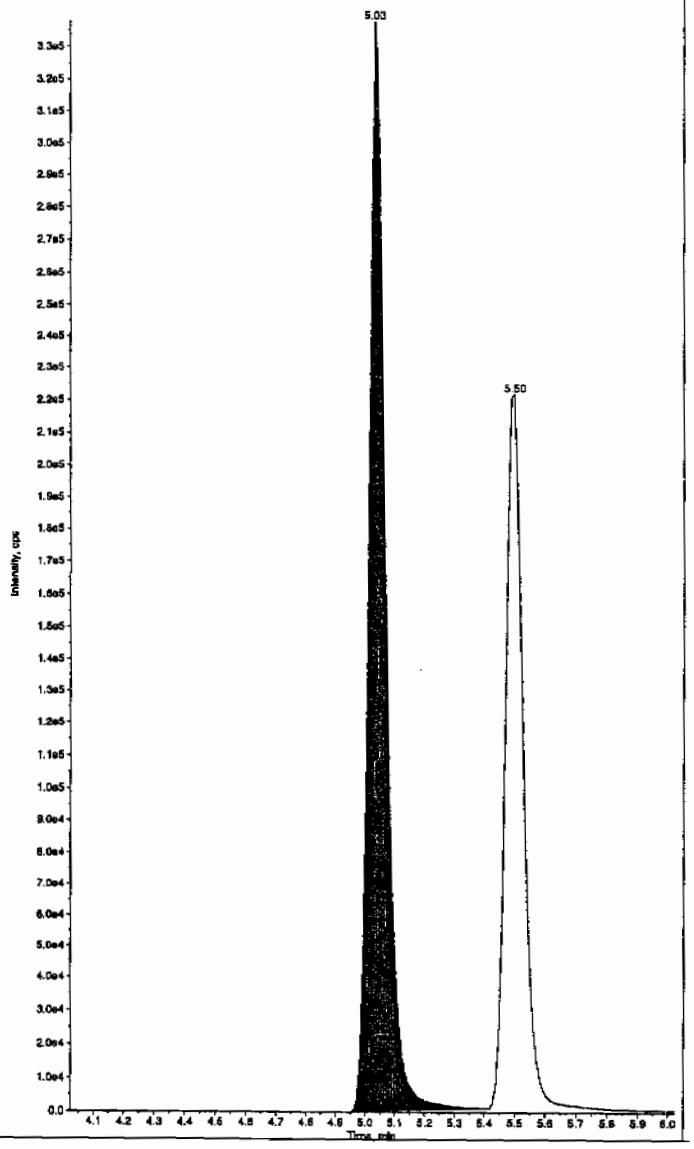


Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050018.wiff"
Peak Name: "26-Diamino-4-nitrotoluene" Mass(es): "166.0/46.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 514. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:34:34 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: 5.02 min
Use Relative RT: No

Int. Type: Valley
Retention Time: 5.03 min
Area: 1.36e+006 counts
Height: 338100.677 cps
Start Time: 4.94 min
End Time: 5.34 min



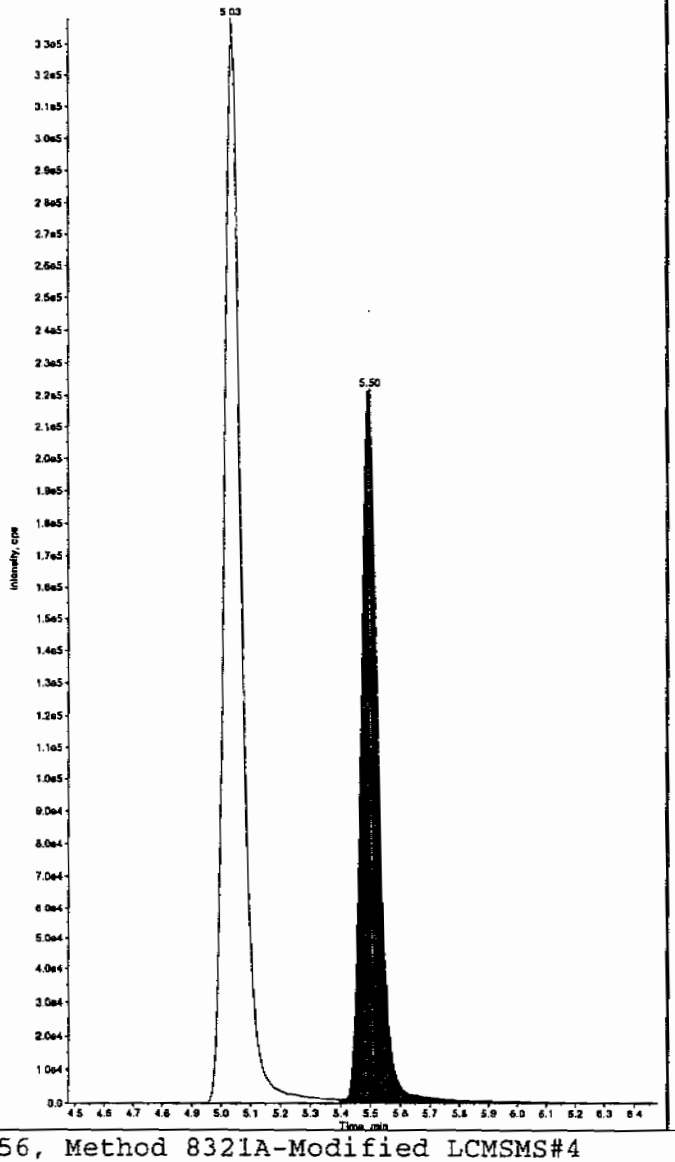
*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050018.wiff"
Peak Name: "24-Diamino-6-nitrotoluene" Mass(es): "166.0/45.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 499. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:34:34 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: 5.50 min
Area: 9.25e+005 counts
Height: 221837.662 cps
Start Time: 5.39 min
End Time: 6.19 min

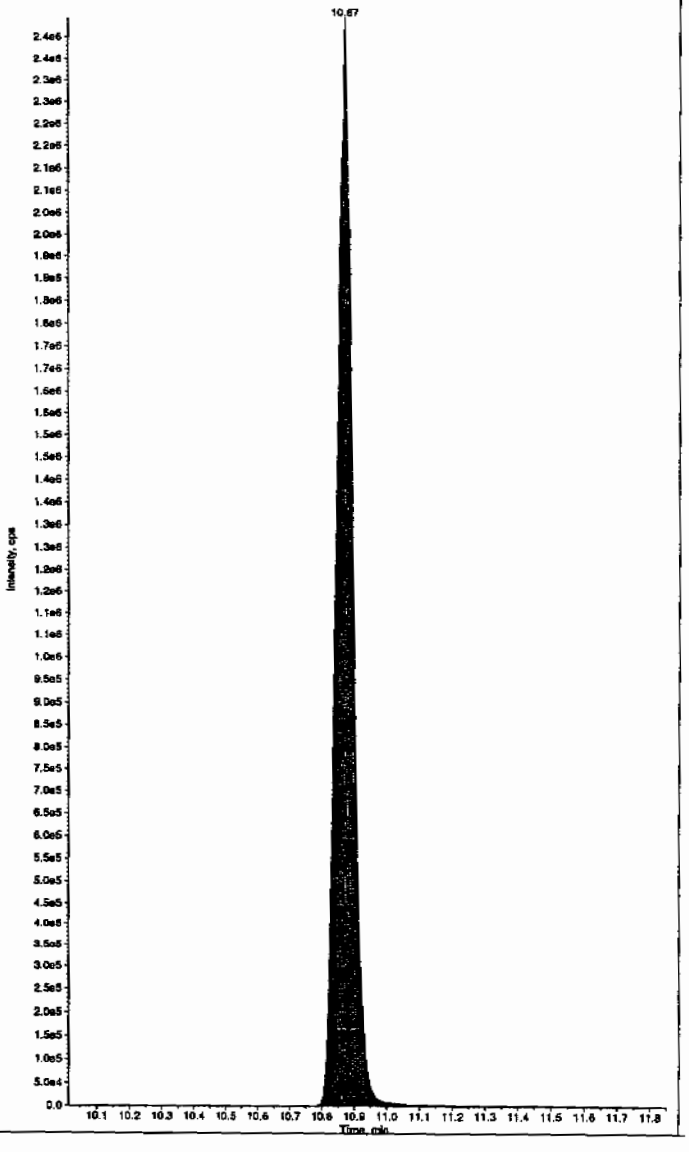


Sample Name: "1202045736" Sample ID: "954321|2|LER" File: "EXS03050018.wiff"
Peak Name: "tris(o-cresyl) phosphate" Mass(es): "368.1/91.0 amu"
Comment: "LCX83212S" Annotation: ""

Sample Index: 1
Sample Type: Unknown
Concentration: N/A
Calculated Conc: 514. ng/mL
Acq. Date: 3/5/2010
Acq. Time: 9:34:34 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: 8.61e+006 counts
Height: 2443262.451 cps
Start Time: 10.8 min
End Time: 11.2 min



*GEL SOP GL-OA-E-056, Method 8321A-Modified LCMSMS#4

GEL Laboratories LLC
Form GEL-DER

DER Report No.: 810724
Revision No.: 1

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
28-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LC-MS/MS	SW846 8321A Modified	Solid	LANL
Batch ID:	**Sample Numbers:**		
954321	See Below		

Potentially affected work order(s)(SDG): 247126(10-1849),247178(10-1861)

Application Issues:

Failed Recovery for MSD/PSD

Failed Recovery for LCS/LCSD

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. The Laboratory Control Sample (1202045736) did not meet spike recovery limits for Tetryl at 37.4% with limits of 51-112% and 2-Amino-4,6-dinitrotoluene at 136% with limits of 90-130%. 2. The Matrix Spike (1202045737) did not meet spike recovery limits for multiple analytes. Please see the Form 3 of the data package for the exact recoveries. 3. The Matrix Spike Duplicate (1202045738) did not meet spike recovery limits for Tetryl at 2.88%. The recovery limits are 36-124%.	1., 2., 3. Since the samples exceeded twice their hold time, re-extraction was not performed. The data are reported with the appropriate DER. The discrepancies are noted in the case narrative.
4. The MS/MSD pair (1202045737/8) did not meet RPD acceptance limits for Tetryl at 74.1% and PETN at 42.9%. The acceptance limits are 0-30%.	4. Since all other RPD recoveries met acceptance criteria, the noted exceptions are attributed to vagaries in the extraction process. The data are reported with the appropriate DER. The discrepancies are noted in the case narrative.

Originator's Name:
Michael Penny 29-MAR-10

Data Validator/Group Leader:
Herbert Maier 30-MAR-10

LC/MS/MS PERCHLORATE ANALYSIS

Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1861

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:	955706
Prep Batch Number:	955705

Sample Analysis

Sample ID	**Client ID**
247178001	RE15-10-7904
247178002	RE15-10-7903
247178003	RE15-10-7994
247178004	RE15-10-7997
247178005	RE15-10-7998
247178006	RE15-10-8000
247178007	RE15-10-7999
247178008	RE15-10-7995
247178009	RE15-10-7996
247178010	RE15-10-7993
247178011	RE15-10-8064
1202049038	Interference Check Sample (ICS)
1202049034	Method Blank (MB)
1202049035	Laboratory Control Sample (LCS)
1202049036	247178002(RE15-10-7903) Matrix Spike (MS)
1202049037	247178002(RE15-10-7903) 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.

QC Sample Designation
Sample 247178002 (RE15-10-7903) 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
Sample 247178011 (RE15-10-8064) required re-analysis due to bracketing CCV failure. The sample was re-analyzed and passed acceptance criteria. The re-analysis is reported.

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 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: Herbert N Maier **Date:** 03/12/10

SAMPLE DATA SUMMARY

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7904

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178001

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	05-MAR-10 15:51	per0305020a
	Perchlorate Isotope Ratio						1	05-MAR-10 15:51	per0305020a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	05-MAR-10 15:51	per0305020a
	Perchlorate-O(18)			5.34	ug/kg		1	05-MAR-10 15:51	per0305020a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7903

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178002

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	05-MAR-10 16:01	per0305021a
	Perchlorate Isotope Ratio						1	05-MAR-10 16:01	per0305021a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	05-MAR-10 16:01	per0305021a
	Perchlorate-O(18)			5.83	ug/kg		1	05-MAR-10 16:01	per0305021a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7994

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178003

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	05-MAR-10 17:02	per0305027a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:02	per0305027a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	05-MAR-10 17:02	per0305027a
	Perchlorate-O(18)			5.29	ug/kg		1	05-MAR-10 17:02	per0305027a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7997

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178004

Date Filtered: 01-MAR-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	.649	2.6	0.649	ug/kg	U	1	05-MAR-10 17:12	per0305028a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:12	per0305028a
14797-73-0	Perchlorate-101	.649	2.6	0.649	ug/kg	U	1	05-MAR-10 17:12	per0305028a
	Perchlorate-O(18)			6.37	ug/kg		1	05-MAR-10 17:12	per0305028a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7998

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178005

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.58	2.32	0.580	ug/kg	U	1	05-MAR-10 17:22	per0305029a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:22	per0305029a
14797-73-0	Perchlorate-101	.58	2.32	0.580	ug/kg	U	1	05-MAR-10 17:22	per0305029a
	Perchlorate-O(18)			5.78	ug/kg		1	05-MAR-10 17:22	per0305029a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8000

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178006

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.57	2.28	0.589	ug/kg	J	1	05-MAR-10 17:32	per0305030a
	Perchlorate Isotope Ratio			3			1	05-MAR-10 17:32	per0305030a
14797-73-0	Perchlorate-101	.57	2.28	0.639	ug/kg	J	1	05-MAR-10 17:32	per0305030a
	Perchlorate-O(18)			5.43	ug/kg		1	05-MAR-10 17:32	per0305030a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7999

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178007

Date Filtered: 01-MAR-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	.607	2.43	0.607	ug/kg	U	1	05-MAR-10 17:42	per0305031a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:42	per0305031a
14797-73-0	Perchlorate-101	.607	2.43	0.607	ug/kg	U	1	05-MAR-10 17:42	per0305031a
	Perchlorate-O(18)			5.67	ug/kg		1	05-MAR-10 17:42	per0305031a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7995

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178008

Date Filtered: 01-MAR-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	.674	2.69	0.674	ug/kg	U	1	05-MAR-10 17:52	per0305032a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:52	per0305032a
14797-73-0	Perchlorate-101	.674	2.69	0.674	ug/kg	U	1	05-MAR-10 17:52	per0305032a
	Perchlorate-O(18)			6.35	ug/kg		1	05-MAR-10 17:52	per0305032a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7996

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178009

Date Filtered: 01-MAR-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	.591	2.36	0.591	ug/kg	U	1	05-MAR-10 18:02	per0305033a
	Perchlorate Isotope Ratio						1	05-MAR-10 18:02	per0305033a
14797-73-0	Perchlorate-101	.591	2.36	0.602	ug/kg	J	1	05-MAR-10 18:02	per0305033a
	Perchlorate-O(18)			5.54	ug/kg		1	05-MAR-10 18:02	per0305033a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7993

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178010

Date Filtered: 01-MAR-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	.624	2.49	0.624	ug/kg	U	1	05-MAR-10 18:12	per0305034a
	Perchlorate Isotope Ratio						1	05-MAR-10 18:12	per0305034a
14797-73-0	Perchlorate-101	.624	2.49	0.624	ug/kg	U	1	05-MAR-10 18:12	per0305034a
	Perchlorate-O(18)			5.82	ug/kg		1	05-MAR-10 18:12	per0305034a

^ 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 =

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

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8064

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178011

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 71

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.705	2.82	0.705	ug/kg	U	1	06-MAR-10 16:15	per0306012a
	Perchlorate Isotope Ratio						1	06-MAR-10 16:15	per0306012a
14797-73-0	Perchlorate-101	.705	2.82	0.705	ug/kg	U	1	06-MAR-10 16:15	per0306012a
	Perchlorate-O(18)			6.43	ug/kg		1	06-MAR-10 16:15	per0306012a

^ 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 =

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

QUALITY CONTROL SUMMARY

Form 5

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1861

Extract Batch Code: 955705

Date Filtered: 01-MAR-10

Matrix: SOIL

Sample ID: 1202049035

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.09	ug/kg	105		70 – 130
Perchlorate Isotope Ratio		3.14				–
Perchlorate-101	2.00	2.17	ug/kg	109		70 – 130
Perchlorate-O(18)		4.94	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.

Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10–1861

Extract Batch Code: 955705

Date Filtered: 01–MAR–10

Matrix: SOIL

Sample ID: 1202049038

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.2	ug/kg	110		70 – 130
Perchlorate Isotope Ratio		3.06				
Perchlorate–101	2.00	2.34	ug/kg	117		70 – 130
Perchlorate–O(18)		5.18	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: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

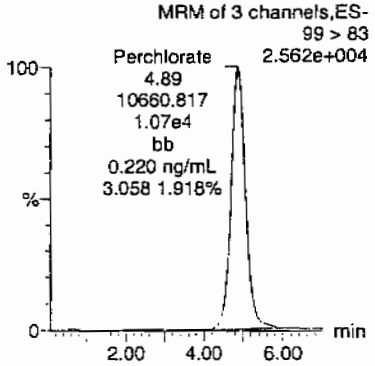
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305014a
Date: 05-Mar-2010
Time: 14:51:19
ID: 1202049038
Vial: 1:3,C

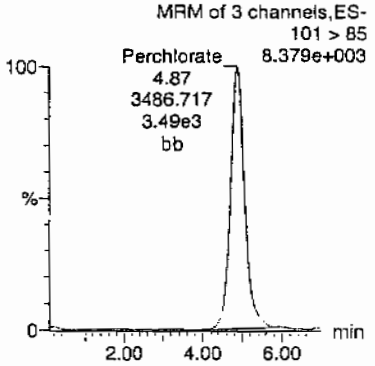
| LZNL | 955706 | 50620 | ICS | 11

WW 03/06/10

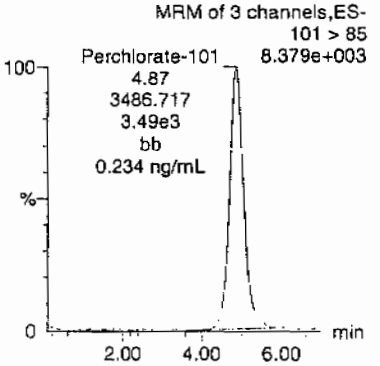
Perchlorate



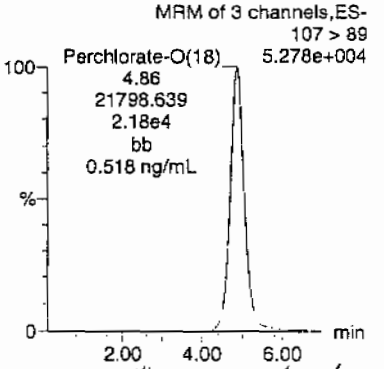
Perchlorate



Perchlorate-101



Perchlorate-O(18)



MM 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049038	Perchlorate	99 > 83	4.89	10660.817	10660.817	bb			0.2199	109.93	9.93	1776.3...	3.06
1202049038	Perchlorate-101	101 > 85	4.87	3486.717	3486.717	bb			0.2343	117.15	17.15	361.201	
1202049038	Perchlorate-O(18)	107 > 89	4.86	21798.639	21798.639	bb			0.5183	103.66	3.66	5505.6...	

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10–1861

Extract Batch Code: 955705

Date Extracted: 01–MAR–10

GEL MS/PS ID: 1202049036

Client ID: RE15–10–7903

GEL MSD/PSD ID: 1202049037

QC Type: MS

Compound^	Spike Added	Sample Conc	Units	MS Conc	MS Rec #	MSD Conc	MSD Rec #	RPD #	RPD Limit	Recovery Limit
Perchlorate	2.48	0.156	ug/kg	2.65	100	2.61	99	1.33	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.04		3.09		0		–
Perchlorate–101	2.48	0.161	ug/kg	2.84	108	2.76	105	2.89	30	75 – 125
Perchlorate–O(18)	0	5.83	ug/kg	5.76		5.73		.514		–

^ 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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1861

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	05–MAR–10	per0305001a	IPB001
Perchlorate–101	0.00	0	NA	05–MAR–10	per0305001a	IPB001
Perchlorate	0.00	0	NA	05–MAR–10	per0305002a	IPB001
Perchlorate–101	0.00	0	NA	05–MAR–10	per0305002a	IPB001
Perchlorate	0.00	0	NA	06–MAR–10	per0306001a	IPB001
Perchlorate–101	0.00	0	NA	06–MAR–10	per0306001a	IPB001
Perchlorate	0.00	0	NA	06–MAR–10	per0306002a	IPB001
Perchlorate–101	0.00	0	NA	06–MAR–10	per0306002a	IPB001

ıantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

.st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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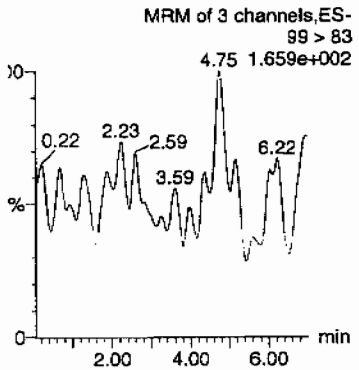
ılibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

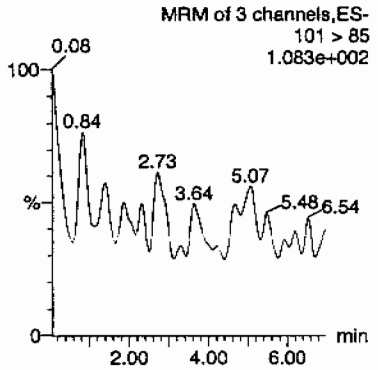
ıme: per0305001a
ıte: 05-Mar-2010
me: 12:39:45
: IPB001
al: 1:1,A

03-06-10

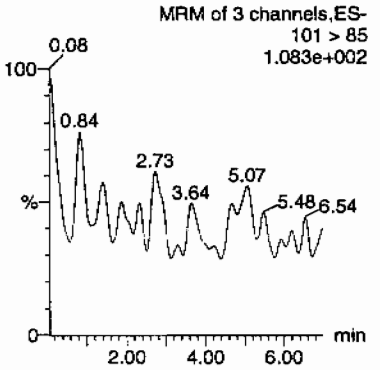
erchlorate



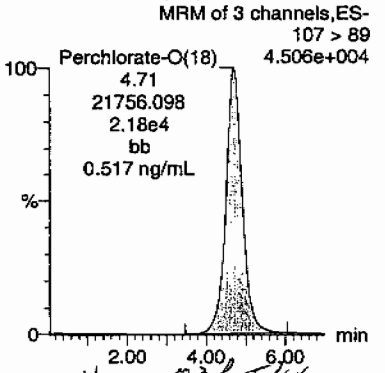
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HJM 03/08/10

	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	4.71	21756.098	21756.098	bb			0.5173	103.45	3.45	1433.3...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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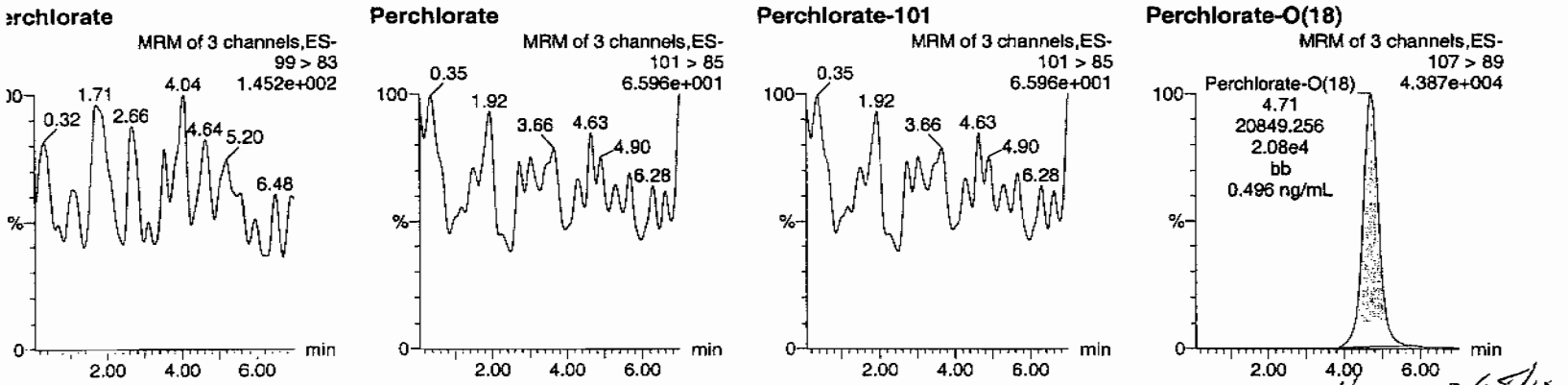
CWD
03-06-10



HAM 03/08/10

	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	4.71	20849.256	20849.256	bb			0.4957	99.14	-0.86	1295.4...	

.EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

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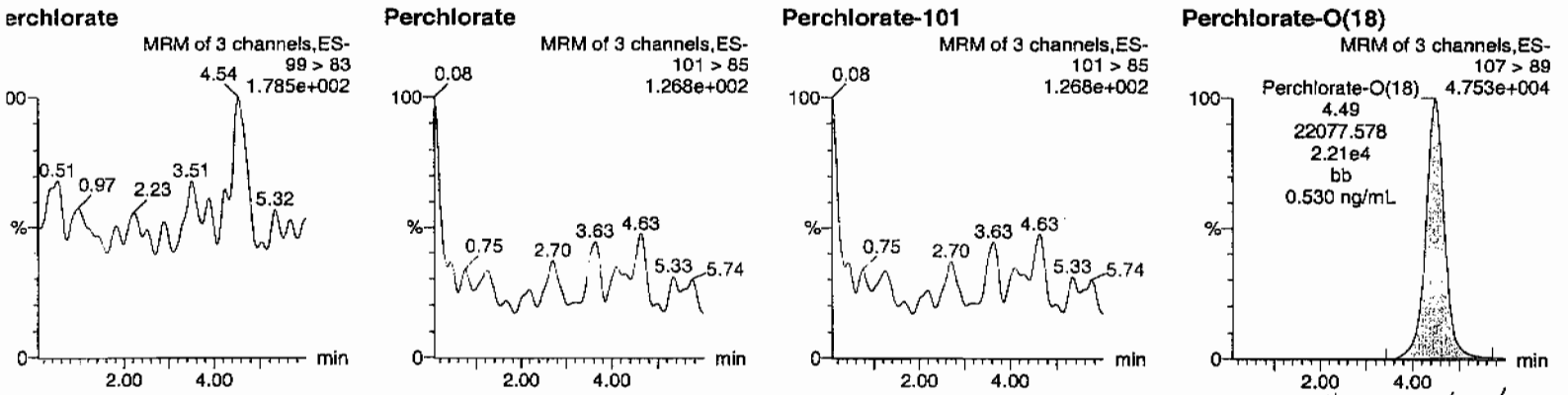
CW 03-07-10



Hum 03/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83											0.00
PB001	Perchlorate-101	101 > 85											
PB001	Perchlorate-O(18)	107 > 89	4.49	22077.578	22077.578	bb			0.5298	105.96	5.96	812.742	

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

ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

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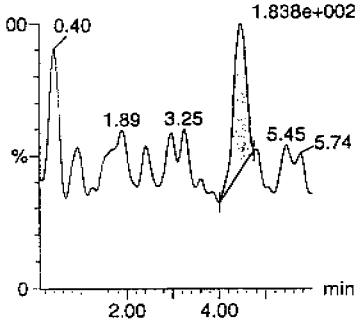
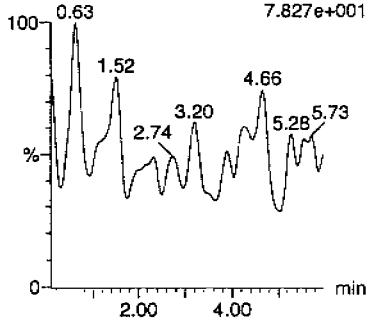
ame: per0306002a
ate: 06-Mar-2010
ime: 14:43:58
): IPB001
ial: 1:1,A

WW 03 07 10

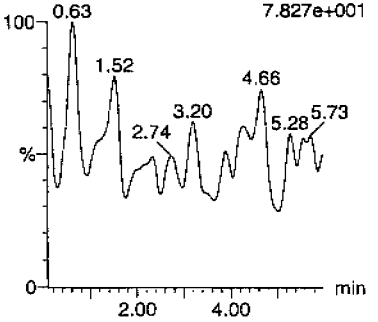
erchlorate
MRM of 3 channels,ES-
99 > 83
1.838e+002



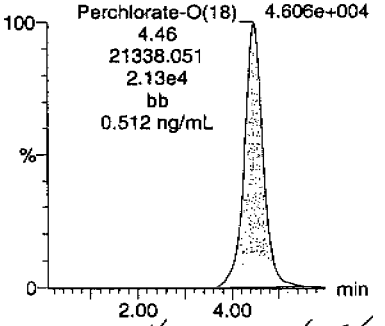
Perchlorate
MRM of 3 channels,ES-
101 > 85
7.827e+001



Perchlorate-101
MRM of 3 channels,ES-
101 > 85
7.827e+001



Perchlorate-O(18)
MRM of 3 channels,ES-
107 > 89
4.606e+004



HMM 03/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB001	Perchlorate	99 > 83	4.46	33.306	33.306	bb			0.0007			5.502	0.00
PB001	Perchlorate-101	101 > 85											
PB001	Perchlorate-O(18)	107 > 89	4.46	21338.051	21338.051	bb			0.5121	102.41	2.41	1800.9...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1861

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	05–MAR–10	per0305008a	IPB002
Perchlorate–101	0.00	0	NA	05–MAR–10	per0305008a	IPB002
Perchlorate	0.00	0	NA	05–MAR–10	per0305010a	IPB003
Perchlorate–101	0.00	0	NA	05–MAR–10	per0305010a	IPB003
Perchlorate	0.00	0	NA	05–MAR–10	per0305023a	IPB004
Perchlorate–101	0.00	0	NA	05–MAR–10	per0305023a	IPB004
Perchlorate	0.00	0	NA	05–MAR–10	per0305036a	IPB005
Perchlorate–101	0.00	0	NA	05–MAR–10	per0305036a	IPB005
Perchlorate	0.00	0	NA	06–MAR–10	per0306008a	IPB002
Perchlorate–101	0.00	0	NA	06–MAR–10	per0306008a	IPB002
Perchlorate	0.00	0	NA	06–MAR–10	per0306010a	IPB003
Perchlorate–101	0.00	0	NA	06–MAR–10	per0306010a	IPB003
Perchlorate	0.00	0	NA	06–MAR–10	per0306015a	IPB004

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1861

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate–101	0.00	0	NA	06–MAR–10	per0306015a	IPB004
Perchlorate	0.00	0	NA	06–MAR–10	per0306023a	IPB005
Perchlorate–101	0.00	0	NA	06–MAR–10	per0306023a	IPB005

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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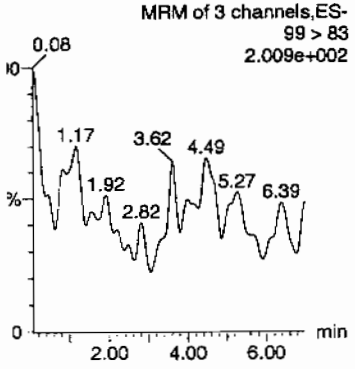
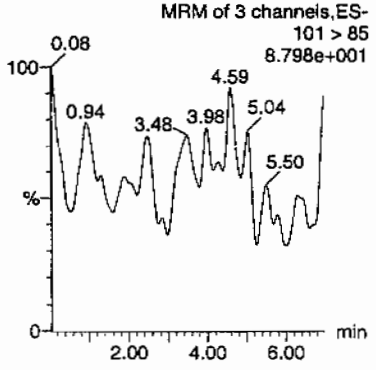
ıte: 05-Mar-2010
me: 13:50:47
: IPB002
al: 1:1,A

CWW 03-06-10

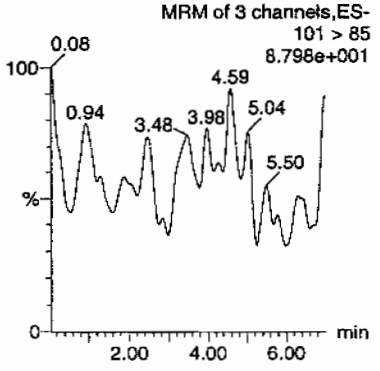
ırchlorate



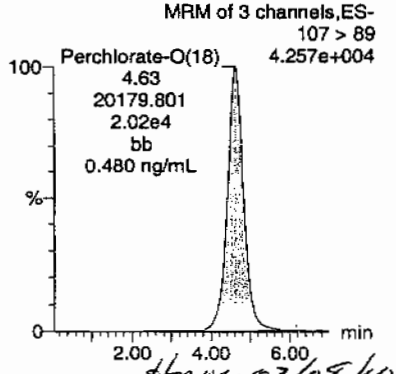
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B002	Perchlorate	99 > 83											0.00
B002	Perchlorate-101	101 > 85											
B002	Perchlorate-O(18)	107 > 89	4.63	20179.801	20179.801	bb			0.4798	95.96	-4.04	336.982	

uantify Sample Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

.st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ıme: per0305010a
ıte: 05-Mar-2010
me: 14:11:00
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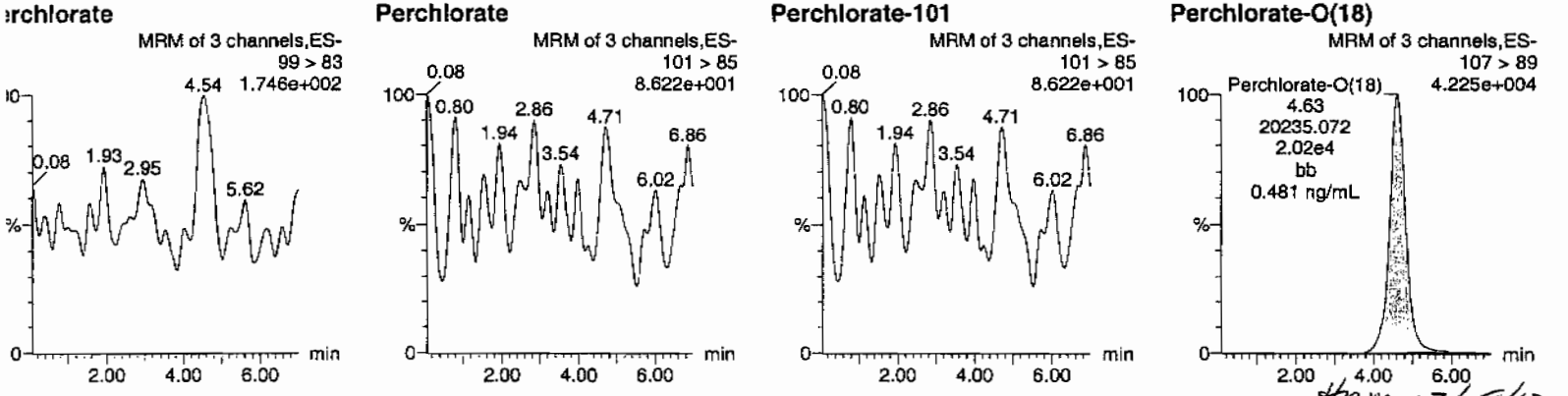
03-06-10



HM m 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B003	Perchlorate	99 > 83											0.00
B003	Perchlorate-101	101 > 85											
B003	Perchlorate-O(18)	107 > 89	4.63	20235.072	20235.072	bb			0.4811	96.22 ✓	-3.78	3040.0...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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me: 16:21:48
: IPB004
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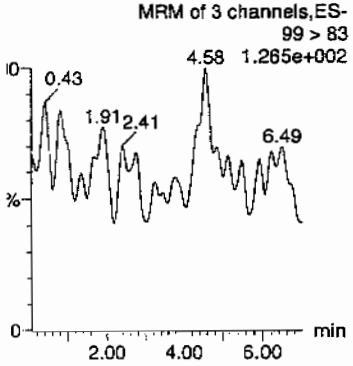
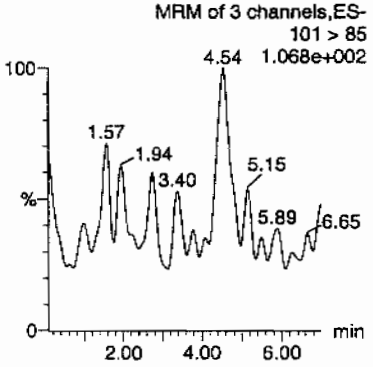
CWW
03-06-10

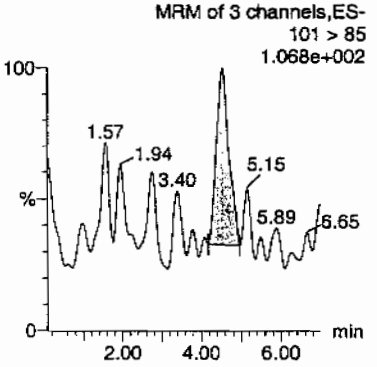
rchlorate



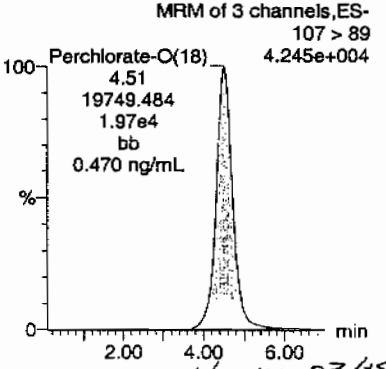
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 03/08/10

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3004	Perchlorate	99 > 83											0.00
3004	Perchlorate-101	101 > 85	4.54	26.151	26.151	bb			0.0018			21.874	
3004	Perchlorate-O(18)	107 > 89	4.51	19749.484	19749.484	bb			0.4696	93.91	-6.09	2622.5...	

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

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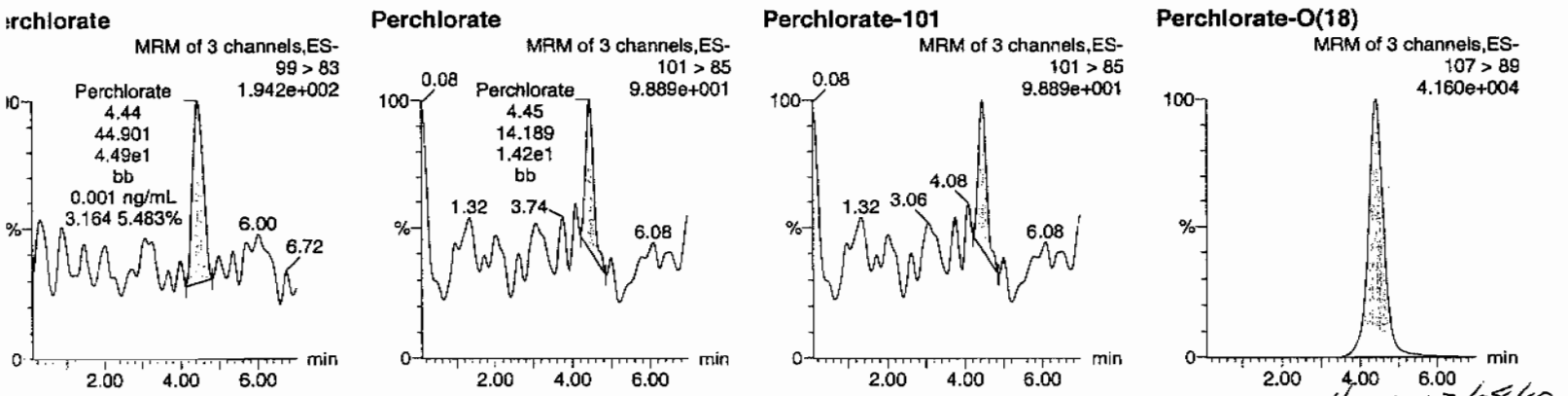
CWJ 03-06-10



HMM 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B005	Perchlorate	99 > 83	4.44	44.901	44.901	bb			0.0009			9.442	3.16
B005	Perchlorate-101	101 > 85	4.45	14.189	14.189	bb			0.0010			12.136	
B005	Perchlorate-O(18)	107 > 89	4.41	19249.852	19249.852	bb			0.4577	91.54	-8.46	3556.7...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

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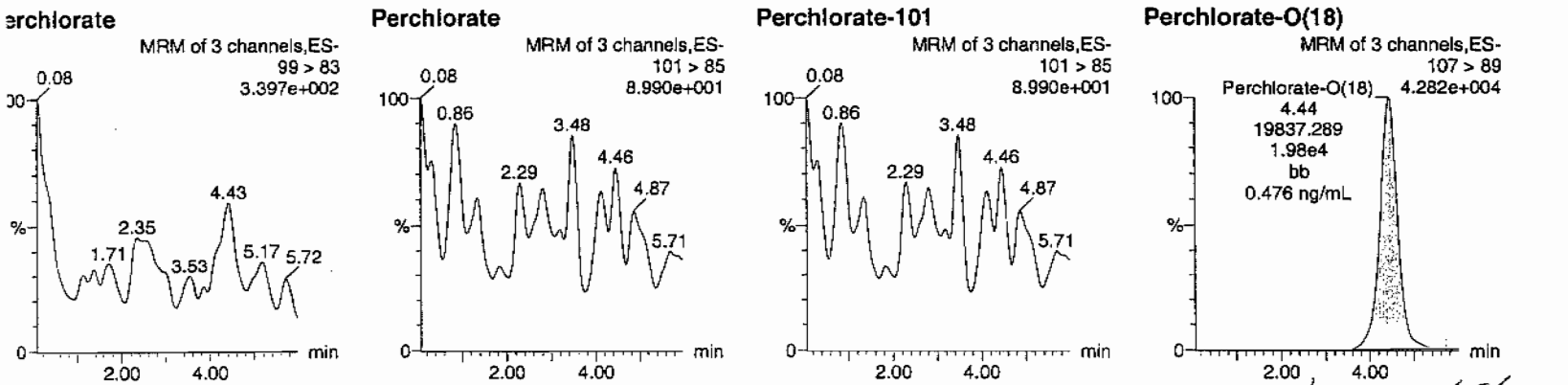

HMM 03/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
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'B002	Perchlorate-101	101 > 85											
'B002	Perchlorate-O(18)	107 > 89	4.44	19837.289	19837.289	bb			0.4761	95.21	-4.79	3506.1...	

uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

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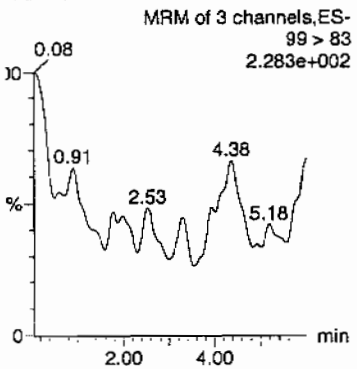
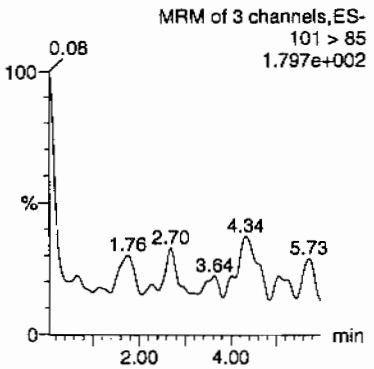
03-07-10

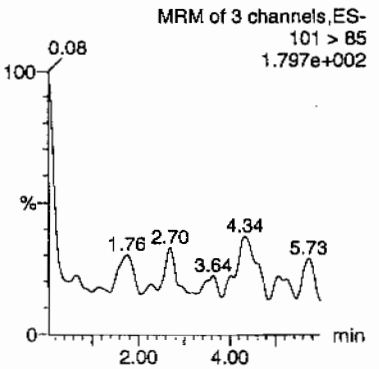
erchlorate



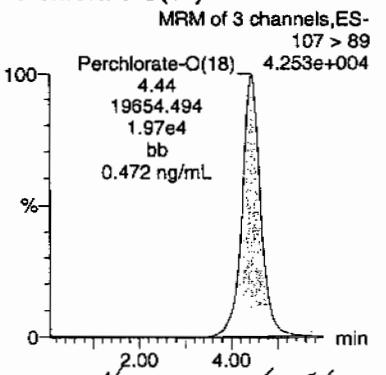
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

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'B003	Perchlorate	99 > 83											0.00
'B003	Perchlorate-101	101 > 85											
'B003	Perchlorate-O(18)	107 > 89	4.44	19654.494	19654.494	bb			0.4717	94.33	-5.67	617.145	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report MassLynx 4.0 SP4
ie GEL Group, LLC Analyst: Charlers W. Wilson

itaset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

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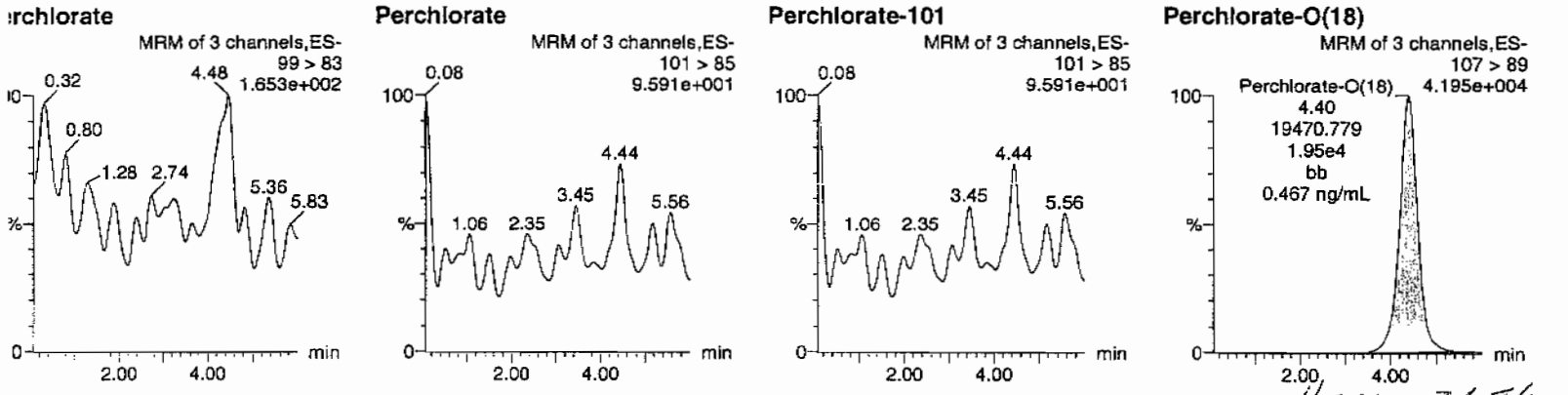
CWJ 03-07-10



HMW 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B004	Perchlorate	99 > 83											0.00
B004	Perchlorate-101	101 > 85											
B004	Perchlorate-O(18)	107 > 89	4.40	19470.779	19470.779	bb			0.4673	93.45	-6.55	1614.6...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

uantify Sample Report **MassLynx 4.0 SP4**
e GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

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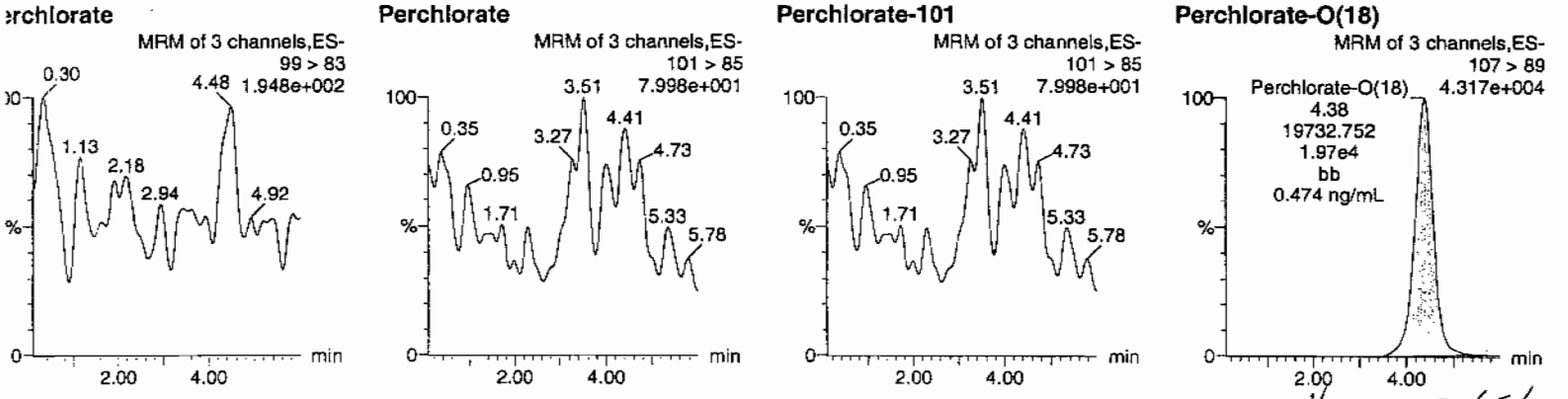
CWJ
03-07-10



Hrine 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
B005	Perchlorate	99 > 83											0.00
B005	Perchlorate-101	101 > 85											
B005	Perchlorate-O(18)	107 > 89	4.38	19732.752	19732.752	bb			0.4736	94.71	-5.29	1130.4...	

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
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Calibration Report - MS1 Static

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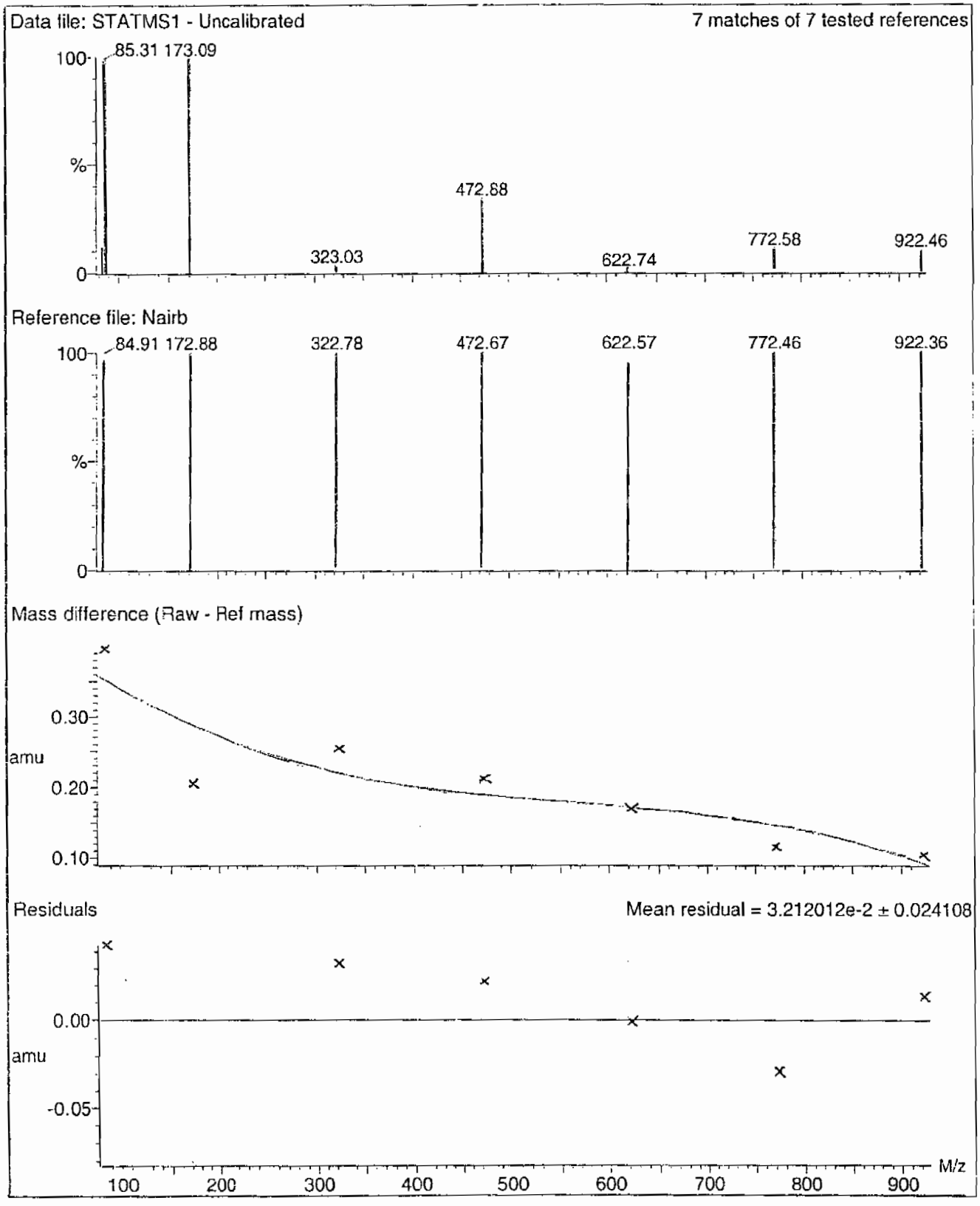
PEAKS HIGHLIGHTED BY CHAN 01-09-08



Calibration Report - MS1 Scanning

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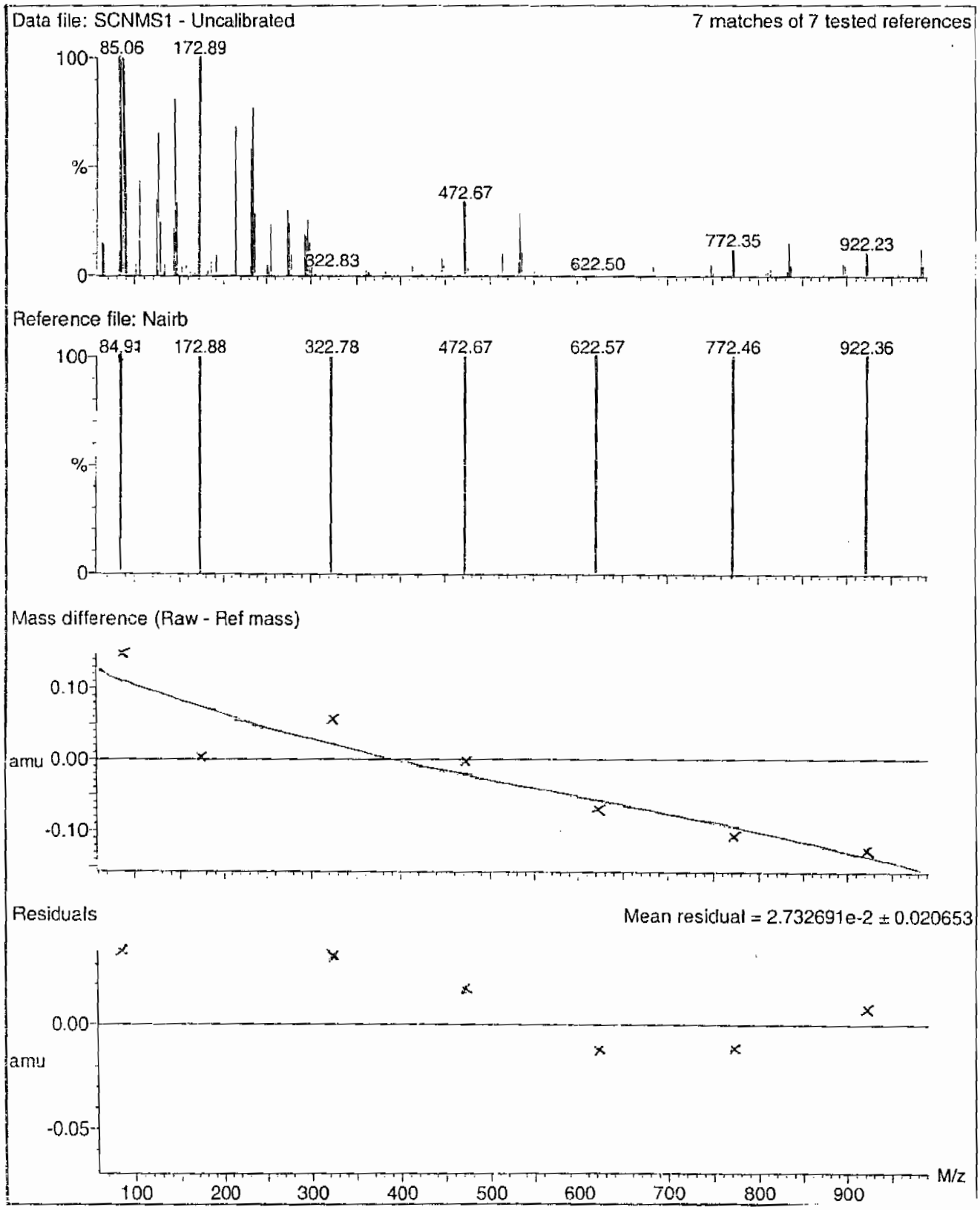

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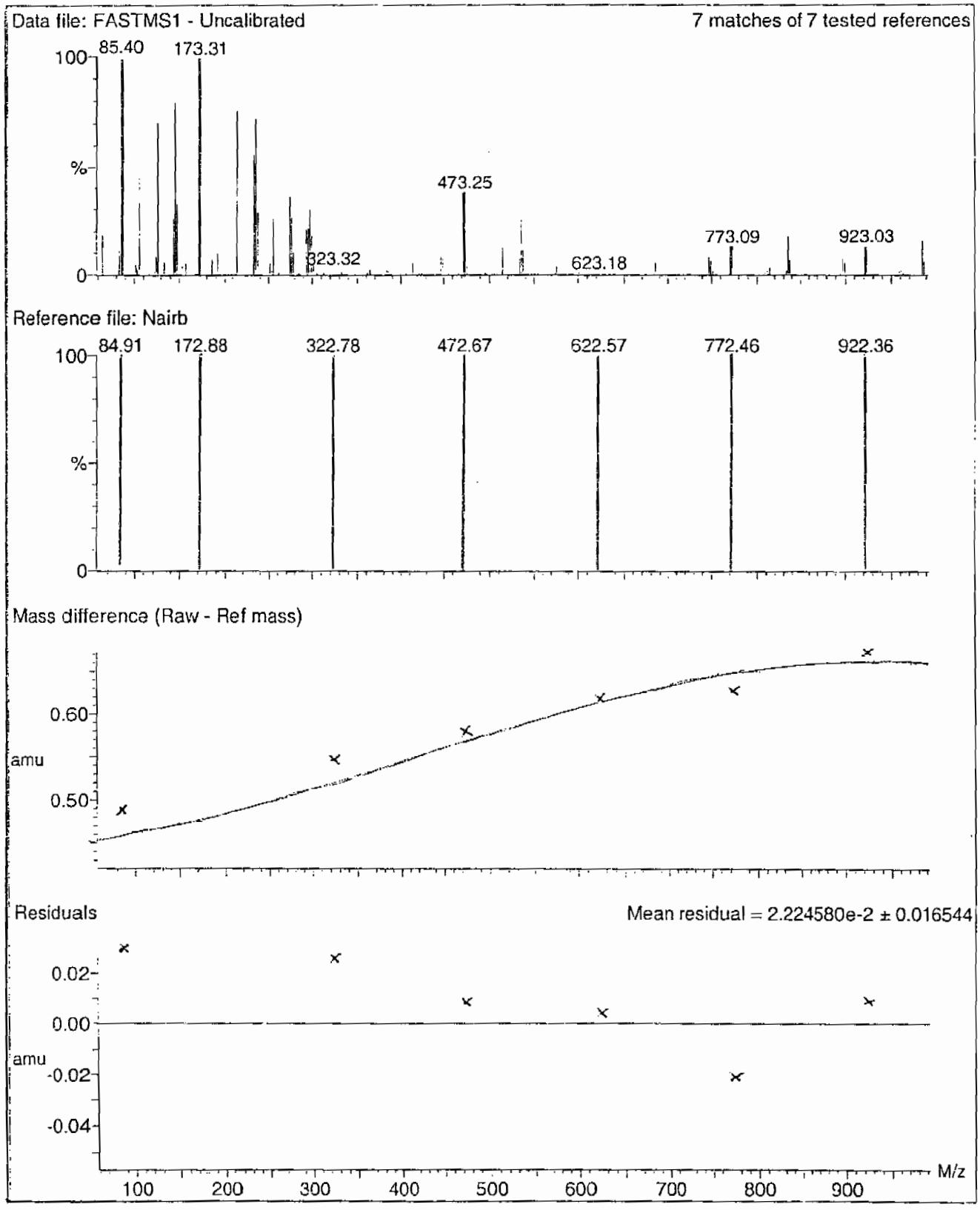

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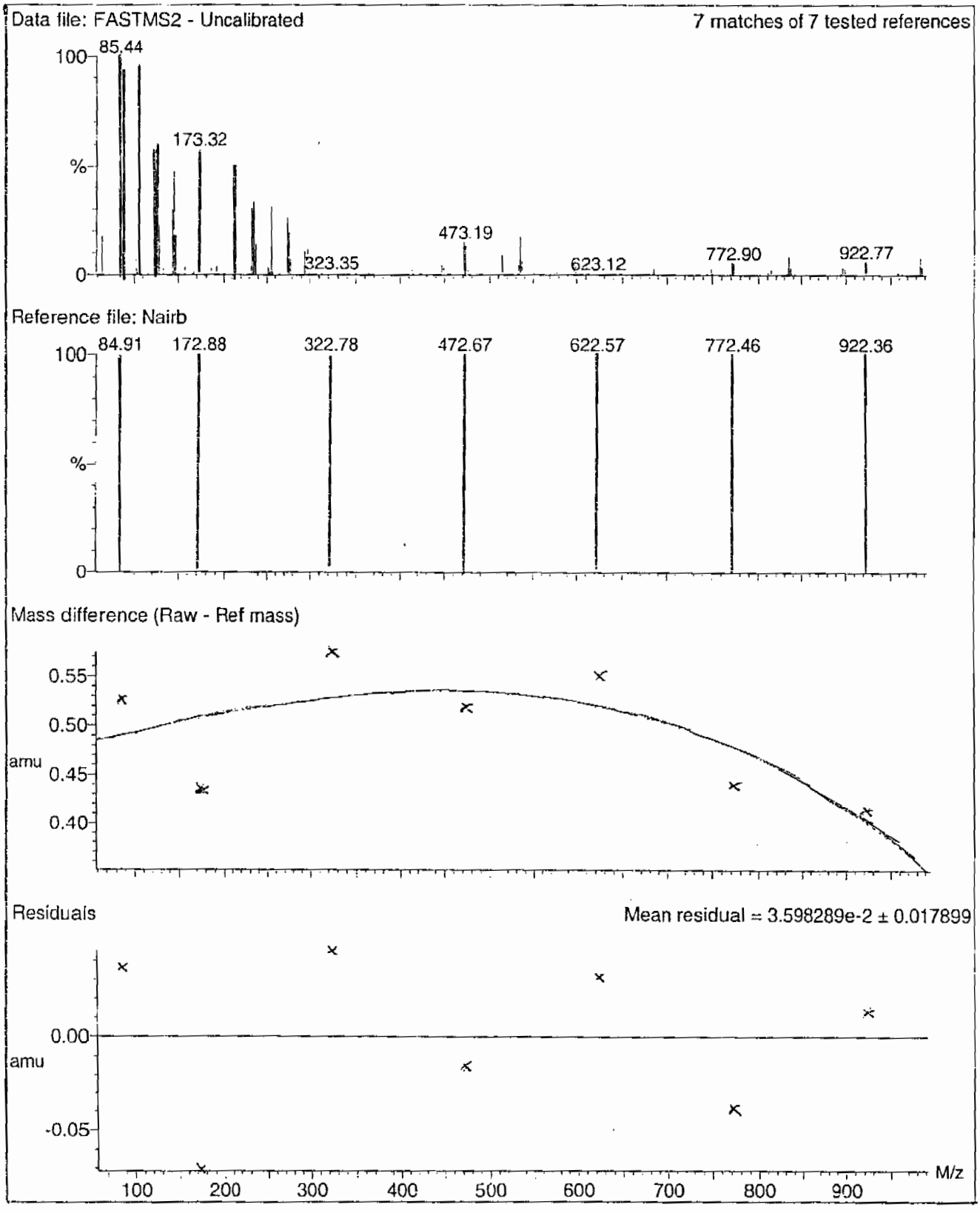

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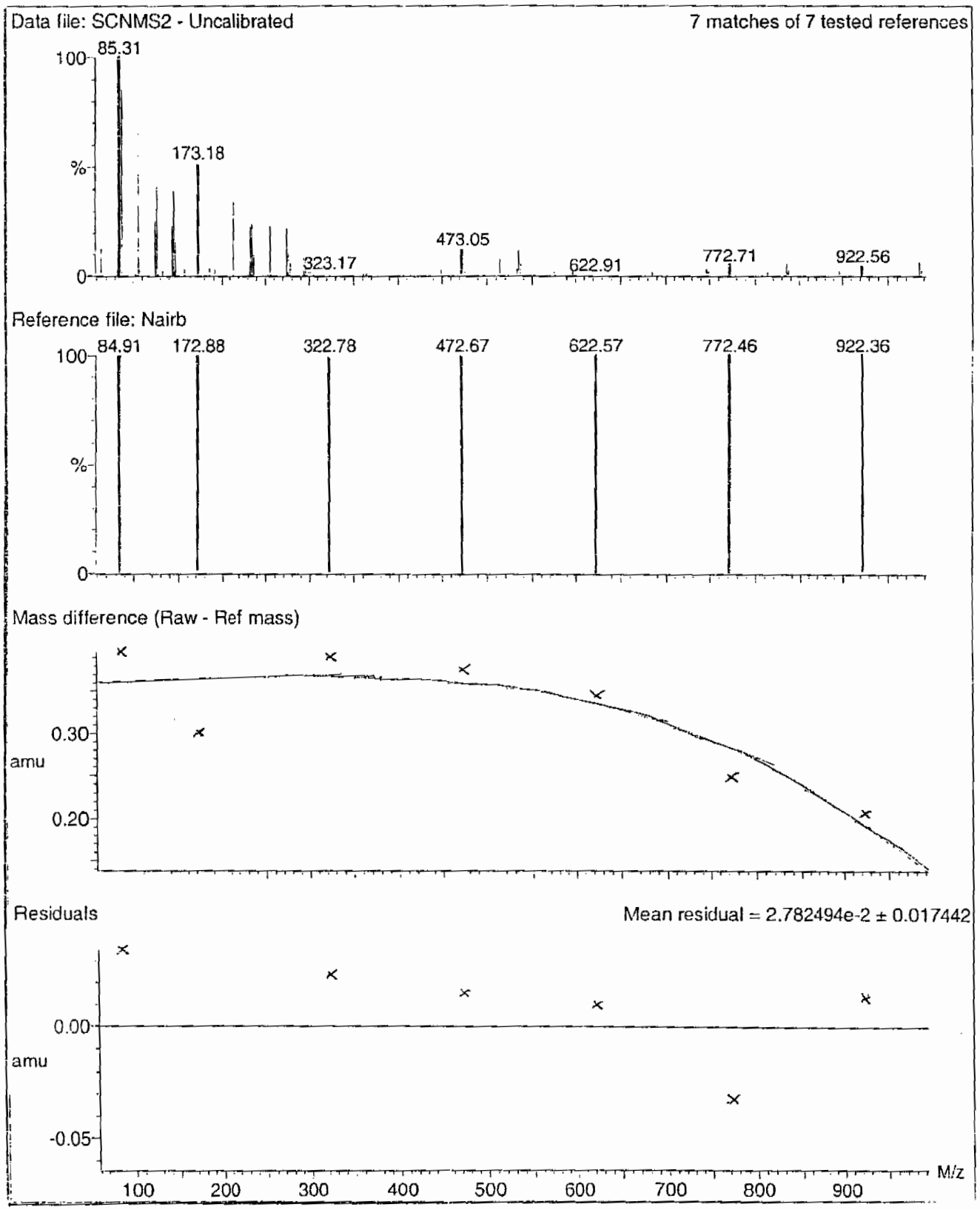

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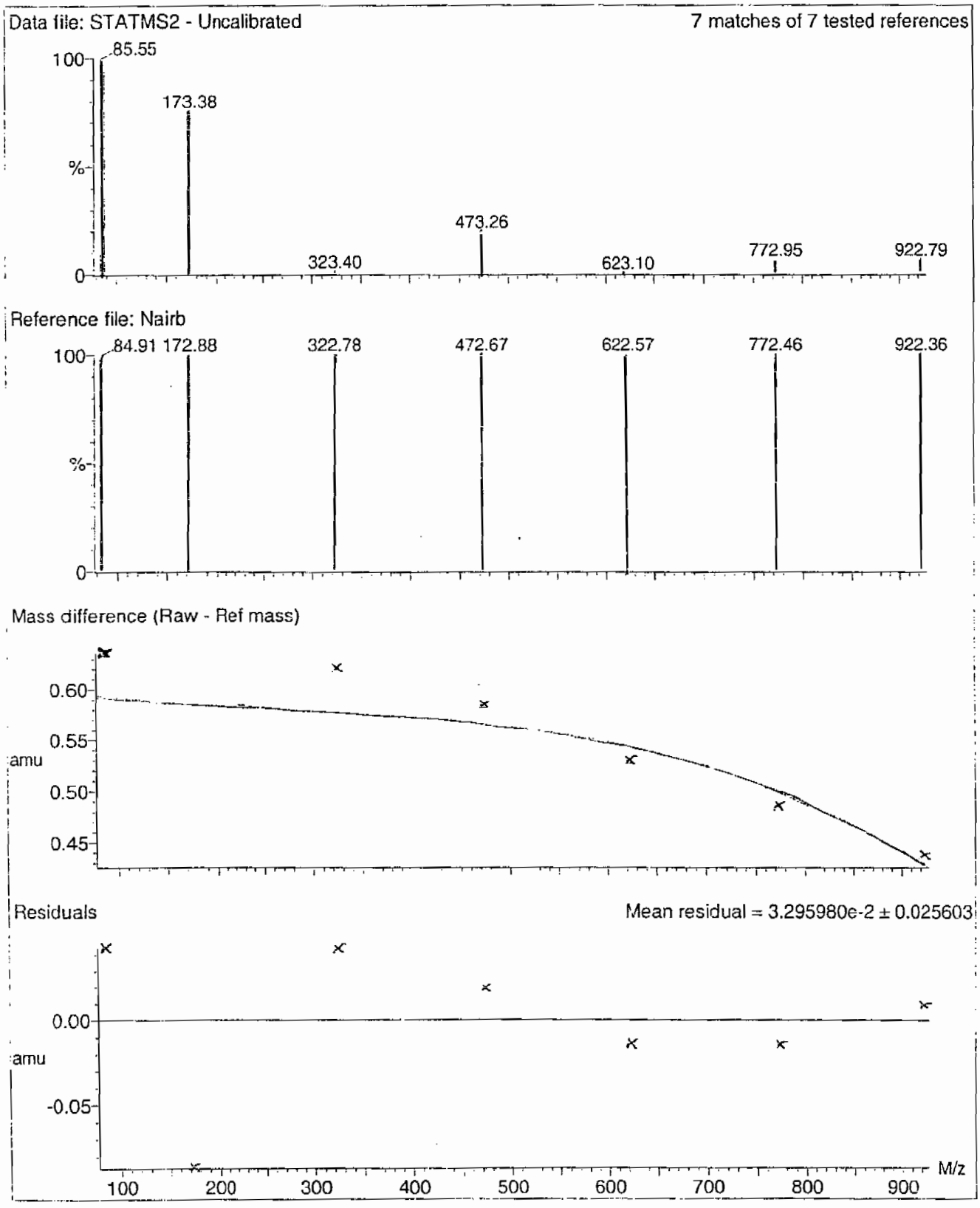

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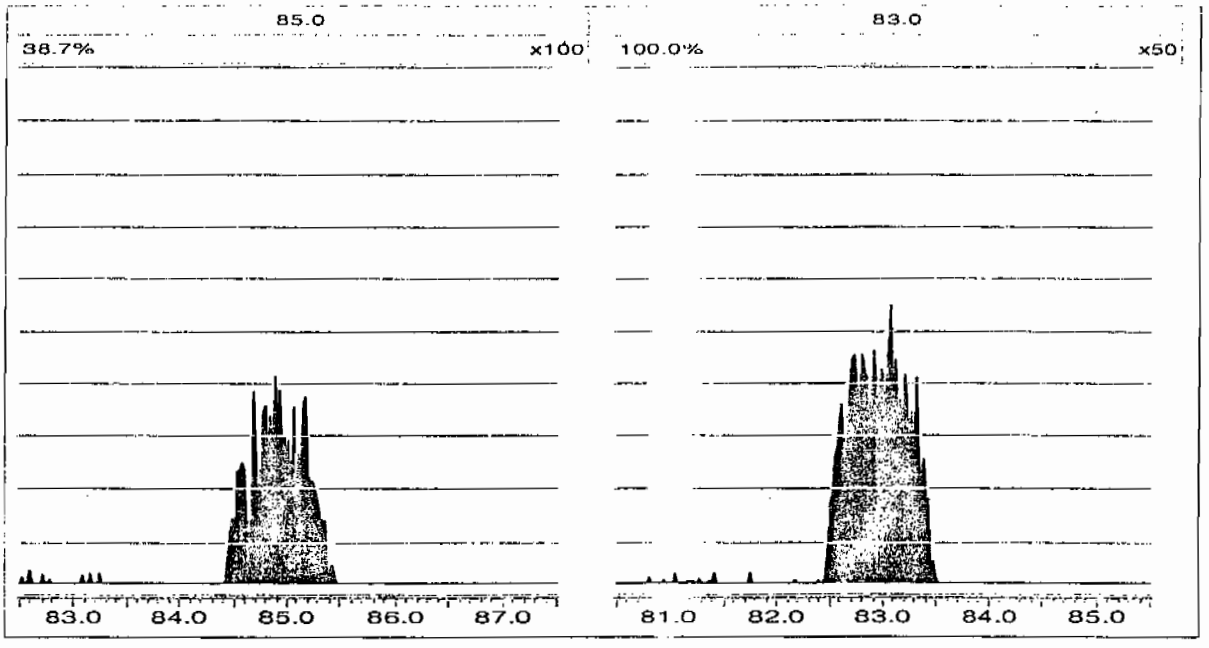

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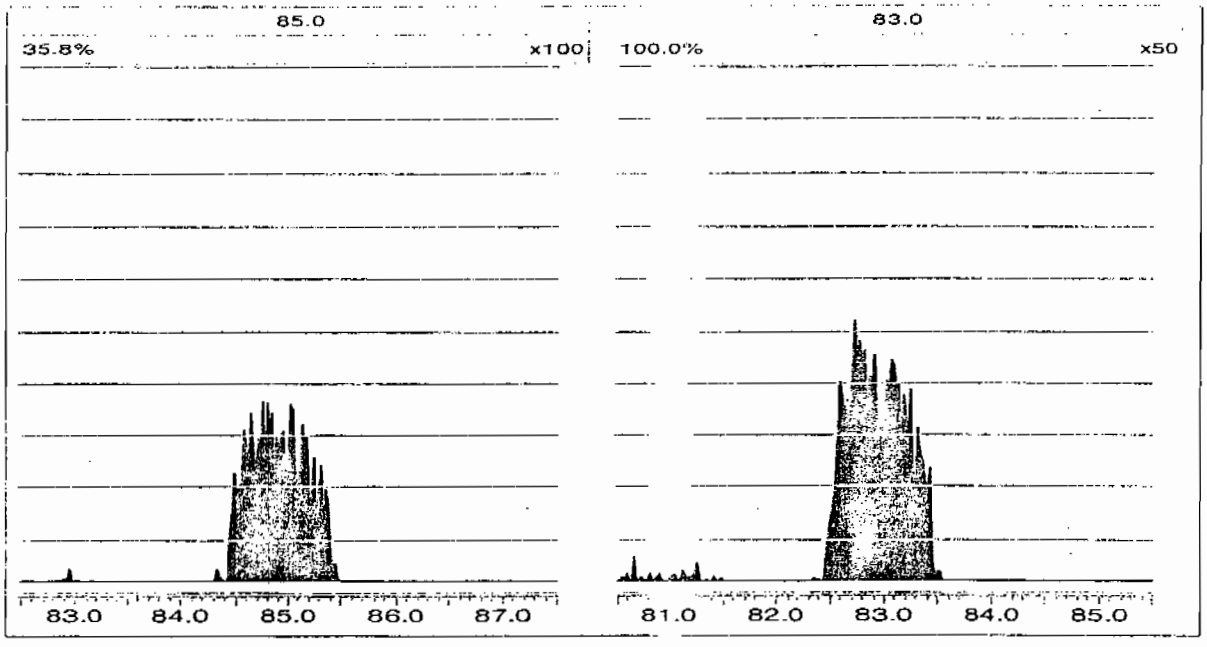

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1861

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	**per0305006a**	**05–MAR–10**	**21416.7**				
Lower Area Limit			**10708.35**				
Upper Area Limit			**42833.4**				
1202049034	per0305012a	05–MAR–10 14:31	19737.8	4.59	4.60073	1.002	
1202049035	per0305013a	05–MAR–10 14:41	20788.1	4.58	4.60077	1.005	
1202049038	per0305014a	05–MAR–10 14:51	21798.6	4.86	4.88653	1.005	
247178001	per0305020a	05–MAR–10 15:51	20114.8	4.53	4.55115	1.005	
247178002	per0305021a	05–MAR–10 16:01	19747.7	4.5	4.52628	1.006	
1202049036	per0305025a	05–MAR–10 16:42	19522.7	4.5	4.51388	1.003	
1202049037	per0305026a	05–MAR–10 16:52	19422.6	4.48	4.5014	1.005	
247178003	per0305027a	05–MAR–10 17:02	19767.1	4.46	4.48895	1.006	

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1861

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	**per0305006a**	**05–MAR–10**	**21416.7**				
Lower Area Limit			**10708.35**				
Upper Area Limit			**42833.4**				
247178004	per0305028a	05–MAR–10 17:12	20637.4	4.48	4.51393	1.008	
247178005	per0305029a	05–MAR–10 17:22	20968.4	4.46	4.48897	1.006	
247178006	per0305030a	05–MAR–10 17:32	20021	4.45	4.47663	1.006	
247178007	per0305031a	05–MAR–10 17:42	19644.4	4.43	4.47663	1.011	
247178008	per0305032a	05–MAR–10 17:52	19833	4.43	4.45167	1.005	
247178009	per0305033a	05–MAR–10 18:02	19720	4.43	4.43937	1.002	
247178010	per0305034a	05–MAR–10 18:12	19621.8	4.41	4.43937	1.007	

Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861

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	**per0306006a**	**06-MAR-10**	**20712.4**				
Lower Area Limit			**10356.2**				
Upper Area Limit			**41424.8**				
247178011	per0306012a	06-MAR-10 16:15	18998.2	4.44	4.4766	1.008	

SAMPLE DATA

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7904

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178001

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.559	2.24	0.559	ug/kg	U	1	05-MAR-10 15:51	per0305020a
	Perchlorate Isotope Ratio						1	05-MAR-10 15:51	per0305020a
14797-73-0	Perchlorate-101	.559	2.24	0.559	ug/kg	U	1	05-MAR-10 15:51	per0305020a
	Perchlorate-O(18)			5.34	ug/kg		1	05-MAR-10 15:51	per0305020a

^ 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 =

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

uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
nted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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ıte: 05-Mar-2010
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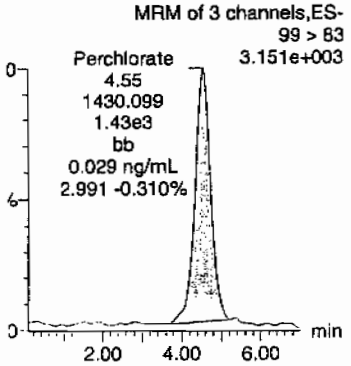
: 247178001
al: 1:4,C

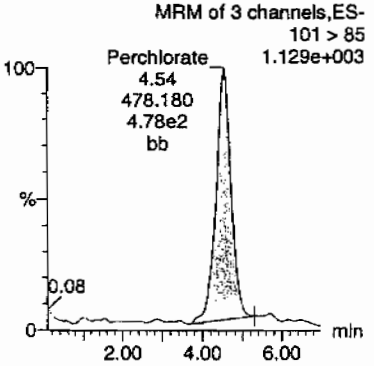
|LAW|955706|5020|1|

WJ 03-06-10

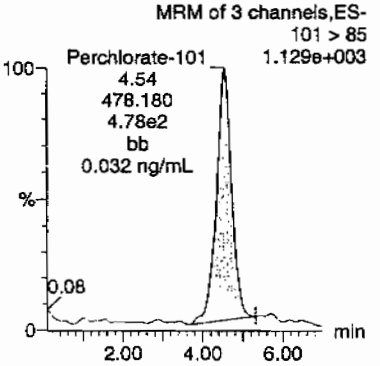
rchlorate



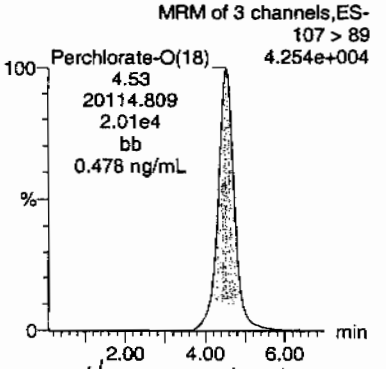
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hrm 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178001	Perchlorate	99 > 83	4.55	1430.099	1430.099	bb			0.0295			58.371	2.99
7178001	Perchlorate-101	101 > 85	4.54	478.180	478.180	bb			0.0321			38.999	
7178001	Perchlorate-O(18)	107 > 89	4.53	20114.809	20114.809	bb			0.4782	95.65	-4.35	2314.2...	

L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7903

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178002

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	0.621	ug/kg	U	1	05-MAR-10 16:01	per0305021a
	Perchlorate Isotope Ratio						1	05-MAR-10 16:01	per0305021a
14797-73-0	Perchlorate-101	.621	2.48	0.621	ug/kg	U	1	05-MAR-10 16:01	per0305021a
	Perchlorate-O(18)			5.83	ug/kg		1	05-MAR-10 16:01	per0305021a

^ 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 =

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

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
nted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ıme: per0305021a
ıte: 05-Mar-2010
ne: 16:01:35
: 247178002
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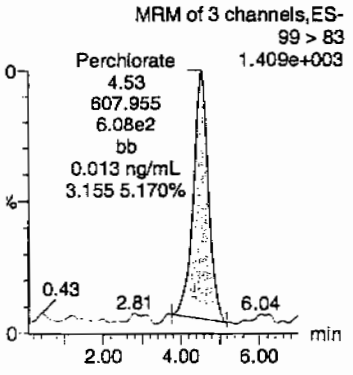
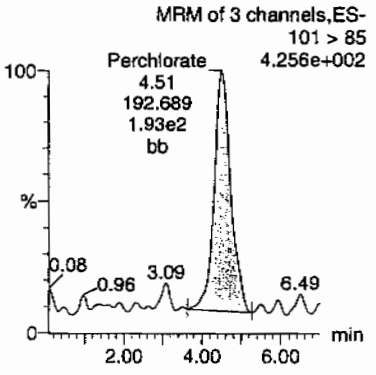
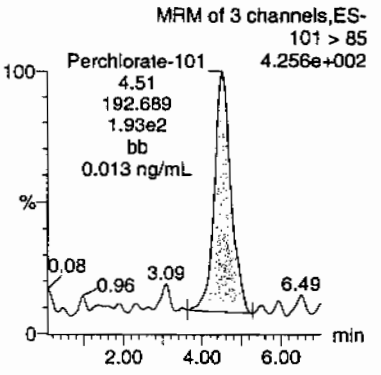
rchlorate



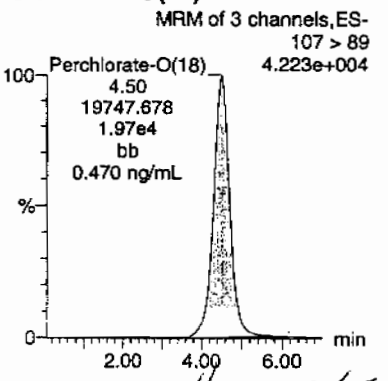
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178002	Perchlorate	99 > 83	4.53	607.955	607.955	bb			0.0125			60.101	3.16
7178002	Perchlorate-101	101 > 85	4.51	192.689	192.689	bb			0.0129			65.014	
7178002	Perchlorate-O(18)	107 > 89	4.50	19747.678	19747.678	bb			0.4695	93.90	-6.10	4937.9...	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7994

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178003

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 89

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.563	2.25	0.563	ug/kg	U	1	05-MAR-10 17:02	per0305027a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:02	per0305027a
14797-73-0	Perchlorate-101	.563	2.25	0.563	ug/kg	U	1	05-MAR-10 17:02	per0305027a
	Perchlorate-O(18)			5.29	ug/kg		1	05-MAR-10 17:02	per0305027a

^ 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 =

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

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

aset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

t Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
ted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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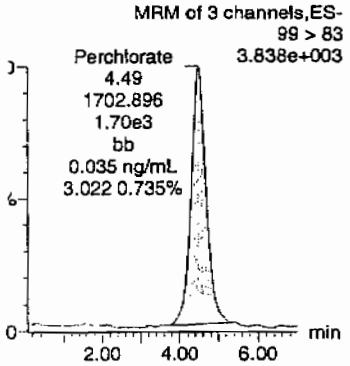
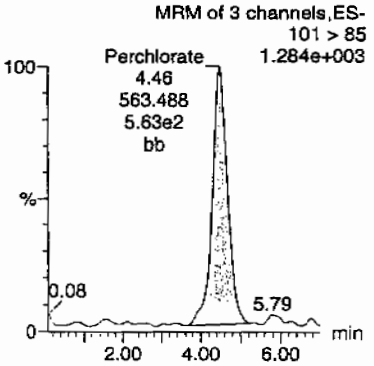
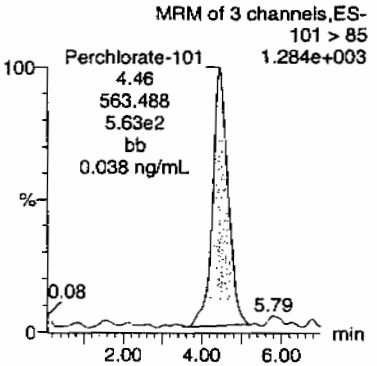
rchlorate



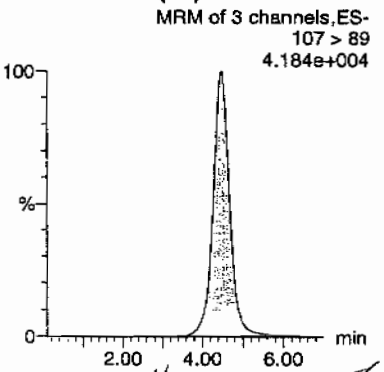
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178003	Perchlorate	99 > 83	4.49	1702.896	1702.896	bb			0.0351			53.164	3.02
7178003	Perchlorate-101	101 > 85	4.46	563.488	563.488	bb			0.0379			103.861	
7178003	Perchlorate-O(18)	107 > 89	4.46	19767.051	19767.051	bb			0.4700	93.99	-6.01	1129.5...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7997

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178004

Date Filtered: 01-MAR-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	.649	2.6	0.649	ug/kg	U	1	05-MAR-10 17:12	per0305028a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:12	per0305028a
14797-73-0	Perchlorate-101	.649	2.6	0.649	ug/kg	U	1	05-MAR-10 17:12	per0305028a
	Perchlorate-O(18)			6.37	ug/kg		1	05-MAR-10 17:12	per0305028a

^ 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 =

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

uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
nted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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te: 05-Mar-2010
ne: 17:12:07
: 247178004
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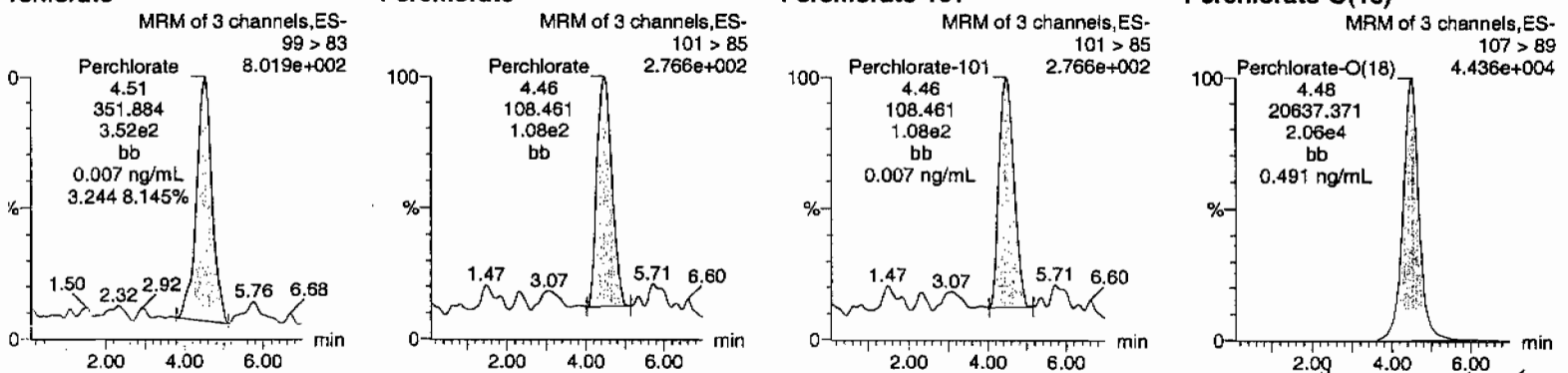
rchlorate **Perchlorate** **Perchlorate-101** **Perchlorate-O(18)**



AMM 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178004	Perchlorate	99 > 83	4.51	351.884	351.884	bb			0.0073			40.883	3.24
7178004	Perchlorate-101	101 > 85	4.46	108.461	108.461	bb			0.0073			25.613	
7178004	Perchlorate-O(18)	107 > 89	4.48	20637.371	20637.371	bb			0.4907	98.13	-1.87	2380.5...	

:L SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7998

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178005

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 86

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.58	2.32	0.580	ug/kg	U	1	05-MAR-10 17:22	per0305029a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:22	per0305029a
14797-73-0	Perchlorate-101	.58	2.32	0.580	ug/kg	U	1	05-MAR-10 17:22	per0305029a
	Perchlorate-O(18)			5.78	ug/kg		1	05-MAR-10 17:22	per0305029a

^ 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 =

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

ıantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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ıte: 05-Mar-2010
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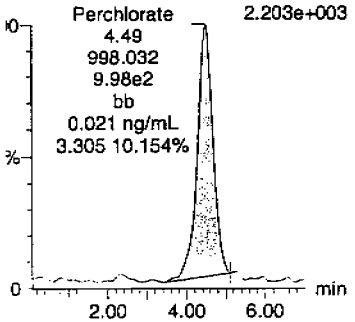
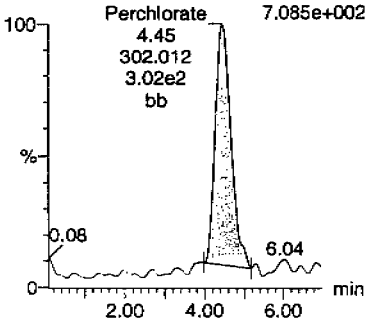
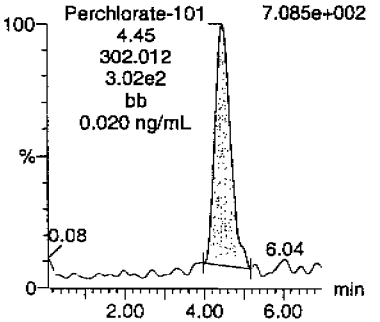
ırchlorate



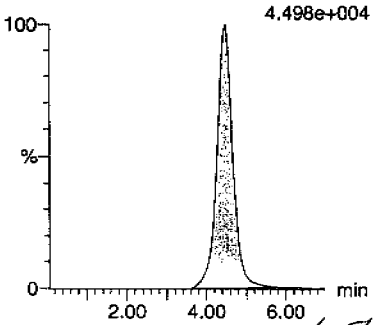
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178005	Perchlorate	99 > 83	4.49	998.032	998.032	bb			0.0206			107.424	3.30
7178005	Perchlorate-101	101 > 85	4.45	302.012	302.012	bb			0.0203			118.849	
7178005	Perchlorate-O(18)	107 > 89	4.46	20968.365	20968.365	bb			0.4985	99.71	-0.29	1385.9...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8000

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178006

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 88

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.57	2.28	0.589	ug/kg	J	1	05-MAR-10 17:32	per0305030a
	Perchlorate Isotope Ratio			3			1	05-MAR-10 17:32	per0305030a
14797-73-0	Perchlorate-101	.57	2.28	0.639	ug/kg	J	1	05-MAR-10 17:32	per0305030a
	Perchlorate-O(18)			5.43	ug/kg		1	05-MAR-10 17:32	per0305030a

^ 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 =

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

antify Sample Report **MassLynx 4.0 SP4**
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
nted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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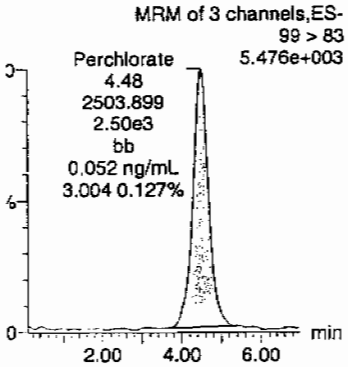
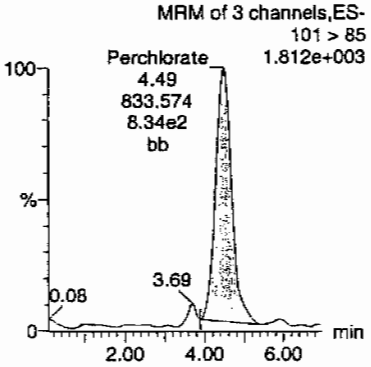
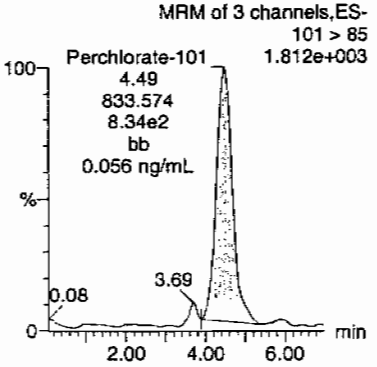
rchlorate



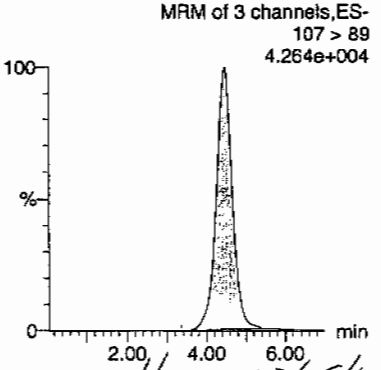
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178006	Perchlorate	99 > 83	4.48	2503.899	2503.899	bb			0.0516			119.062	3.00
7178006	Perchlorate-101	101 > 85	4.49	833.574	833.574	bb			0.0560			64.135	
7178006	Perchlorate-O(18)	107 > 89	4.45	20020.957	20020.957	bb			0.4760	95.20	-4.80	952.240	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7999

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178007

Date Filtered: 01-MAR-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	.607	2.43	0.607	ug/kg	U	1	05-MAR-10 17:42	per0305031a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:42	per0305031a
14797-73-0	Perchlorate-101	.607	2.43	0.607	ug/kg	U	1	05-MAR-10 17:42	per0305031a
	Perchlorate-O(18)			5.67	ug/kg		1	05-MAR-10 17:42	per0305031a

^ 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 =

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

ıantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

ıtaset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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ıte: 05-Mar-2010
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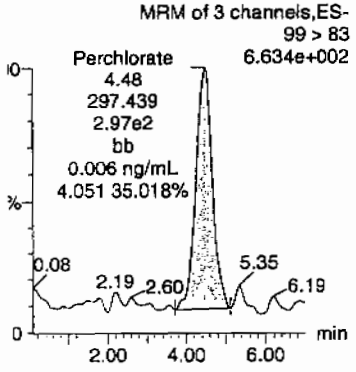
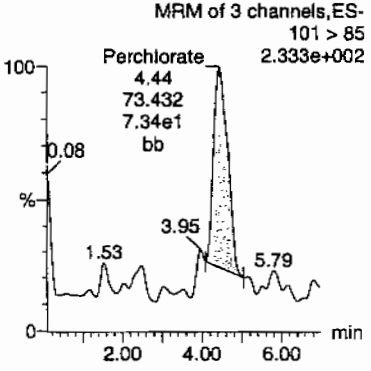
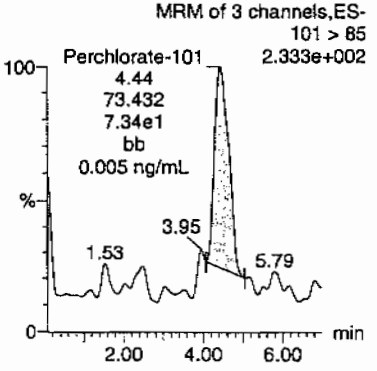
:rchlorate



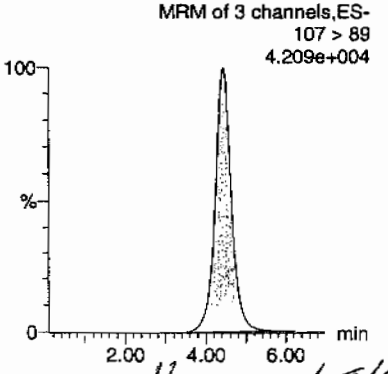
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178007	Perchlorate	99 > 83	4.48	297.439	297.439	bb			0.0061			29.393	4.05
7178007	Perchlorate-101	101 > 85	4.44	73.432	73.432	bb			0.0049			27.867	
7178007	Perchlorate-O(18)	107 > 89	4.43	19644.400	19644.400	bb			0.4671	93.41	-6.59	640.574	

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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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7995

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178008

Date Filtered: 01-MAR-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	.674	2.69	0.674	ug/kg	U	1	05-MAR-10 17:52	per0305032a
	Perchlorate Isotope Ratio						1	05-MAR-10 17:52	per0305032a
14797-73-0	Perchlorate-101	.674	2.69	0.674	ug/kg	U	1	05-MAR-10 17:52	per0305032a
	Perchlorate-O(18)			6.35	ug/kg		1	05-MAR-10 17:52	per0305032a

^ 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 =

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

uantify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

taset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

st Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305032a
ate: 05-Mar-2010
me: 17:52:17
: 247178008
al: 1:5,F

|LZNL|955706|50020|1|

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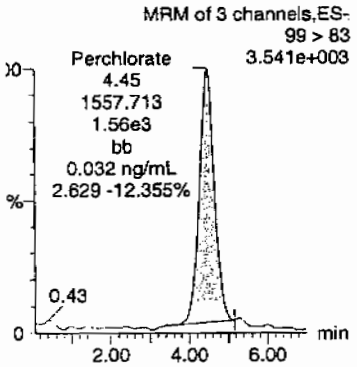
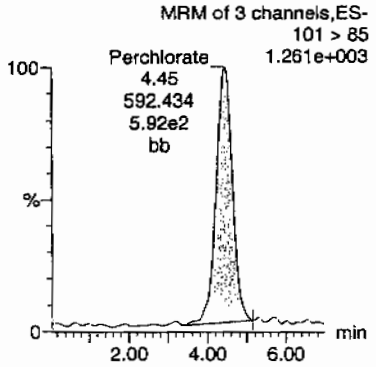
03-06-10

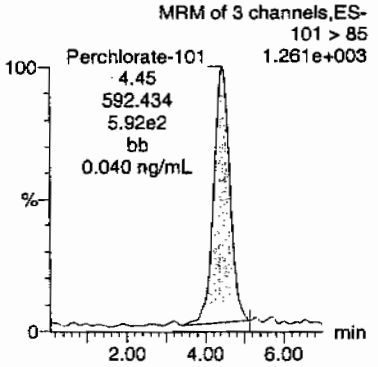
erchlorate



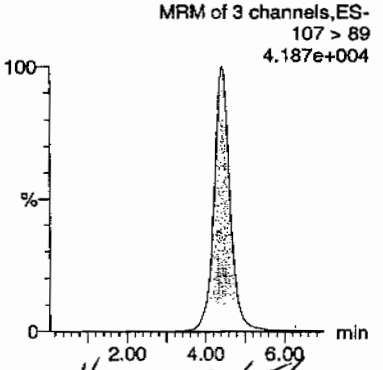
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
47178008	Perchlorate	99 > 83	4.45	1557.713	1557.713	bb			0.0321			237.268	2.63
47178008	Perchlorate-101	101 > 85	4.45	592.434	592.434	bb			0.0398			100.575	
47178008	Perchlorate-O(18)	107 > 89	4.43	19833.031	19833.031	bb			0.4715	94.31	-5.69	1113.8...	

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7996

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178009

Date Filtered: 01-MAR-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	.591	2.36	0.591	ug/kg	U	1	05-MAR-10 18:02	per0305033a
	Perchlorate Isotope Ratio						1	05-MAR-10 18:02	per0305033a
14797-73-0	Perchlorate-101	.591	2.36	0.602	ug/kg	J	1	05-MAR-10 18:02	per0305033a
	Perchlorate-O(18)			5.54	ug/kg		1	05-MAR-10 18:02	per0305033a

^ 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 =

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

ne GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

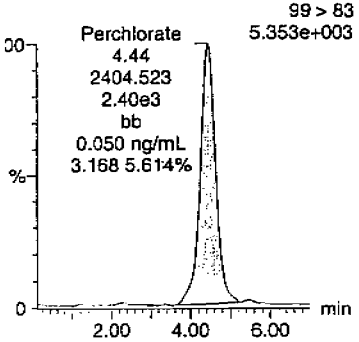
ast Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
rinted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305033a
ate: 05-Mar-2010
ime: 18:02:20
): 247178009
ial: 1:6,A

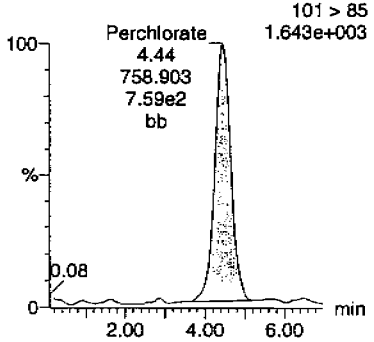
|LANL|955706|50120|1|

CWJ 03-06-10

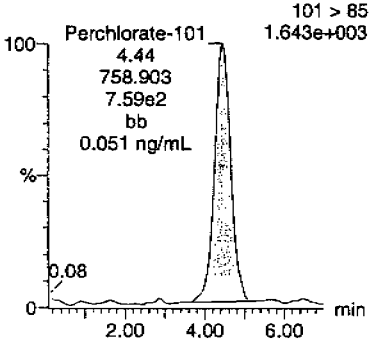
erchlorate



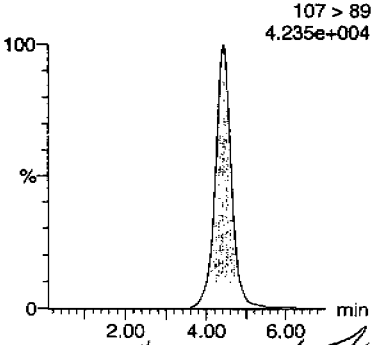
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmk 03/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
47178009	Perchlorate	99 > 83	4.44	2404.523	2404.523	bb			0.0496			119.406	3.17
47178009	Perchlorate-101	101 > 85	4.44	758.903	758.903	bb			0.0510			142.044	
47178009	Perchlorate-O(18)	107 > 89	4.43	19720.031	19720.031	bb			0.4689	93.77	-6.23	892.113	

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7993

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178010

Date Filtered: 01-MAR-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	.624	2.49	0.624	ug/kg	U	1	05-MAR-10 18:12	per0305034a
	Perchlorate Isotope Ratio						1	05-MAR-10 18:12	per0305034a
14797-73-0	Perchlorate-101	.624	2.49	0.624	ug/kg	U	1	05-MAR-10 18:12	per0305034a
	Perchlorate-O(18)			5.82	ug/kg		1	05-MAR-10 18:12	per0305034a

^ 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 =

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

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

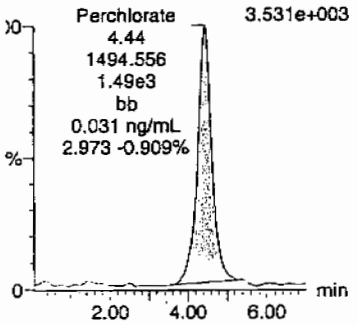
ıst Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ame: per0305034a
ate: 05-Mar-2010
me: 18:12:24
: 247178010
al: 1:6,B

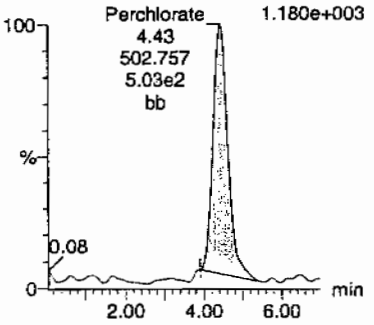
|LANL|955706|50220|1|

03-06-10

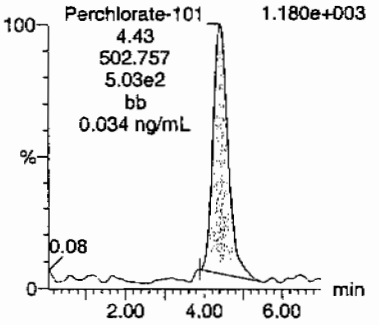
erchlorate



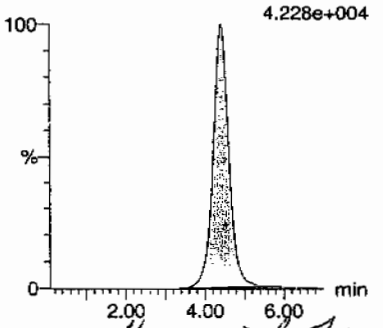
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
7178010	Perchlorate	99 > 83	4.44	1494.556	1494.556	bb			0.0308			390.285	2.97
7178010	Perchlorate-101	101 > 85	4.43	502.757	502.757	bb			0.0338			136.753	
7178010	Perchlorate-O(18)	107 > 89	4.41	19621.771	19621.771	bb			0.4665	93.30	-6.70	1795.3...	

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-8064

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 247178011

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 71

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.705	2.82	0.705	ug/kg	U	1	06-MAR-10 16:15	per0306012a
	Perchlorate Isotope Ratio						1	06-MAR-10 16:15	per0306012a
14797-73-0	Perchlorate-101	.705	2.82	0.705	ug/kg	U	1	06-MAR-10 16:15	per0306012a
	Perchlorate-O(18)			6.43	ug/kg		1	06-MAR-10 16:15	per0306012a

^ 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 =

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

uantify Sample Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ıst Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
inted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

ame: per0306012a
ate: 06-Mar-2010
me: 16:15:11
: 247178011
al: 1:3,A

|LANL|955706|SOLD|1|RA

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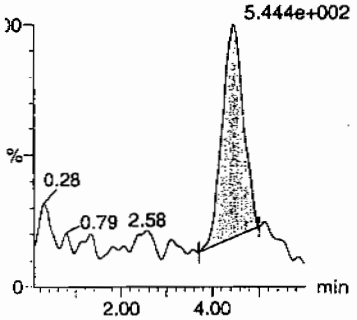
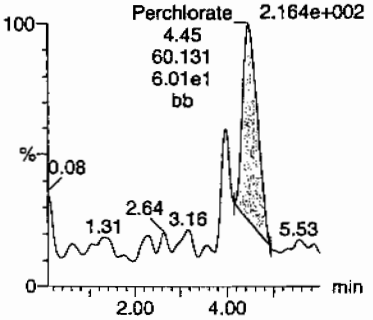
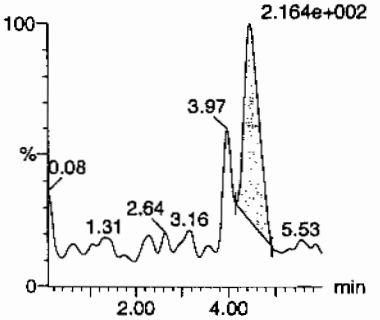
erchlorate



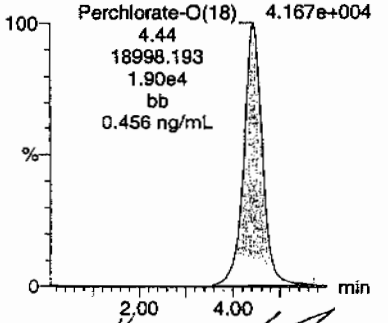
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmc 03/08/10

	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
47178011	Perchlorate	99 > 83	4.48	235.587	235.587	bb			0.0047			29.180	3.92
47178011	Perchlorate-101	101 > 85	4.45	60.131	60.131	bb			0.0038			51.057	
47178011	Perchlorate-O(18)	107 > 89	4.44	18998.193	18998.193	bb			0.4559	91.18	-8.82	3054.7...	

OKAY
LAO500

EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 05-MAR-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: 48489.74

Response Type: External Standard

Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 05-MAR-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-101

Coefficient of Determination:

Calibration Curve: 14881.82

Response Type: External Standard

Curve Type: RF

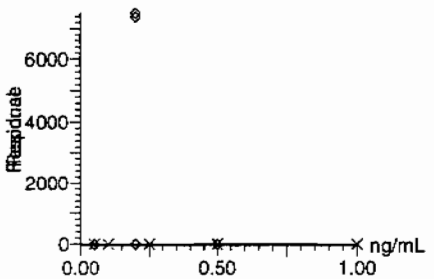
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

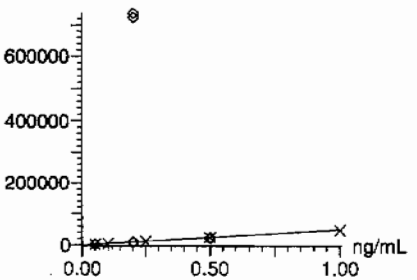
ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ıst Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
rinted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ethod: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

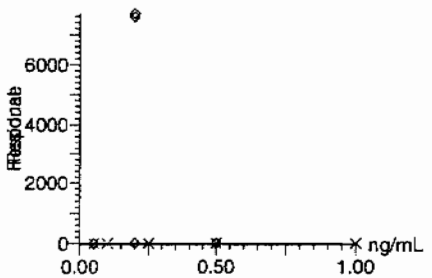
ompound name: Perchlorate
esponse Factor: 48489.7
RF SD: 1243.24, % Relative SD: 2.56392
esponse type: External Std, Area
urve type: RF

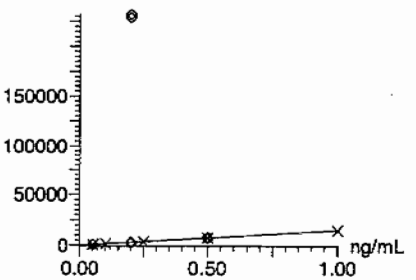




CW
03-06-10

ompound name: Perchlorate-101
esponse Factor: 14881.8
RF SD: 415.715, % Relative SD: 2.79344
esponse type: External Std, Area
urve type: RF





KMM 03/08/10

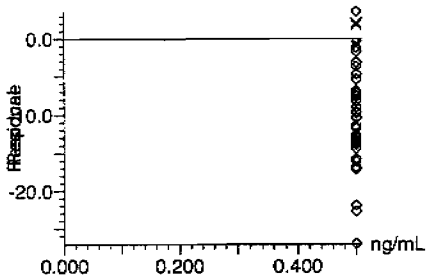
EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

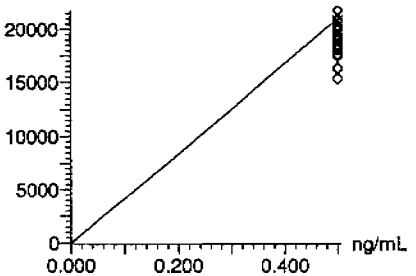
uantify Calibration Report MassLynx 4.0 SP4
ıe GEL Group, LLC Analyst: Charlers W. Wilson

ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ıst Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
inted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

ompound name: Perchlorate-O(18)
esponse Factor: 42059.8
RF SD: 811.21, % Relative SD: 1.9287
esponse type: External Std, Area
urve type: RF





EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 06-MAR-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: 49865.1

Response Type: External Standard

Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 06-MAR-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-101

Coefficient of Determination:

Calibration Curve: 15687.1

Response Type: External Standard

Curve Type: RF

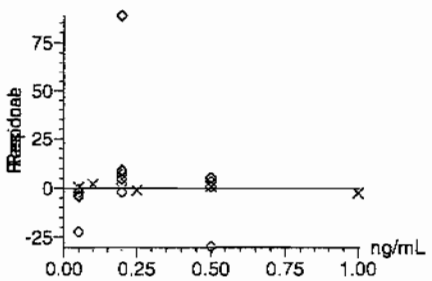
uantify Calibration Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

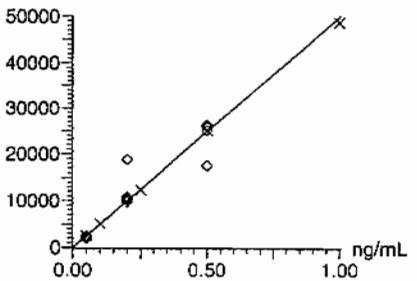
ataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

ast Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
rinted: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

lethod: C:\MassLynx\Perchlorate.PRO\MethDB\per030610a.mdb 07 Mar 2010 10:54:54
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030610a.cdb 07 Mar 2010 11:00:09

ompound name: Perchlorate
esponse Factor: 49865.1
RF SD: 927.627, % Relative SD: 1.86027
esponse type: External Std, Area
urve type: RF





3-8-10

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esponse Factor: 15687.1
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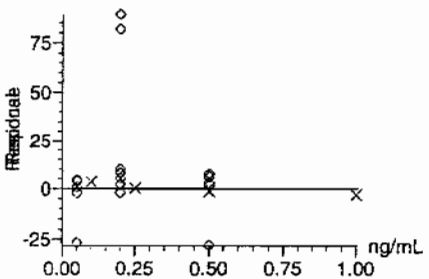
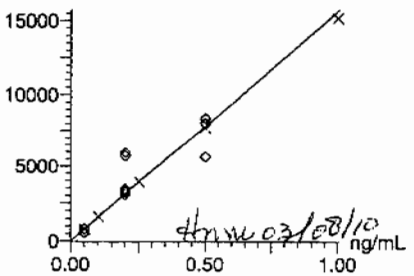
esponse type: External Std, Area
urve type: RF





tmw 03/08/10

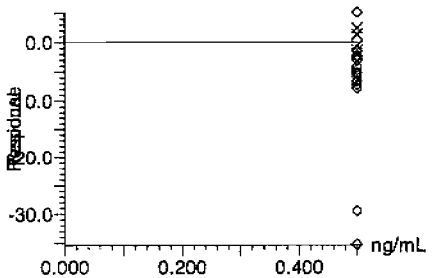
EL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

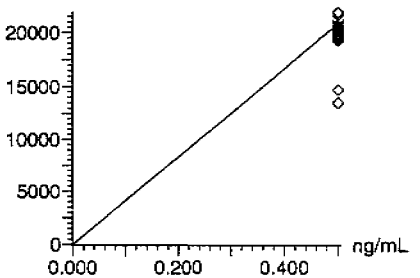
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qid

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 41669.8
RRF SD: 770.369, % Relative SD: 1.84875
Response type: External Std, Area
Curve type: RF





GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1861

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.59	05–MAR–10 14:00	per0305009a
Perchlorate Isotope Ratio		3.02		05–MAR–10 14:00	per0305009a
Perchlorate–101	.5	.55	109.45	05–MAR–10 14:00	per0305009a
Perchlorate	.5	.53	105.64	06–MAR–10 15:47	per0306009a
Perchlorate Isotope Ratio		3.17		06–MAR–10 15:47	per0306009a
Perchlorate–101	.5	.53	105.93	06–MAR–10 15:47	per0306009a

he GEL Group, LLC Analyst: Charlers W. Wilson

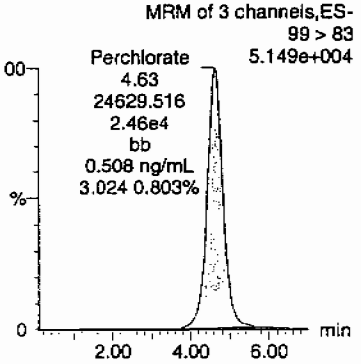
ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ast Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
rinted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

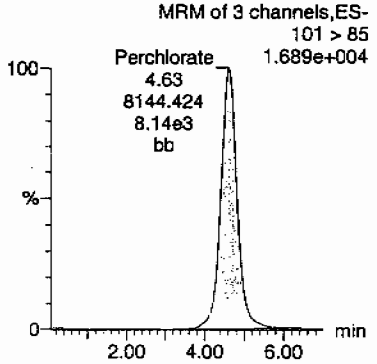
ame: per0305009a
ate: 05-Mar-2010
ime: 14:00:49
): WCL100227-06ICV
ial: 1:2,A

Pass
aws
03-06-10

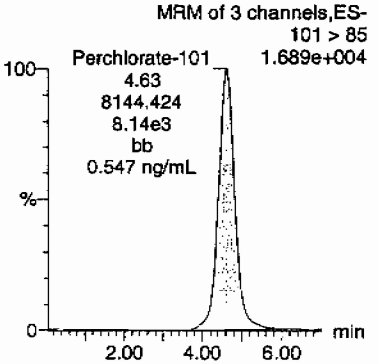
erchlorate



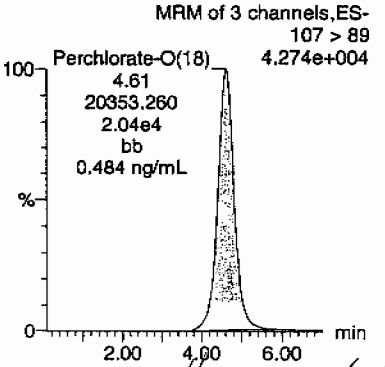
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

)	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
/CL100227-06ICV	Perchlorate	99 > 83	4.63	24629.516	24629.516	bb			0.5079	101.59	1.59	3539.4...	3.02
/CL100227-06ICV	Perchlorate-101	101 > 85	4.63	8144.424	8144.424	bb			0.5473	109.45	9.45	2045.0...	
/CL100227-06ICV	Perchlorate-O(18)	107 > 89	4.61	20353.260	20353.260	bb			0.4839	96.78	-3.22	3845.3...	

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

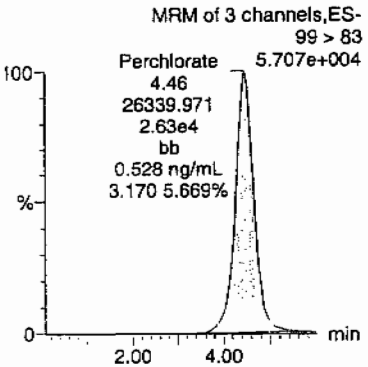
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

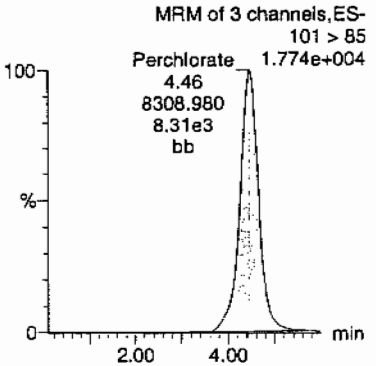
Name: per0306009a
Date: 06-Mar-2010
Time: 15:47:39
ID: WCL100227-06ICV
Vial: 1:2,A

Pass
CWW
03-07-10

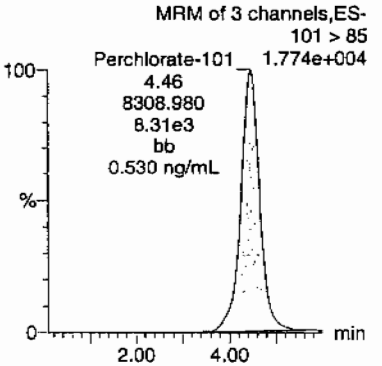
Perchlorate



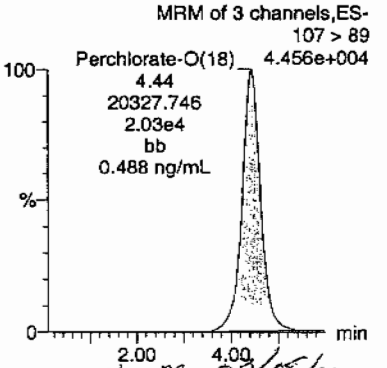
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/06/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06ICV	Perchlorate	99 > 83	4.46	26339.971	26339.971	bb			0.5282	105.64	5.64	1460.8...	3.17
WCL100227-06ICV	Perchlorate-101	101 > 85	4.46	8308.980	8308.980	bb			0.5297	105.93	5.93	310.031	
WCL100227-06ICV	Perchlorate-O(18)	107 > 89	4.44	20327.746	20327.746	bb			0.4878	97.57	-2.43	842.834	

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1861

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.84	05–MAR–10 16:11	per0305022a
Perchlorate Isotope Ratio		3.08		05–MAR–10 16:11	per0305022a
Perchlorate–101	.5	.53	106.73	05–MAR–10 16:11	per0305022a
Perchlorate	.5	.5	100.86	05–MAR–10 18:22	per0305035a
Perchlorate Isotope Ratio		3.15		05–MAR–10 18:22	per0305035a
Perchlorate–101	.5	.52	104.17	05–MAR–10 18:22	per0305035a
Perchlorate	.5	.52	103.44	06–MAR–10 17:45	per0306022a
Perchlorate Isotope Ratio		3.23		06–MAR–10 17:45	per0306022a
Perchlorate–101	.5	.51	101.86	06–MAR–10 17:45	per0306022a

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

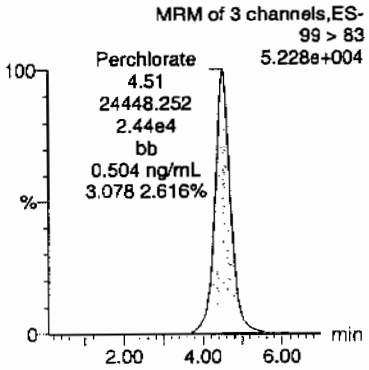
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

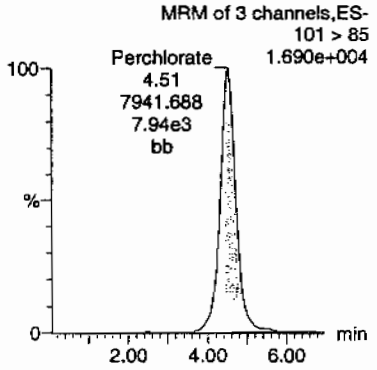
Name: per0305022a
Date: 05-Mar-2010
Time: 16:11:38
ID: WCL100227-06CCV
Vial: 1:2,A

Pass
aw
03-06-10

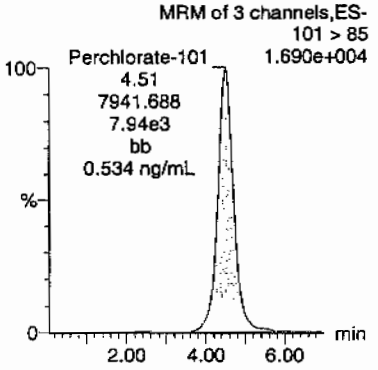
Perchlorate



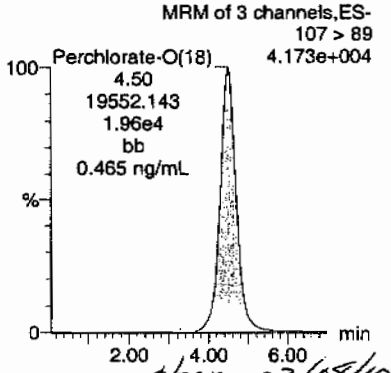
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.51	24448.252	24448.252	bb			0.5042	100.84	0.84	2170.1...	3.08
WCL100227-06CCV	Perchlorate-101	101 > 85	4.51	7941.688	7941.688	bb			0.5337	106.73	6.73	534.771	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.50	19552.143	19552.143	bb			0.4649	92.97	-7.03	2384.2...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

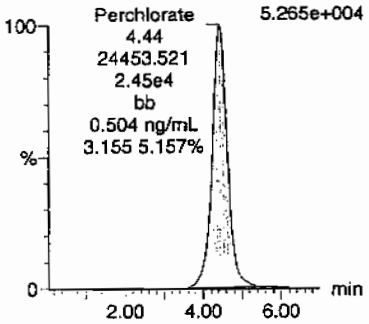
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

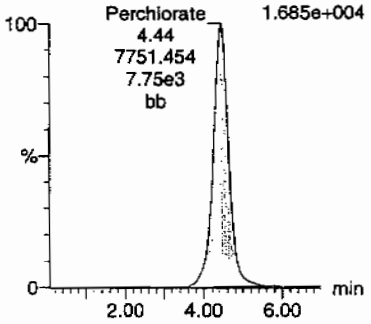
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305035a
Date: 05-Mar-2010
Time: 18:22:27
ID: WCL100227-06CCV
Vial: 1:2,A

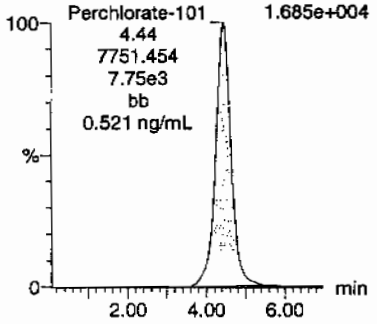
Perchlorate
MRM of 3 channels,ES-
99 > 83
5.265e+004



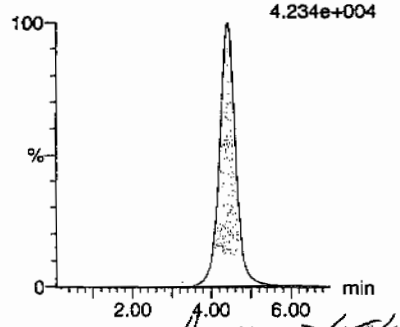
Perchlorate
MRM of 3 channels,ES-
101 > 85
1.685e+004



Perchlorate-101
MRM of 3 channels,ES-
101 > 85
1.685e+004



Perchlorate-O(18)
MRM of 3 channels,ES-
107 > 89
4.234e+004



Perc
Cno
03-06-10

Amm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.44	24453.521	24453.521	bb			0.5043	100.86	0.86	2843.3...	3.15
WCL100227-06CCV	Perchlorate-101	101 > 85	4.44	7751.454	7751.454	bb			0.5209	104.17	4.17	512.645	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.41	19898.803	19898.803	bb			0.4731	94.62	-5.38	2133.5...	

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

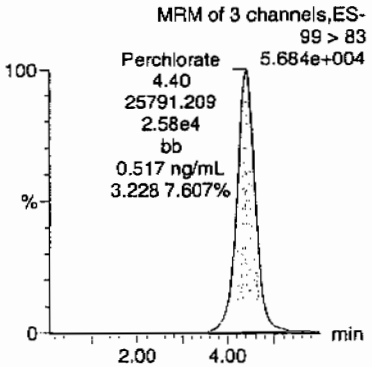
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

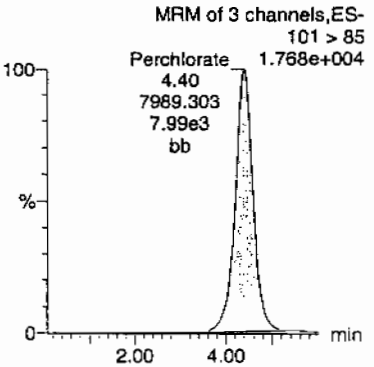
Name: per0306022a
Date: 06-Mar-2010
Time: 17:45:51
ID: WCL100227-06CCV
Vial: 1:2,A

PWD
03-07-10

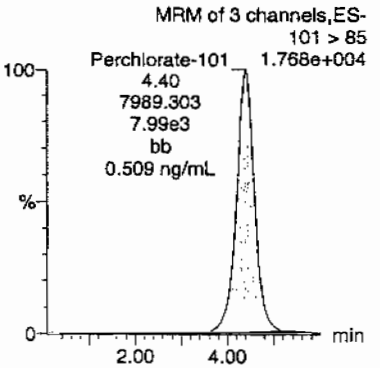
Perchlorate



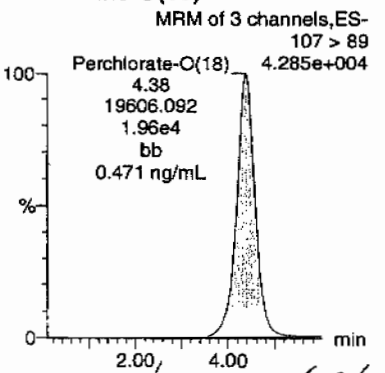
Perchlorate



Perchlorate-101



Perchlorate-O(18)



03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.40	25791.209	25791.209	bb			0.5172	103.44	3.44	2256.3...	3.23
WCL100227-06CCV	Perchlorate-101	101 > 85	4.40	7989.303	7989.303	bb			0.5093	101.86	1.86	1287.2...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.38	19606.092	19606.092	bb			0.4705	94.10	-5.90	6406.1...	

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.42	05-MAR-10 14:21	per0305011a
Perchlorate Isotope Ratio		3.39		05-MAR-10 14:21	per0305011a
Perchlorate-101	.05	.05	93.73	05-MAR-10 14:21	per0305011a
Perchlorate	.05	.05	94.34	05-MAR-10 16:31	per0305024a
Perchlorate Isotope Ratio		2.94		05-MAR-10 16:31	per0305024a
Perchlorate-101	.05	.05	104.64	05-MAR-10 16:31	per0305024a
Perchlorate	.05	.04	88.33	05-MAR-10 18:42	per0305037a
Perchlorate Isotope Ratio		2.97		05-MAR-10 18:42	per0305037a
Perchlorate-101	.05	.05	96.82	05-MAR-10 18:42	per0305037a
Perchlorate	.05	.05	96.41	06-MAR-10 16:05	per0306011a
Perchlorate Isotope Ratio		2.95		06-MAR-10 16:05	per0306011a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10–1861

Lab Code: GEL

Reporting Units: ug/kg

Perchlorate–101	.05	.05	103.98	06–MAR–10 16:05	per0306011a
Perchlorate	.05	.05	97.89	06–MAR–10 18:04	per0306024a
Perchlorate Isotope Ratio		2.98		06–MAR–10 18:04	per0306024a
Perchlorate–101	.05	.05	104.42	06–MAR–10 18:04	per0306024a

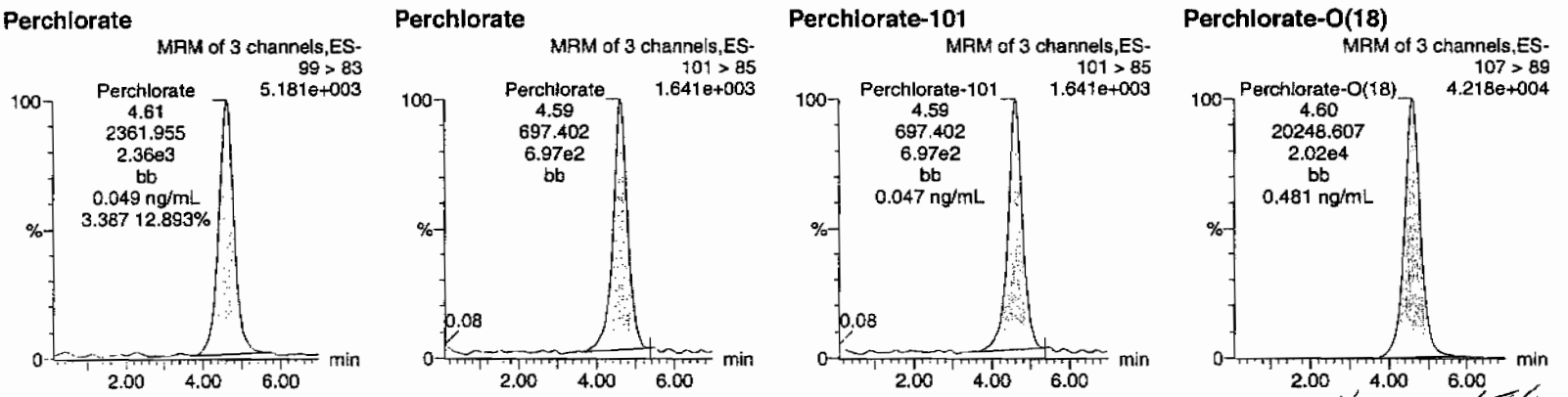
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305011a
Date: 05-Mar-2010
Time: 14:21:02
ID: WCL100227-07CRI
Vial: 1:2,B

Pass
03-06-10



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.61	2361.955	2361.955	bb			0.0487	97.42	-2.58	227.404	3.39
WCL100227-07CRI	Perchlorate-101	101 > 85	4.59	697.402	697.402	bb			0.0469	93.73	-6.27	49.831	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.60	20248.607	20248.607	bb			0.4814	96.28	-3.72	305.789	

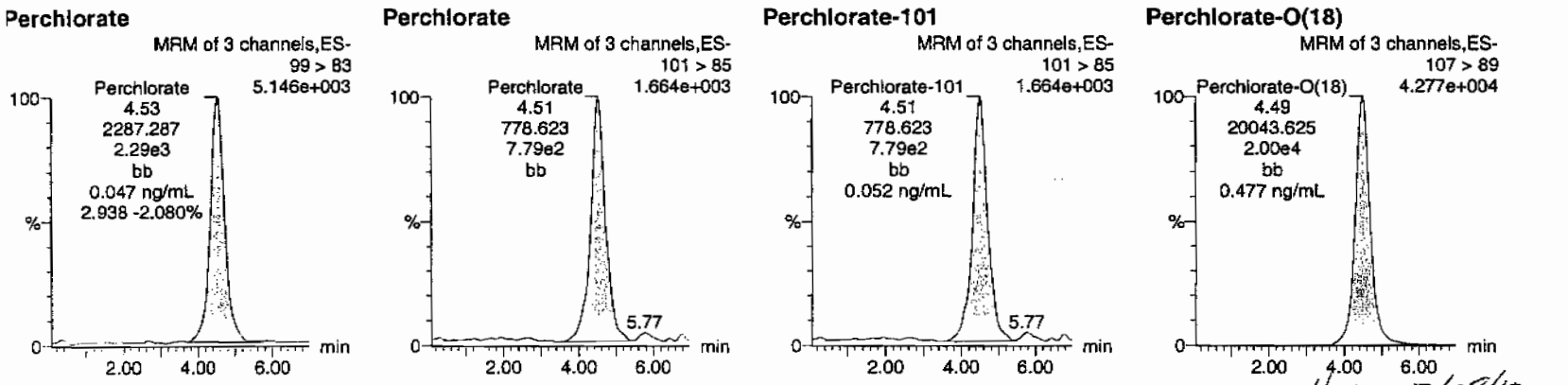
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305024a
Date: 05-Mar-2010
Time: 16:31:58
ID: WCL100227-07CRI
Vial: 1:2,B

PWD
03/08/10



HMW 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.53	2287.287	2287.287	bb			0.0472	94.34	-5.66	193.383	2.94
WCL100227-07CRI	Perchlorate-101	101 > 85	4.51	778.623	778.623	bb			0.0523	104.64	4.64	32.800	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.49	20043.625	20043.625	bb			0.4766	95.31	-4.69	1708.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

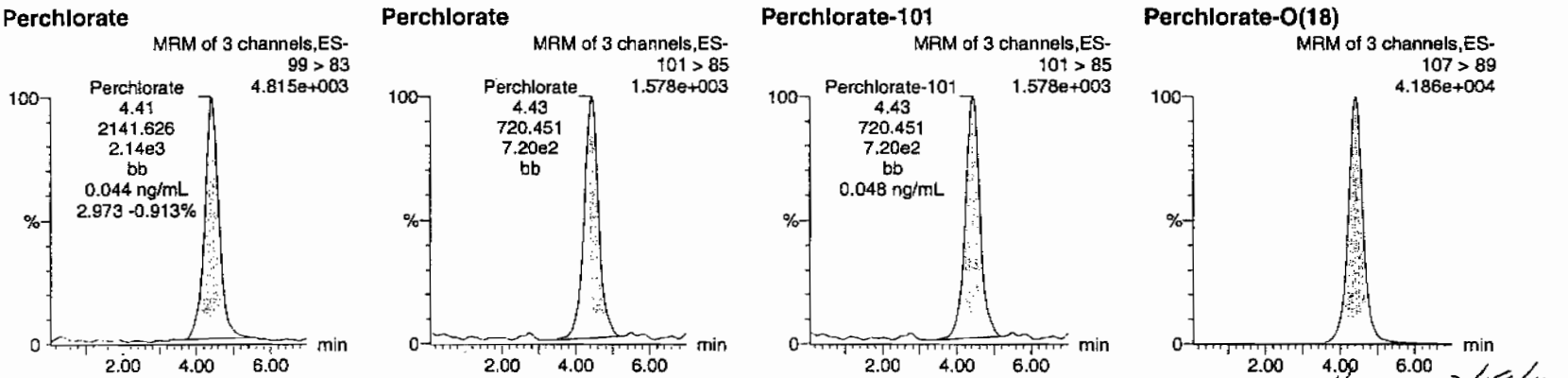
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305037a
Date: 05-Mar-2010
Time: 18:42:54
ID: WCL100227-07CRI
Vial: 1:2,B

Pass
03/06-10



MM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.41	2141.626	2141.626	bb			0.0442	88.33	-11.67	305.770	2.97
WCL100227-07CRI	Perchlorate-101	101 > 85	4.43	720.451	720.451	bb			0.0484	96.82	-3.18	132.935	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.41	19596.717	19596.717	bb			0.4659	93.19	-6.81	1590.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

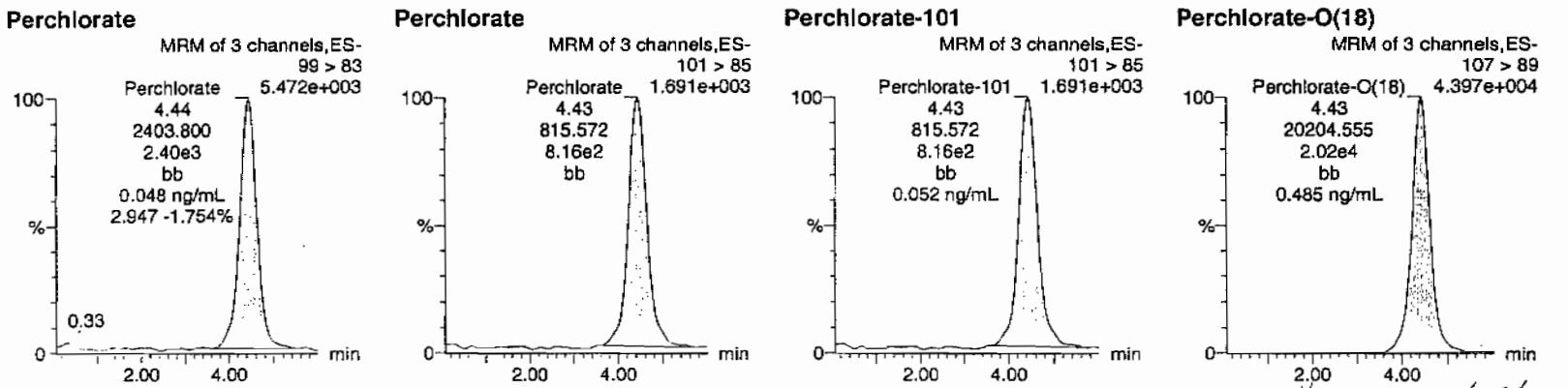
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

Name: per0306011a
Date: 06-Mar-2010
Time: 16:05:59
ID: WCL100227-07CRI
Vial: 1:2,B

PWD 03-07-10



Hmc 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.44	2403.800	2403.800	bb			0.0482	96.41	-3.59	30.940	2.95
WCL100227-07CRI	Perchlorate-101	101 > 85	4.43	815.572	815.572	bb			0.0520	103.98	3.98	105.676	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.43	20204.555	20204.555	bb			0.4849	96.97	-3.03	3173.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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

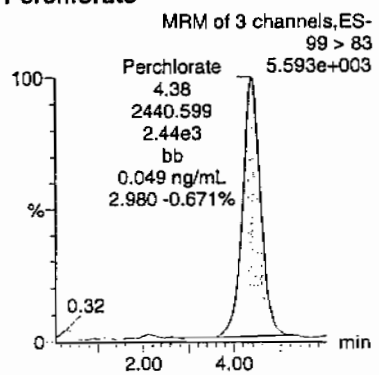
Dataset: C:\MassLynx\Perchlorate.PRO\per030610a.qld

Last Altered: Sunday, March 07, 2010 11:00:09 AM Eastern Standard Time
Printed: Sunday, March 07, 2010 11:08:57 AM Eastern Standard Time

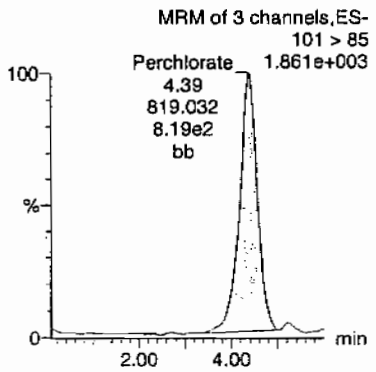
Name: per0306024a
Date: 06-Mar-2010
Time: 18:04:03
ID: WCL100227-07CRI
Vial: 1:2,B

aw
03-07-10

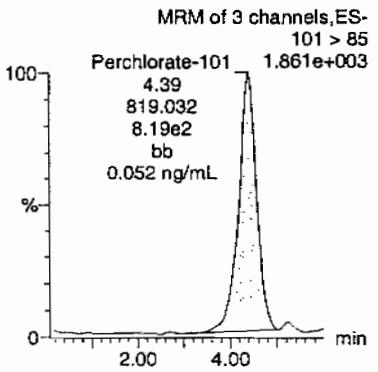
Perchlorate



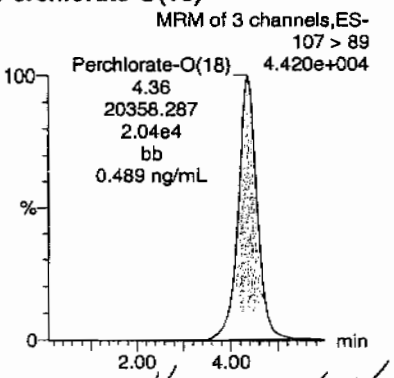
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.38	2440.599	2440.599	bb			0.0489	97.89	-2.11	254.348	2.98
WCL100227-07CRI	Perchlorate-101	101 > 85	4.39	819.032	819.032	bb			0.0522	104.42	4.42	96.508	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.36	20358.287	20358.287	bb			0.4886	97.71	-2.29	1453.1...	

QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
MB

Date Received: 01-MAR-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 1202049034

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 100

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	05-MAR-10 14:31	per0305012a
	Perchlorate Isotope Ratio						1	05-MAR-10 14:31	per0305012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	05-MAR-10 14:31	per0305012a
	Perchlorate-O(18)			4.69	ug/kg		1	05-MAR-10 14:31	per0305012a

^ 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 =

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

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

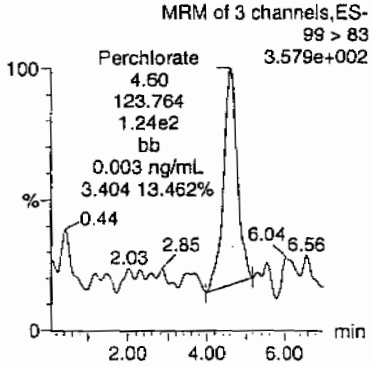
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

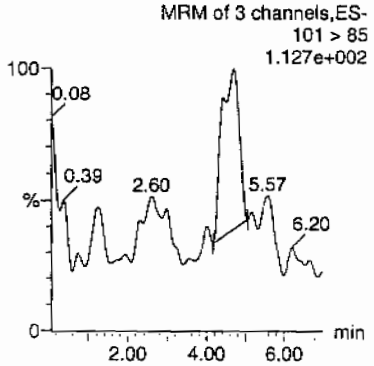
Name: per0305012a
Date: 05-Mar-2010
Time: 14:31:06
ID: 1202049034
Vial: 1:3,A

LAW | 955706 | 3020 | MB | 1 | 03-06-10

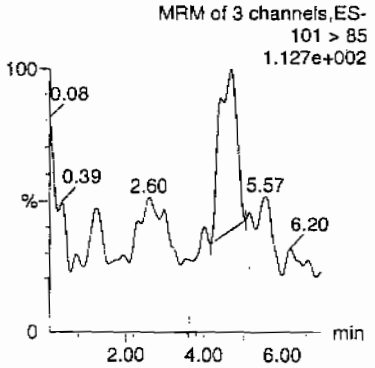
Perchlorate



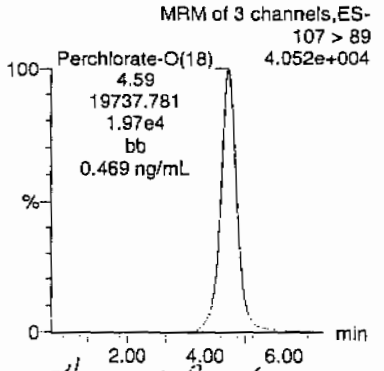
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hnm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049034	Perchlorate	99 > 83	4.60	123.764	123.764	bb			0.0026			18.139	3.40
1202049034	Perchlorate-101	101 > 85	4.69	36.360	36.360	bb			0.0024			18.302	
1202049034	Perchlorate-O(18)	107 > 89	4.59	19737.781	19737.781	bb			0.4693	93.86	-6.14	1863.7...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
LCS

Date Received: 01-MAR-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 1202049035

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.09	ug/kg		1	05-MAR-10 14:41	per0305013a
	Perchlorate Isotope Ratio			3.14			1	05-MAR-10 14:41	per0305013a
14797-73-0	Perchlorate-101	.5	2	2.17	ug/kg		1	05-MAR-10 14:41	per0305013a
	Perchlorate-O(18)			4.94	ug/kg		1	05-MAR-10 14:41	per0305013a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

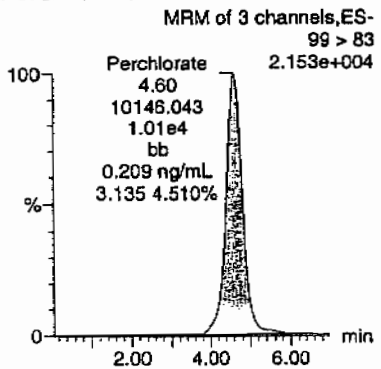
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305013a
Date: 05-Mar-2010
Time: 14:41:17
ID: 1202049035
Vial: 1:3,B

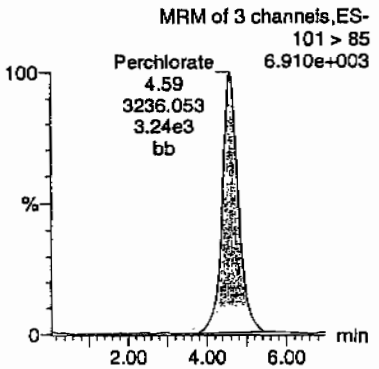
LZNL | 955706 | 50120 | LCS | 11

GWO 03-08-10

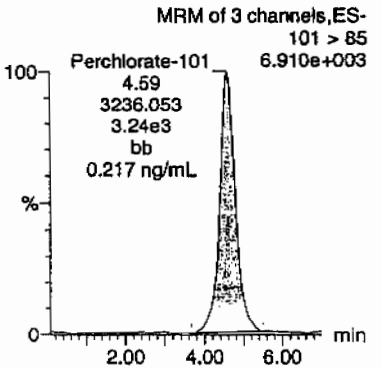
Perchlorate



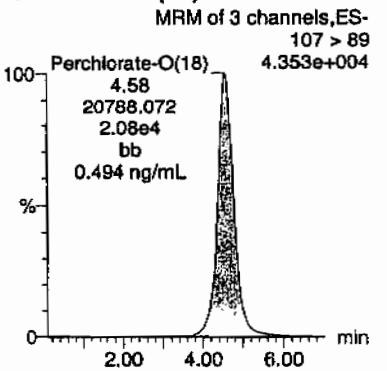
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049035	Perchlorate	99 > 83	4.60	10146.043	10146.043	bb			0.2092	104.62	4.62	640.255	3.14
1202049035	Perchlorate-101	101 > 85	4.59	3236.053	3236.053	bb			0.2175	108.73	8.73	237.145	
1202049035	Perchlorate-O(18)	107 > 89	4.58	20788.072	20788.072	bb			0.4943	98.85	-1.15	2629.3...	

$$\frac{10146.043}{48489.7} = 0.2092$$

HMW 03/08/10

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7903MS

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 1202049036

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	2.65	ug/kg		1	05-MAR-10 16:42	per0305025a
	Perchlorate Isotope Ratio			3.04			1	05-MAR-10 16:42	per0305025a
14797-73-0	Perchlorate-101	.621	2.48	2.84	ug/kg		1	05-MAR-10 16:42	per0305025a
	Perchlorate-O(18)			5.76	ug/kg		1	05-MAR-10 16:42	per0305025a

^ 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 =

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

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

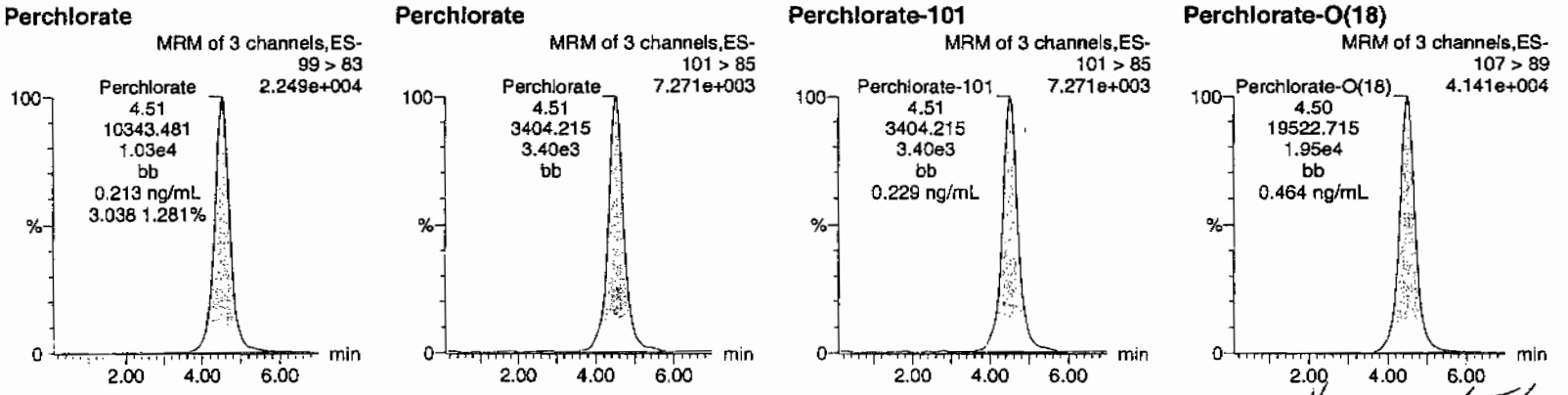
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305025a
Date: 05-Mar-2010
Time: 16:42:00
ID: 1202049036
Vial: 1:4,E

|LZNL|955706|50120|MS|11|

CWJ 03-06-10



tmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049036	Perchlorate	99 > 83	4.51	10343.481	10343.481	bb			0.2133	106.66	6.66	558.858	3.04
1202049036	Perchlorate-101	101 > 85	4.51	3404.215	3404.215	bb			0.2288	114.38	14.38	462.211	
1202049036	Perchlorate-O(18)	107 > 89	4.50	19522.715	19522.715	bb			0.4642	92.83	-7.17	2828.7...	

$$\frac{10343.481}{48489.7} \Big| \frac{10}{} \Big| \frac{100}{80.6} = 2.65$$

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.
RE15-10-7903MSD

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861

GEL Sample ID: 1202049037

Date Filtered: 01-MAR-10

Injection Volume (uL): 20

%Solids: 81

CAS No.	Analyte^	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.621	2.48	2.61	ug/kg		1	05-MAR-10 16:52	per0305026a
	Perchlorate Isotope Ratio			3.09			1	05-MAR-10 16:52	per0305026a
14797-73-0	Perchlorate-101	.621	2.48	2.76	ug/kg		1	05-MAR-10 16:52	per0305026a
	Perchlorate-O(18)			5.73	ug/kg		1	05-MAR-10 16:52	per0305026a

^ 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 =

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

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

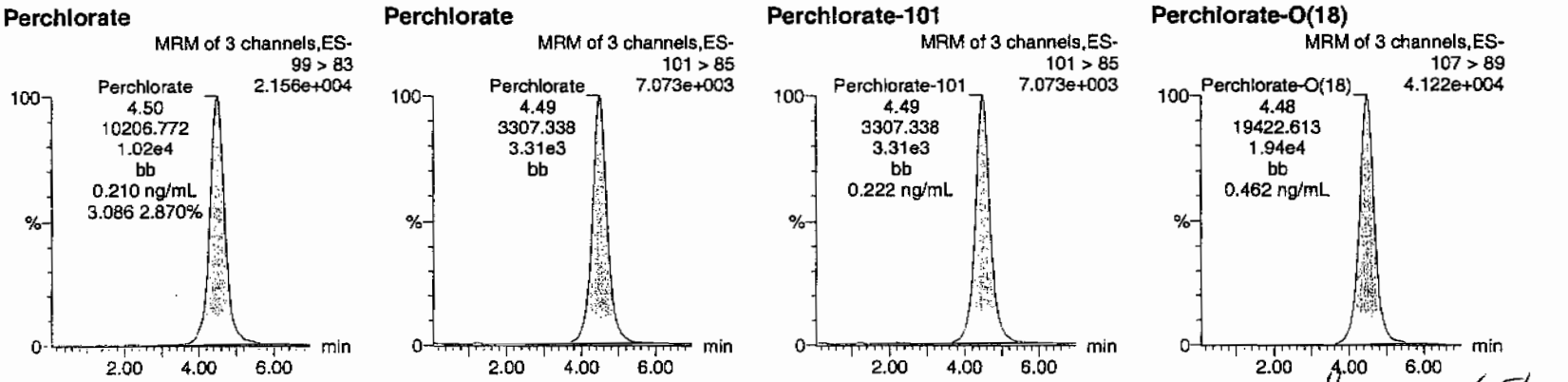
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305026a
Date: 05-Mar-2010
Time: 16:52:01
ID: 1202049037
Vial: 1:4,F

|LANL|955706|50120|MSO|1|

Gmw 03-06-10



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049037	Perchlorate	99 > 83	4.50	10206.772	10206.772	bb			0.2105	105.25	5.25	1298.4...	3.09
1202049037	Perchlorate-101	101 > 85	4.49	3307.338	3307.338	bb			0.2222	111.12	11.12	277.325	
1202049037	Perchlorate-O(18)	107 > 89	4.48	19422.613	19422.613	bb			0.4618	92.36	-7.64	3946.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955705 Verified by:
Analyst: Jareth Shirley
Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6
Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202049034 MB	01-MAR-2010 15:15:00	2	20	10
1202049035 LCS	01-MAR-2010 15:15:00	2	20	10
247141001	01-MAR-2010 15:15:00	2	20	10
247141002	01-MAR-2010 15:15:00	2	20	10
247141003	01-MAR-2010 15:15:00	2	20	10
247172001	01-MAR-2010 15:15:00	2	20	10
247172002	01-MAR-2010 15:15:00	2	20	10
247178001	01-MAR-2010 15:15:00	2	20	10
247178002	01-MAR-2010 15:15:00	2	20	10
1202049036 MS (247178002)	01-MAR-2010 15:15:00	2	20	10
1202049037 MSD (247178002)	01-MAR-2010 15:15:00	2	20	10
247178003	01-MAR-2010 15:15:00	2	20	10
247178004	01-MAR-2010 15:15:00	2	20	10
247178005	01-MAR-2010 15:15:00	2	20	10
247178006	01-MAR-2010 15:15:00	2	20	10
247178007	01-MAR-2010 15:15:00	2	20	10
247178008	01-MAR-2010 15:15:00	2	20	10
247178009	01-MAR-2010 15:15:00	2	20	10
247178010	01-MAR-2010 15:15:00	2	20	10
247178011	01-MAR-2010 15:15:00	2	20	10
247197001	01-MAR-2010 15:15:00	2	20	10
247197002	01-MAR-2010 15:15:00	2	20	10
1202049038 ICS	01-MAR-2010 15:15:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202049038	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.4	mL
LCS	1202049035	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.4	mL
MS	1202049036	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.4	mL
MSD	1202049037	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.4	mL

Comments:

Desalting cartridges used: 100217-1-H & 100209-1-Bu

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/05/10
Extr. Injection Volume: 20uL
Sequence Number: per030510a
Initial Calibration Date: 03/05/10

Method: EPA 6850-Modified
Int. Std.: UCL100126-01
Mobile Phase Lot#: 1278668, 1271949
Standard-Samp Reagent Lot#:: 1271949

Reviewed BY: [illegible]
Date: 03/08/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0305001a	IPB001	CWW	3/5/2010 12:39			1		USE	B
per0305002a	IPB001	CWW	3/5/2010 12:50			1		USE	B
per0305003a	WCLICAL-01	CWW	3/5/2010 13:00			1		USE	I
per0305004a	WCLICAL-02	CWW	3/5/2010 13:10			1		USE	I
per0305005a	WCLICAL-03	CWW	3/5/2010 13:20			1		USE	I
per0305006a	WCLICAL-04	CWW	3/5/2010 13:30			1		USE	I
per0305007a	WCLICAL-05	CWW	3/5/2010 13:40			1		USE	I
per0305008a	IPB002	CWW	3/5/2010 13:50			1		USE	B
per0305009a	WCLICV	CWW	3/5/2010 14:00			1		USE	C
per0305010a	IPB003	CWW	3/5/2010 14:11			1		USE	B
per0305011a	WCLCRI	CWW	3/5/2010 14:21			1		USE	C
per0305012a	1202049034	CWW	3/5/2010 14:31	955706	VARIOUS	1	LANL	USE	S
per0305013a	1202049035	CWW	3/5/2010 14:41	955706	VARIOUS	1	LANL	USE	S
per0305014a	1202049038	CWW	3/5/2010 14:51	955706	VARIOUS	1	LANL	USE	S
per0305015a	247141001	CWW	3/5/2010 15:01	955706	10-1859	1	LANL	USE	S
per0305016a	247141002	CWW	3/5/2010 15:11	955706	10-1859	1	LANL	USE	S
per0305017a	247141003	CWW	3/5/2010 15:21	955706	10-1859	1	LANL	USE	S
per0305018a	247172001	CWW	3/5/2010 15:31	955706	10-1866	1	LANL	USE	S
per0305019a	247172002	CWW	3/5/2010 15:41	955706	10-1866	1	LANL	USE	S
per0305020a	247178001	CWW	3/5/2010 15:51	955706	10-1861	1	LANL	USE	S
per0305021a	247178002	CWW	3/5/2010 16:01	955706	10-1861	1	LANL	USE	S
per0305022a	WCLCCV	CWW	3/5/2010 16:11			1		USE	C
per0305023a	IPB004	CWW	3/5/2010 16:21			1		USE	B
per0305024a	WCLCRI	CWW	3/5/2010 16:31			1		USE	C
per0305025a	1202049036	CWW	3/5/2010 16:42	955706	10-1861	1	LANL	USE	S
per0305026a	1202049037	CWW	3/5/2010 16:52	955706	10-1861	1	LANL	USE	S
per0305027a	247178003	CWW	3/5/2010 17:02	955706	10-1861	1	LANL	USE	S
per0305028a	247178004	CWW	3/5/2010 17:12	955706	10-1861	1	LANL	USE	S
per0305029a	247178005	CWW	3/5/2010 17:22	955706	10-1861	1	LANL	USE	S

per0305030a	247178006	CWW	3/5/2010 17:32	955706	10-1861	1	LANL	USE	S
per0305031a	247178007	CWW	3/5/2010 17:42	955706	10-1861	1	LANL	USE	S
per0305032a	247178008	CWW	3/5/2010 17:52	955706	10-1861	1	LANL	USE	S
per0305033a	247178009	CWW	3/5/2010 18:02	955706	10-1861	1	LANL	USE	S
per0305034a	247178010	CWW	3/5/2010 18:12	955706	10-1861	1	LANL	USE	S
per0305035a	WCLCCV	CWW	3/5/2010 18:22			1		USE	C
per0305036a	IPB005	CWW	3/5/2010 18:32			1		USE	B
per0305037a	WCLCRI	CWW	3/5/2010 18:42			1		USE	C
per0305038a	247178011	CWW	3/5/2010 18:53	955706	10-1861	1	LANL	DUSE-RA	S
per0305039a	247197001	CWW	3/5/2010 19:03	955706	10-1865-1	1	LANL	DUSE-RA	S
per0305040a	247197002	CWW	3/5/2010 19:13	955706	10-1865-1	1	LANL	DUSE-RA	S
per0305041a	IPB006	CWW	3/5/2010 19:23			1		DUSE-RA	B
per0305042a	1202062446	CWW	3/5/2010 19:33	961557	248683	1	LANL	DUSE-RA	S
per0305043a	1202062447	CWW	3/5/2010 19:43	961557	248683	1	LANL	DUSE-RA	S
per0305044a	1202062450	CWW	3/5/2010 19:53	961557	248683	1	LANL	DUSE-RA	S
per0305045a	248683001	CWW	3/5/2010 20:03	961557	248683	1	LANL	DUSE-RA	S
per0305046a	1202062448	CWW	3/5/2010 20:13	961557	248683	1	LANL	DUSE-RA	S
per0305047a	1202062449	CWW	3/5/2010 20:23	961557	248683	1	LANL	DUSE-RA	S
per0305048a	WCLCCV	CWW	3/5/2010 20:34			1		DUSE	C
per0305049a	IPB007	CWW	3/5/2010 20:44			1		DUSE	B
per0305050a	WCLCRI	CWW	3/5/2010 20:54			1		DUSE	C
per0305051a	1202049039	CWW	3/5/2010 21:04	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305052a	1202049040	CWW	3/5/2010 21:14	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305053a	1202049043	CWW	3/5/2010 21:24	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305054a	247187001	CWW	3/5/2010 21:34	955709	10-1867	1	LANL	DUSE-RA	S
per0305055a	247187002	CWW	3/5/2010 21:45	955709	10-1867	1	LANL	DUSE-RA	S
per0305056a	247187003	CWW	3/5/2010 21:55	955709	10-1867	1	LANL	DUSE-RA	S
per0305057a	247188001	CWW	3/5/2010 22:05	955709	10-1863	1	LANL	DUSE-RA	S
per0305058a	1202049041	CWW	3/5/2010 22:15	955709	10-1863	1	LANL	DUSE-RA	S
per0305059a	1202049042	CWW	3/5/2010 22:25	955709	10-1863	1	LANL	DUSE-RA	S
per0305060a	247188002	CWW	3/5/2010 22:35	955709	10-1863	1	LANL	DUSE-RA	S
per0305061a	WCLCCV	CWW	3/5/2010 22:45			1		USE	C
per0305062a	IPB008	CWW	3/5/2010 22:55			1		USE	B
per0305063a	WCLCRI	CWW	3/5/2010 23:06			1		USE	C
per0305064a	247188003	CWW	3/5/2010 23:16	955709	10-1863	1	LANL	USE	S
per0305065a	247188004	CWW	3/5/2010 23:26	955709	10-1863	1	LANL	USE	S
per0305066a	247188005	CWW	3/5/2010 23:36	955709	10-1863	1	LANL	USE	S

per0305067a	247188006	CWW	3/5/2010 23:46	955709	10-1863	1	LANL	USE	S
per0305068a	247188007	CWW	3/5/2010 23:56	955709	10-1863	1	LANL	USE	S
per0305069a	247188008	CWW	3/6/2010 0:06	955709	10-1863	1	LANL	USE	S
per0305070a	247188009	CWW	3/6/2010 0:16	955709	10-1863	1	LANL	USE	S
per0305071a	247188010	CWW	3/6/2010 0:26	955709	10-1863	1	LANL	USE	S
per0305072a	247188011	CWW	3/6/2010 0:36	955709	10-1863	1	LANL	USE	S
per0305073a	247188012	CWW	3/6/2010 0:46	955709	10-1863	1	LANL	USE	S
per0305074a	WCLCCV	CWW	3/6/2010 0:56			1		USE	C
per0305075a	IPB009	CWW	3/6/2010 1:07			1		USE	B
per0305076a	WCLCRI	CWW	3/6/2010 1:17			1		USE	C
per0305077a	247188013	CWW	3/6/2010 1:27	955709	10-1863	1	LANL	USE	S
per0305078a	247188014	CWW	3/6/2010 1:37	955709	10-1863	1	LANL	USE	S
per0305079a	IPB010	CWW	3/6/2010 1:47			1		USE	B
per0305080a	1202049044	CWW	3/6/2010 1:58	955712	VARIOUS	1	LANL	USE	S
per0305081a	1202049045	CWW	3/6/2010 2:08	955712	VARIOUS	1	LANL	USE	S
per0305082a	1202049048	CWW	3/6/2010 2:18	955712	VARIOUS	1	LANL	USE	S
per0305083a	247181001	CWW	3/6/2010 2:28	955712	10-1871-1	1	LANL	USE	S
per0305084a	247181002	CWW	3/6/2010 2:38	955712	10-1871-1	1	LANL	USE	S
per0305085a	247186001	CWW	3/6/2010 2:48	955712	10-1868-1	1	LANL	USE	S
per0305086a	247186002	CWW	3/6/2010 2:58	955712	10-1868-1	1	LANL	USE	S
per0305087a	WCLCCV	CWW	3/6/2010 3:08			1		USE	C
per0305088a	IPB011	CWW	3/6/2010 3:19			1		USE	B
per0305089a	WCLCRI	CWW	3/6/2010 3:29			1		USE	C
per0305090a	247186003	CWW	3/6/2010 3:39	955712	10-1868-1	1	LANL	USE	S
per0305091a	247186004	CWW	3/6/2010 3:49	955712	10-1868-1	1	LANL	USE	S
per0305092a	247186005	CWW	3/6/2010 3:59	955712	10-1868-1	1	LANL	USE	S
per0305093a	247186006	CWW	3/6/2010 4:09	955712	10-1868-1	1	LANL	USE	S
per0305094a	247186007	CWW	3/6/2010 4:19	955712	10-1868-1	1	LANL	USE	S
per0305095a	247186008	CWW	3/6/2010 4:29	955712	10-1868-1	1	LANL	USE	S
per0305096a	247186009	CWW	3/6/2010 4:39	955712	10-1868-1	1	LANL	USE	S
per0305097a	247186010	CWW	3/6/2010 4:49	955712	10-1868-1	1	LANL	USE	S
per0305098a	WCLCCV	CWW	3/6/2010 4:59			1		USE	C
per0305099a	IPB012	CWW	3/6/2010 5:10			1		USE	B
per0305100a	WCLCRI	CWW	3/6/2010 5:20			1		USE	C
per0305101a	247201001	CWW	3/6/2010 5:30	955712	10-1873	1	LANL	USE	S
per0305102a	1202049046	CWW	3/6/2010 5:40	955712	10-1873	1	LANL	USE	S
per0305103a	1202049047	CWW	3/6/2010 5:50	955712	10-1873	1	LANL	USE	S

per0305104a	247201002	CWW	3/6/2010 6:00	955712	10-1873	1	LANL	USE	S
per0305105a	247201003	CWW	3/6/2010 6:10	955712	10-1873	1	LANL	USE	S
per0305106a	247201004	CWW	3/6/2010 6:20	955712	10-1873	1	LANL	USE	S
per0305107a	247201005	CWW	3/6/2010 6:31	955712	10-1873	1	LANL	USE	S
per0305108a	247201006	CWW	3/6/2010 6:41	955712	10-1873	1	LANL	USE	S
per0305109a	247201007	CWW	3/6/2010 6:51	955712	10-1873	1	LANL	USE	S
per0305110a	WCLCCV	CWW	3/6/2010 7:01			1		USE	C
per0305111a	IPB013	CWW	3/6/2010 7:11			1		USE	B
per0305112a	WCLCRI	CWW	3/6/2010 7:21			1		USE	C
per0305113a	1202049069	CWW	3/6/2010 7:31	955727	VARIOUS	1	LANL	USE	S
per0305114a	1202049070	CWW	3/6/2010 7:42	955727	VARIOUS	1	LANL	USE	S
per0305115a	1202049073	CWW	3/6/2010 7:52	955727	VARIOUS	1	LANL	USE	S
per0305116a	247127001	CWW	3/6/2010 8:02	955727	10-1849-1	1	LANL	USE	S
per0305117a	247130001	CWW	3/6/2010 8:12	955727	10-1850-1	1	LANL	USE	S
per0305118a	247139001	CWW	3/6/2010 8:22	955727	10-1854-1	1	LANL	USE	S
per0305119a	1202049071	CWW	3/6/2010 8:32	955727	10-1854-1	1	LANL	USE	S
per0305120a	1202049072	CWW	3/6/2010 8:42	955727	10-1854-1	1	LANL	USE	S
per0305121a	247179001	CWW	3/6/2010 8:52	955727	10-1871	1	LANL	USE	S
per0305122a	247182001	CWW	3/6/2010 9:02	955727	10-1861-1	1	LANL	USE	S
per0305123a	WCLCCV	CWW	3/6/2010 9:12			1		USE	C
per0305124a	IPB014	CWW	3/6/2010 9:23			1		USE	B
per0305125a	WCLCRI	CWW	3/6/2010 9:33			1		USE	C

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/06/10
Extr. Injection Volume: 20uL
Sequence Number: per030610a
Initial Calibration Date: 03/06/10

Method: EPA 6850-Modified
Int. Std.: UCL100126-01
Mobile Phase Lot#: 1278668, 1271949
Standard-Samp Reagent Lot#:: 1271949

Reviewed BY: [illegible]
Date: 03/08/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0306001a	IPB001	CWW	3/6/2010 14:34			1		USE	B
per0306002a	IPB001	CWW	3/6/2010 14:43			1		USE	B
per0306003a	WCLICAL-01	CWW	3/6/2010 14:53			1		USE	I
per0306004a	WCLICAL-02	CWW	3/6/2010 15:02			1		USE	I
per0306005a	WCLICAL-03	CWW	3/6/2010 15:11			1		USE	I
per0306006a	WCLICAL-04	CWW	3/6/2010 15:20			1		USE	I
per0306007a	WCLICAL-05	CWW	3/6/2010 15:29			1		USE	I
per0306008a	IPB002	CWW	3/6/2010 15:38			1		USE	B
per0306009a	WCLICV	CWW	3/6/2010 15:47			1		USE	C
per0306010a	IPB003	CWW	3/6/2010 15:56			1		USE	B
per0306011a	WCLCRI	CWW	3/6/2010 16:05			1		USE	C
per0306012a	247178011	CWW	3/6/2010 16:15	955706	10-1861	1	LANL	USE	S
per0306013a	247197001	CWW	3/6/2010 16:24	955706	10-1865-1	1	LANL	USE	S
per0306014a	247197002	CWW	3/6/2010 16:33	955706	10-1865-1	1	LANL	USE	S
per0306015a	IPB004	CWW	3/6/2010 16:42			1		USE	B
per0306016a	1202062446	CWW	3/6/2010 16:51	961557	248683	1	LANL	USE	S
per0306017a	1202062447	CWW	3/6/2010 17:00	961557	248683	1	LANL	USE	S
per0306018a	1202062450	CWW	3/6/2010 17:09	961557	248683	1	LANL	USE	S
per0306019a	248683001	CWW	3/6/2010 17:18	961557	248683	50	LANL	USE	S
per0306020a	1202062448	CWW	3/6/2010 17:27	961557	248683	50	LANL	USE	S
per0306021a	1202062449	CWW	3/6/2010 17:36	961557	248683	50	LANL	USE	S
per0306022a	WCLCCV	CWW	3/6/2010 17:45			1		USE	C
per0306023a	IPB005	CWW	3/6/2010 17:54			1		USE	B
per0306024a	WCLCRI	CWW	3/6/2010 18:04			1		USE	C
per0306025a	1202049039	CWW	3/6/2010 18:13	955709	VARIOUS	1	LANL	USE	S
per0306026a	1202049040	CWW	3/6/2010 18:22	955709	VARIOUS	1	LANL	USE	S
per0306027a	1202049043	CWW	3/6/2010 18:31	955709	VARIOUS	1	LANL	USE	S
per0306028a	247187001	CWW	3/6/2010 18:40	955709	10-1867	1	LANL	USE	S
per0306029a	247187002	CWW	3/6/2010 18:49	955709	10-1867	1	LANL	USE	S

per0306030a	247187003	CWW	3/6/2010 18:58	955709	10-1867	1	LANL	USE	S
per0306031a	247188001	CWW	3/6/2010 19:07	955709	10-1863	1	LANL	USE	S
per0306032a	1202049041	CWW	3/6/2010 19:16	955709	10-1863	1	LANL	USE	S
per0306033a	1202049042	CWW	3/6/2010 19:25	955709	10-1863	1	LANL	USE	S
per0306034a	247188002	CWW	3/6/2010 19:34	955709	10-1863	1	LANL	USE	S
per0306035a	WCLCCV	CWW	3/6/2010 19:43			1		USE	C
per0306036a	IPB006	CWW	3/6/2010 19:52			1		USE	B
per0306037a	WCLCRI	CWW	3/6/2010 20:01			1		USE	C
per0306038a	247183001	CWW	3/6/2010 20:10	955727	10-1868	1	LANL	USE	S
per0306039a	247192001	CWW	3/6/2010 20:20	955727	10-1863-1	1	LANL	USE	S
per0306040a	247203001	CWW	3/6/2010 20:29	955727	10-1873-1	1	LANL	USE	S
per0306041a	247250001	CWW	3/6/2010 20:38	955727	10-1877-1	1	LANL	USE	S
per0306042a	247250002	CWW	3/6/2010 20:47	955727	10-1877-1	1	LANL	USE	S
per0306043a	247256001	CWW	3/6/2010 20:56	955727	10-1879-1	1	LANL	USE	S
per0306044a	247256002	CWW	3/6/2010 21:05	955727	10-1879-1	1	LANL	USE	S
per0306045a	247322001	CWW	3/6/2010 21:14	955727	10-1893-1	1	LANL	USE	S
per0306046a	247322002	CWW	3/6/2010 21:23	955727	10-1893-1	1	LANL	USE	S
per0306047a	247335001	CWW	3/6/2010 21:32	955727	10-1906	1	LANL	USE	S
per0306048a	WCLCCV	CWW	3/6/2010 21:41			1		USE	C
per0306049a	IPB007	CWW	3/6/2010 21:50			1		USE	B
per0306050a	WCLCRI	CWW	3/6/2010 21:59			1		USE	C
per0306051a	247339001	CWW	3/6/2010 22:08	955727	10-1909-1	1	LANL	DUSE-RA	S
per0306052a	247339002	CWW	3/6/2010 22:18	955727	10-1909-1	1	LANL	DUSE-RA	S
per0306053a	247350001	CWW	3/6/2010 22:27	955727	10-1912-1	1	LANL	DUSE-RA	S
per0306054a	IPB008	CWW	3/6/2010 22:36			1		DUSE	B
per0306055a	1202049027	CWW	3/6/2010 22:45	955703	VARIOUS	1	LANL	DUSE-RA	S
per0306056a	1202049028	CWW	3/6/2010 22:54	955703	VARIOUS	1	LANL	DUSE-RA	S
per0306057a	1202049031	CWW	3/6/2010 23:03	955703	VARIOUS	1	LANL	DUSE-RA	S
per0306058a	247123001	CWW	3/6/2010 23:12	955703	10-1848	1	LANL	DUSE-RA	S
per0306059a	247123002	CWW	3/6/2010 23:21	955703	10-1848	1	LANL	DUSE-RA	S
per0306060a	247123003	CWW	3/6/2010 23:30	955703	10-1848	1	LANL	DUSE-RA	S
per0306061a	WCLCCV	CWW	3/6/2010 23:39			1		DUSE	C
per0306062a	IPB009	CWW	3/6/2010 23:48			1		DUSE	B
per0306063a	WCLCRI	CWW	3/6/2010 23:57			1		DUSE	C

Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

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 10-1861-1

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:	955727
Prep Batch Number:	955726

Sample Analysis

Sample ID	Client ID
247182001	RE15-10-8087
1202049073	Interference Check Sample (ICS)
1202049069	Method Blank (MB)
1202049070	Laboratory Control Sample (LCS)
1202049071	247139001(RE16-10-3910) Matrix Spike (MS)
1202049072	247139001(RE16-10-3910) 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.

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 247139001 (RE16-10-3910) from SDG 10-1854 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 M Maier **Date:** 03/12/10

SAMPLE DATA SUMMARY

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: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE15-10-8087

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861-1

GEL Sample ID: 247182001

Date Filtered: 02-MAR-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	06-MAR-10 09:02	per0305122a
	Perchlorate Isotope Ratio						1	06-MAR-10 09:02	per0305122a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-MAR-10 09:02	per0305122a
	Perchlorate-O(18)			0.424	ug/L		1	06-MAR-10 09:02	per0305122a

^ 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 =

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

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1861-1

Extract Batch Code: 955726

Date Filtered: 02-MAR-10

Matrix: WATER

Sample ID: 1202049070

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.18	ug/L	90.1		85 – 115
Perchlorate Isotope Ratio		3.12				–
Perchlorate-101	0.200	.188	ug/L	93.9		85 – 115
Perchlorate-O(18)		.416	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.

Form 5a

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1861-1

Extract Batch Code: 955726

Date Filtered: 02-MAR-10

Matrix: WATER

Sample ID: 1202049073

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.163	ug/L	81.6		70 – 130
Perchlorate Isotope Ratio		2.98				
Perchlorate-101	0.200	.178	ug/L	89.2		70 – 130
Perchlorate-O(18)		.456	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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qid

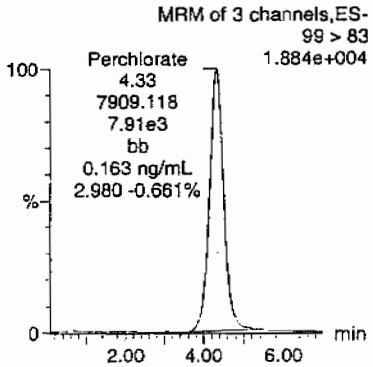
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305115a
Date: 06-Mar-2010
Time: 07:52:13
ID: 1202049073
Vial: 3:1,C

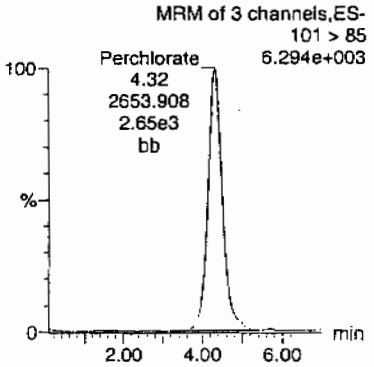
|LANL|955727|LZW|ICS|11

GW
03-26-10

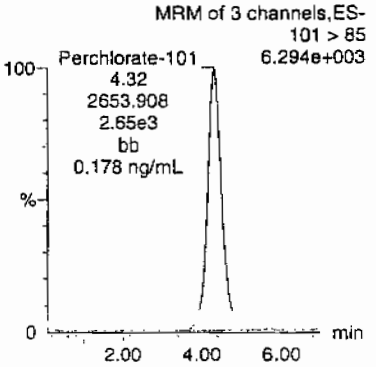
Perchlorate



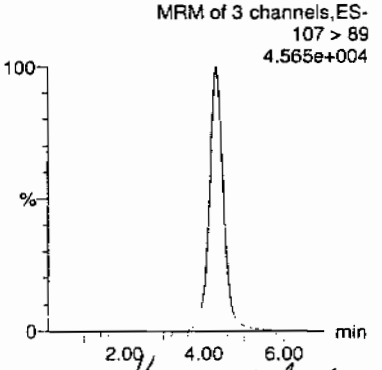
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/09/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049073	Perchlorate	99 > 83	4.33	7909.118	7909.118	bb			0.1631	81.55	-18.45	520.937	2.98
1202049073	Perchlorate-101	101 > 85	4.32	2653.908	2653.908	bb			0.1783	89.17	-10.83	114.573	
1202049073	Perchlorate-O(18)	107 > 89	4.32	19159.748	19159.748	bb			0.4555	91.11	-8.89	3028.5...	

Form 6

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1861-1

Extract Batch Code: 955726

Date Extracted: 02-MAR-10

GEL MS/PS ID: 1202049071

Client ID: RE16-10-3910

GEL MSD/PSD ID: 1202049072

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	0.00113	ug/L	0.176	87.6	.179	88.7	1.33	30	75 – 125
Perchlorate Isotope Ratio	0	0.00		3.13		3.1		0		–
Perchlorate-101	0.200	0.00083	ug/L	0.184	91.4	.188	93.5	2.22	30	75 – 125
Perchlorate-O(18)	0	0.408	ug/L	0.414		.42		1.23		–

^ 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

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	05-MAR-10	per0305001a	IPB001
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305001a	IPB001
Perchlorate	0.00	0	NA	05-MAR-10	per0305002a	IPB001
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305002a	IPB001

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

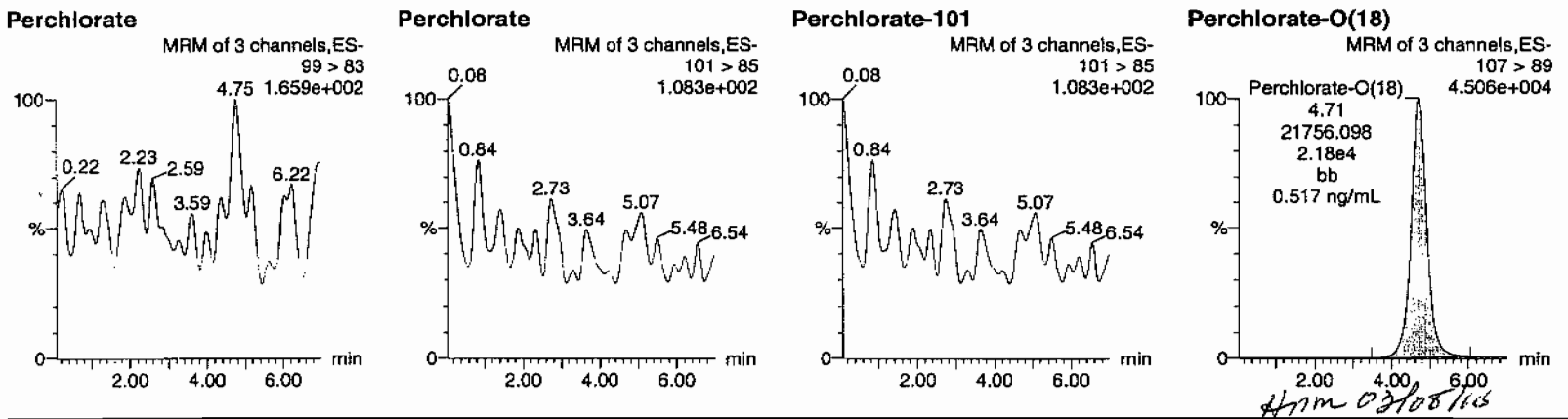
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

Name: per0305001a
Date: 05-Mar-2010
Time: 12:39:45
ID: IPB001
Vial: 1:1,A

03-06-10



HM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.71	21756.098	21756.098	bb			0.5173	103.45	3.45	1433.3...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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

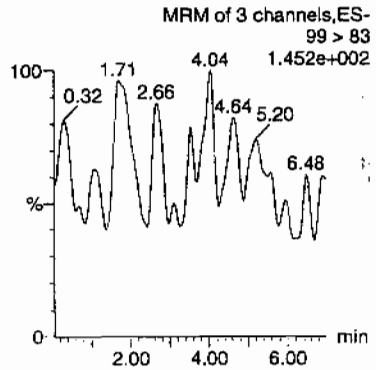
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

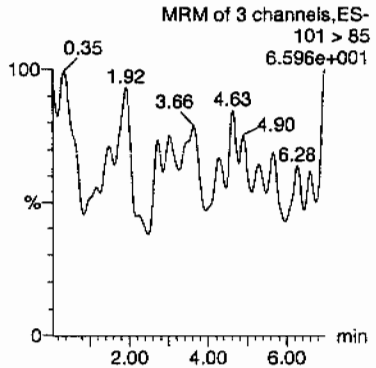
Name: per0305002a
Date: 05-Mar-2010
Time: 12:50:06
ID: IPB001
Vial: 1:1,A

CWW 03-06-10

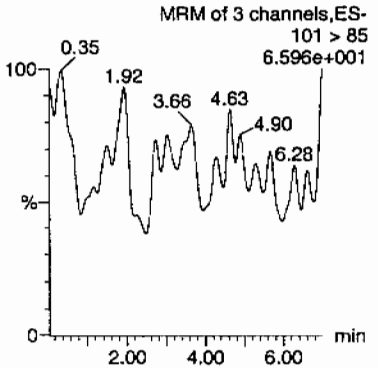
Perchlorate



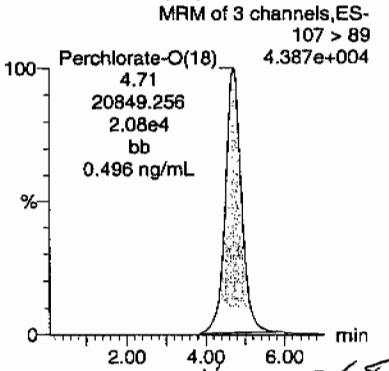
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB001	Perchlorate	99 > 83											0.00
IPB001	Perchlorate-101	101 > 85											
IPB001	Perchlorate-O(18)	107 > 89	4.71	20849.256	20849.256	bb			0.4957	99.14	-0.86	1295.4...	

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	05-MAR-10	per0305008a	IPB002
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305008a	IPB002
Perchlorate	0.00	0	NA	05-MAR-10	per0305010a	IPB003
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305010a	IPB003
Perchlorate	0.00	0	NA	05-MAR-10	per0305023a	IPB004
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305023a	IPB004
Perchlorate	0.00	0	NA	05-MAR-10	per0305036a	IPB005
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305036a	IPB005
Perchlorate	0.00	0	NA	05-MAR-10	per0305062a	IPB008
Perchlorate-101	0.00	0	NA	05-MAR-10	per0305062a	IPB008
Perchlorate	0.00	0	NA	06-MAR-10	per0305075a	IPB009
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305075a	IPB009
Perchlorate	0.00	0	NA	06-MAR-10	per0305079a	IPB010

Form 4

Perchlorate Continuing Calibration Blank

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305079a	IPB010
Perchlorate	0.00	0	NA	06-MAR-10	per0305088a	IPB011
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305088a	IPB011
Perchlorate	0.00	0	NA	06-MAR-10	per0305099a	IPB012
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305099a	IPB012
Perchlorate	0.00	0	NA	06-MAR-10	per0305111a	IPB013
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305111a	IPB013
Perchlorate	0.00	0	NA	06-MAR-10	per0305124a	IPB014
Perchlorate-101	0.00	0	NA	06-MAR-10	per0305124a	IPB014

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

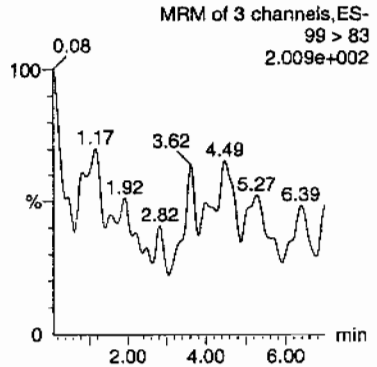
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

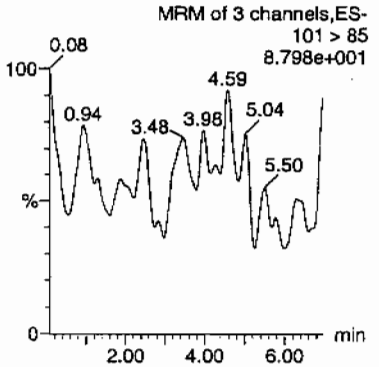
Name: per0305008a
Date: 05-Mar-2010
Time: 13:50:47
ID: IPB002
Vial: 1:1,A

CWW 03-06-10

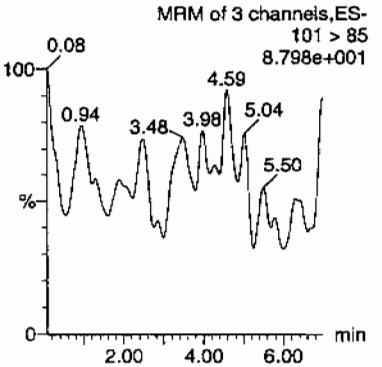
Perchlorate



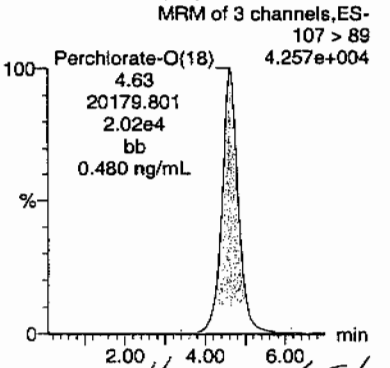
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB002	Perchlorate	99 > 83											0.00
IPB002	Perchlorate-101	101 > 85											
IPB002	Perchlorate-O(18)	107 > 89	4.63	20179.801	20179.801	bb			0.4798	95.96	-4.04	336.982	

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

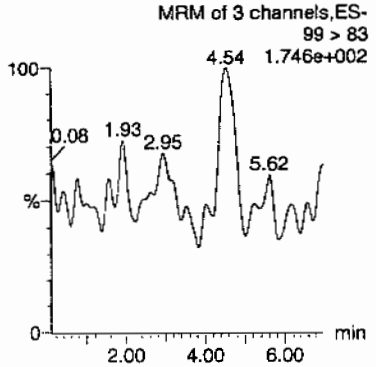
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

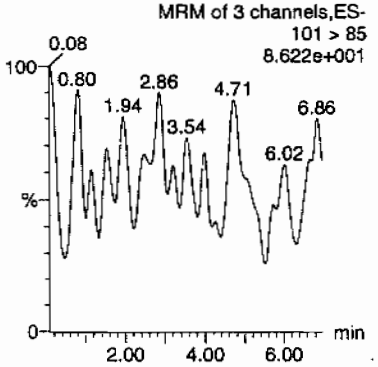
Name: per0305010a
Date: 05-Mar-2010
Time: 14:11:00
ID: IPB003
Vial: 1:1,A

03-06-10

Perchlorate



Perchlorate



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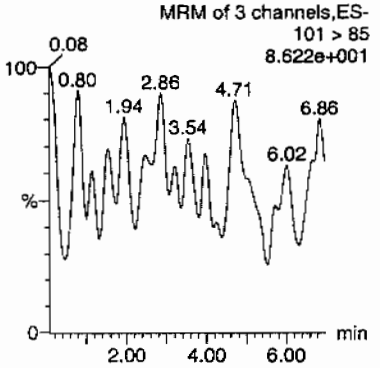
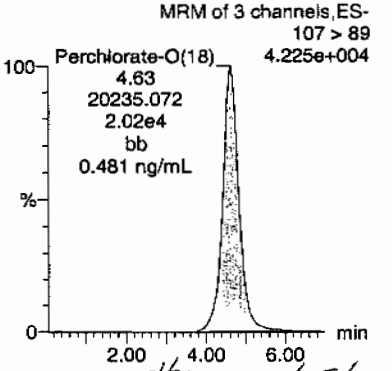


Perchlorate-O(18)



HM mu 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83											0.00
PB003	Perchlorate-101	101 > 85											
PB003	Perchlorate-O(18)	107 > 89	4.63	20235.072	20235.072	bb			0.4811	96.22 ✓	-3.78	3040.0...	

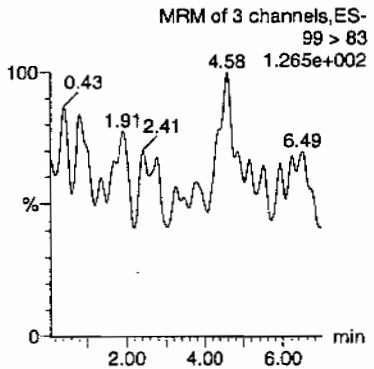
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

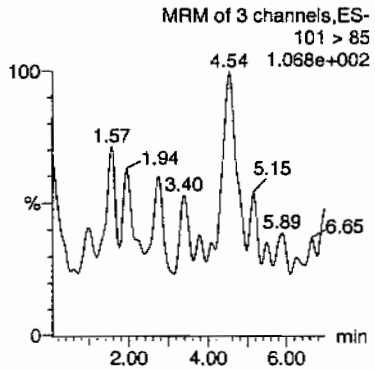
Name: per0305023a
Date: 05-Mar-2010
Time: 16:21:48
ID: IPB004
Vial: 1:1,A

CWW
03-06-10

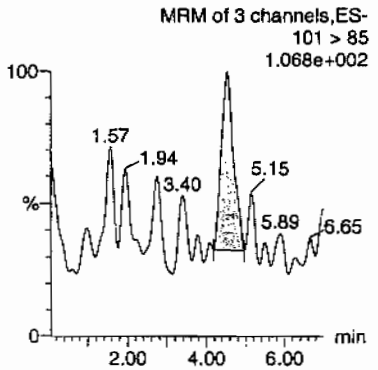
Perchlorate



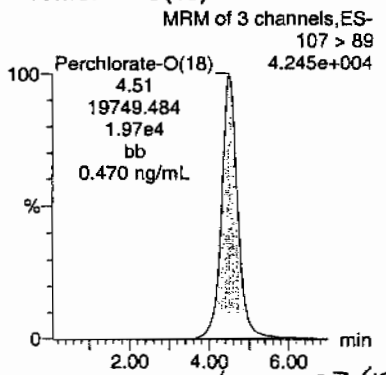
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB004	Perchlorate	99 > 83											0.00
PB004	Perchlorate-101	101 > 85	4.54	26.151	26.151	bb			0.0018			21.874	
PB004	Perchlorate-O(18)	107 > 89	4.51	19749.484	19749.484	bb			0.4696	93.91	-6.09	2622.5...	

The GEL Group, LLC Analyst: Charlers W. Wilson

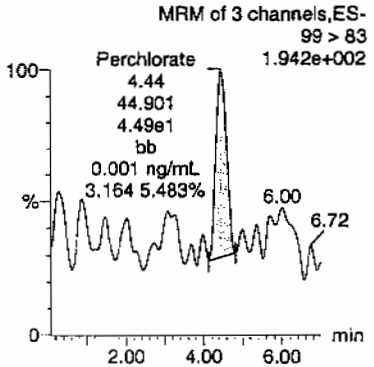
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

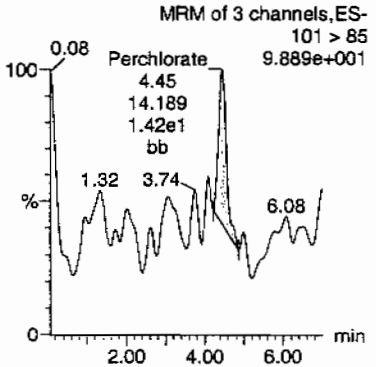
Name: per0305036a
Date: 05-Mar-2010
Time: 18:32:44
ID: IPB005
Vial: 1:1,A

CWJ 03-06-10

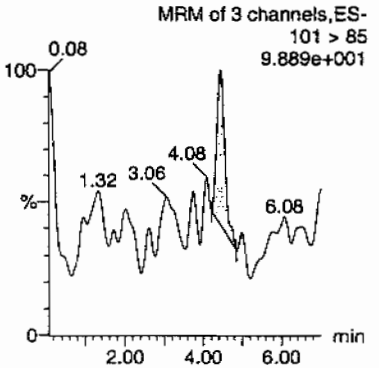
Perchlorate



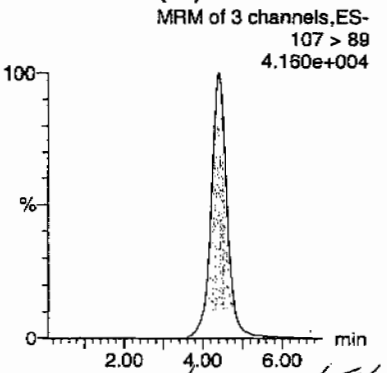
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB005	Perchlorate	99 > 83	4.44	44.901	44.901	bb			0.0009			9.442	3.16
PB005	Perchlorate-101	101 > 85	4.45	14.189	14.189	bb			0.0010			12.136	
PB005	Perchlorate-O(18)	107 > 89	4.41	19249.852	19249.852	bb			0.4577	91.54	-8.46	3556.7...	

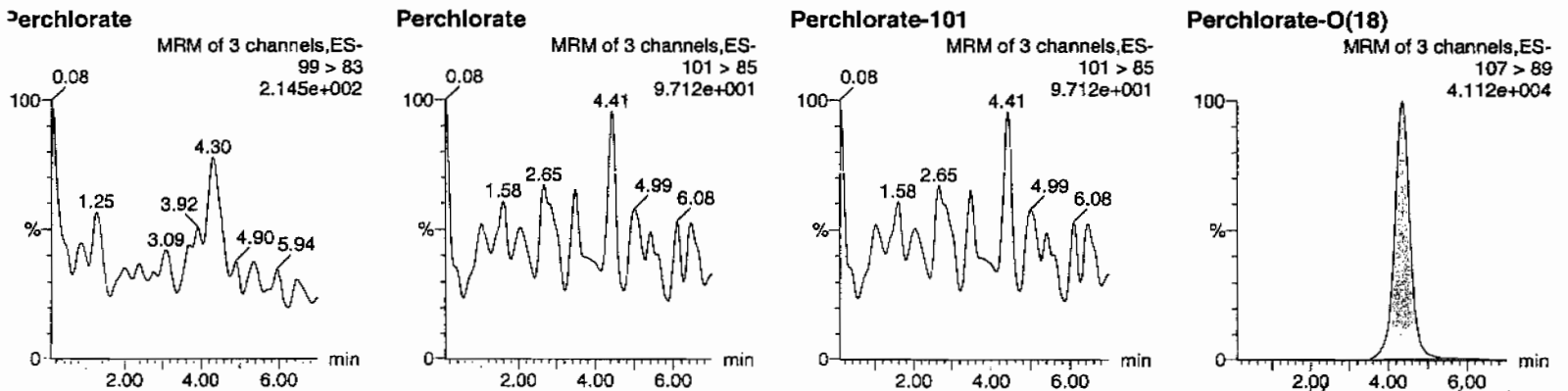
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305062a
Date: 05-Mar-2010
Time: 22:55:56
ID: IPB008
Vial: 1:1,A

03-06-10



HMR 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB008	Perchlorate	99 > 83											0.00
PB008	Perchlorate-101	101 > 85											
PB008	Perchlorate-O(18)	107 > 89	4.34	18762.594	18762.594	bb			0.4461	89.22	-10.78	2075.7...	

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

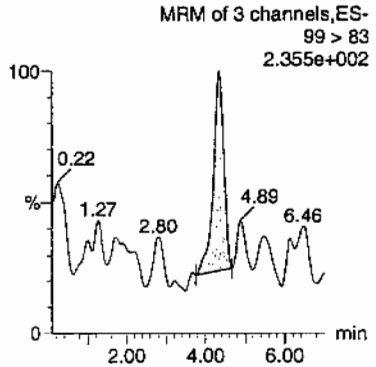
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qid

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

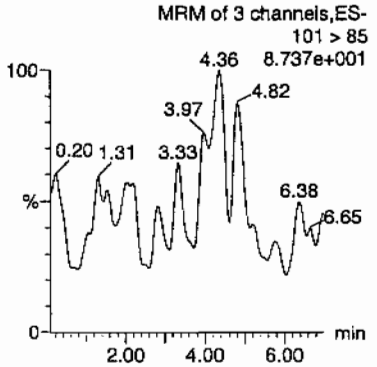
Name: per0305075a
Date: 06-Mar-2010
Time: 01:07:14
ID: IPB009
Vial: 1:1,A

03 06-10

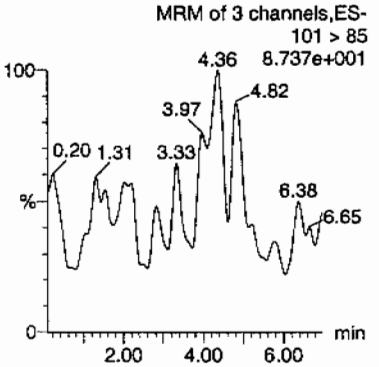
Perchlorate



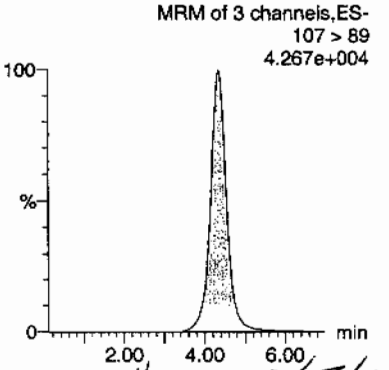
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB009	Perchlorate	99 > 83	4.35	56.745	56.745	bb			0.0012			28.981	0.00
IPB009	Perchlorate-101	101 > 85											
IPB009	Perchlorate-O(18)	107 > 89	4.34	19612.217	19612.217	bb			0.4663	93.26	-6.74	1489.6...	

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

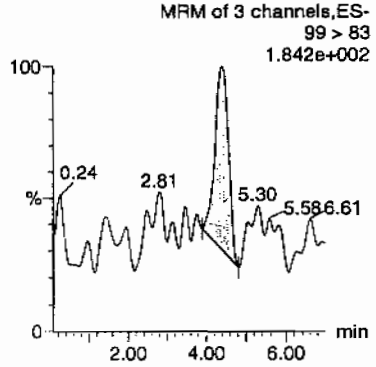
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

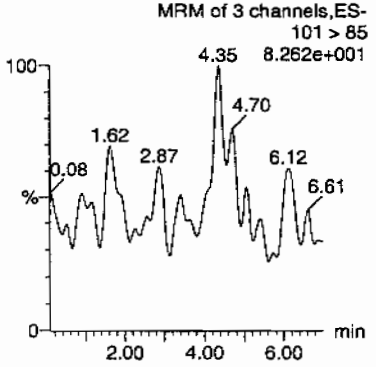
Name: per0305079a
Date: 06-Mar-2010
Time: 01:47:51
ID: IPB010
Vial: 1:1,A

330
03-06-10

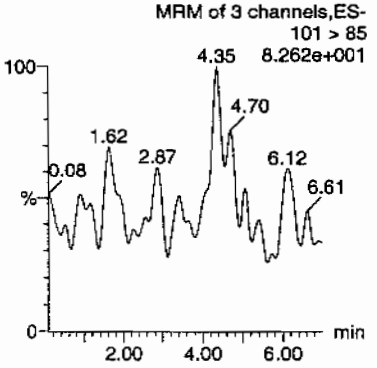
Perchlorate



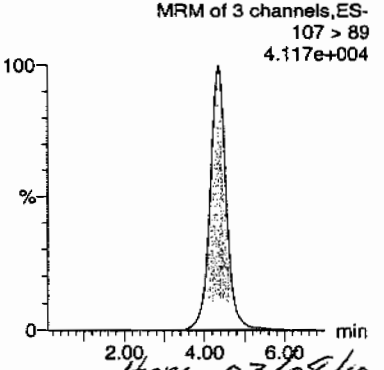
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB010	Perchlorate	99 > 83	4.41	52.090	52.090	bb			0.0011			12.083	0.00
IPB010	Perchlorate-101	101 > 85											
IPB010	Perchlorate-O(18)	107 > 89	4.35	18875.709	18875.709	bb			0.4488	89.76	-10.24	3786.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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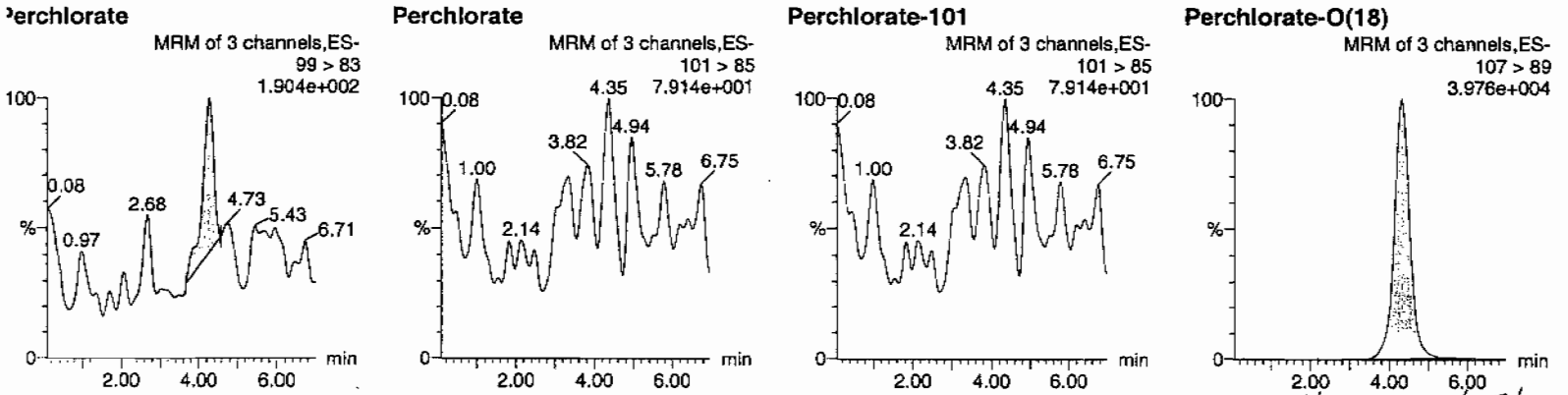
Date: 06-Mar-2010
Time: 03:19:03
ID: IPB011
Vial: 1:1,A

Cw 03-06-10



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB011	Perchlorate	99 > 83	4.27	38.645	38.645	bb			0.0008			9.935	0.00
PB011	Perchlorate-101	101 > 85											
PB011	Perchlorate-O(18)	107 > 89	4.32	18268.896	18268.896	bb			0.4344	86.87	-13.13	3328.6...	

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

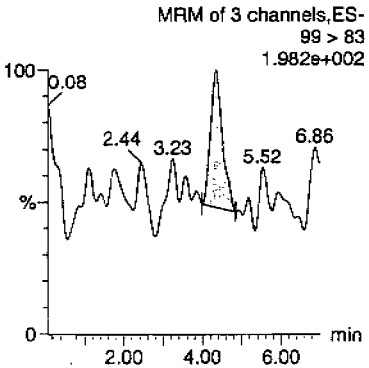
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

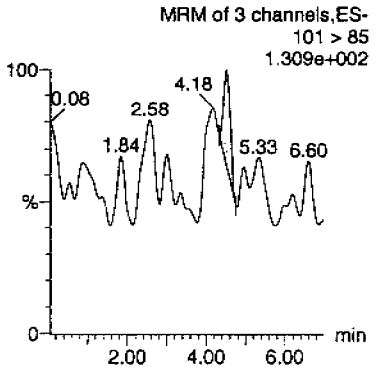
Name: per0305099a
Date: 06-Mar-2010
Time: 05:10:08
ID: IPB012
Vial: 1:1,A

CWO
03-06-10

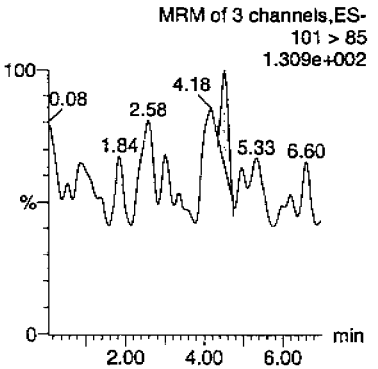
Perchlorate



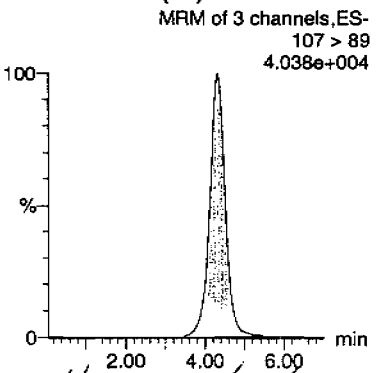
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio	
PB012	Perchlorate	99 > 83	4.34	38.264	38.264	bb			0.0008			12.046	3.88	0.024
PB012	Perchlorate-101	101 > 85	4.51	9.873	9.873	bb			0.0007			12.423		<0.020
PB012	Perchlorate-O(18)	107 > 89	4.32	18361.596	18361.596	bb			0.4366	87.31	-12.69	1563.3...		

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

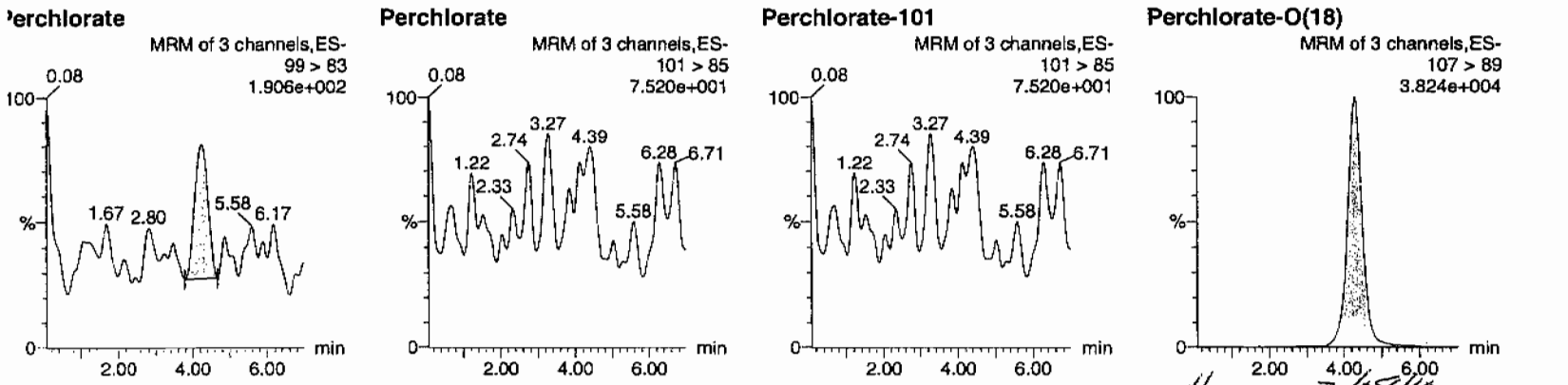
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305111a
Date: 06-Mar-2010
Time: 07:11:35
ID: IPB013
Vial: 1:1,A

CW
03-06-10



HMM 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB013	Perchlorate	99 > 83	4.23	43.509	43.509	bb			0.0009			8.985	0.00
PB013	Perchlorate-101	101 > 85											
PB013	Perchlorate-O(18)	107 > 89	4.29	17616.211	17616.211	bb			0.4188	83.77	-16.23	3253.1...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

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Date: 06-Mar-2010
Time: 09:23:06
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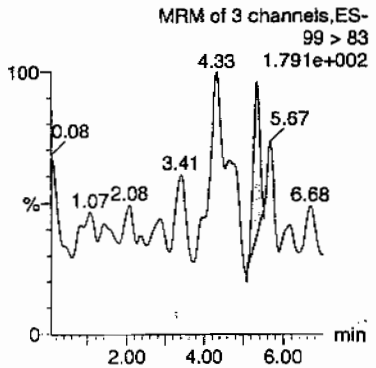
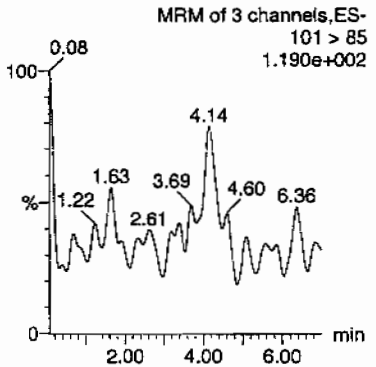
Vial: 1:1,A

WW 03-06-10

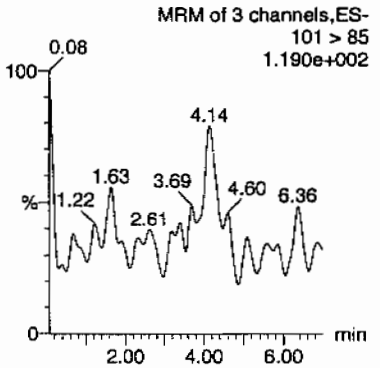
Perchlorate



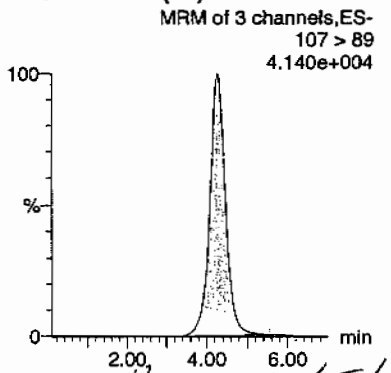
Perchlorate



Perchlorate-101



Perchlorate-O(18)



MM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB014	Perchlorate	99 > 83	5.35	19.880	19.880	bb			0.0004			6.472	0.00
IPB014	Perchlorate-101	101 > 85											
IPB014	Perchlorate-O(18)	107 > 89	4.28	18518.193	18518.193	bb			0.4403	88.06	-11.94	832.657	

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

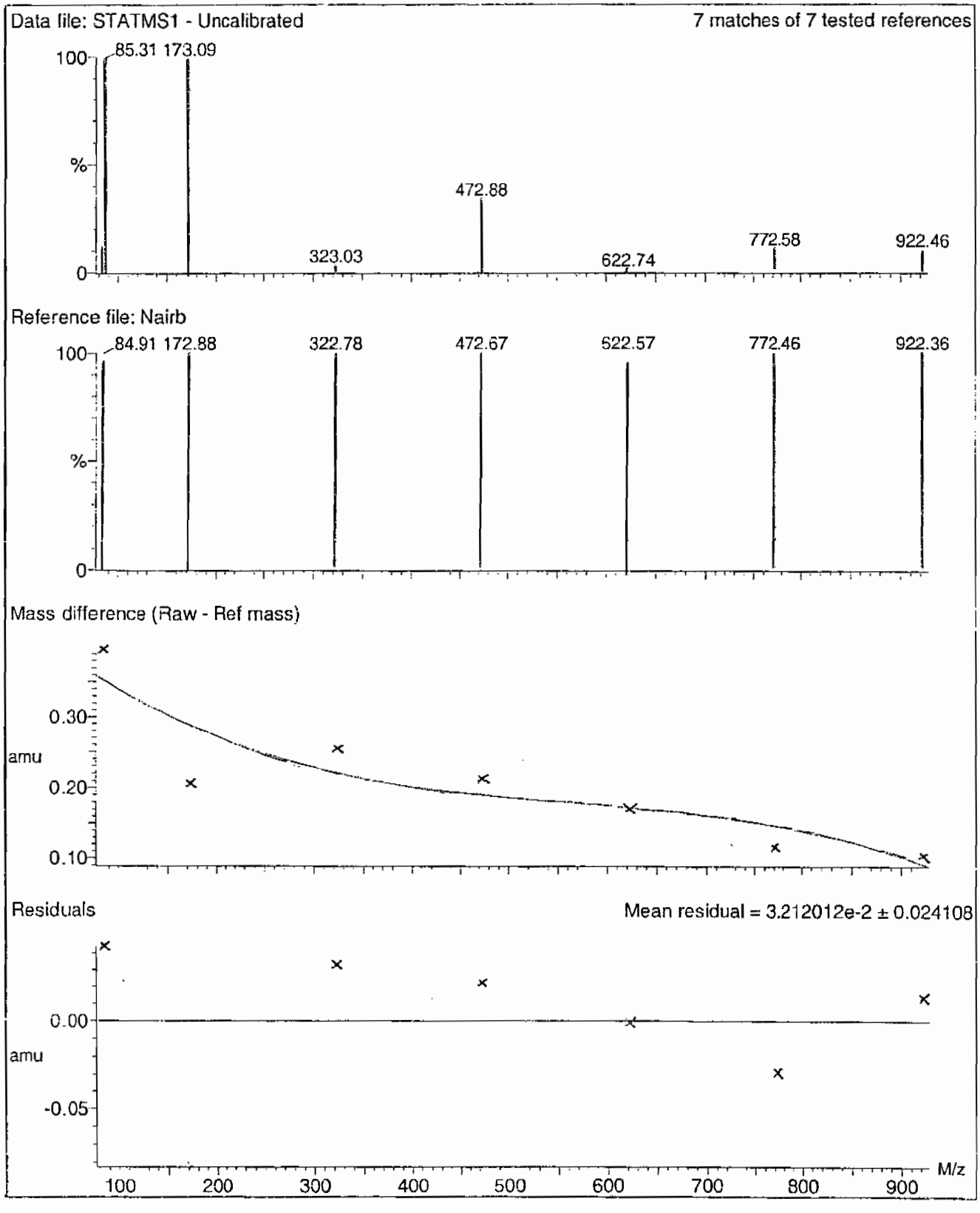
22.9898	100
84.9118	100
172.8840	100
322.7782	100
472.6725	100
622.5667	100
772.4610	100
922.3552	100
1072.2494	100
; 1222.1437	100
; 1372.0379	100
; 1521.9321	100
; 1671.8264	100
; 1821.7206	100
; 1971.6149	100
; 2121.5091	100
; 2271.4033	100
; 2421.2976	100
; 2571.1918	100
; 2721.0861	100
; 2870.9803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

QUATTRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Printed: **Tue Jan 08 12:19:12 2008**

PEAKS HIGHLIGHTED BY CWJ 01-07-08



Calibration Report - MS1 Scanning

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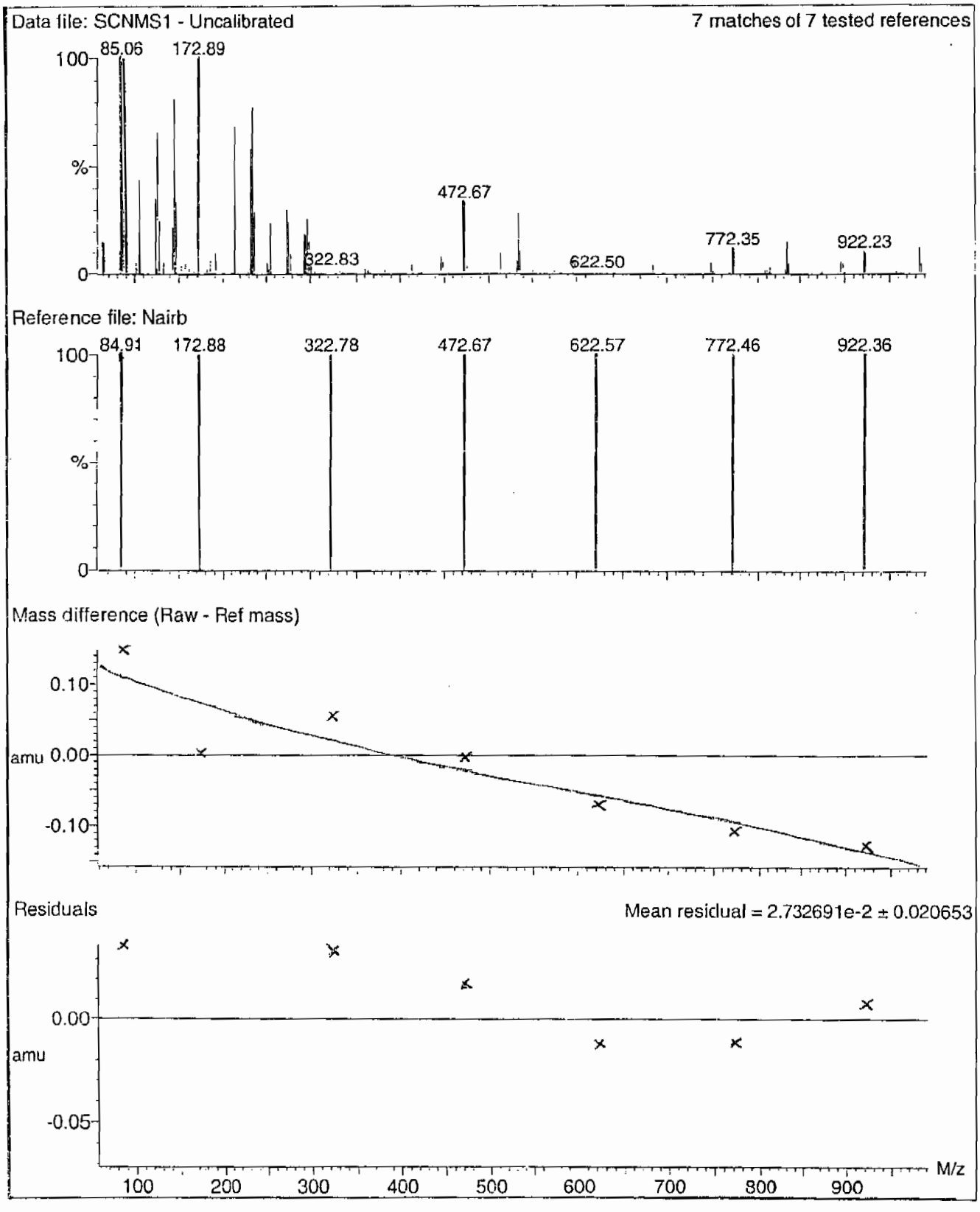

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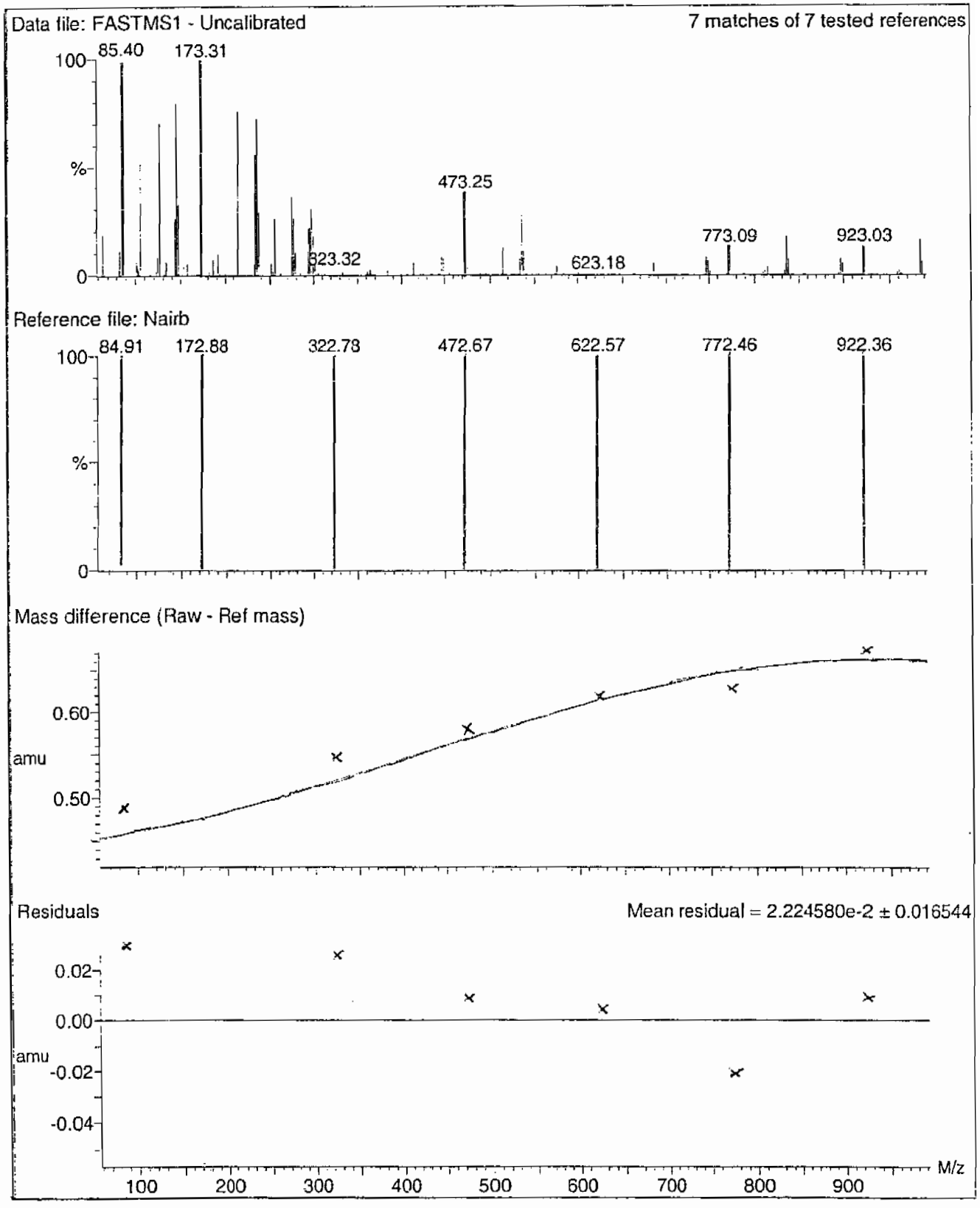

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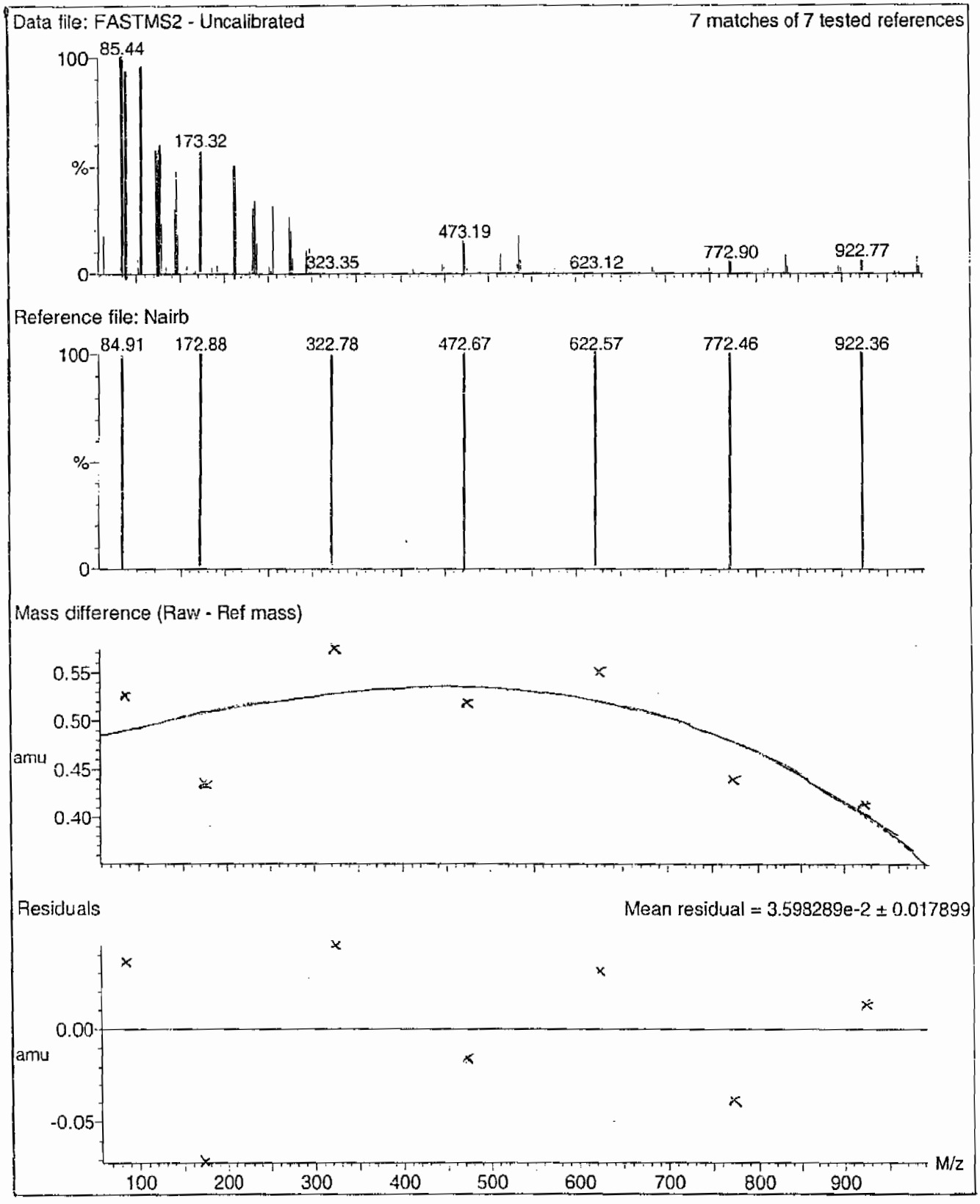

Calibration Report - MS2 Scanning

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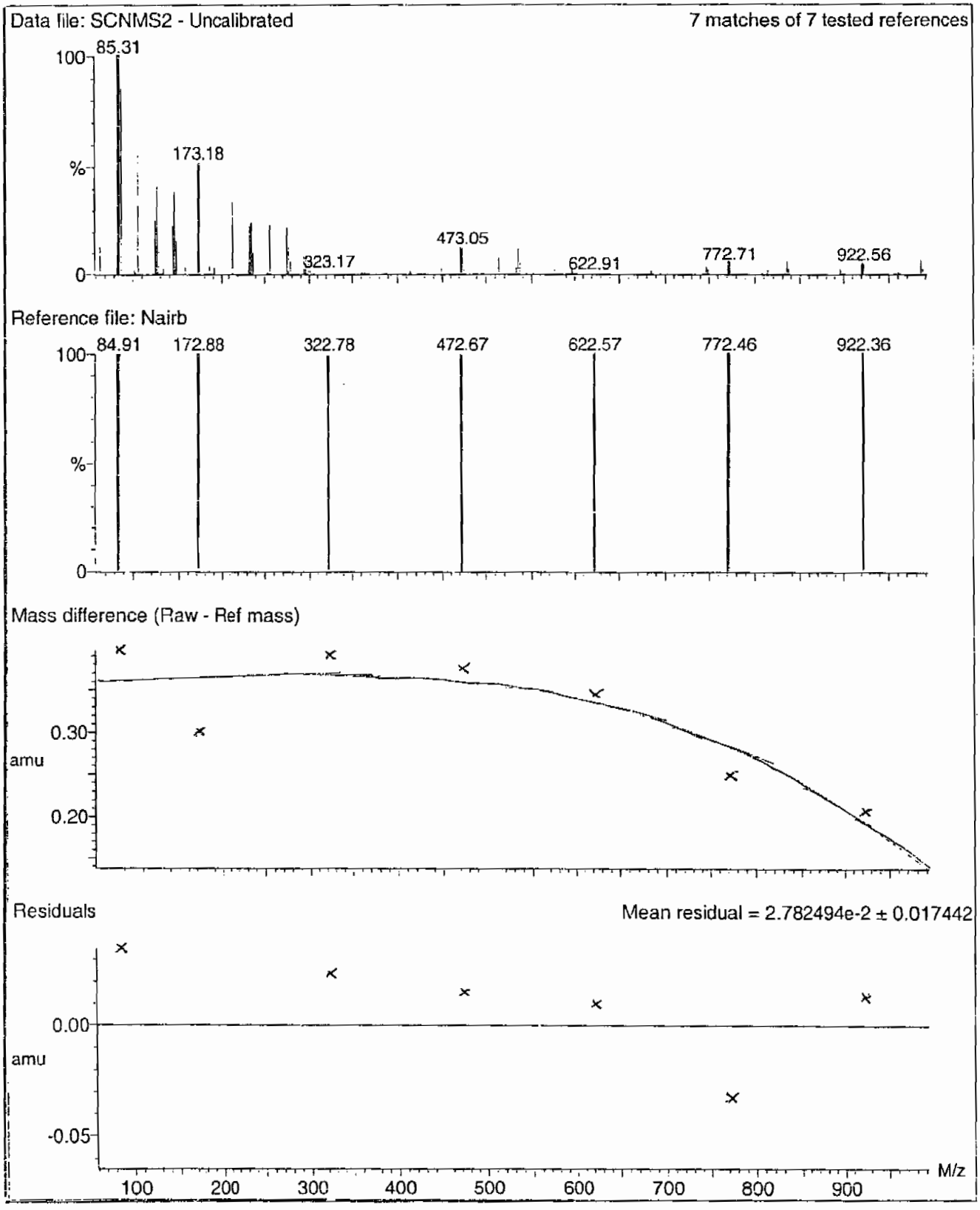

Calibration Report - MS2 Static

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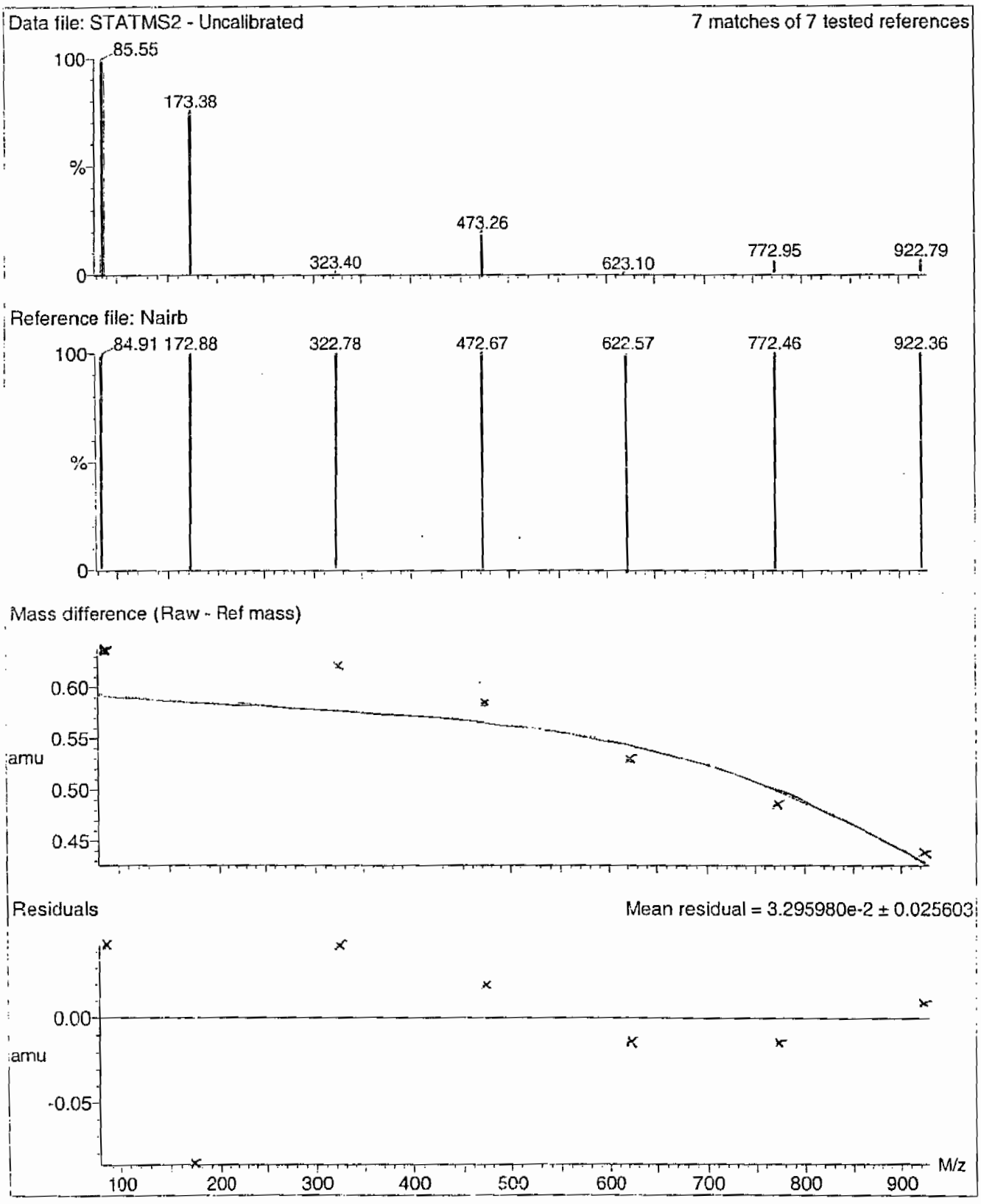
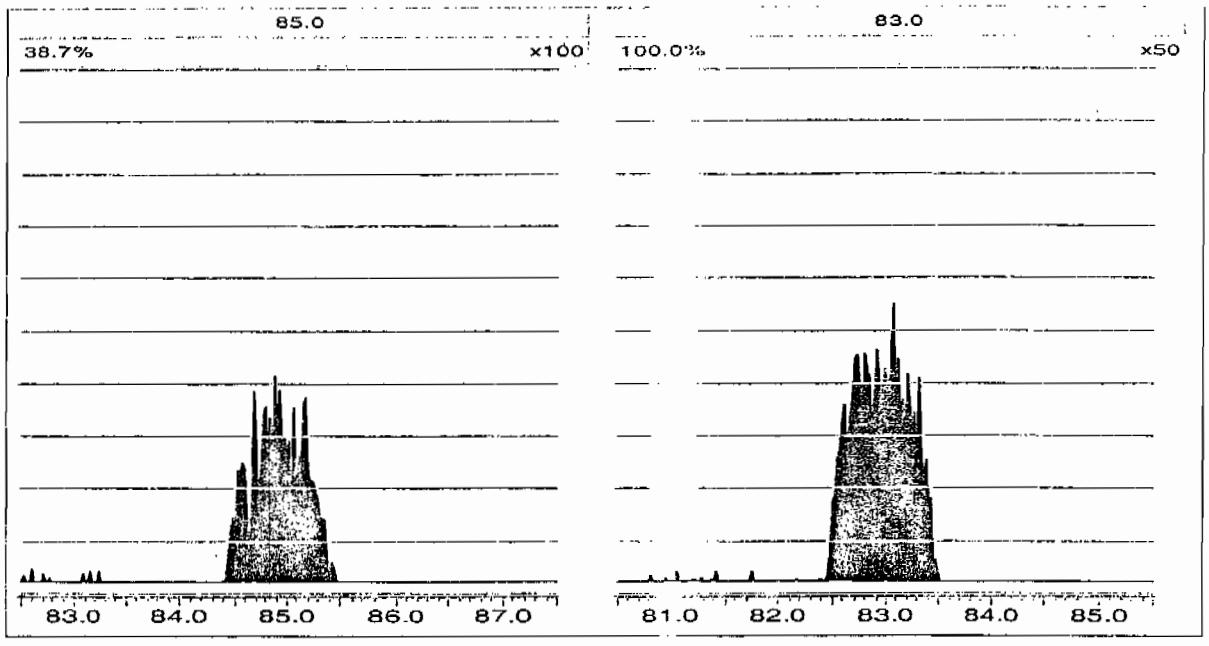


File: C:\MassLynx\Perchlorate.PRO\ACQUDB\Perchlorate.IPR

Printed: Friday, March 05, 2010 10:31:47 Eastern Standard Time



Form 8

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10–1861–1

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	**per0305006a**	**05–MAR–10**	**21416.7**				
Lower Area Limit			**10708.35**				
Upper Area Limit			**42833.4**				
1202049069	per0305113a	06–MAR–10 07:31	18340.5	4.29	4.2778	.997	
1202049070	per0305114a	06–MAR–10 07:42	17497.8	4.29	4.30265	1.003	
1202049073	per0305115a	06–MAR–10 07:52	19159.7	4.32	4.3276	1.002	
247182001	per0305122a	06–MAR–10 09:02	17819.8	4.27			

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: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
RE15-10-8087

Date Received: 16-FEB-10

GEL Job No (SDG): 10-1861-1

GEL Sample ID: 247182001

Date Filtered: 02-MAR-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	06-MAR-10 09:02	per0305122a
	Perchlorate Isotope Ratio						1	06-MAR-10 09:02	per0305122a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-MAR-10 09:02	per0305122a
	Perchlorate-O(18)			0.424	ug/L		1	06-MAR-10 09:02	per0305122a

^ 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 =

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

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

ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

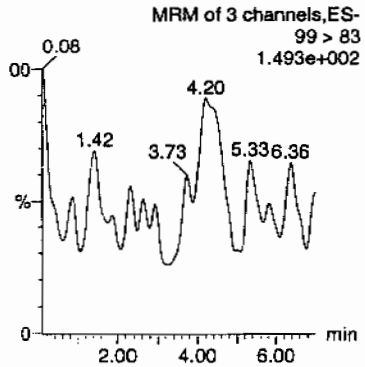
ast Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
rinted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

lame: per0305122a
ate: 06-Mar-2010
Ime: 09:02:41
): 247182001
ial: 3:2,D

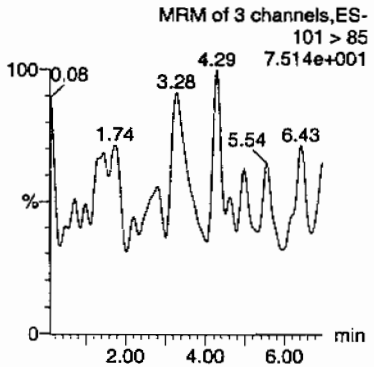
|LANL|955727|LZW|1|

CWW 03-06-10

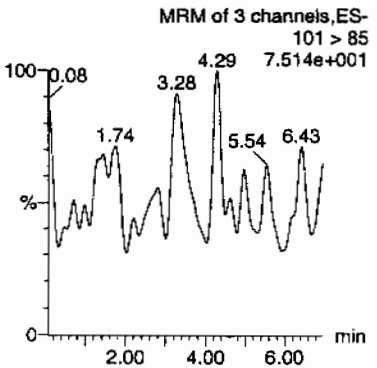
erchlorate



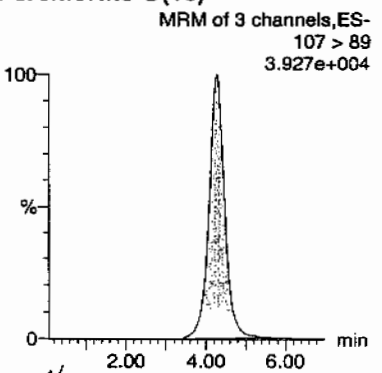
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/09/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
47182001	Perchlorate	99 > 83											0.00
47182001	Perchlorate-101	101 > 85											
47182001	Perchlorate-O(18)	107 > 89	4.27	17819.813	17819.813	bb			0.4237	84.74	-15.26	2994.6...	

STANDARDS DATA

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 05-MAR-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: 48489.74

Response Type: External Standard

Curve Type: RF

Form 2

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories **GEL Job No.(SDG):** 10-1861-1

Lab Code: GEL

Instrument ID: LCMSMS **Date Analyzed:** 05-MAR-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-101

Coefficient of Determination:

Calibration Curve: 14881.82

Response Type: External Standard

Curve Type: RF

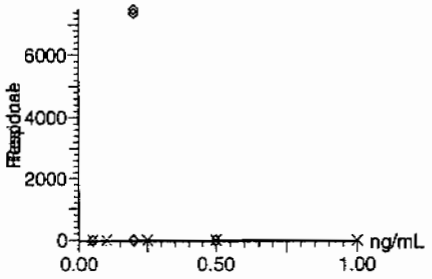
uantify Calibration Report MassLynx 4.0 SP4
he GEL Group, LLC Analyst: Charlers W. Wilson

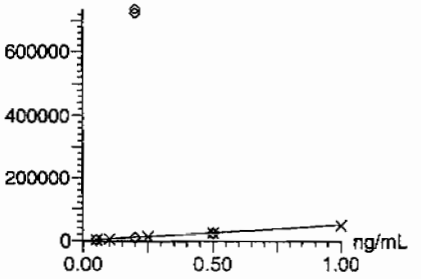
ataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

ast Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
rinted: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

lethod: C:\MassLynx\Perchlorate.PRO\MethDB\per030510a.mdb 06 Mar 2010 09:51:19
alibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030510a.cdb 06 Mar 2010 09:51:51

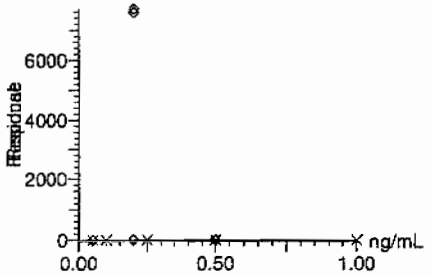
ompound name: Perchlorate
esponse Factor: 48489.7
RF SD: 1243.24, % Relative SD: 2.56392
esponse type: External Std, Area
urve type: RF

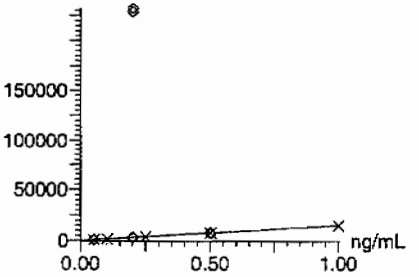




03-06-10

ompound name: Perchlorate-101
esponse Factor: 14881.8
RF SD: 415.715, % Relative SD: 2.79344
esponse type: External Std, Area
urve type: RF





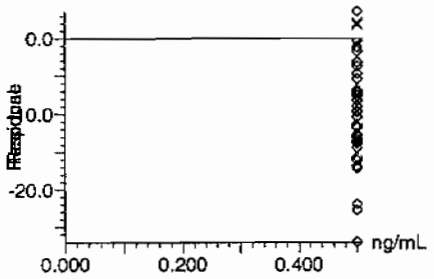
03/08/10

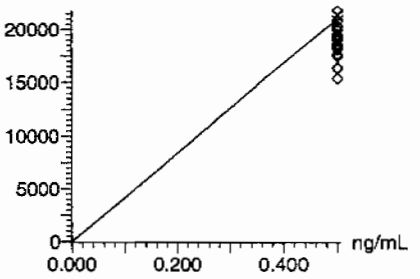
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Compound name: Perchlorate-O(18)
Response Factor: 42059.8
IRF SD: 811.21, % Relative SD: 1.9287
Response type: External Std, Area
Curve type: RF





GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 3

Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.51	101.59	05-MAR-10 14:00	per0305009a
Perchlorate Isotope Ratio		3.02		05-MAR-10 14:00	per0305009a
Perchlorate-101	.5	.55	109.45	05-MAR-10 14:00	per0305009a

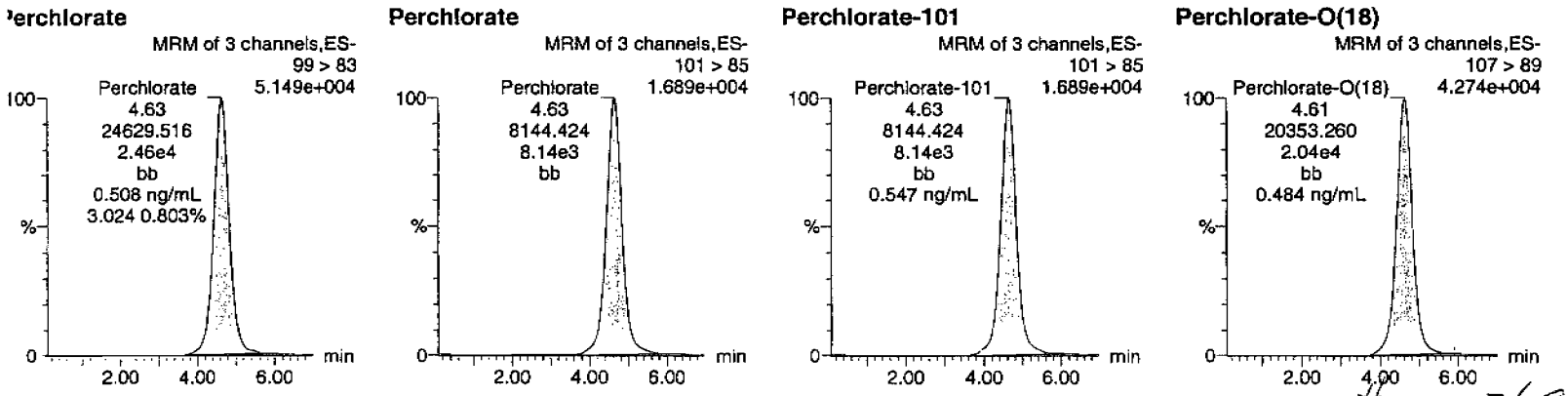
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305009a
Date: 05-Mar-2010
Time: 14:00:49
ID: WCL100227-06ICV
Vial: 1:2,A

Pass
aw
03-06-10



AMM 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100227-06ICV	Perchlorate	99 > 83	4.63	24629.516	24629.516	bb			0.5079	101.59	1.59	3539.4...	3.02
VCL100227-06ICV	Perchlorate-101	101 > 85	4.63	8144.424	8144.424	bb			0.5473	109.45	9.45	2045.0...	
VCL100227-06ICV	Perchlorate-O(18)	107 > 89	4.61	20353.260	20353.260	bb			0.4839	96.78	-3.22	3845.3...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	100.84	05-MAR-10 16:11	per0305022a
Perchlorate Isotope Ratio		3.08		05-MAR-10 16:11	per0305022a
Perchlorate-101	.5	.53	106.73	05-MAR-10 16:11	per0305022a
Perchlorate	.5	.5	100.86	05-MAR-10 18:22	per0305035a
Perchlorate Isotope Ratio		3.15		05-MAR-10 18:22	per0305035a
Perchlorate-101	.5	.52	104.17	05-MAR-10 18:22	per0305035a
Perchlorate	.5	.49	97.76	05-MAR-10 22:45	per0305061a
Perchlorate Isotope Ratio		3.15		05-MAR-10 22:45	per0305061a
Perchlorate-101	.5	.51	101.05	05-MAR-10 22:45	per0305061a
Perchlorate	.5	.49	98.25	06-MAR-10 00:56	per0305074a
Perchlorate Isotope Ratio		3.17		06-MAR-10 00:56	per0305074a
Perchlorate-101	.5	.51	101.04	06-MAR-10 00:56	per0305074a
Perchlorate	.5	.47	93.47	06-MAR-10 03:08	per0305087a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.06		06-MAR-10 03:08	per0305087a
Perchlorate-101	.5	.5	99.39	06-MAR-10 03:08	per0305087a
Perchlorate	.5	.46	92.94	06-MAR-10 04:59	per0305098a
Perchlorate Isotope Ratio		3.07		06-MAR-10 04:59	per0305098a
Perchlorate-101	.5	.49	98.61	06-MAR-10 04:59	per0305098a
Perchlorate	.5	.47	93.15	06-MAR-10 07:01	per0305110a
Perchlorate Isotope Ratio		3.12		06-MAR-10 07:01	per0305110a
Perchlorate-101	.5	.49	97.44	06-MAR-10 07:01	per0305110a
Perchlorate	.5	.46	92.21	06-MAR-10 09:12	per0305123a
Perchlorate Isotope Ratio		3.1		06-MAR-10 09:12	per0305123a
Perchlorate-101	.5	.49	97.06	06-MAR-10 09:12	per0305123a

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

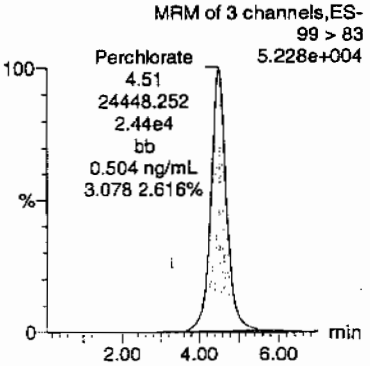
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

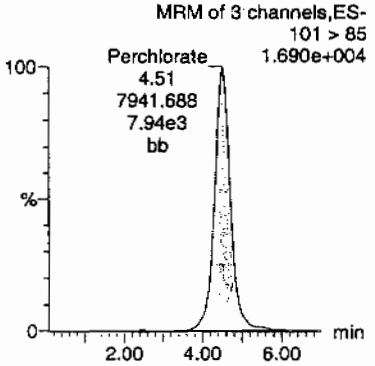
Name: per0305022a
Date: 05-Mar-2010
Time: 16:11:38
ID: WCL100227-06CCV
Vial: 1:2,A

Pass
aw
03-06-10

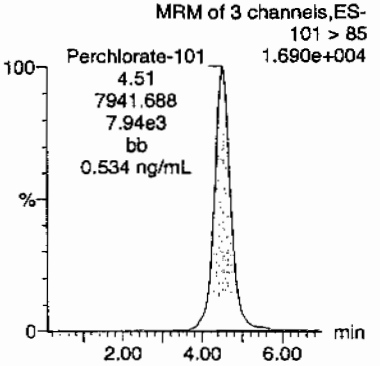
Perchlorate



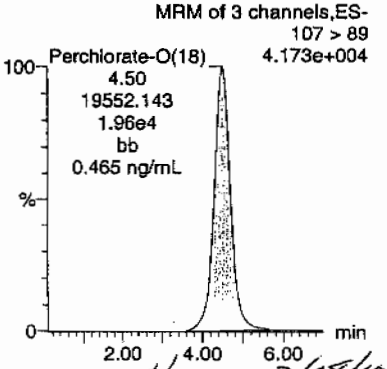
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.51	24448.252	24448.252	bb			0.5042	100.84	0.84	2170.1...	3.08
WCL100227-06CCV	Perchlorate-101	101 > 85	4.51	7941.688	7941.688	bb			0.5337	106.73	6.73	534.771	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.50	19552.143	19552.143	bb			0.4649	92.97	-7.03	2384.2...	

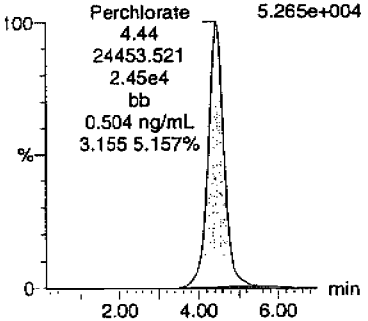
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

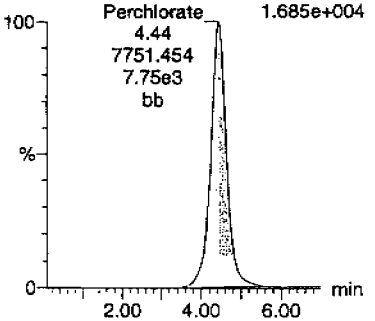
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305035a
Date: 05-Mar-2010
Time: 18:22:27
ID: WCL100227-06CCV
Vial: 1:2,A

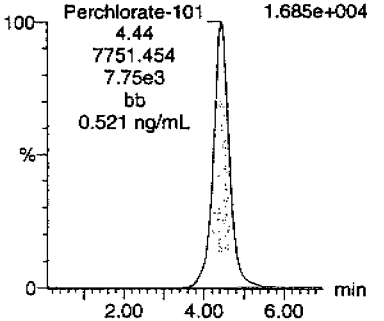
Perchlorate
MRM of 3 channels,ES-
99 > 83
5.265e+004



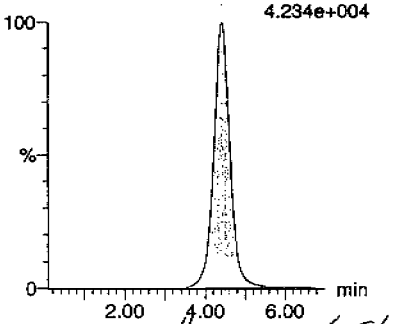
Perchlorate
MRM of 3 channels,ES-
101 > 85
1.685e+004



Perchlorate-101
MRM of 3 channels,ES-
101 > 85
1.685e+004



Perchlorate-O(18)
MRM of 3 channels,ES-
107 > 89
4.234e+004



Perc
03-06-10

AMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.44	24453.521	24453.521	bb			0.5043	100.86	0.86	2843.3...	3.15
WCL100227-06CCV	Perchlorate-101	101 > 85	4.44	7751.454	7751.454	bb			0.5209	104.17	4.17	512.645	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.41	19898.803	19898.803	bb			0.4731	94.62	-5.38	2133.5...	

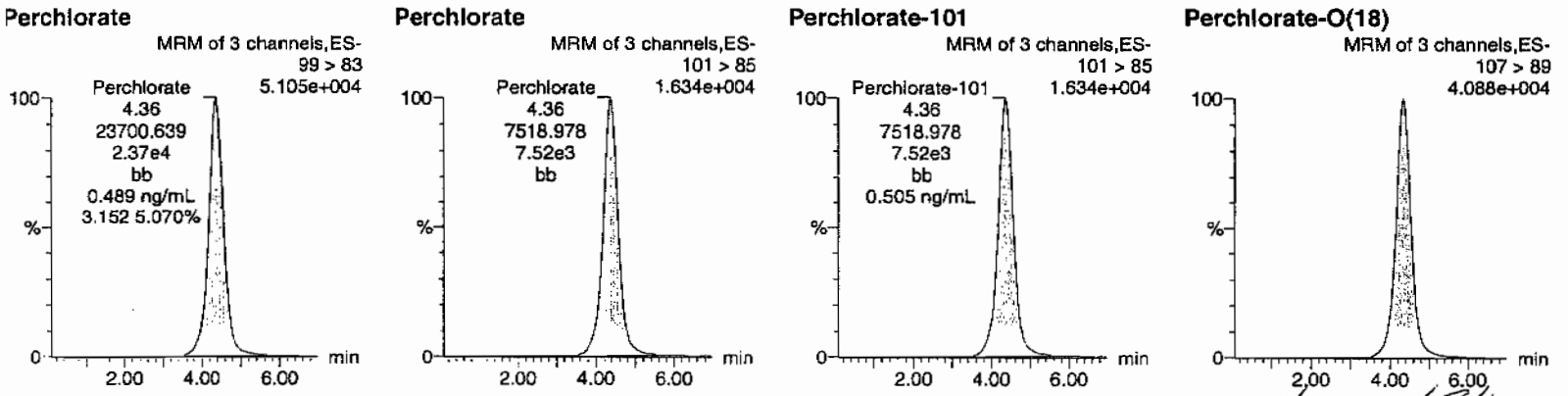
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305061a
Date: 05-Mar-2010
Time: 22:45:32
ID: WCL100227-06CCV
Vial: 1:2,A

Pass
03-06-10



HMM 03/08/10

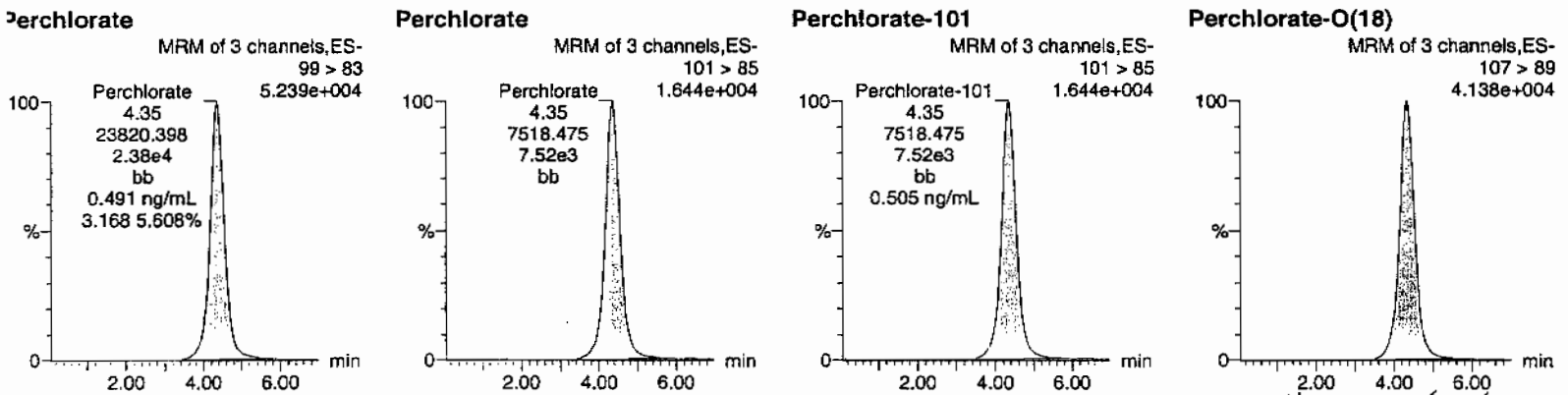
ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.36	23700.639	23700.639	bb			0.4888	97.76	-2.24	1855.8...	3.15
WCL100227-06CCV	Perchlorate-101	101 > 85	4.36	7518.978	7518.978	bb			0.5052	101.05	1.05	619.599	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.34	18982.309	18982.309	bb			0.4513	90.26	-9.74	1438.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305074a
Date: 06-Mar-2010
Time: 00:56:49
ID: WCL100227-06CCV Pass aw 03-06-10
Vial: 1:2,A



HMM 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.35	23820.398	23820.398	bb			0.4912	98.25	-1.75	1882.8...	3.17
WCL100227-06CCV	Perchlorate-101	101 > 85	4.35	7518.475	7518.475	bb			0.5052	101.04	1.04	1244.3...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.34	18849.641	18849.641	bb			0.4482	89.63	-10.37	3023.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

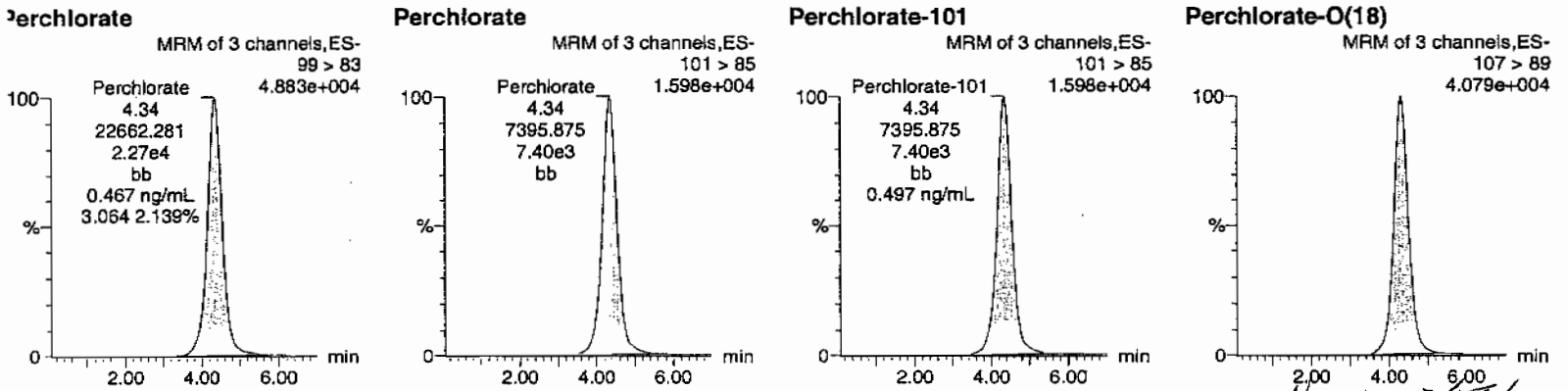
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305087a
Date: 06-Mar-2010
Time: 03:08:46
ID: WCL100227-06CCV
Vial: 1:2,A

Pm
03 06-10



Amm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.34	22662.281	22662.281	bb			0.4674	93.47	-6.53	1088.5...	3.06
WCL100227-06CCV	Perchlorate-101	101 > 85	4.34	7395.875	7395.875	bb			0.4970	99.39	-0.61	829.416	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.32	18312.898	18312.898	bb			0.4354	87.08	-12.92	1929.6...	

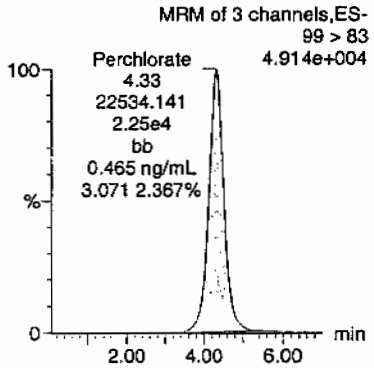
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

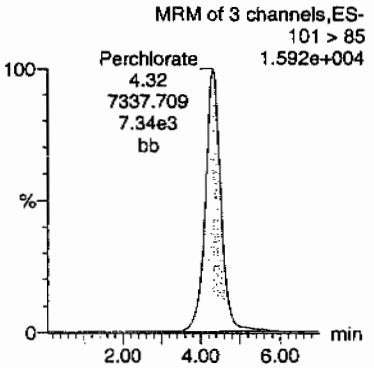
Name: per0305098a
Date: 06-Mar-2010
Time: 04:59:51
ID: WCL100227-06CCV
Vial: 1:2,A

Pass
AW
03-06-10

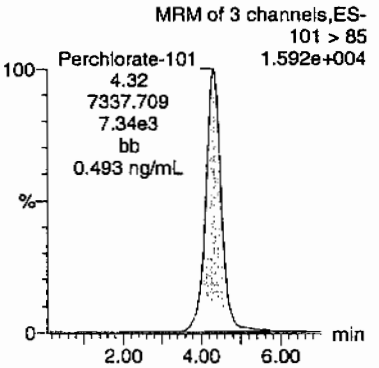
Perchlorate



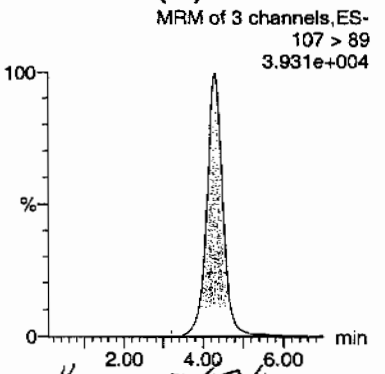
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.33	22534.141	22534.141	bb			0.4647	92.94	-7.06	255.249	3.07
WCL100227-06CCV	Perchlorate-101	101 > 85	4.32	7337.709	7337.709	bb			0.4931	98.61	-1.39	1249.7...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.30	18199.572	18199.572	bb			0.4327	86.54	-13.46	3457.1...	

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

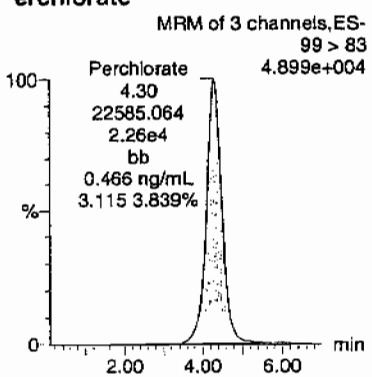
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

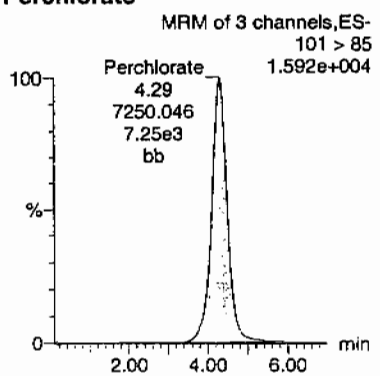
Name: per0305110a
Date: 06-Mar-2010
Time: 07:01:18
ID: WCL100227-06CCV
Vial: 1:2,A

Pass
ang
03-06-10

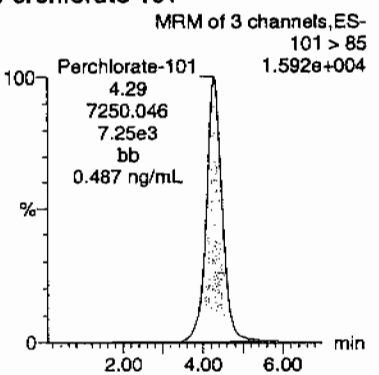
Perchlorate



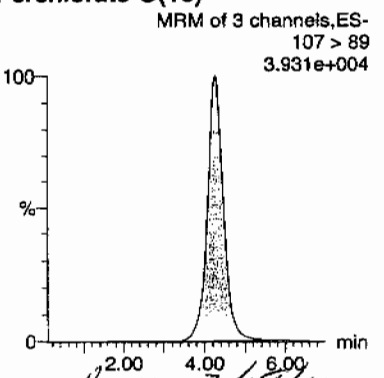
Perchlorate



Perchlorate-101



Perchlorate-O(18)



AMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.30	22585.064	22585.064	bb			0.4658	93.15	-6.85	2395.1...	3.12
WCL100227-06CCV	Perchlorate-101	101 > 85	4.29	7250.046	7250.046	bb			0.4872	97.43	-2.57	732.143	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.28	18011.781	18011.781	bb			0.4282	85.65	-14.35	2249.1...	

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

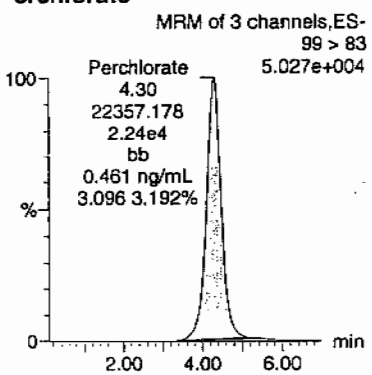
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

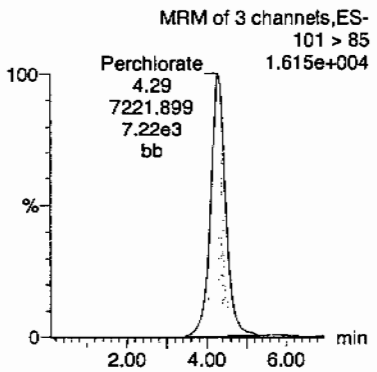
Name: per0305123a
Date: 06-Mar-2010
Time: 09:12:51
ID: WCL100227-06CCV
Vial: 1:2,A

Pass
aw
03-06-10

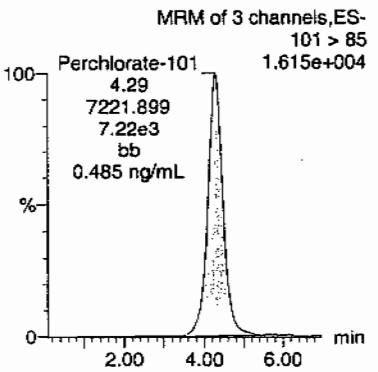
Perchlorate



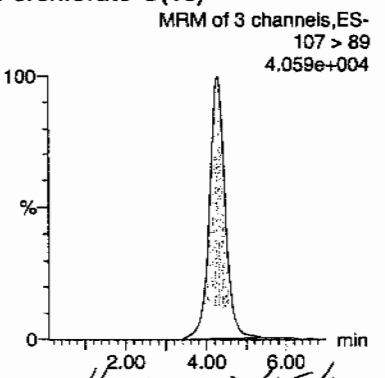
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	4.30	22357.178	22357.178	bb			0.4611	92.21	-7.79	2720.1...	3.10
WCL100227-06CCV	Perchlorate-101	101 > 85	4.29	7221.899	7221.899	bb			0.4853	97.06	-2.94	1629.7...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	4.28	18345.527	18345.527	bb			0.4362	87.24	-12.76	970.638	

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	97.42	05-MAR-10 14:21	per0305011a
Perchlorate Isotope Ratio		3.39		05-MAR-10 14:21	per0305011a
Perchlorate-101	.05	.05	93.73	05-MAR-10 14:21	per0305011a
Perchlorate	.05	.05	94.34	05-MAR-10 16:31	per0305024a
Perchlorate Isotope Ratio		2.94		05-MAR-10 16:31	per0305024a
Perchlorate-101	.05	.05	104.64	05-MAR-10 16:31	per0305024a
Perchlorate	.05	.04	88.33	05-MAR-10 18:42	per0305037a
Perchlorate Isotope Ratio		2.97		05-MAR-10 18:42	per0305037a
Perchlorate-101	.05	.05	96.82	05-MAR-10 18:42	per0305037a
Perchlorate	.05	.04	85.02	05-MAR-10 23:06	per0305063a
Perchlorate Isotope Ratio		3.14		05-MAR-10 23:06	per0305063a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.04	88.26	05-MAR-10 23:06	per0305063a
Perchlorate	.05	.04	89.21	06-MAR-10 01:17	per0305076a
Perchlorate Isotope Ratio		3.29		06-MAR-10 01:17	per0305076a
Perchlorate-101	.05	.04	88.45	06-MAR-10 01:17	per0305076a
Perchlorate	.05	.04	85.29	06-MAR-10 03:29	per0305089a
Perchlorate Isotope Ratio		3.36		06-MAR-10 03:29	per0305089a
Perchlorate-101	.05	.04	82.59	06-MAR-10 03:29	per0305089a
Perchlorate	.05	.04	88.04	06-MAR-10 05:20	per0305100a
Perchlorate Isotope Ratio		3.45		06-MAR-10 05:20	per0305100a
Perchlorate-101	.05	.04	83.27	06-MAR-10 05:20	per0305100a
Perchlorate	.05	.04	89.34	06-MAR-10 07:21	per0305112a

Form 3

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1861-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.08		06-MAR-10 07:21	per0305112a
Perchlorate-101	.05	.05	94.48	06-MAR-10 07:21	per0305112a
Perchlorate	.05	.05	90.32	06-MAR-10 09:33	per0305125a
Perchlorate Isotope Ratio		3.21		06-MAR-10 09:33	per0305125a
Perchlorate-101	.05	.05	91.78	06-MAR-10 09:33	per0305125a

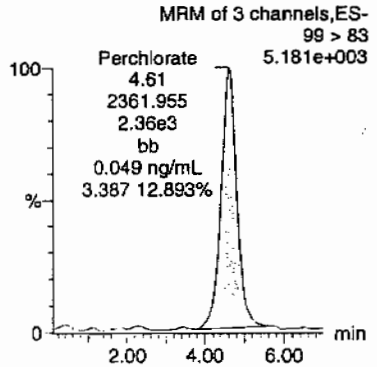
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

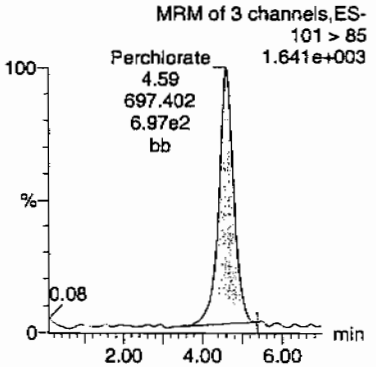
Name: per0305011a
Date: 05-Mar-2010
Time: 14:21:02
ID: WCL100227-07CRI
Vial: 1:2,B

Pass
03-06-10

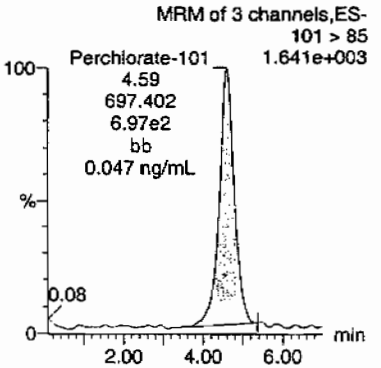
Perchlorate



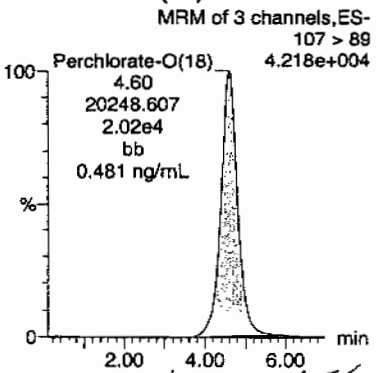
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.61	2361.955	2361.955	bb			0.0487	97.42	-2.58	227.404	3.39
WCL100227-07CRI	Perchlorate-101	101 > 85	4.59	697.402	697.402	bb			0.0469	93.73	-6.27	49.831	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.60	20248.607	20248.607	bb			0.4814	96.28	-3.72	305.789	

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

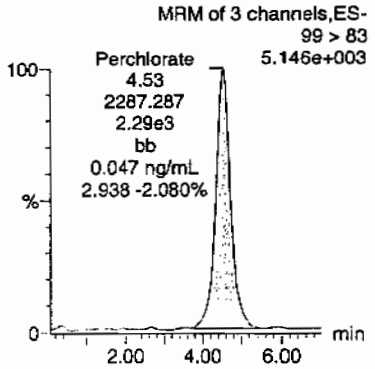
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

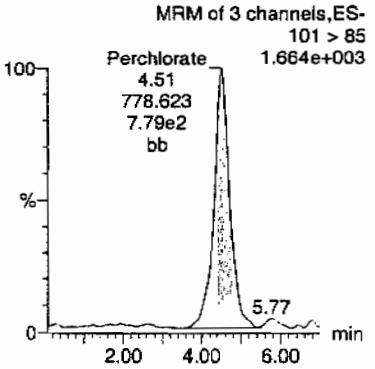
Name: per0305024a
Date: 05-Mar-2010
Time: 16:31:58
ID: WCL100227-07CRI
Vial: 1:2,B

PMD
03/08/10

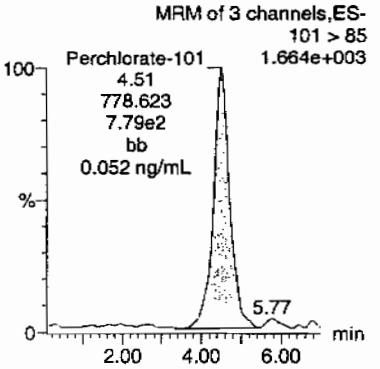
Perchlorate



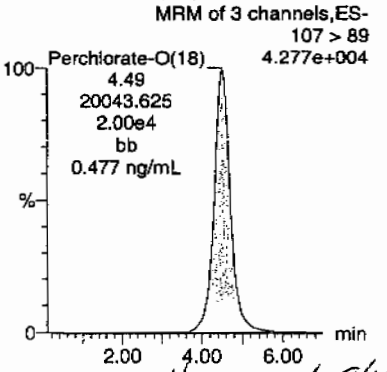
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.53	2287.287	2287.287	bb			0.0472	94.34	-5.66	193.383	2.94
WCL100227-07CRI	Perchlorate-101	101 > 85	4.51	778.623	778.623	bb			0.0523	104.64	4.64	32.800	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.49	20043.625	20043.625	bb			0.4766	95.31	-4.69	1708.4...	

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

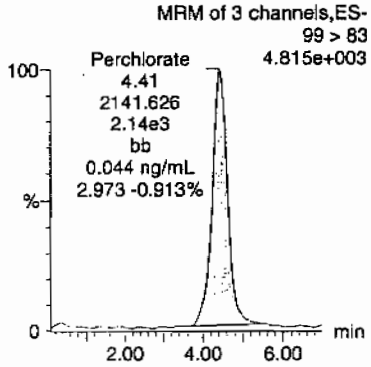
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

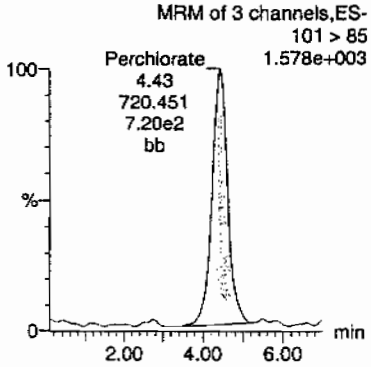
Name: per0305037a
Date: 05-Mar-2010
Time: 18:42:54
ID: WCL100227-07CRI
Vial: 1:2,B

Pass
aw
03-06-10

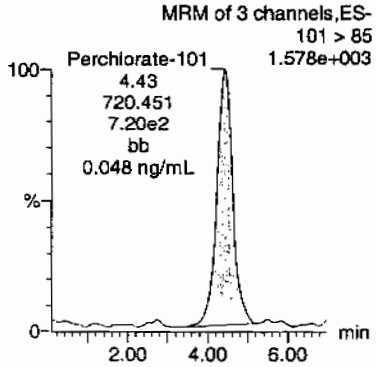
Perchlorate



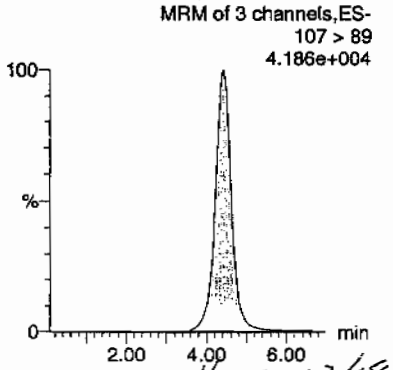
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.41	2141.626	2141.626	bb			0.0442	88.33	-11.67	305.770	2.97
WCL100227-07CRI	Perchlorate-101	101 > 85	4.43	720.451	720.451	bb			0.0484	96.82	-3.18	132.935	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.41	19596.717	19596.717	bb			0.4659	93.19	-6.81	1590.0...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

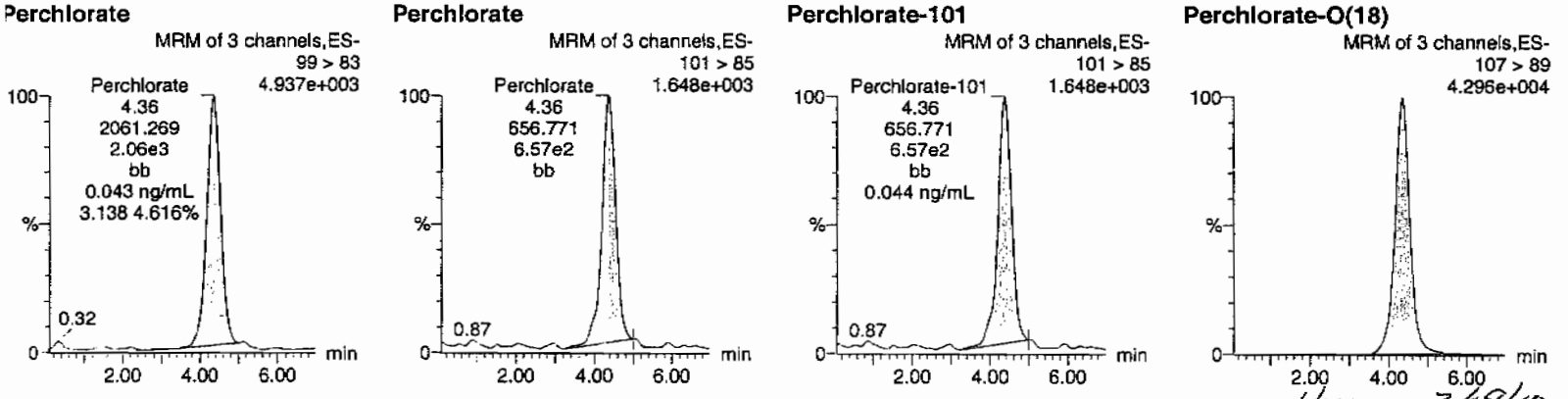
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305063a
Date: 05-Mar-2010
Time: 23:06:06
ID: WCL100227-07CRI
Vial: 1:2,B

Pg 33 03-06-10



Hmm 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.36	2061.269	2061.269	bb			0.0425	85.02	-14.98	66.938	3.14
WCL100227-07CRI	Perchlorate-101	101 > 85	4.36	656.771	656.771	bb			0.0441	88.26	-11.74	112.286	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.34	19344.582	19344.582	bb			0.4599	91.99	-8.01	2975.6...	

The GEL Group, LLC Analyst: Charlers W. Wilson

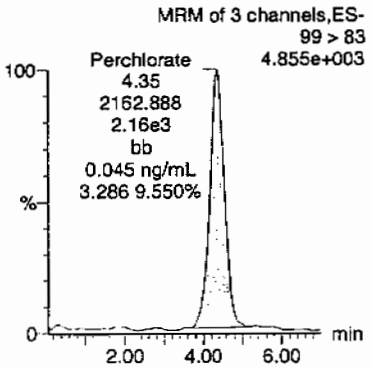
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

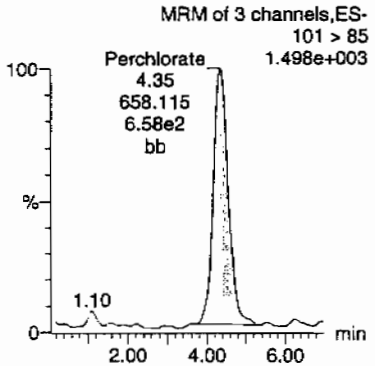
Name: per0305076a
Date: 06-Mar-2010
Time: 01:17:24
ID: WCL100227-07CRI
Vial: 1:2,B

Pass and 03/08/10

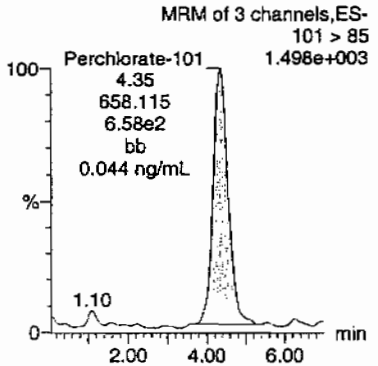
Perchlorate



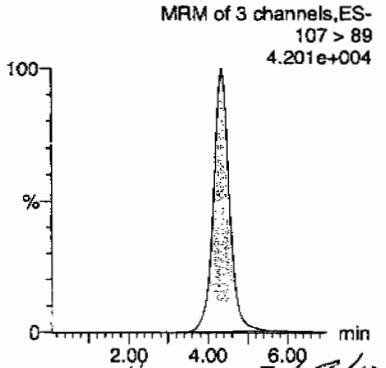
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.35	2162.888	2162.888	bb			0.0446	89.21	-10.79	223.515	3.29
WCL100227-07CRI	Perchlorate-101	101 > 85	4.35	658.115	658.115	bb			0.0442	88.45	-11.55	76.826	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.34	19454.201	19454.201	bb			0.4625	92.51	-7.49	1998.1...	

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

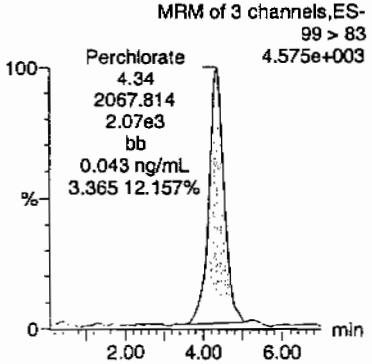
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

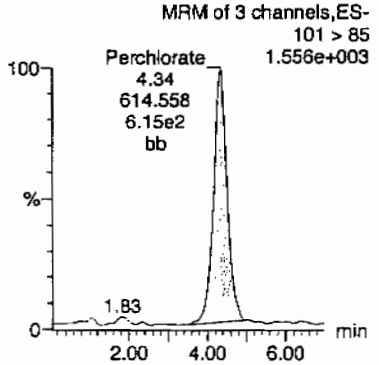
Name: per0305089a
Date: 06-Mar-2010
Time: 03:29:13
ID: WCL100227-07CRI
Vial: 1:2,B

CWJ 03-06-10

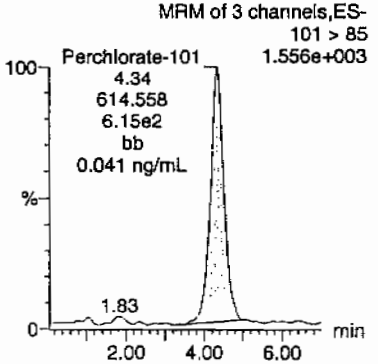
Perchlorate



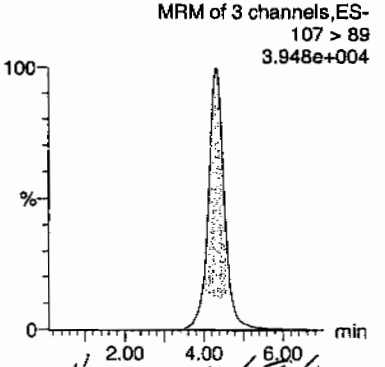
Perchlorate



Perchlorate-101



Perchlorate-O(18)



Hmc 03/08/10

D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.34	2067.814	2067.814	bb			0.0426	85.29	-14.71	261.095	3.36
WCL100227-07CRI	Perchlorate-101	101 > 85	4.34	614.558	614.558	bb			0.0413	82.59	-17.41	104.546	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.33	18267.762	18267.762	bb			0.4343	86.87	-13.13	1288.7...	

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

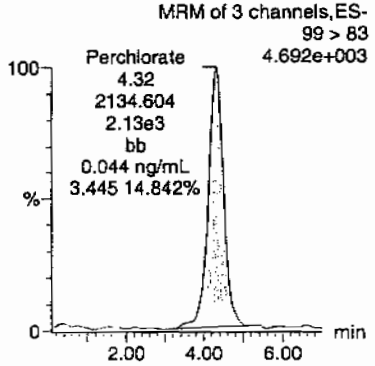
Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

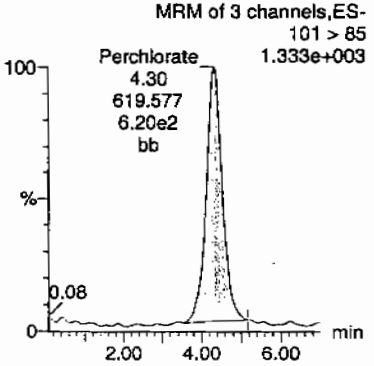
Name: per0305100a
Date: 06-Mar-2010
Time: 05:20:11
ID: WCL100227-07CRI
Vial: 1:2,B

Pass
03-06-10

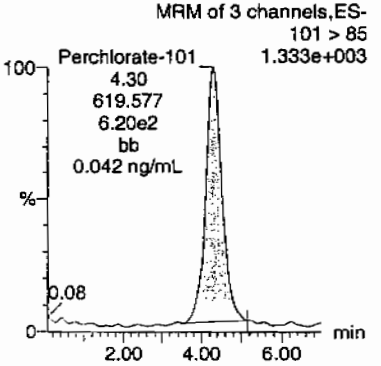
Perchlorate



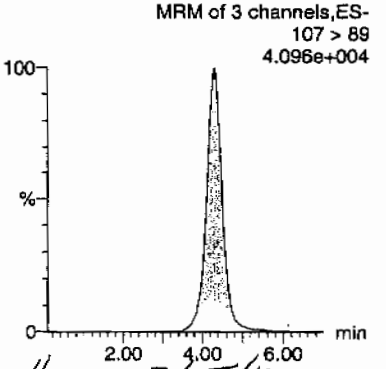
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.32	2134.604	2134.604	bb			0.0440	88.04	-11.96	100.010	3.45
WCL100227-07CRI	Perchlorate-101	101 > 85	4.30	619.577	619.577	bb			0.0416	83.27	-16.73	22.917	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.30	18652.084	18652.084	bb			0.4435	88.69	-11.31	1487.4...	

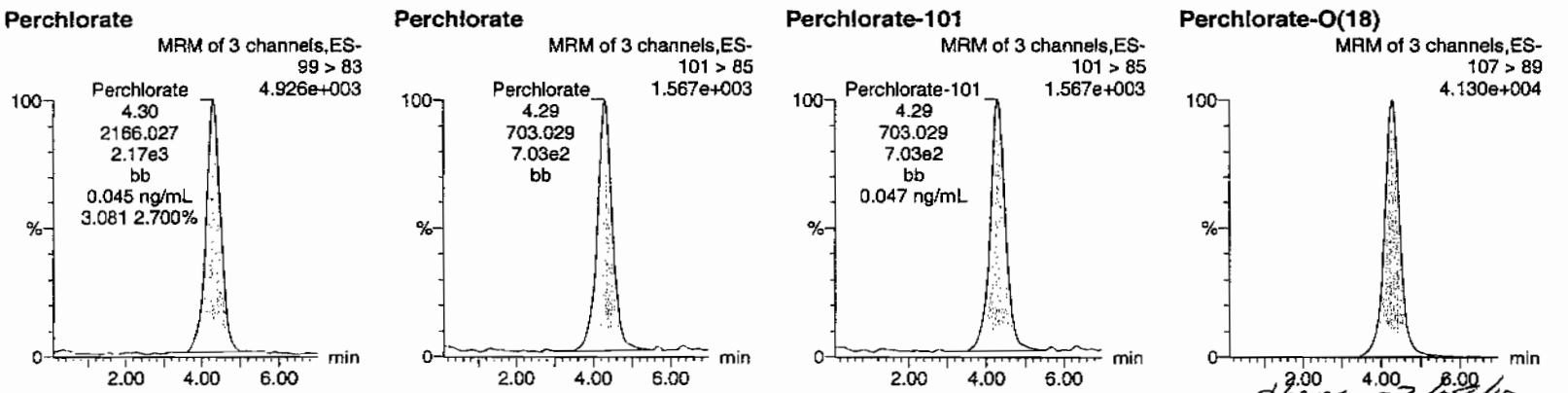
Quantify Sample Report **MassLynx 4.0 SP4**
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305112a
Date: 06-Mar-2010
Time: 07:21:38
ID: WCL100227-07CRI
Vial: 1:2,B

Pass
GJ 03-10



HMM 03/08/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.30	2166.027	2166.027	bb			0.0447	89.34	-10.66	111.737	3.08
WCL100227-07CRI	Perchlorate-101	101 > 85	4.29	703.029	703.029	bb			0.0472	94.48	-5.52	132.902	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.28	18598.717	18598.717	bb			0.4422	88.44	-11.56	2205.4...	

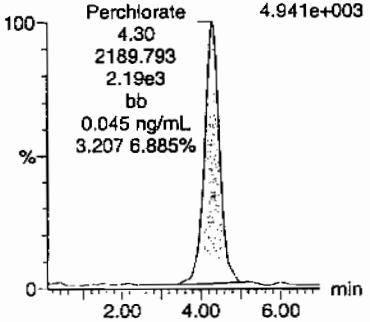
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

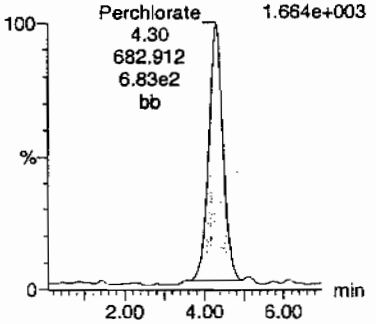
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305125a
Date: 06-Mar-2010
Time: 09:33:16
ID: WCL100227-07CRI
Vial: 1:2,B

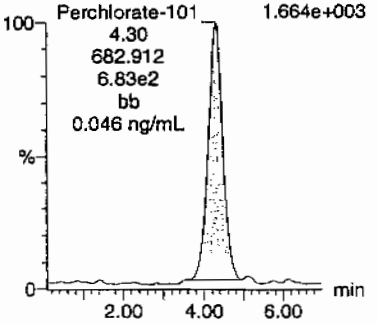
Perchlorate
MRM of 3 channels,ES-
99 > 83
4.941e+003



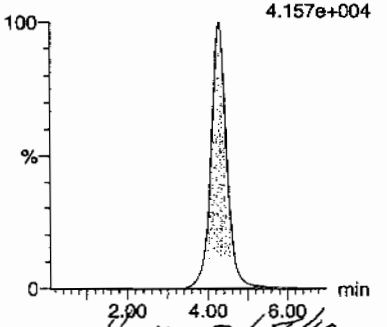
Perchlorate
MRM of 3 channels,ES-
101 > 85
1.664e+003



Perchlorate-101
MRM of 3 channels,ES-
101 > 85
1.664e+003



Perchlorate-O(18)
MRM of 3 channels,ES-
107 > 89
4.157e+004



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	4.30	2189.793	2189.793	bb			0.0452	90.32	-9.68	217.886	3.21
WCL100227-07CRI	Perchlorate-101	101 > 85	4.30	682.912	682.912	bb			0.0459	91.78	-8.22	123.453	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	4.28	18871.918	18871.918	bb			0.4487	89.74	-10.26	3389.5...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

QUALITY CONTROL

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
MB

Date Received: 02-MAR-10

GEL Job No (SDG): 10-1861-1

GEL Sample ID: 1202049069

Date Filtered: 02-MAR-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	06-MAR-10 07:31	per0305113a
	Perchlorate Isotope Ratio						1	06-MAR-10 07:31	per0305113a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	06-MAR-10 07:31	per0305113a
	Perchlorate-O(18)			0.436	ug/L		1	06-MAR-10 07:31	per0305113a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

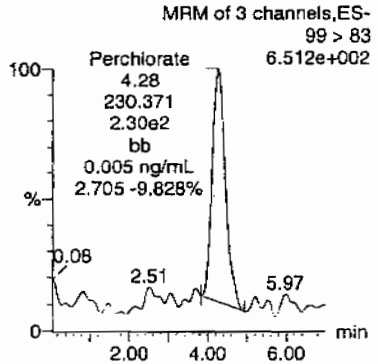
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305113a
Date: 06-Mar-2010
Time: 07:31:49
ID: 1202049069
Vial: 3:1,A

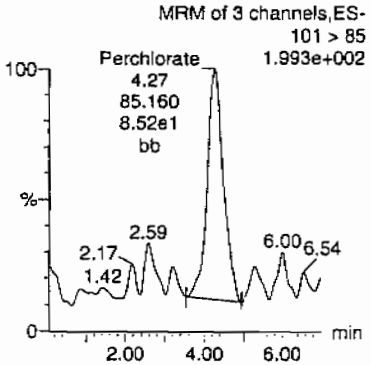
|LANL|955727|LCQ|MB|1|

CWW 03-06-10

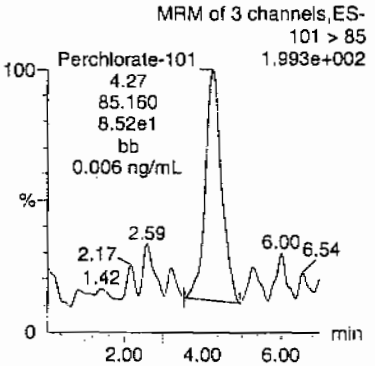
Perchlorate



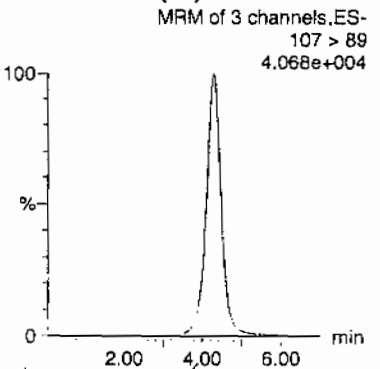
Perchlorate



Perchlorate-101



Perchlorate-O(18)



tmm 03/09/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049069	Perchlorate	99 > 83	4.28	230.371	230.371	bb			0.0048			29.862	2.71
1202049069	Perchlorate-101	101 > 85	4.27	85.160	85.160	bb			0.0057			20.845	
1202049069	Perchlorate-O(18)	107 > 89	4.29	18340.451	18340.451	bb			0.4361	87.21	-12.79	2029.6...	

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 955726

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.
LCS

Date Received: 02-MAR-10

GEL Job No (SDG): 10-1861-1

GEL Sample ID: 1202049070

Date Filtered: 02-MAR-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	0.180	ug/L	J	1	06-MAR-10 07:42	per0305114a
	Perchlorate Isotope Ratio			3.12			1	06-MAR-10 07:42	per0305114a
14797-73-0	Perchlorate-101	.05	.2	0.188	ug/L	J	1	06-MAR-10 07:42	per0305114a
	Perchlorate-O(18)			0.416	ug/L		1	06-MAR-10 07:42	per0305114a

^ 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 =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

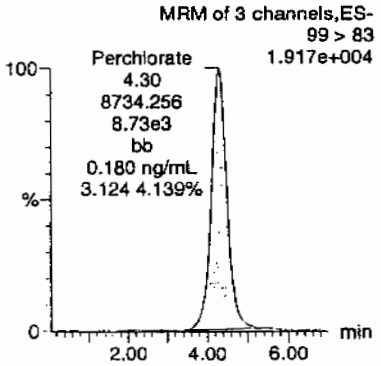
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305114a
Date: 06-Mar-2010
Time: 07:42:03
ID: 1202049070
Vial: 3:1,B

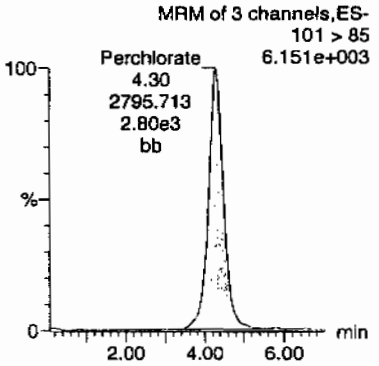
|LANL|955727|LCU|LCS|11|

CW 03-06-10

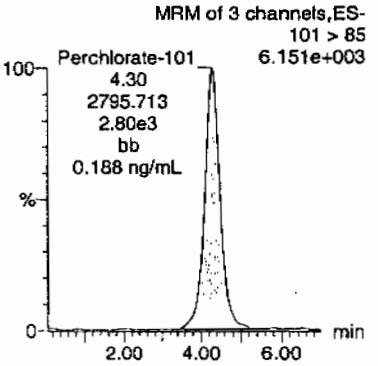
Perchlorate



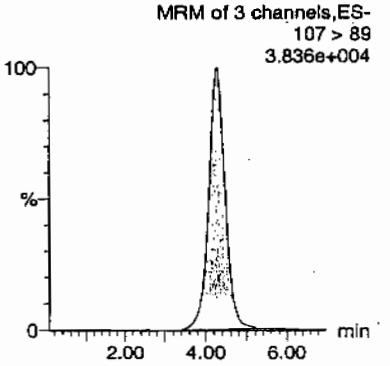
Perchlorate



Perchlorate-101



Perchlorate-O(18)



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049070	Perchlorate	99 > 83	4.30	8734.256	8734.256	bb			0.1801	90.06	-9.94	2607.4...	3.12
1202049070	Perchlorate-101	101 > 85	4.30	2795.713	2795.713	bb			0.1879	93.93	-6.07	624.279	
1202049070	Perchlorate-O(18)	107 > 89	4.29	17497.846	17497.846	bb			0.4160	83.20	-16.80	1738.9...	

$\frac{8734.256}{48489.7} = 0.1801$

HMW 03/09/10

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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: 955726 **Verified by:**
Analyst: Kaylie Westmoreland
Method: SW846 6850 Modified

Lab SOP: GL-OA-E-067 REV# 6
Instrument: MicroMass Quatro Ultima

Sample ID	Run Date	Initial Volume (mL)	Final Volume (mL)	Prepped Factor (mL/mL)
1202049069 MB	02-MAR-2010 14:28:00	10	10	1
1202049070 LCS	02-MAR-2010 14:28:00	10	10	1
247127001	02-MAR-2010 14:28:00	10	10	1
247130001	02-MAR-2010 14:28:00	10	10	1
247139001	02-MAR-2010 14:28:00	10	10	1
1202049071 MS (247139001)	02-MAR-2010 14:28:00	10	10	1
1202049072 MSD (247139001)	02-MAR-2010 14:28:00	10	10	1
247179001	02-MAR-2010 14:28:00	10	10	1
247182001	02-MAR-2010 14:28:00	10	10	1
247183001	02-MAR-2010 14:28:00	10	10	1
247192001	02-MAR-2010 14:28:00	10	10	1
247203001	02-MAR-2010 14:28:00	10	10	1
247250001	02-MAR-2010 14:28:00	10	10	1
247250002	02-MAR-2010 14:28:00	10	10	1
247256001	02-MAR-2010 14:28:00	10	10	1
247256002	02-MAR-2010 14:28:00	10	10	1
247322001	02-MAR-2010 14:28:00	10	10	1
247322002	02-MAR-2010 14:28:00	10	10	1
247335001	02-MAR-2010 14:28:00	10	10	1
247339001	02-MAR-2010 14:28:00	10	10	1
247339002	02-MAR-2010 14:28:00	10	10	1
247350001	02-MAR-2010 14:28:00	10	10	1
1202049073 ICS	02-MAR-2010 14:28:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units
ICS	1202049073	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL
LCS	1202049070	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL
MS	1202049071	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL
MSD	1202049072	10 ug/L ICV/CCV Second Source	UCL100210-02.2	.2	mL
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1267890	10	mL
RGNT	All	O2SI HPLC Grade Water	1271949	10	mL

Comments:
Desalting cartridges used: 100217-1-H & 100209-1-Ba

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/05/10
Extr. Injection Volume: 20uL
Sequence Number: per030510a
Initial Calibration Date: 03/05/10

Method: EPA 6850-Modified
Int. Std.: UCL100126-01
Mobile Phase Lot#: 1278668, 1271949
Standard-Samp Reagent Lot#:: 1271949

Reviewed BY: Hmc
Date: 03/09/10
SOP: GL-OA-E-067 Rev.6
Alt Check Std. ID: WCL100227-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0305001a	IPB001	CWW	3/5/2010 12:39			1		USE	B
per0305002a	IPB001	CWW	3/5/2010 12:50			1		USE	B
per0305003a	WCLICAL-01	CWW	3/5/2010 13:00			1		USE	I
per0305004a	WCLICAL-02	CWW	3/5/2010 13:10			1		USE	I
per0305005a	WCLICAL-03	CWW	3/5/2010 13:20			1		USE	I
per0305006a	WCLICAL-04	CWW	3/5/2010 13:30			1		USE	I
per0305007a	WCLICAL-05	CWW	3/5/2010 13:40			1		USE	I
per0305008a	IPB002	CWW	3/5/2010 13:50			1		USE	B
per0305009a	WCLICV	CWW	3/5/2010 14:00			1		USE	C
per0305010a	IPB003	CWW	3/5/2010 14:11			1		USE	B
per0305011a	WCLCRI	CWW	3/5/2010 14:21			1		USE	C
per0305012a	1202049034	CWW	3/5/2010 14:31	955706	VARIOUS	1	LANL	USE	S
per0305013a	1202049035	CWW	3/5/2010 14:41	955706	VARIOUS	1	LANL	USE	S
per0305014a	1202049038	CWW	3/5/2010 14:51	955706	VARIOUS	1	LANL	USE	S
per0305015a	247141001	CWW	3/5/2010 15:01	955706	10-1859	1	LANL	USE	S
per0305016a	247141002	CWW	3/5/2010 15:11	955706	10-1859	1	LANL	USE	S
per0305017a	247141003	CWW	3/5/2010 15:21	955706	10-1859	1	LANL	USE	S
per0305018a	247172001	CWW	3/5/2010 15:31	955706	10-1866	1	LANL	USE	S
per0305019a	247172002	CWW	3/5/2010 15:41	955706	10-1866	1	LANL	USE	S
per0305020a	247178001	CWW	3/5/2010 15:51	955706	10-1861	1	LANL	USE	S
per0305021a	247178002	CWW	3/5/2010 16:01	955706	10-1861	1	LANL	USE	S
per0305022a	WCLCCV	CWW	3/5/2010 16:11			1		USE	C
per0305023a	IPB004	CWW	3/5/2010 16:21			1		USE	B
per0305024a	WCLCRI	CWW	3/5/2010 16:31			1		USE	C
per0305025a	1202049036	CWW	3/5/2010 16:42	955706	10-1861	1	LANL	USE	S
per0305026a	1202049037	CWW	3/5/2010 16:52	955706	10-1861	1	LANL	USE	S
per0305027a	247178003	CWW	3/5/2010 17:02	955706	10-1861	1	LANL	USE	S
per0305028a	247178004	CWW	3/5/2010 17:12	955706	10-1861	1	LANL	USE	S
per0305029a	247178005	CWW	3/5/2010 17:22	955706	10-1861	1	LANL	USE	S

per0305030a	247178006	CWW	3/5/2010 17:32	955706	10-1861	1	LANL	USE	S
per0305031a	247178007	CWW	3/5/2010 17:42	955706	10-1861	1	LANL	USE	S
per0305032a	247178008	CWW	3/5/2010 17:52	955706	10-1861	1	LANL	USE	S
per0305033a	247178009	CWW	3/5/2010 18:02	955706	10-1861	1	LANL	USE	S
per0305034a	247178010	CWW	3/5/2010 18:12	955706	10-1861	1	LANL	USE	S
per0305035a	WCLCCV	CWW	3/5/2010 18:22			1		USE	C
per0305036a	IPB005	CWW	3/5/2010 18:32			1		USE	B
per0305037a	WCLCRI	CWW	3/5/2010 18:42			1		USE	C
per0305038a	247178011	CWW	3/5/2010 18:53	955706	10-1861	1	LANL	DUSE-RA	S
per0305039a	247197001	CWW	3/5/2010 19:03	955706	10-1865-1	1	LANL	DUSE-RA	S
per0305040a	247197002	CWW	3/5/2010 19:13	955706	10-1865-1	1	LANL	DUSE-RA	S
per0305041a	IPB006	CWW	3/5/2010 19:23			1		DUSE-RA	B
per0305042a	1202062446	CWW	3/5/2010 19:33	961557	248683	1	LANL	DUSE-RA	S
per0305043a	1202062447	CWW	3/5/2010 19:43	961557	248683	1	LANL	DUSE-RA	S
per0305044a	1202062450	CWW	3/5/2010 19:53	961557	248683	1	LANL	DUSE-RA	S
per0305045a	248683001	CWW	3/5/2010 20:03	961557	248683	1	LANL	DUSE-RA	S
per0305046a	1202062448	CWW	3/5/2010 20:13	961557	248683	1	LANL	DUSE-RA	S
per0305047a	1202062449	CWW	3/5/2010 20:23	961557	248683	1	LANL	DUSE-RA	S
per0305048a	WCLCCV	CWW	3/5/2010 20:34			1		DUSE	C
per0305049a	IPB007	CWW	3/5/2010 20:44			1		DUSE	B
per0305050a	WCLCRI	CWW	3/5/2010 20:54			1		DUSE	C
per0305051a	1202049039	CWW	3/5/2010 21:04	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305052a	1202049040	CWW	3/5/2010 21:14	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305053a	1202049043	CWW	3/5/2010 21:24	955709	VARIOUS	1	LANL	DUSE-RA	S
per0305054a	247187001	CWW	3/5/2010 21:34	955709	10-1867	1	LANL	DUSE-RA	S
per0305055a	247187002	CWW	3/5/2010 21:45	955709	10-1867	1	LANL	DUSE-RA	S
per0305056a	247187003	CWW	3/5/2010 21:55	955709	10-1867	1	LANL	DUSE-RA	S
per0305057a	247188001	CWW	3/5/2010 22:05	955709	10-1863	1	LANL	DUSE-RA	S
per0305058a	1202049041	CWW	3/5/2010 22:15	955709	10-1863	1	LANL	DUSE-RA	S
per0305059a	1202049042	CWW	3/5/2010 22:25	955709	10-1863	1	LANL	DUSE-RA	S
per0305060a	247188002	CWW	3/5/2010 22:35	955709	10-1863	1	LANL	DUSE-RA	S
per0305061a	WCLCCV	CWW	3/5/2010 22:45			1		USE	C
per0305062a	IPB008	CWW	3/5/2010 22:55			1		USE	B
per0305063a	WCLCRI	CWW	3/5/2010 23:06			1		USE	C
per0305064a	247188003	CWW	3/5/2010 23:16	955709	10-1863	1	LANL	USE	S
per0305065a	247188004	CWW	3/5/2010 23:26	955709	10-1863	1	LANL	USE	S
per0305066a	247188005	CWW	3/5/2010 23:36	955709	10-1863	1	LANL	USE	S

per0305067a	247188006	CWW	3/5/2010 23:46	955709	10-1863	1	LANL	USE	S
per0305068a	247188007	CWW	3/5/2010 23:56	955709	10-1863	1	LANL	USE	S
per0305069a	247188008	CWW	3/6/2010 0:06	955709	10-1863	1	LANL	USE	S
per0305070a	247188009	CWW	3/6/2010 0:16	955709	10-1863	1	LANL	USE	S
per0305071a	247188010	CWW	3/6/2010 0:26	955709	10-1863	1	LANL	USE	S
per0305072a	247188011	CWW	3/6/2010 0:36	955709	10-1863	1	LANL	USE	S
per0305073a	247188012	CWW	3/6/2010 0:46	955709	10-1863	1	LANL	USE	S
per0305074a	WCLCCV	CWW	3/6/2010 0:56			1		USE	C
per0305075a	IPB009	CWW	3/6/2010 1:07			1		USE	B
per0305076a	WCLCRI	CWW	3/6/2010 1:17			1		USE	C
per0305077a	247188013	CWW	3/6/2010 1:27	955709	10-1863	1	LANL	USE	S
per0305078a	247188014	CWW	3/6/2010 1:37	955709	10-1863	1	LANL	USE	S
per0305079a	IPB010	CWW	3/6/2010 1:47			1		USE	B
per0305080a	1202049044	CWW	3/6/2010 1:58	955712	VARIOUS	1	LANL	USE	S
per0305081a	1202049045	CWW	3/6/2010 2:08	955712	VARIOUS	1	LANL	USE	S
per0305082a	1202049048	CWW	3/6/2010 2:18	955712	VARIOUS	1	LANL	USE	S
per0305083a	247181001	CWW	3/6/2010 2:28	955712	10-1871-1	1	LANL	USE	S
per0305084a	247181002	CWW	3/6/2010 2:38	955712	10-1871-1	1	LANL	USE	S
per0305085a	247186001	CWW	3/6/2010 2:48	955712	10-1868-1	1	LANL	USE	S
per0305086a	247186002	CWW	3/6/2010 2:58	955712	10-1868-1	1	LANL	USE	S
per0305087a	WCLCCV	CWW	3/6/2010 3:08			1		USE	C
per0305088a	IPB011	CWW	3/6/2010 3:19			1		USE	B
per0305089a	WCLCRI	CWW	3/6/2010 3:29			1		USE	C
per0305090a	247186003	CWW	3/6/2010 3:39	955712	10-1868-1	1	LANL	USE	S
per0305091a	247186004	CWW	3/6/2010 3:49	955712	10-1868-1	1	LANL	USE	S
per0305092a	247186005	CWW	3/6/2010 3:59	955712	10-1868-1	1	LANL	USE	S
per0305093a	247186006	CWW	3/6/2010 4:09	955712	10-1868-1	1	LANL	USE	S
per0305094a	247186007	CWW	3/6/2010 4:19	955712	10-1868-1	1	LANL	USE	S
per0305095a	247186008	CWW	3/6/2010 4:29	955712	10-1868-1	1	LANL	USE	S
per0305096a	247186009	CWW	3/6/2010 4:39	955712	10-1868-1	1	LANL	USE	S
per0305097a	247186010	CWW	3/6/2010 4:49	955712	10-1868-1	1	LANL	USE	S
per0305098a	WCLCCV	CWW	3/6/2010 4:59			1		USE	C
per0305099a	IPB012	CWW	3/6/2010 5:10			1		USE	B
per0305100a	WCLCRI	CWW	3/6/2010 5:20			1		USE	C
per0305101a	247201001	CWW	3/6/2010 5:30	955712	10-1873	1	LANL	USE	S
per0305102a	1202049046	CWW	3/6/2010 5:40	955712	10-1873	1	LANL	USE	S
per0305103a	1202049047	CWW	3/6/2010 5:50	955712	10-1873	1	LANL	USE	S

per0305104a	247201002	CWW	3/6/2010 6:00	955712	10-1873	1	LANL	USE	S
per0305105a	247201003	CWW	3/6/2010 6:10	955712	10-1873	1	LANL	USE	S
per0305106a	247201004	CWW	3/6/2010 6:20	955712	10-1873	1	LANL	USE	S
per0305107a	247201005	CWW	3/6/2010 6:31	955712	10-1873	1	LANL	USE	S
per0305108a	247201006	CWW	3/6/2010 6:41	955712	10-1873	1	LANL	USE	S
per0305109a	247201007	CWW	3/6/2010 6:51	955712	10-1873	1	LANL	USE	S
per0305110a	WCLCCV	CWW	3/6/2010 7:01			1		USE	C
per0305111a	IPB013	CWW	3/6/2010 7:11			1		USE	B
per0305112a	WCLCRI	CWW	3/6/2010 7:21			1		USE	C
per0305113a	1202049069	CWW	3/6/2010 7:31	955727	VARIOUS	1	LANL	USE	S
per0305114a	1202049070	CWW	3/6/2010 7:42	955727	VARIOUS	1	LANL	USE	S
per0305115a	1202049073	CWW	3/6/2010 7:52	955727	VARIOUS	1	LANL	USE	S
per0305116a	247127001	CWW	3/6/2010 8:02	955727	10-1849-1	1	LANL	USE	S
per0305117a	247130001	CWW	3/6/2010 8:12	955727	10-1850-1	1	LANL	USE	S
per0305118a	247139001	CWW	3/6/2010 8:22	955727	10-1854-1	1	LANL	USE	S
per0305119a	1202049071	CWW	3/6/2010 8:32	955727	10-1854-1	1	LANL	USE	S
per0305120a	1202049072	CWW	3/6/2010 8:42	955727	10-1854-1	1	LANL	USE	S
per0305121a	247179001	CWW	3/6/2010 8:52	955727	10-1871	1	LANL	USE	S
per0305122a	247182001	CWW	3/6/2010 9:02	955727	10-1861-1	1	LANL	USE	S
per0305123a	WCLCCV	CWW	3/6/2010 9:12			1		USE	C
per0305124a	IPB014	CWW	3/6/2010 9:23			1		USE	B
per0305125a	WCLCRI	CWW	3/6/2010 9:33			1		USE	C

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

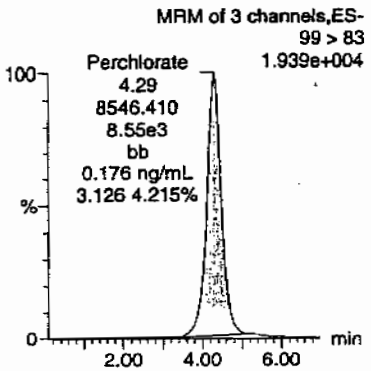
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305119a
Date: 06-Mar-2010
Time: 08:32:26
ID: 1202049071
Vial: 3:2,A

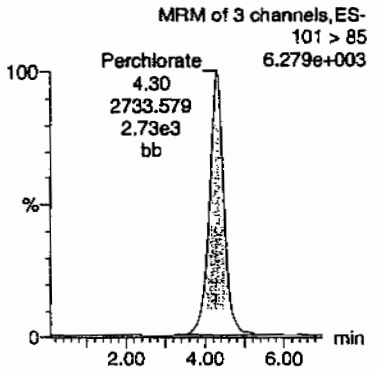
|LZW|955727|LZW|MS|1|

LW 03-06-10

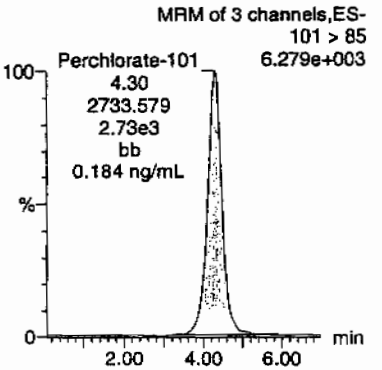
Perchlorate



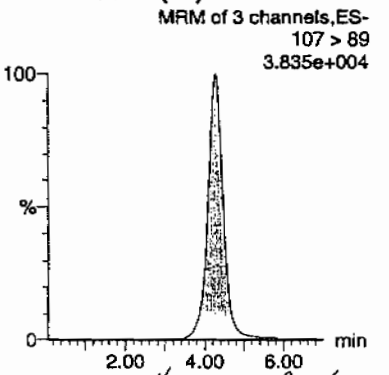
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HNM 03/09/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049071	Perchlorate	99 > 83	4.29	8546.410	8546.410	bb			0.1763	88.13	-11.87	2108.0...	3.13
1202049071	Perchlorate-101	101 > 85	4.30	2733.579	2733.579	bb			0.1837	91.84	-8.16	366.816	
1202049071	Perchlorate-O(18)	107 > 89	4.28	17431.014	17431.014	bb			0.4144	82.89	-17.11	662.567	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030510a.qld

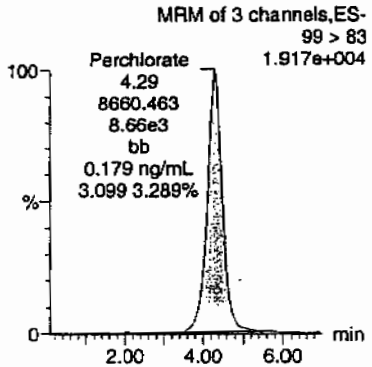
Last Altered: Saturday, March 06, 2010 9:51:52 AM Eastern Standard Time
Printed: Saturday, March 06, 2010 10:38:46 AM Eastern Standard Time

Name: per0305120a
Date: 06-Mar-2010
Time: 08:42:37
ID: 1202049072
Vial: 3:2,B

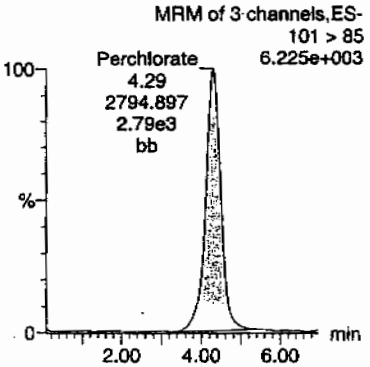
|LANL|955727|LAQ|MSD|11|

LWJ 03-06-10

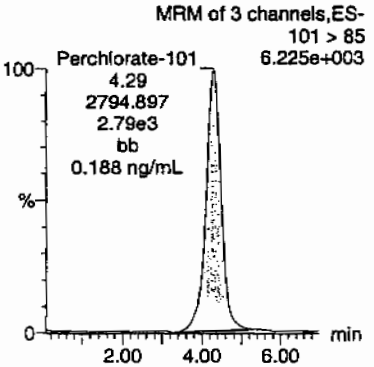
Perchlorate



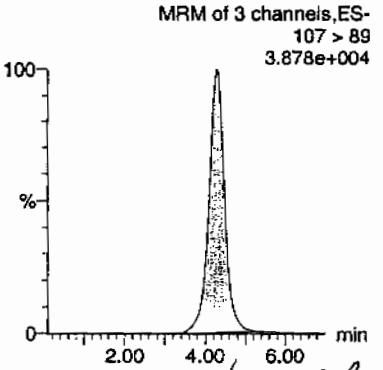
Perchlorate



Perchlorate-101



Perchlorate-O(18)



HMW 03/09/10

ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202049072	Perchlorate	99 > 83	4.29	8660.463	8660.463	bb			0.1786	89.30	-10.70	982.990	3.10
1202049072	Perchlorate-101	101 > 85	4.29	2794.897	2794.897	bb			0.1878	93.90	-6.10	161.762	
1202049072	Perchlorate-O(18)	107 > 89	4.28	17646.725	17646.725	bb			0.4196	83.91	-16.09	1070.4...	

GEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

Isotope Ratio Criteria

Isotope Ratio $_{35}Cl/_{37}CL$

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.

GC SEMIVOLATILE PCB ANALYSIS

PCB Case Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1861

Method/Analysis Information

Procedure:	**Analysis of Polychlorinated Biphenyls by ECD**
Analytical Method:	SW846 8082
Prep Method:	SW846 3550B
Analytical Batch Number:	955562
Prep Batch Number:	955560

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 8082:

Sample ID	Client ID
247178001	RE15-10-7904
247178002	RE15-10-7903
1202048657	Method Blank (MB)
1202048658	Laboratory Control Sample (LCS)
1202048659	247178001(RE15-10-7904) Matrix Spike (MS)
1202048660	247178001(RE15-10-7904) 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 inversed 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
The calibration verification standards(CVS, ICV, or CCV) requirements have not been met for this SDG.

One of the the five quantified peaks did not meet the acceptance criteria in Aroclor-1016 standard analyzed for this SDG; however, the average concentration of the five quantitated peaks met the acceptance criteria.

Aroclor-1260 failed to meet the acceptance criteria with positive bias in the standards analyzed for this SDG. The positive bias for the analytical data is a result of the instrument response increasing after the initial calibration. There were no Aroclors detected in the associated samples; therefore, the non-compliance has no adverse effects on the data.

Quality Control (QC) Information

Method Blank (MB) Statement
The MB analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

QC Sample Designation
Sample 247178001 (RE15-10-7904) was selected for the matrix spike and matrix spike duplicate analysis.

Matrix Spike (MS) Recovery Statement
The MS recoveries for this SDG were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement
The MSD recoveries for this SDG 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. A DER was not required for this SDG.

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 VIIs 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

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: Jimmi Cao Date: 3/15/10

Roadmap for LANL 10-1861 PCB

This roadmap was analyzed by yip00818 on 02-24-2010, 09:29.
This roadmap was reviewed by jcb on 02-25-2010, 12:07.
This roadmap was packaged by yml on 03-13-2010, 07:16.
This roadmap was validated by jim01140 on 03-15-2010, 12:35.

Front Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd1a.i/022310.b/035f3501.d	247178001	sample	23-FEB-2010	13:55	10-1861.sub	RE15-10-7904	1.00000	955562	DUSE WAS MS
□	N	/chem/ecd1a.i/022310.b/037f3701.d	247178001	sample	23-FEB-2010	14:20	10-1861.sub	RE15-10-7904	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/022310.b/039f3901.d	247178002	sample	23-FEB-2010	14:45	10-1861.sub	RE15-10-7903	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER

Back Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
■	N	/chem/ecd1a.i/022310.b/035h3501.d	247178001	sample	23-FEB-2010	13:55	10-1861.sub	RE15-10-7904	1.00000	955562	DUSE WAS MS
□	N	/chem/ecd1a.i/022310.b/037h3701.d	247178001	sample	23-FEB-2010	14:20	10-1861.sub	RE15-10-7904	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/022310.b/039h3901.d	247178002	sample	23-FEB-2010	14:45	10-1861.sub	RE15-10-7903	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER

Front QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd1a.i/022310.b/014f1401-1.d	1202048657	mb	23-FEB-2010	09:33	10-1861.sub	PBLK01	1.00000	955562	
□	N	/chem/ecd1a.i/022310.b/015f1501-1.d	1202048658	lcs	23-FEB-2010	09:46	10-1861.sub	PBLK01LCS	1.00000	955562	
□	N	/chem/ecd1a.i/022310.b/036f3601.d	1202048659	ms	23-FEB-2010	14:07	10-1861.sub	RE15-10-7904MS	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/022310.b/038f3801.d	1202048660	msd	23-FEB-2010	14:32	10-1861.sub	RE15-10-7904MSD	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER

Back QC Sample Column

exclude	manual	datafile	smpid	sampletype	injdate	injtime	sublist	clientid	dilution	prepbatchid	comment
□	N	/chem/ecd1a.i/022310.b/014h1401-1.d	1202048657	mb	23-FEB-2010	09:33	10-1861.sub	PBLK01	1.00000	955562	
□	N	/chem/ecd1a.i/022310.b/015h1501-1.d	1202048658	lcs	23-FEB-2010	09:46	10-1861.sub	PBLK01LCS	1.00000	955562	
□	N	/chem/ecd1a.i/022310.b/036h3601.d	1202048659	ms	23-FEB-2010	14:07	10-1861.sub	RE15-10-7904MS	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER
□	N	/chem/ecd1a.i/022310.b/038h3801.d	1202048660	msd	23-FEB-2010	14:32	10-1861.sub	RE15-10-7904MSD	1.00000	955562	UPLOAD BOTH COLUMNS, USE HIGHER

SAMPLE DATA SUMMARY

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-1861	**Date Collected:**	02/10/2010 12:00	**Matrix:**	R
Lab Sample ID:	247178002	**Date Received:**	02/16/2010 08:50	**%Moisture:**	19.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-7903	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	955562	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	02/23/2010 14:45	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	02/22/2010 21:35	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	039f3901.d	**Column:**	1 CLP1	**Level:**	LOW
	039b3901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	4.14	ug/kg	1.38	4.14	1
11104-28-2	Aroclor-1221	U	4.14	ug/kg	1.38	4.14	1
11141-16-5	Aroclor-1232	U	4.14	ug/kg	1.38	4.14	1
53469-21-9	Aroclor-1242	U	4.14	ug/kg	1.38	4.14	1
12672-29-6	Aroclor-1248	U	4.14	ug/kg	1.38	4.14	1
11097-69-1	Aroclor-1254	U	4.14	ug/kg	1.38	4.14	1
11096-82-5	Aroclor-1260	U	4.14	ug/kg	1.38	4.14	1

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-1861**	**Date Collected:**	**02/10/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**247178001**	**Date Received:**	**02/16/2010 08:50**	**%Moisture:**	**10.5**
		Client:	**LANL010**	**Project:**	**LANL01004**
Client ID:	**RE15-10-7904**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**955562**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**02/23/2010 14:20**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**02/22/2010 21:35**	**Aliquot:**	**30.11 g**	**Final Volume:**	**1 mL**
Data File:	**037f3701.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	037b3701.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

QUALITY CONTROL SUMMARY

PCB

Surrogate Recovery Report

SDG Number: 10-1861

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 #
1202048657	MB for batch 955560	65	63	54	67
1202048658	LCS for batch 955560	60	57	57	63
1202048659	RE15-10-7904MS	62	59	71	64
247178001	RE15-10-7904	68	65	74	72
1202048660	RE15-10-7904MSD	66	63	61	67
247178002	RE15-10-7903	59	57	65	59

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

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1861
Client ID: LCS for batch 955560
Lab Sample ID: 1202048658
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Laboratory Control Sample
Matrix: SOIL
Analysis Date: 02/23/2010 09:46
Dilution: 1
Prep Batch ID: 955560
Batch ID: 955562

CAS No		Parmname	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	20.9	63	39-102
11096-82-5	LCS	Aroclor-1260	33.3	0.0	25.0	75	45-118

PCB

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1861
Client ID: RE15-10-7904MS
Lab Sample ID: 1202048659
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike
Matrix: R
%Moisture: 10.5
Analysis Date: 02/23/2010 14:07
Prep Batch ID: 955560
Batch ID: 955562

Dilution: 1

CAS No		Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits
12674-11-2	MS	Aroclor-1016	37.2	0.00	U	23.9	64	23-119
11096-82-5	MS	Aroclor-1260	37.2	0.00	U	30.4	82	28-124

Quality Control Summary
Spike Recovery Report

SDG Number: 10-1861
Client ID: RE15-10-7904MSD
Lab Sample ID: 1202048660
Instrument: ECD1A.I
Analyst: YS1
Inj. Vol: 1 uL

Sample Type: Matrix Spike Duplicate
Matrix: R
%Moisture: 10.5
Analysis Date: 02/23/2010 14:32
Dilution: 1
Prep Batch ID: 955560
Batch ID: 955562

CAS No	Parmname	Amount Added ug/kg	Sample Conc. ug/kg		Spike Conc. ug/kg	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
12674-11-2	MSD Aroclor-1016	37.0	0.00	U	23.3	63	23-119	3	0-28
11096-82-5	MSD Aroclor-1260	37.0	0.00	U	32.9	89	28-124	8	0-30

Method Blank Summary

SDG Number:	10-1861	Client:	LANL010	Matrix:	SOIL
Client ID:	MB for batch 955560	Instrument ID:	ECD1A.I_2 ECD1A.I_1	Data File:	014b1401-1.d 014f1401-1.d
Lab Sample ID:	1202048657				
Column:	CLP2 CLP1	Prep Date:	02/22/2010 21:35	Analyzed:	02/23/10 09:33
		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 955560	1202048658	015f1501-1.d 015b1501-1.d	02/23/10	0946
02	RE15-10-7904MS	1202048659	036f3601.d 036b3601.d	02/23/10	1407
03	RE15-10-7904	247178001	037f3701.d 037b3701.d	02/23/10	1420
04	RE15-10-7904MSD	1202048660	038f3801.d 038b3801.d	02/23/10	1432
05	RE15-10-7903	247178002	039f3901.d 039b3901.d	02/23/10	1445

SAMPLE
DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–1861	**Date Collected:**	02/10/2010 12:00	**Matrix:**	R
Lab Sample ID:	247178002	**Date Received:**	02/16/2010 08:50	**%Moisture:**	19.4
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15–10–7903	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	955562	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	02/23/2010 14:45	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	02/22/2010 21:35	**Aliquot:**	30.01 g	**Final Volume:**	1 mL
Data File:	039f3901.d	**Column:**	1 CLP1	**Level:**	LOW
	039b3901.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016	U	4.14	ug/kg	1.38	4.14	1
11104–28–2	Aroclor–1221	U	4.14	ug/kg	1.38	4.14	1
11141–16–5	Aroclor–1232	U	4.14	ug/kg	1.38	4.14	1
53469–21–9	Aroclor–1242	U	4.14	ug/kg	1.38	4.14	1
12672–29–6	Aroclor–1248	U	4.14	ug/kg	1.38	4.14	1
11097–69–1	Aroclor–1254	U	4.14	ug/kg	1.38	4.14	1
11096–82–5	Aroclor–1260	U	4.14	ug/kg	1.38	4.14	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/039f3901.d
Lab Smp Id: 247178002 Client Smp ID: RE15-10-7903
Inj Date : 23-FEB-2010 14:45
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |247178002|1|
Misc Info : |ECD82P_1S|955562|SVA|LANL|SOIL|RE15-10-7903|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 24-Feb-2010 06:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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	30.01000	Weight of sample extracted (g)
M	19.43970	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.922	1.922	0.000	50847403	118.075	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.229	5.232	-0.003	39947353	129.999	5.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/022310.b/039f3901.d

Date : 23-FEB-2010 14:45

Client ID: RE15-10-7903

Sample Info: |247178002|1|

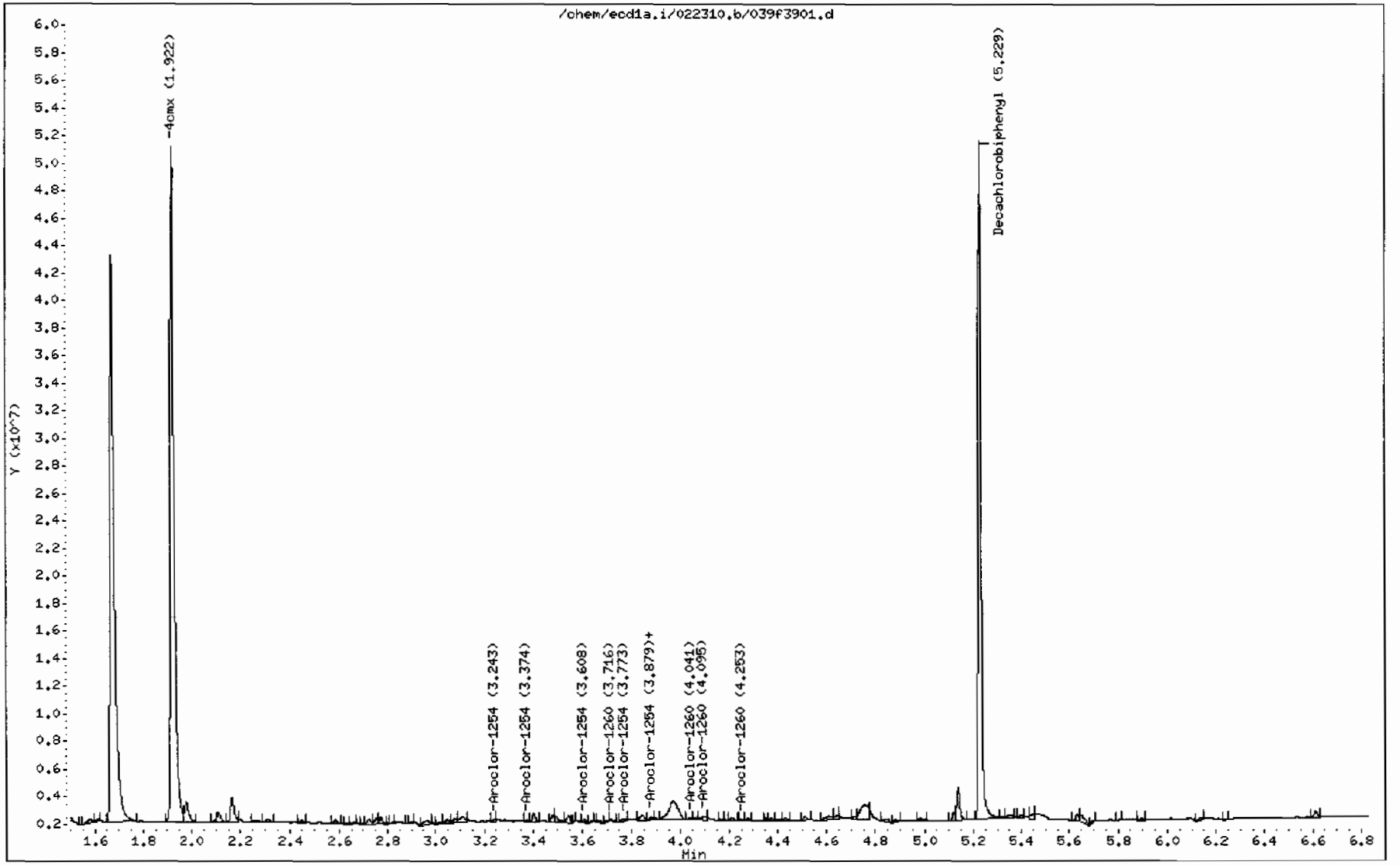
Volume Injected (uL): 1.0

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/039b3901.d
Lab Smp Id: 247178002 Client Smp ID: RE15-10-7903
Inj Date : 23-FEB-2010 14:45
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |247178002|1|
Misc Info : |ECD82P_1S|955562|SVA|LANL|SOIL|RE15-10-7903|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 24-Feb-2010 06:53 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 39
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

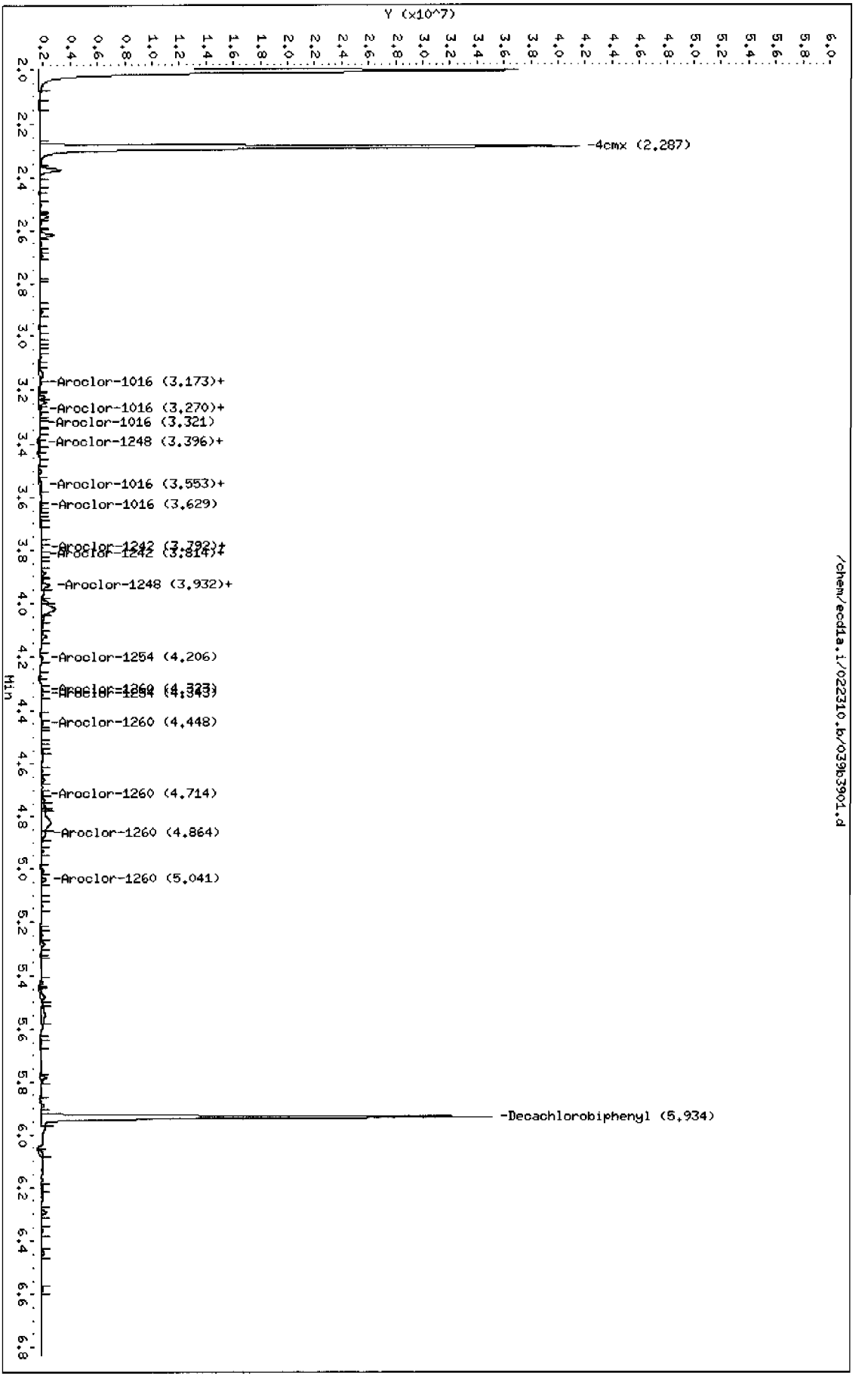
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.01000	Weight of sample extracted (g)
M	19.43970	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.287	2.287	0.000	33770596	113.554	4.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.934	5.936	-0.002	24871839	117.598	4.9	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/022310.b/039b3901.d
Date : 23-FEB-2010 14:45
Client ID: RE15-10-7903
Sample Info: 1247178002|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-1861	**Date Collected:**	02/10/2010 12:00	**Matrix:**	R
Lab Sample ID:	247178001	**Date Received:**	02/16/2010 08:50	**%Moisture:**	10.5
		Client:	LANL010	**Project:**	LANL01004
Client ID:	RE15-10-7904	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	955562	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	02/23/2010 14:20	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	02/22/2010 21:35	**Aliquot:**	30.11 g	**Final Volume:**	1 mL
Data File:	037f3701.d	**Column:**	1 CLP1	**Level:**	LOW
	037b3701.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016	U	3.71	ug/kg	1.24	3.71	1
11104-28-2	Aroclor-1221	U	3.71	ug/kg	1.24	3.71	1
11141-16-5	Aroclor-1232	U	3.71	ug/kg	1.24	3.71	1
53469-21-9	Aroclor-1242	U	3.71	ug/kg	1.24	3.71	1
12672-29-6	Aroclor-1248	U	3.71	ug/kg	1.24	3.71	1
11097-69-1	Aroclor-1254	U	3.71	ug/kg	1.24	3.71	1
11096-82-5	Aroclor-1260	U	3.71	ug/kg	1.24	3.71	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/037f3701.d
Lab Smp Id: 247178001 Client Smp ID: RE15-10-7904
Inj Date : 23-FEB-2010 14:20
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |247178001|1|
Misc Info : |ECD82P_1S|955562|SVA|LANL|SOIL|
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 24-Feb-2010 08:09 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

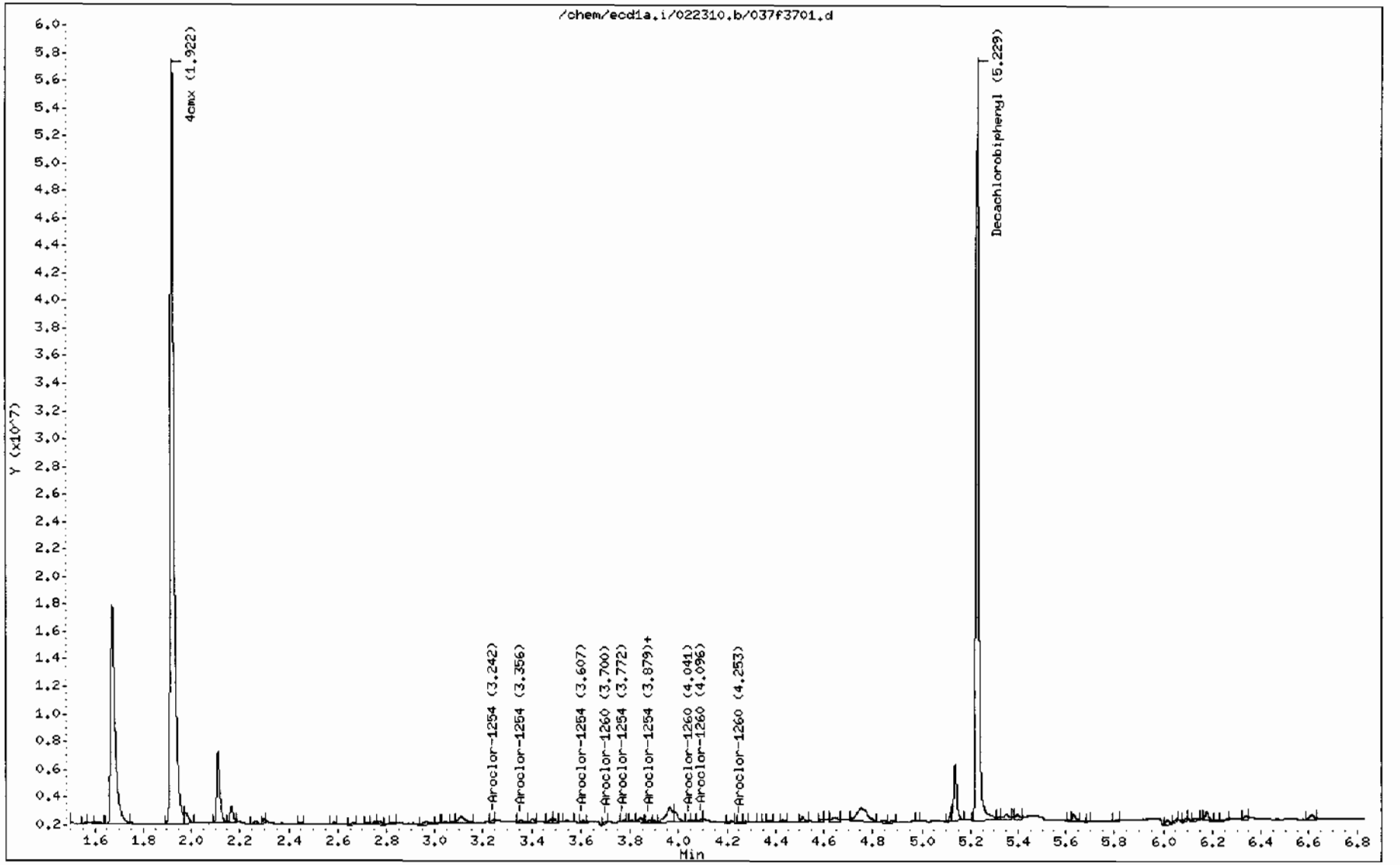
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	10.52500	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.922	1.922	0.000	58944070	136.876	5.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.229	5.232	-0.003	45177708	147.020	5.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/022310.b/037f3701.d
Date : 23-FEB-2010 14:20
Client ID: RE15-10-7904
Sample Info: |247178001|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022310.b/037b3701.d
Lab Smp Id: 247178001 Client Smp ID: RE15-10-7904
Inj Date : 23-FEB-2010 14:20
Operator : YS1 Inst ID: ecdla.i
Smp Info : |247178001|1|
Misc Info : |ECD82P_1S|955562|SVA|LANL|SOIL|
Comment :
Method : /chem/ecdla.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 24-Feb-2010 08:10 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

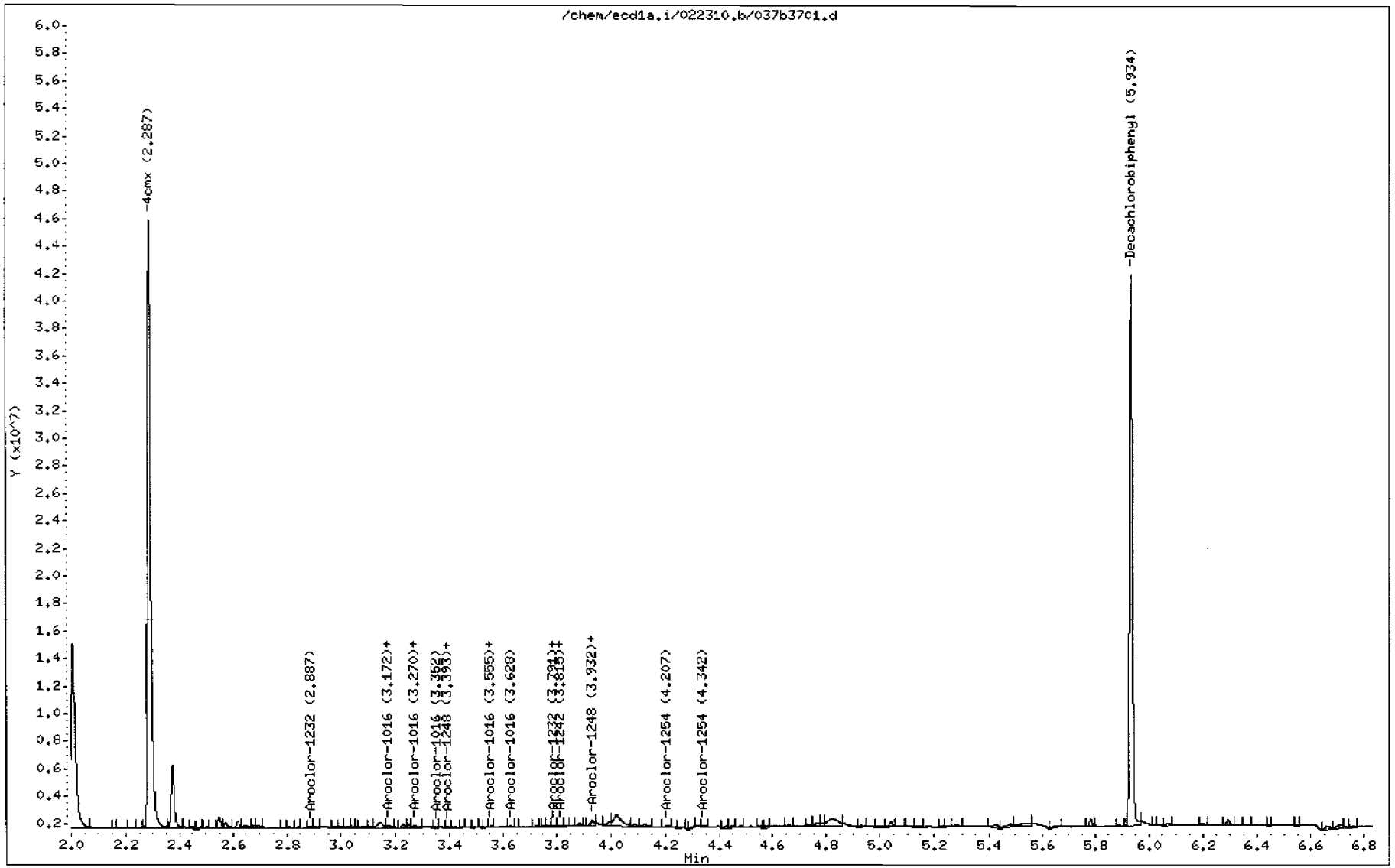
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.11000	Weight of sample extracted (g)
M	10.52500	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.287	2.287	0.000	38602369	129.801	4.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.934	5.936	-0.002	30517326	144.291	5.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/022310.b/037b3701.d
Date : 23-FEB-2010 14:20
Client ID: RE15-10-7904
Sample Info: |247178001|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



STANDARDS DATA

Report Date: 24-Feb-2010 08:58

Calibration History

Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 22-FEB-2010 12:08

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecd1a.i/022210.b/032f3201.d
22-FEB-2010 10:23	AR1248	/chem/ecd1a.i/022210.b/026f2601.d
22-FEB-2010 09:20	AR1242	/chem/ecd1a.i/022210.b/020f2001.d
22-FEB-2010 08:16	AR1254	/chem/ecd1a.i/022210.b/014f1401.d
22-FEB-2010 07:13	AR1660	/chem/ecd1a.i/022210.b/008f0801.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033f3301.d
22-FEB-2010 10:33	AR1248	/chem/ecd1a.i/022210.b/027f2701.d
22-FEB-2010 09:30	AR1242	/chem/ecd1a.i/022210.b/021f2101.d
22-FEB-2010 08:27	AR1254	/chem/ecd1a.i/022210.b/015f1501.d
22-FEB-2010 07:24	AR1660	/chem/ecd1a.i/022210.b/009f0901.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034f3401.d
22-FEB-2010 10:44	AR1248	/chem/ecd1a.i/022210.b/028f2801.d
22-FEB-2010 09:41	AR1242	/chem/ecd1a.i/022210.b/022f2201.d
22-FEB-2010 08:37	AR1254	/chem/ecd1a.i/022210.b/016f1601.d
22-FEB-2010 07:34	AR1660	/chem/ecd1a.i/022210.b/010f1001.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035f3501.d
22-FEB-2010 11:05	AR1248	/chem/ecd1a.i/022210.b/030f3001.d
22-FEB-2010 09:51	AR1242	/chem/ecd1a.i/022210.b/023f2301.d
22-FEB-2010 08:48	AR1254	/chem/ecd1a.i/022210.b/017f1701.d
22-FEB-2010 07:45	AR1660	/chem/ecd1a.i/022210.b/011f1101.d
22-FEB-2010 07:03	AR1262	/chem/ecd1a.i/022210.b/007f0701.d
22-FEB-2010 06:52	AR1221	/chem/ecd1a.i/022210.b/006f0601.d
22-FEB-2010 06:41	AR1232	/chem/ecd1a.i/022210.b/005f0501.d
22-FEB-2010 06:31	DDTANALOGSTD	/chem/ecd1a.i/022210.b/004f0401.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036f3601.d
22-FEB-2010 10:54	AR1248	/chem/ecd1a.i/022210.b/029f2901.d
22-FEB-2010 10:02	AR1242	/chem/ecd1a.i/022210.b/024f2401.d
22-FEB-2010 08:59	AR1254	/chem/ecd1a.i/022210.b/018f1801.d
22-FEB-2010 07:55	AR1660	/chem/ecd1a.i/022210.b/012f1201.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 19:45	AR1660	/chem/ecd1a.i/022310.b/063f6301.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 14:58	AR1660	/chem/ecd1a.i/022310.b/040f4001.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 22:04	AR1660	/chem/ecd1a.i/022310.b/074f7401.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 21:26	AR1660	/chem/ecd1a.i/022310.b/071f7101.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 17:25	AR1660	/chem/ecd1a.i/022310.b/052f5201.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 13:34	AR1660	/chem/ecd1a.i/022310.b/033f3301.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 11:39	AR1660	/chem/ecd1a.i/022310.b/024f2401.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 07:25	AR1268	/chem/ecd1a.i/022310.b/009f0901.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 07:15	AR1262	/chem/ecd1a.i/022310.b/008f0801.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 07:04	AR1221	/chem/ecd1a.i/022310.b/007f0701.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 06:53	AR1232	/chem/ecd1a.i/022310.b/006f0601.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 06:43	AR1248	/chem/ecd1a.i/022310.b/005f0501.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 06:32	AR1242	/chem/ecd1a.i/022310.b/004f0401.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 06:22	AR1254	/chem/ecd1a.i/022310.b/003f0301.d
Ccal Level: 4 , Ccal Amount: 1000		
23-FEB-2010 06:11	AR1660	/chem/ecd1a.i/022310.b/002f0201.d

Report Date: 24-Feb-2010 08:58

Calibration History

Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Start Cal Date: 22-FEB-2010 06:31
End Cal Date : 22-FEB-2010 12:08

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 100.00000		
22-FEB-2010 11:26	AR1268	/chem/ecd1a.i/022210.b/032b3201.d
22-FEB-2010 10:23	AR1248	/chem/ecd1a.i/022210.b/026b2601.d
22-FEB-2010 09:20	AR1242	/chem/ecd1a.i/022210.b/020b2001.d
22-FEB-2010 08:16	AR1254	/chem/ecd1a.i/022210.b/014b1401.d
22-FEB-2010 07:13	AR1660	/chem/ecd1a.i/022210.b/008b0801.d
Cal Level: 2 , Cal Amount: 250.00000		
22-FEB-2010 11:37	AR1268	/chem/ecd1a.i/022210.b/033b3301.d
22-FEB-2010 10:33	AR1248	/chem/ecd1a.i/022210.b/027b2701.d
22-FEB-2010 09:30	AR1242	/chem/ecd1a.i/022210.b/021b2101.d
22-FEB-2010 08:27	AR1254	/chem/ecd1a.i/022210.b/015b1501.d
22-FEB-2010 07:24	AR1660	/chem/ecd1a.i/022210.b/009b0901.d
Cal Level: 3 , Cal Amount: 500.00000		
22-FEB-2010 11:47	AR1268	/chem/ecd1a.i/022210.b/034b3401.d
22-FEB-2010 10:44	AR1248	/chem/ecd1a.i/022210.b/028b2801.d
22-FEB-2010 09:41	AR1242	/chem/ecd1a.i/022210.b/022b2201.d
22-FEB-2010 08:37	AR1254	/chem/ecd1a.i/022210.b/016b1601.d
22-FEB-2010 07:34	AR1660	/chem/ecd1a.i/022210.b/010b1001.d
Cal Level: 4 , Cal Amount: 1000.00000		
22-FEB-2010 11:58	AR1268	/chem/ecd1a.i/022210.b/035b3501.d
22-FEB-2010 11:05	AR1248	/chem/ecd1a.i/022210.b/030b3001.d
22-FEB-2010 09:51	AR1242	/chem/ecd1a.i/022210.b/023b2301.d
22-FEB-2010 08:48	AR1254	/chem/ecd1a.i/022210.b/017b1701.d
22-FEB-2010 07:45	AR1660	/chem/ecd1a.i/022210.b/011b1101.d
22-FEB-2010 07:03	AR1262	/chem/ecd1a.i/022210.b/007b0701.d
22-FEB-2010 06:52	AR1221	/chem/ecd1a.i/022210.b/006b0601.d
22-FEB-2010 06:41	AR1232	/chem/ecd1a.i/022210.b/005b0501.d
22-FEB-2010 06:31	DDTANALOGSTD	/chem/ecd1a.i/022210.b/004b0401.d
Cal Level: 5 , Cal Amount: 4000.00000		
22-FEB-2010 12:08	AR1268	/chem/ecd1a.i/022210.b/036b3601.d
22-FEB-2010 10:54	AR1248	/chem/ecd1a.i/022210.b/029b2901.d
22-FEB-2010 10:02	AR1242	/chem/ecd1a.i/022210.b/024b2401.d
22-FEB-2010 08:59	AR1254	/chem/ecd1a.i/022210.b/018b1801.d
22-FEB-2010 07:55	AR1660	/chem/ecd1a.i/022210.b/012b1201.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 4

Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 22:04 | AR1660 | /chem/ecd1a.i/022310.b/074b7401.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 21:26 | AR1660 | /chem/ecd1a.i/022310.b/071b7101.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 19:45 | AR1660 | /chem/ecd1a.i/022310.b/063b6301.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 17:25 | AR1660 | /chem/ecd1a.i/022310.b/052b5201.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 14:58 | AR1660 | /chem/ecd1a.i/022310.b/040b4001.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 13:34 | AR1660 | /chem/ecd1a.i/022310.b/033b3301.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 11:39 | AR1660 | /chem/ecd1a.i/022310.b/024b2401.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 06:11 | AR1660 | /chem/ecd1a.i/022310.b/002b0201.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 07:25 | AR1268 | /chem/ecd1a.i/022310.b/009b0901.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 07:15 | AR1262 | /chem/ecd1a.i/022310.b/008b0801.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 07:04 | AR1221 | /chem/ecd1a.i/022310.b/007b0701.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 06:53 | AR1232 | /chem/ecd1a.i/022310.b/006b0601.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 06:43 | AR1248 | /chem/ecd1a.i/022310.b/005b0501.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 06:32 | AR1242 | /chem/ecd1a.i/022310.b/004b0401.d
Ccal Level: 4 , Ccal Amount: 1000
23-FEB-2010 06:22 | AR1254 | /chem/ecd1a.i/022310.b/003b0301.d

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Quant Method : ESTD Target Version : 3.50
Last Update : 24-Feb-2010 08:09 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	2.376	2.346-2.406	1.538e+04
	2.663	2.633-2.693	1.824e+04
	2.743	2.713-2.773	1.207e+04
	2.781	2.751-2.811	7.096e+03
	2.992	2.962-3.022	8.912e+03
63 4,4-DDD	3.900	3.880-3.920	3.060e+05
64 4,4-DDE	3.551	3.531-3.571	3.552e+05
62 4,4-DDT	4.064	4.044-4.084	2.080e+05
2 Aroclor-1221	2.035	2.005-2.065	4.398e+03
	2.128	2.098-2.158	2.431e+03
	2.153	2.123-2.183	1.042e+04
3 Aroclor-1232	2.378	2.348-2.408	6.218e+03
	2.664	2.634-2.694	7.488e+03
	2.745	2.715-2.775	4.887e+03
	2.859	2.829-2.889	2.191e+03
	3.247	3.217-3.277	2.731e+03
4 Aroclor-1242	2.377	2.347-2.407	1.256e+04
	2.664	2.634-2.694	1.461e+04
	2.783	2.753-2.813	5.629e+03
	2.993	2.963-3.023	7.310e+03
	3.246	3.216-3.276	6.183e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m

Compound	RT	RT Window	RF
5 Aroclor-1248	2.859	2.829-2.889	9.301e+03
	2.993	2.963-3.023	1.241e+04
	3.246	3.216-3.276	1.220e+04
	3.378	3.348-3.408	1.042e+04
	3.611	3.581-3.641	6.820e+03
6 Aroclor-1254	3.222	3.192-3.252	1.201e+04
	3.377	3.347-3.407	1.583e+04
	3.610	3.580-3.640	1.952e+04
	3.774	3.744-3.804	1.381e+04
	3.883	3.853-3.913	1.428e+04
7 Aroclor-1260	3.718	3.688-3.748	1.707e+04
	3.881	3.851-3.911	2.364e+04
	4.042	4.012-4.072	2.497e+04
	4.111	4.081-4.141	1.441e+04
	4.254	4.224-4.284	1.443e+04
8 Aroclor-1262	3.720	3.690-3.750	1.261e+04
	3.881	3.851-3.911	1.569e+04
	4.112	4.082-4.142	1.995e+04
	4.255	4.225-4.285	1.798e+04
	4.434	4.404-4.464	3.725e+04
9 Aroclor-1268	4.620	4.590-4.650	4.848e+04
	4.642	4.612-4.672	5.448e+04
	4.755	4.725-4.785	3.862e+04
	4.957	4.927-4.987	1.635e+04
	5.123	5.093-5.153	1.121e+05
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	1.922	1.892-1.952	4.306e+05
$ 12 Decachlorobiphenyl	5.232	5.202-5.262	3.073e+05

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Quant Method : ESTD Target Version : 3.50
Last Update : 24-Feb-2010 08:10 Number of Cpnds : 15
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
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	3.183	3.153-3.213	1.279e+04
	3.267	3.237-3.297	8.918e+03
	3.330	3.300-3.360	5.406e+03
	3.557	3.527-3.587	6.916e+03
	3.632	3.602-3.662	6.425e+03
62 4,4-DDT	4.660	4.640-4.680	1.000e+05
63 4,4-DDE	4.128	4.108-4.148	2.505e+05
64 4,4-DDD	4.473	4.453-4.493	2.085e+05
2 Aroclor-1221	2.485	2.455-2.515	3.431e+03
	2.579	2.549-2.609	2.152e+03
	2.620	2.590-2.650	7.328e+03
3 Aroclor-1232	2.888	2.858-2.918	4.920e+03
	3.186	3.156-3.216	5.252e+03
	3.268	3.238-3.298	3.768e+03
	3.559	3.529-3.589	2.699e+03
	3.793	3.763-3.823	2.631e+03
4 Aroclor-1242	3.185	3.155-3.215	1.035e+04
	3.268	3.238-3.298	7.279e+03
	3.558	3.528-3.588	5.768e+03
	3.793	3.763-3.823	5.788e+03
	3.820	3.790-3.850	6.641e+03

GEL Laboratories LLC

COMPOUND LISTING

Method file : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m

Compound	RT	RT Window	RF
5 Aroclor-1248	3.394	3.364-3.424	7.602e+03
	3.559	3.529-3.589	9.360e+03
	3.792	3.762-3.822	1.065e+04
	3.820	3.790-3.850	1.210e+04
	3.957	3.927-3.987	1.150e+04
6 Aroclor-1254	3.394	3.364-3.424	6.068e+03
	3.816	3.786-3.846	1.074e+04
	3.932	3.902-3.962	1.164e+04
	4.209	4.179-4.239	1.590e+04
	4.345	4.315-4.375	1.198e+04
7 Aroclor-1260	4.324	4.294-4.354	1.321e+04
	4.449	4.419-4.479	1.557e+04
	4.716	4.686-4.746	1.184e+04
	4.889	4.859-4.919	1.220e+04
	5.036	5.006-5.066	2.653e+04
8 Aroclor-1262	4.450	4.420-4.480	1.126e+04
	4.716	4.686-4.746	1.550e+04
	4.891	4.861-4.921	1.407e+04
	5.037	5.007-5.067	2.845e+04
	5.251	5.221-5.281	1.972e+04
9 Aroclor-1268	5.249	5.219-5.279	3.730e+04
	5.276	5.246-5.306	3.492e+04
	5.426	5.396-5.456	2.658e+04
	5.591	5.561-5.621	1.223e+04
	5.784	5.754-5.814	7.433e+04
M 10 Aroclor-Total	1.000	0.980-1.020	
$ 11 4cmx	2.287	2.257-2.317	2.974e+05
$ 12 Decachlorobiphenyl	5.936	5.906-5.966	2.115e+05

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 22-FEB-2010 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Cal Date : 24-Feb-2010 08:09 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/022210.b/032f3201.d
Level 2: /chem/ecd1a.i/022210.b/033f3301.d
Level 3: /chem/ecd1a.i/022210.b/034f3401.d
Level 4: /chem/ecd1a.i/022210.b/035f3501.d
Level 5: /chem/ecd1a.i/022210.b/036f3601.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)	18473	16312	15150	14238	12749	15384	14.060
(2)	20194	18537	17759	17625	17070	18237	6.651
(3)	14170	12473	11875	11163	10646	12065	11.317
(4)	8163	7198	6933	6624	6564	7096	9.135
(5)	10345	9178	8623	8273	8142	8912	10.051
63 4,4-DDD	+++++	+++++	+++++	305990	+++++	305990	0.000
64 4,4-DDE	+++++	+++++	+++++	355239	+++++	355239	0.000
62 4,4-DDT	+++++	+++++	+++++	208015	+++++	208015	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	4398	+++++	4398	0.000
(2)	+++++	+++++	+++++	2431	+++++	2431	0.000
(3)	+++++	+++++	+++++	10418	+++++	10418	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	6218	+++++	6218	0.000
(2)	+++++	+++++	+++++	7488	+++++	7488	0.000
(3)	+++++	+++++	+++++	4887	+++++	4887	0.000
(4)	+++++	+++++	+++++	2191	+++++	2191	0.000
(5)	+++++	+++++	+++++	2731	+++++	2731	0.000
4 Aroclor-1242(1)	14895	13406	12308	11554	10624	12557	13.200
(2)	15940	15326	14418	13613	13761	14612	6.870
(3)	6066	5934	5542	5337	5267	5629	6.326
(4)	8523	7616	7127	6725	6562	7310	10.814
(5)	6824	6256	5999	5817	6020	6183	6.317
5 Aroclor-1248(1)	10594	9810	9017	8885	8199	9301	9.911
(2)	14228	12736	11895	11712	11476	12409	9.043
(3)	12841	12156	11815	11785	12410	12201	3.615
(4)	11297	10503	10013	9956	10333	10420	5.179
(5)	7445	6917	6453	6460	6824	6820	5.977

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 22-FEB-2010 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Cal Date : 24-Feb-2010 08:09 yip00818
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	13496	12213	11744	11466	11117	12007	7.694
(2)	16789	15969	15727	15423	15253	15832	3.802
(3)	20267	19353	19208	19481	19310	19524	2.185
(4)	14142	13669	13487	13772	13976	13809	1.858
(5)	15228	14234	13851	14228	13864	14281	3.932
7 Aroclor-1260(1)	19445	17307	16758	16208	15645	17072	8.574
(2)	25625	23757	23316	22992	22528	23643	5.056
(3)	27164	24948	24176	24127	24442	24971	5.079
(4)	16166	14596	13941	13551	13775	14406	7.345
(5)	15672	14437	13986	13647	14411	14431	5.316
8 Aroclor-1262(1)	#####	#####	#####	12612	#####	12612	0.000
(2)	#####	#####	#####	15693	#####	15693	0.000
(3)	#####	#####	#####	19946	#####	19946	0.000
(4)	#####	#####	#####	17981	#####	17981	0.000
(5)	#####	#####	#####	37250	#####	37250	0.000
9 Aroclor-1268(1)	49163	48928	48151	48132	48019	48478	1.086
(2)	55254	54719	54718	54649	53075	54483	1.512
(3)	39937	38826	38121	38191	38006	38616	2.083
(4)	16234	16191	16152	16347	16815	16348	1.657
(5)	114910	115297	111446	111050	107804	112101	2.753
M 10 Aroclor-Total	#####	#####	#####	#####	#####	#####	#####
$ 11 4dmx	457836	439032	431646	423676	400995	430637	4.841
$ 12 Decachlorobiphenyl	331580	312081	303953	298909	289924	307289	5.135

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 22-FEB-2010 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Cal Date : 24-Feb-2010 08:10 yip00818
Curve Type : Average

Calibration File Names:
Level 1: /chem/ecd1a.i/022210.b/032b3201.d
Level 2: /chem/ecd1a.i/022210.b/033b3301.d
Level 3: /chem/ecd1a.i/022210.b/034b3401.d
Level 4: /chem/ecd1a.i/022210.b/035b3501.d
Level 5: /chem/ecd1a.i/022210.b/036b3601.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)	14790	13406	12599	11956	11198	12790	10.807
(2)	11020	9550	8735	8081	7204	8918	16.336
(3)	6667	5702	5261	4923	4477	5406	15.464
(4)	8469	7466	6811	6206	5627	6916	15.991
(5)	7861	6755	6366	5845	5300	6425	15.123
62 4,4-DDT	+++++	+++++	+++++	100019	+++++	100019	0.000
63 4,4-DDE	+++++	+++++	+++++	250510	+++++	250510	0.000
64 4,4-DDD	+++++	+++++	+++++	208527	+++++	208527	0.000
2 Aroclor-1221(1)	+++++	+++++	+++++	3431	+++++	3431	0.000
(2)	+++++	+++++	+++++	2152	+++++	2152	0.000
(3)	+++++	+++++	+++++	7328	+++++	7328	0.000
3 Aroclor-1232(1)	+++++	+++++	+++++	4920	+++++	4920	0.000
(2)	+++++	+++++	+++++	5252	+++++	5252	0.000
(3)	+++++	+++++	+++++	3768	+++++	3768	0.000
(4)	+++++	+++++	+++++	2699	+++++	2699	0.000
(5)	+++++	+++++	+++++	2631	+++++	2631	0.000
4 Aroclor-1242(1)	12162	10602	10267	9852	8873	10351	11.615
(2)	8972	7860	7095	6551	5917	7279	16.286
(3)	7172	6222	5595	5138	4714	5768	16.707
(4)	7092	6149	5608	5215	4876	5788	15.018
(5)	8262	7049	6439	5944	5512	6641	16.138
5 Aroclor-1248(1)	9375	8130	7334	6873	6297	7602	15.743
(2)	11273	9902	9059	8609	7955	9360	13.704
(3)	12356	11118	10348	9982	9432	10647	10.657
(4)	14147	12783	11698	11327	10532	12097	11.596
(5)	13387	12032	11069	10719	10286	11499	10.750

GEL Laboratories LLC

INITIAL CALIBRATION DATA

Start Cal Date : 22-FEB-2010 06:31
End Cal Date : 22-FEB-2010 12:08
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Cal Date : 24-Feb-2010 08:10 yip00818
Curve Type : Average

Compound	100.000 Level 1	250.000 Level 2	500.000 Level 3	1000.000 Level 4	4000.000 Level 5	RRF	% RSD
6 Aroclor-1254(1)	7593	6474	5915	5463	4897	6068	16.986
(2)	13079	11278	10543	9836	8978	10743	14.511
(3)	14023	12144	11373	10769	9907	11643	13.419
(4)	18579	16173	15683	15087	13972	15899	10.745
(5)	14693	12059	11530	11303	10291	11975	13.772
7 Aroclor-1260(1)	16156	14478	12627	11898	10869	13206	15.988
(2)	18308	16389	15401	14483	13254	15567	12.332
(3)	14169	12468	11644	10875	10061	11844	13.319
(4)	14677	12787	11930	11182	10430	12201	13.416
(5)	30570	27429	26347	25126	23163	26527	10.405
8 Aroclor-1262(1)	+++++	+++++	+++++	11265	+++++	11265	0.000
(2)	+++++	+++++	+++++	15504	+++++	15504	0.000
(3)	+++++	+++++	+++++	14070	+++++	14070	0.000
(4)	+++++	+++++	+++++	28448	+++++	28448	0.000
(5)	+++++	+++++	+++++	19723	+++++	19723	0.000
9 Aroclor-1268(1)	41829	39003	36612	35751	33294	37298	8.721
(2)	39747	36378	33891	33096	31474	34917	9.246
(3)	30202	27679	25801	25188	24032	26580	9.093
(4)	14370	12834	11677	11309	10971	12232	11.329
(5)	81955	77588	73073	71224	67792	74326	7.452
M 10 Aroclor-Total	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 11 4cmx	335261	308362	295849	285028	262485	297397	9.098
$ 12 Decachlorobiphenyl	252219	220293	206273	196840	181867	211498	12.633

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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 0611

Lab File ID: 002F0201 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13535.104	0.01	-12.0	15.0
(2)	18237.012	16914.086	0.01	-7.2	15.0
(3)	12065.482	10868.544	0.01	-9.9	15.0
(4)	7096.105	6510.230	0.01	-8.2	15.0
(5)	8912.192	8262.297	0.01	-7.3	15.0
Aroclor-1260	17072.421	17718.373	0.01	3.8	15.0
(2)	23643.449	25348.511	0.01	7.2	15.0
(3)	24971.335	27084.315	0.01	8.5	15.0
(4)	14405.675	15473.477	0.01	7.4	15.0
(5)	14430.527	15854.511	0.01	9.9	15.0
4cmx	430636.91	396908.24	0.01	-7.8	15.0
Decachlorobiphenyl	307289.35	289760.17	0.01	-5.7	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 0611

Lab File ID: 002B0201 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	11458.800	0.01	-10.4	15.0
(2)	8917.926	7736.071	0.01	-13.2	15.0
(3)	5406.011	4765.375	0.01	-11.8	15.0
(4)	6915.638	6010.703	0.01	-13.1	15.0
(5)	6425.213	5640.945	0.01	-12.2	15.0
Aroclor-1260	13205.642	12335.399	0.01	-6.6	15.0
(2)	15566.814	15064.788	0.01	-3.2	15.0
(3)	11843.501	11343.130	0.01	-4.2	15.0
(4)	12201.193	11755.960	0.01	-3.6	15.0
(5)	26527.172	26335.720	0.01	-0.7	15.0
4cmx	297396.93	265172.56	0.01	-10.8	15.0
Decachlorobiphenyl	211498.34	185738.53	0.01	-12.2	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 1139

Lab File ID: 024F2401 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	15384.345	15394.829	0.01	0.1	15.0	
(2)	18237.012	19495.086	0.01	6.9	15.0	
(3)	12065.482	12413.334	0.01	2.9	15.0	
(4)	7096.105	7438.914	0.01	4.8	15.0	
(5)	8912.192	9410.221	0.01	5.6	15.0	
Aroclor-1260	17072.421	18833.247	0.01	10.3	15.0	
(2)	23643.449	27496.529	0.01	16.3	15.0	<-
(3)	24971.335	28237.420	0.01	13.1	15.0	
(4)	14405.675	16492.242	0.01	14.5	15.0	
(5)	14430.527	17043.877	0.01	18.1	15.0	<-
4cmx	430636.91	451299.89	0.01	4.8	15.0	
Decachlorobiphenyl	307289.35	282603.93	0.01	-8.0	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 1139

Lab File ID: 024B2401 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12569.120	0.01	-1.7	15.0
(2)	8917.926	8309.933	0.01	-6.8	15.0
(3)	5406.011	5168.871	0.01	-4.4	15.0
(4)	6915.638	6610.603	0.01	-4.4	15.0
(5)	6425.213	6113.618	0.01	-4.8	15.0
Aroclor-1260	13205.642	12198.299	0.01	-7.6	15.0
(2)	15566.814	14907.421	0.01	-4.2	15.0
(3)	11843.501	11108.369	0.01	-6.2	15.0
(4)	12201.193	11436.353	0.01	-6.3	15.0
(5)	26527.172	25613.604	0.01	-3.4	15.0
4cmx	297396.93	288878.24	0.01	-2.9	15.0
Decachlorobiphenyl	211498.34	192412.47	0.01	-9.0	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 1334

Lab File ID: 033F3301 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	15384.345	15406.866	0.01	0.1	15.0	
(2)	18237.012	18903.645	0.01	3.6	15.0	
(3)	12065.482	12340.530	0.01	2.3	15.0	
(4)	7096.105	7441.784	0.01	4.9	15.0	
(5)	8912.192	9438.125	0.01	5.9	15.0	
Aroclor-1260	17072.421	19050.200	0.01	11.6	15.0	
(2)	23643.449	27594.751	0.01	16.7	15.0	<-
(3)	24971.335	29591.497	0.01	18.5	15.0	<-
(4)	14405.675	16955.062	0.01	17.7	15.0	<-
(5)	14430.527	17391.129	0.01	20.5	15.0	<-
4cmx	430636.91	452638.43	0.01	5.1	15.0	
Decachlorobiphenyl	307289.35	329408.59	0.01	7.2	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 1334

Lab File ID: 033B3301 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	12789.782	12786.963	0.01	-0.0	15.0
(2)	8917.926	8380.650	0.01	-6.0	15.0
(3)	5406.011	5191.632	0.01	-4.0	15.0
(4)	6915.638	6505.726	0.01	-5.9	15.0
(5)	6425.213	6146.851	0.01	-4.3	15.0
Aroclor-1260	13205.642	12389.421	0.01	-6.2	15.0
(2)	15566.814	15170.982	0.01	-2.5	15.0
(3)	11843.501	11359.505	0.01	-4.1	15.0
(4)	12201.193	11771.505	0.01	-3.5	15.0
(5)	26527.172	26316.051	0.01	-0.8	15.0
4cmx	297396.93	292257.72	0.01	-1.7	15.0
Decachlorobiphenyl	211498.34	201692.62	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 1458

Lab File ID: 040F4001 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP1 ID: 0.25 (mm)

COMPOUND	$\overline{RRF}$	RRF 1000	MIN RRF	%D	MAX %D
Aroclor-1016	15384.345	13817.688	0.01	-10.2	15.0
(2)	18237.012	17049.592	0.01	-6.5	15.0
(3)	12065.482	11134.455	0.01	-7.7	15.0
(4)	7096.105	6691.207	0.01	-5.7	15.0
(5)	8912.192	8530.122	0.01	-4.3	15.0
Aroclor-1260	17072.421	17099.844	0.01	0.2	15.0
(2)	23643.449	24747.363	0.01	4.7	15.0
(3)	24971.335	26431.869	0.01	5.8	15.0
(4)	14405.675	15156.872	0.01	5.2	15.0
(5)	14430.527	15656.749	0.01	8.5	15.0
4cmx	430636.91	403897.63	0.01	-6.2	15.0
Decachlorobiphenyl	307289.35	286854.79	0.01	-6.6	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.: 10-1861

Instrument ID: ECD1A Calibration Date: 02/23/10 Time: 1458

Lab File ID: 040B4001 Init. Calib. Date(s): 02/22/10 02/22/10

Heated Purge: (Y/N) N Init. Calib. Times: 0713 0755

GC Column: CLP2 ID: 0.25 (mm)

COMPOUND	RRF	RRF 1000	MIN RRF	%D	MAX %D	
Aroclor-1016	12789.782	11709.612	0.01	-8.4	15.0	
(2)	8917.926	7582.126	0.01	-15.0	15.0	
(3)	5406.011	4699.918	0.01	-13.1	15.0	
(4)	6915.638	5937.303	0.01	-14.1	15.0	
(5)	6425.213	5456.636	0.01	-15.1	15.0	<-
Aroclor-1260	13205.642	11326.989	0.01	-14.2	15.0	
(2)	15566.814	13884.105	0.01	-10.8	15.0	
(3)	11843.501	10466.529	0.01	-11.6	15.0	
(4)	12201.193	10840.427	0.01	-11.2	15.0	
(5)	26527.172	24256.154	0.01	-8.6	15.0	
4cmx	297396.93	262119.49	0.01	-11.9	15.0	
Decachlorobiphenyl	211498.34	187233.54	0.01	-11.5	15.0	

FORM VII PEST

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/002f0201.d
Lab Smp Id: WAR100203-60 01 Client Smp ID: AR166001
Inj Date : 23-FEB-2010 06:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:28 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

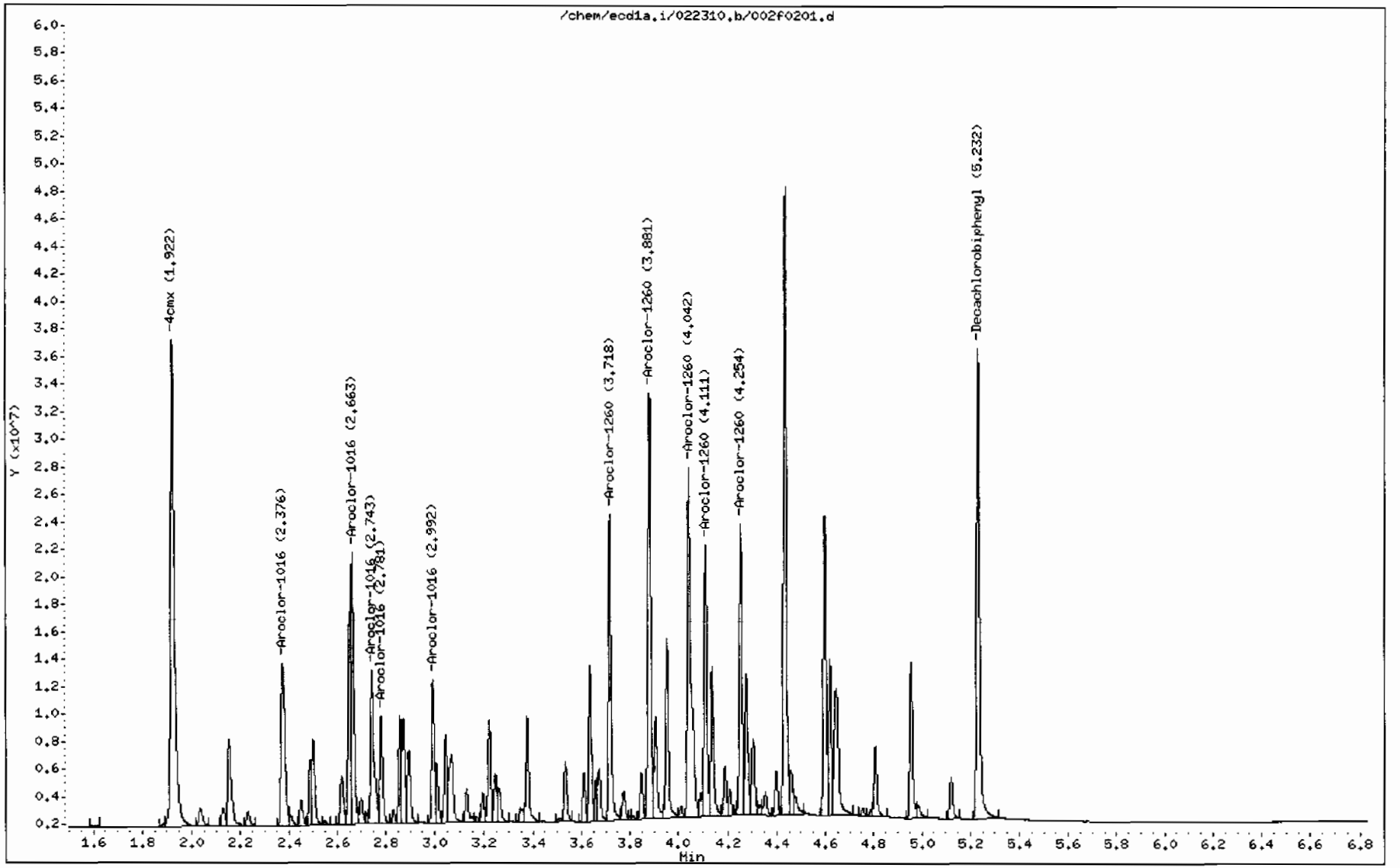
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.922	1.922	0.000	39690824	100.000	92.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.232	5.232	0.000	28976017	100.000	94.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.376	2.376	0.000	13535104	1000.00	880	80.00- 120.00	100.00
2.663	2.663	0.000	16914085	1000.00	927	104.96- 144.96	124.96
2.743	2.743	0.000	10868543	1000.00	901	60.30- 100.30	80.30
2.781	2.781	0.000	6510230	1000.00	917	28.10- 68.10	48.10
2.992	2.992	0.000	8262297	1000.00	927	41.04- 81.04	61.04
Average of Peak Amounts =					911		
7 Aroclor-1260					CAS #: 11096-82-5		
3.718	3.718	0.000	17718372	1000.00	1040	80.00- 120.00	100.00
3.881	3.881	0.000	25348510	1000.00	1070	123.06- 163.06	143.06
4.042	4.042	0.000	27084315	1000.00	1080	132.86- 172.86	152.86
4.111	4.111	0.000	15473477	1000.00	1070	67.33- 107.33	87.33
4.254	4.254	0.000	15854510	1000.00	1100	69.48- 109.48	89.48
Average of Peak Amounts =					1.07e+03		

Data File: /chem/ecd1a.i/022310.b/002f0201.d
Date : 23-FEB-2010 06:11
Client ID: AR166001
Sample Info: IWAR100203-60 01

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/002b0201.d
Lab Smp Id: WAR100203-60 01 Client Smp ID: AR166001
Inj Date : 23-FEB-2010 06:11
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 01
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:30 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.287	2.287	0.000	26517256	100.000	89.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.936	5.936	0.000	18573853	100.000	87.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.183	3.183	0.000	11458800	1000.00	896	80.00- 120.00	100.00(M)
3.267	3.267	0.000	7736071	1000.00	867	47.51- 87.51	67.51
3.330	3.330	0.000	4765375	1000.00	881	21.59- 61.59	41.59
3.557	3.557	0.000	6010703	1000.00	869	32.45- 72.45	52.45
3.632	3.632	0.000	5640945	1000.00	878	29.23- 69.23	59.26
Average of Peak Amounts -					878		
7 Aroclor-1260					CAS #: 11096-82-5		
4.324	4.324	0.000	12335399	1000.00	934	80.00- 120.00	100.00
4.449	4.449	0.000	15064788	1000.00	968	102.13- 142.13	122.13
4.716	4.716	0.000	11343130	1000.00	958	71.96- 111.96	91.96
4.889	4.889	0.000	11755960	1000.00	964	75.30- 115.30	95.30
5.036	5.036	0.000	26335720	1000.00	993	193.50- 233.50	213.50
Average of Peak Amounts -					963		

QC Flag Legend

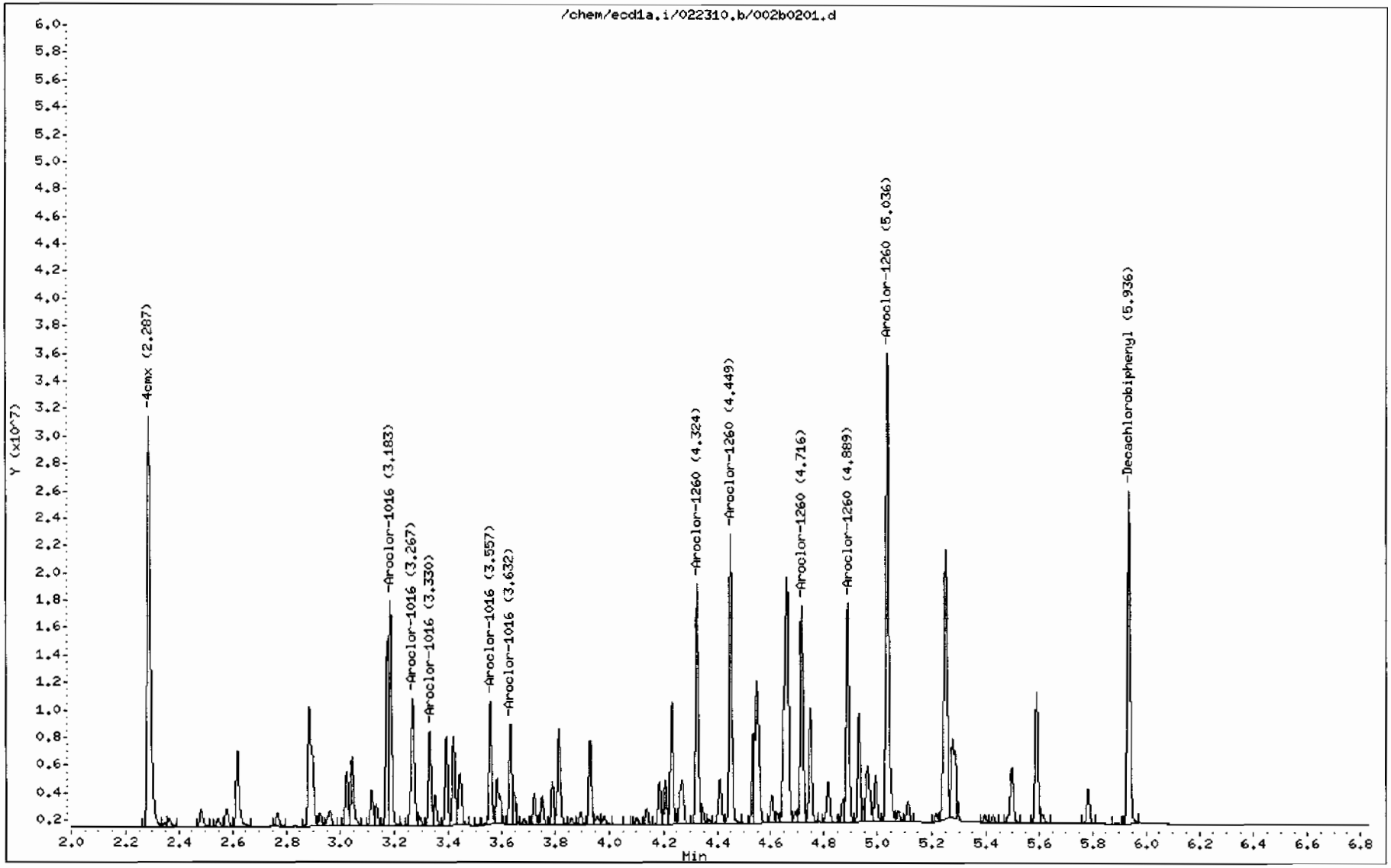
M - Compound response manually integrated.

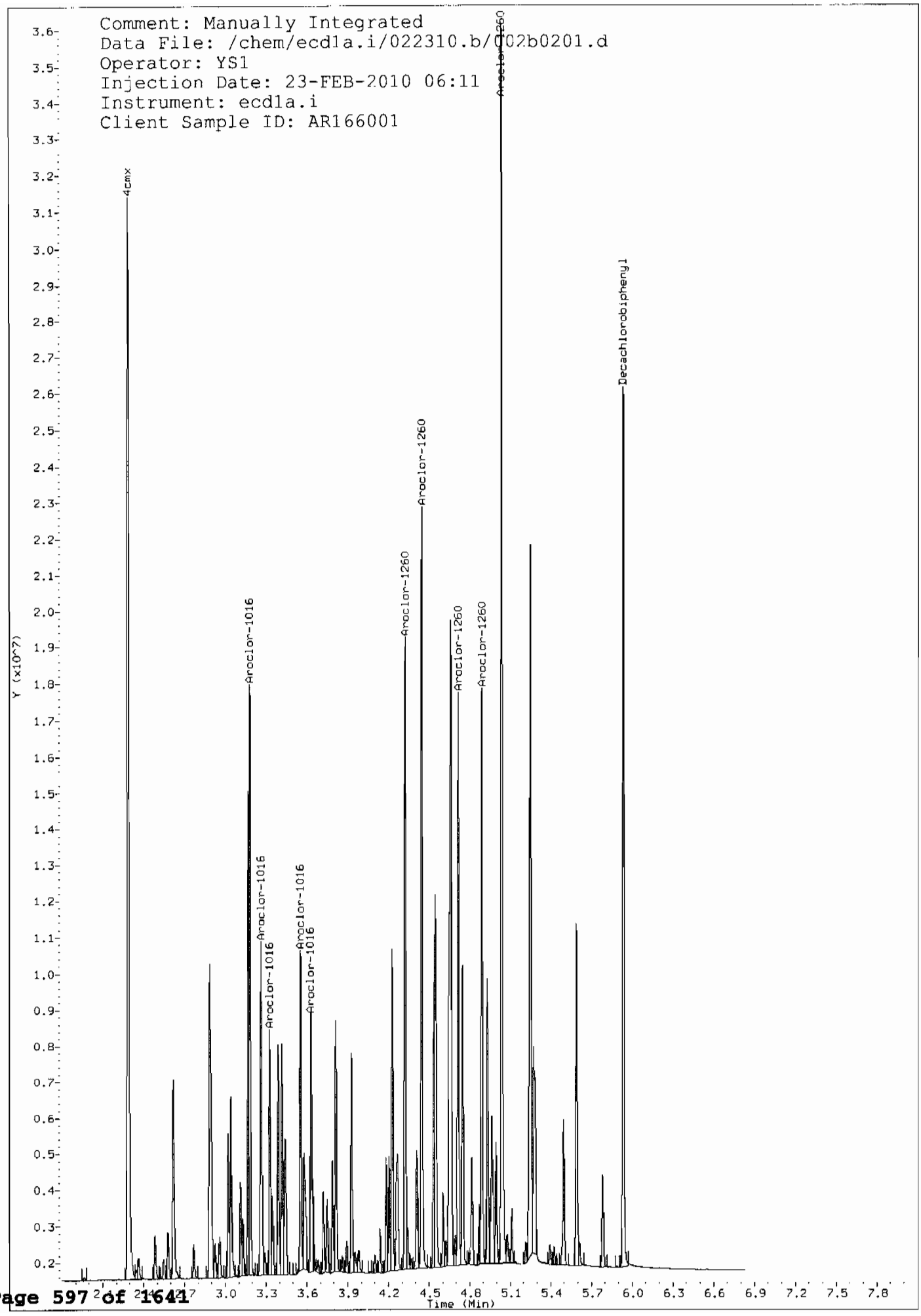
Data File: /chem/ecd1a.i/022310.b/002b0201.d
Date : 23-FEB-2010 06:11
Client ID: AR166001
Sample Info: |WAR100203-60 01

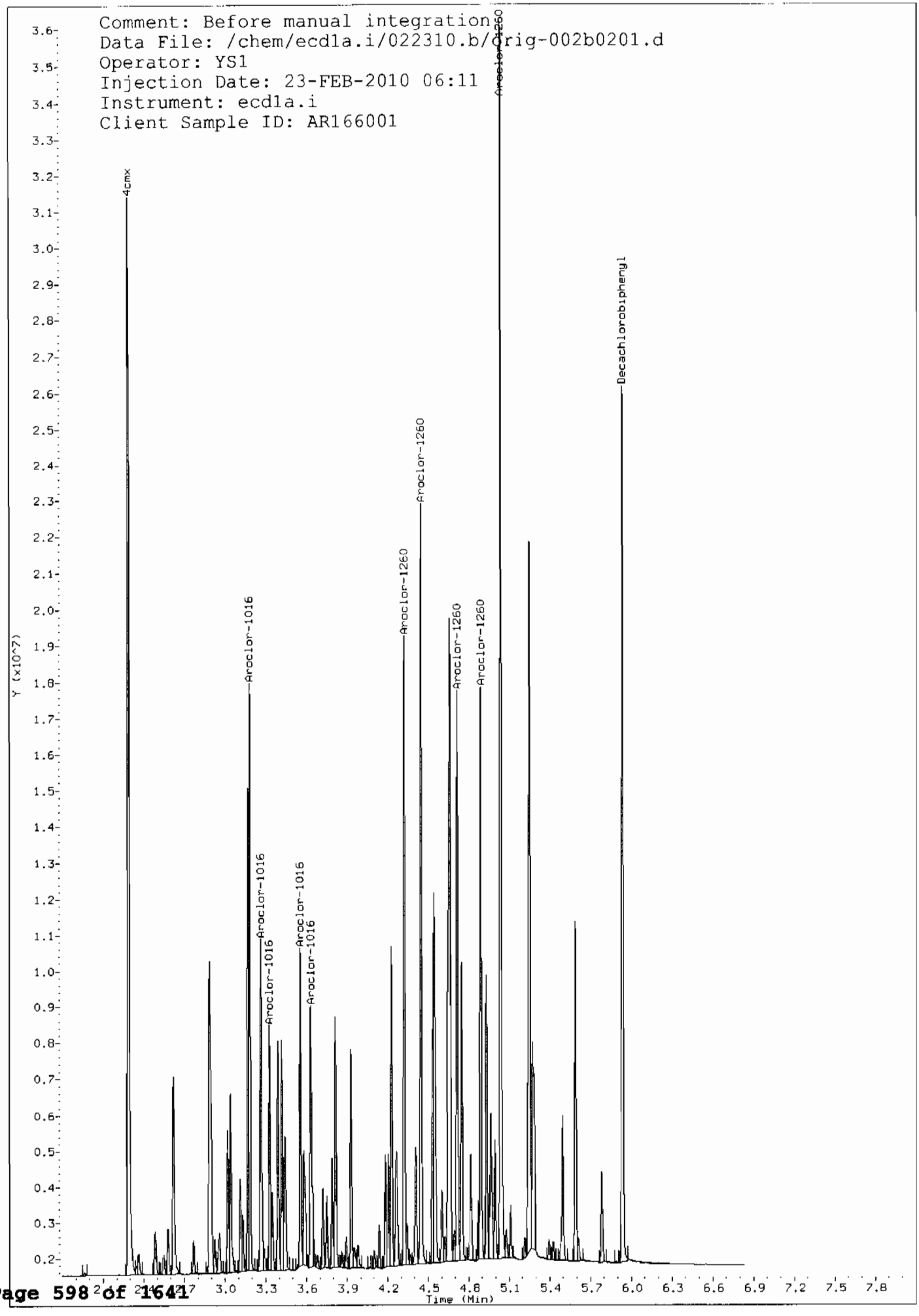
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd1a.i/022310.b/C02b0201.d
Operator: YS1
Injection Date: 23-FEB-2010 06:11
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/022310.b/Orig-002b0201.d
Operator: YS1
Injection Date: 23-FEB-2010 06:11
Instrument: ecd1a.i
Client Sample ID: AR166001
4cmx
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecdla.i/022310.b/003f0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 23-FEB-2010 06:22
Operator : YS1 Inst ID: ecdla.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecdla.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:28 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.222	3.222	0.000	12023733	1000.00	1000	80.00- 120.00	100.00
3.377	3.377	0.000	16139536	1000.00	1020	114.23- 154.23	134.23
3.610	3.610	0.000	20832543	1000.00	1070	153.26- 193.26	173.26
3.774	3.774	0.000	14837457	1000.00	1070	103.40- 143.40	123.40
3.883	3.883	0.000	15559530	1000.00	1090	109.41- 149.41	129.41

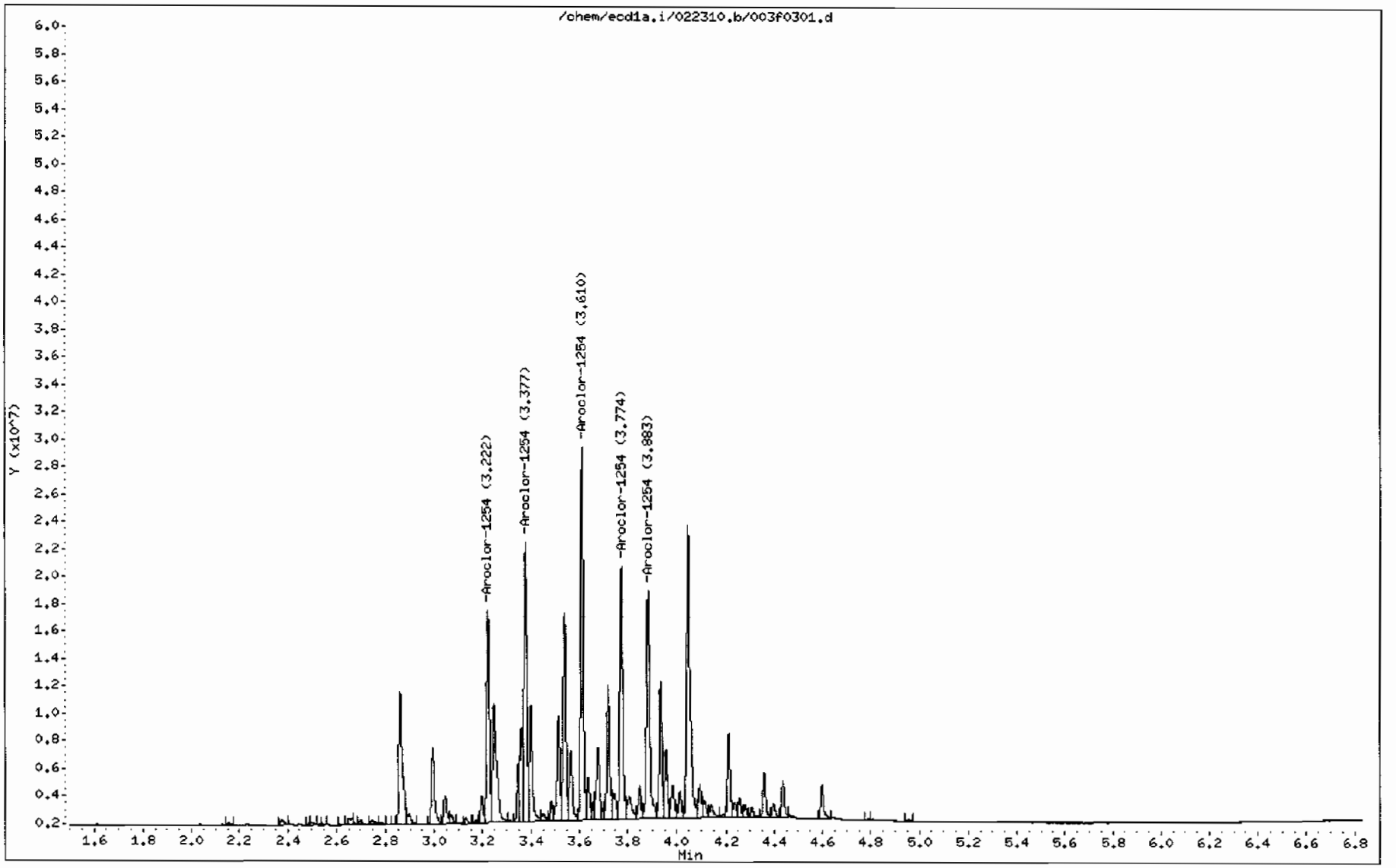
Average of Peak Amounts = 1.05e+03

Data File: /chem/ecd1a.i/022310.b/003f0301.d
Date : 23-FEB-2010 06:22
Client ID: AR125401
Sample Info: !WAR100219-54

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/003b0301.d
Lab Smp Id: WAR100219-54 Client Smp ID: AR125401
Inj Date : 23-FEB-2010 06:22
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-54
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:30 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1254.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
6 Aroclor-1254					CAS #: 11097-69-1		
3.394	3.394	0.000	5521374	1000.00	910	80.00- 120.00	100.00
3.816	3.816	0.000	9874704	1000.00	919	158.85- 198.85	178.85
3.932	3.932	0.000	10861414	1000.00	933	176.72- 216.72	196.72
4.209	4.209	0.000	15218943	1000.00	957	255.64- 295.64	275.64
4.345	4.345	0.000	11120215	1000.00	929	181.40- 221.40	201.40
		Average of Peak Amounts =			930		

Data File: /chem/ecd1a.i/022310.b/003b0301.d

Date : 23-FEB-2010 06:22

Client ID: AR125401

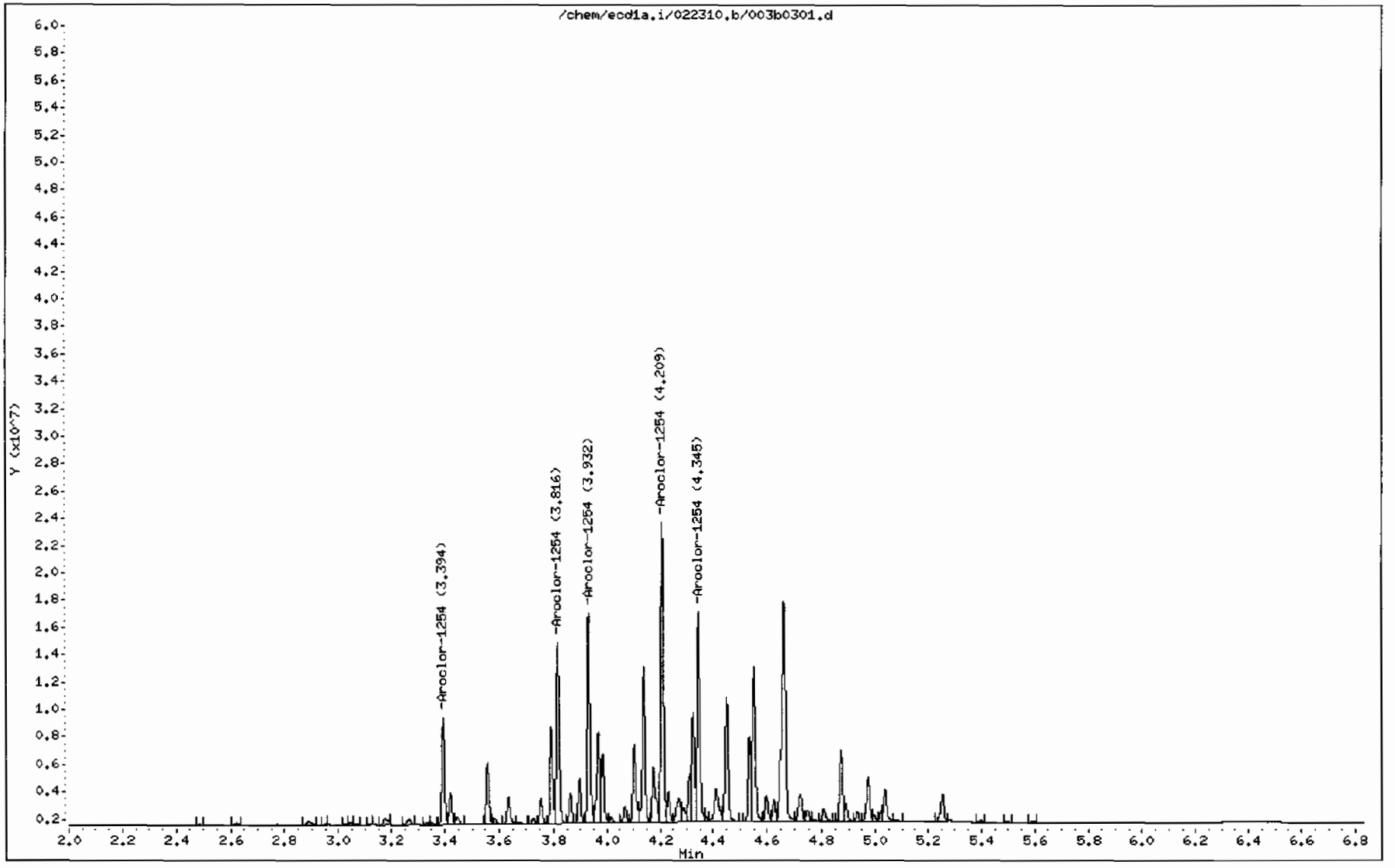
Sample Info: IWAR100219-54

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/004f0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 23-FEB-2010 06:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:28 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

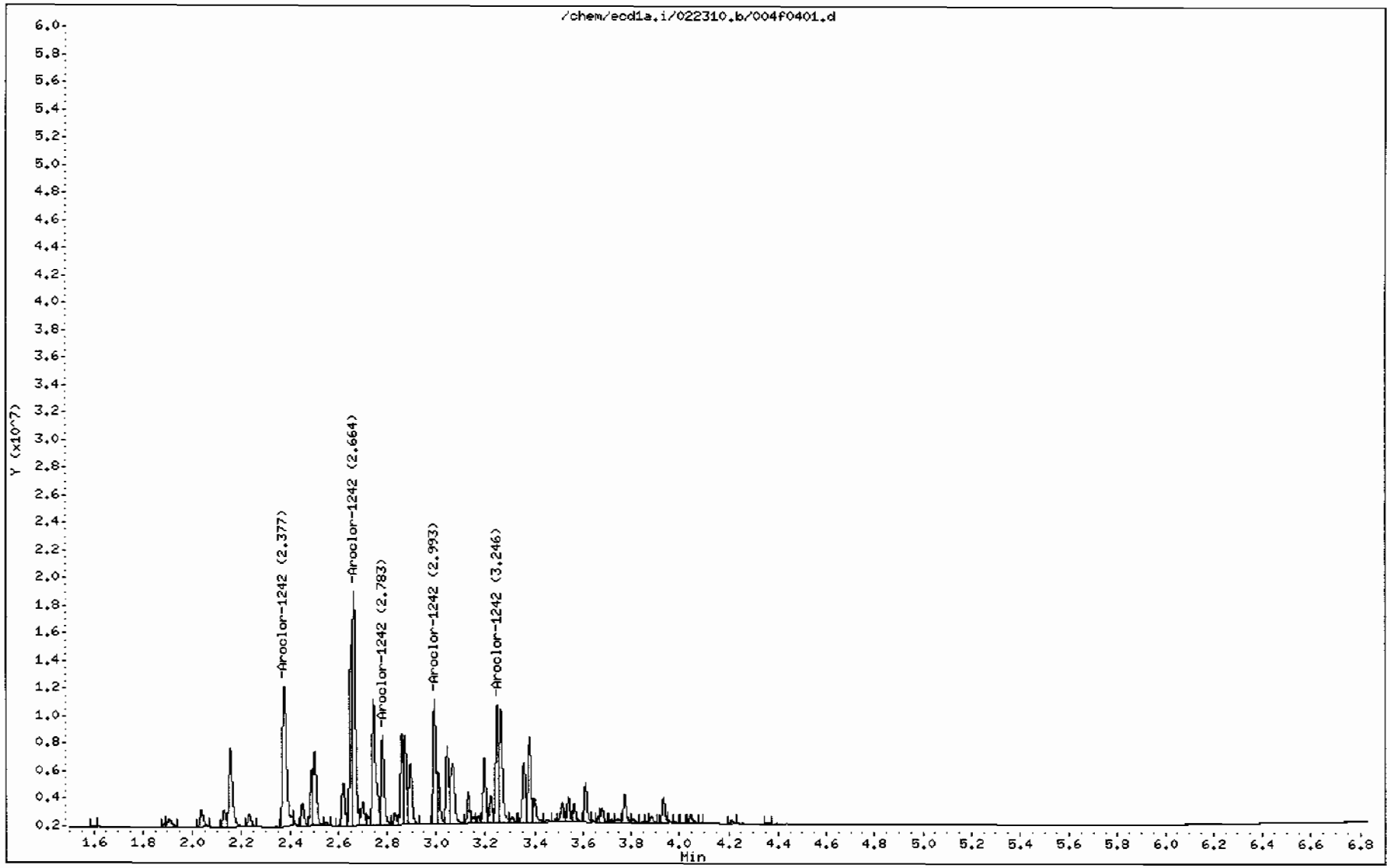
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9		
2.377	2.377	0.000	12139934	1000.00	967	80.00- 120.00	100.00
2.664	2.664	0.000	14039341	1000.00	961	95.65- 135.65	115.65
2.783	2.783	0.000	5580145	1000.00	991	25.97- 65.97	45.97
2.993	2.993	0.000	7084930	1000.00	969	38.36- 78.36	58.36
3.246	3.246	0.000	6333052	1000.00	1020	32.17- 72.17	52.17
Average of Peak Amounts =					982		

Data File: /chem/ecd1a.i/022310.b/004f0401.d
Date : 23-FEB-2010 06:32
Client ID: AR124201
Sample Info: |WAR100219-42

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/004b0401.d
Lab Smp Id: WAR100219-42 Client Smp ID: AR124201
Inj Date : 23-FEB-2010 06:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100219-42
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:30 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 4 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1242.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
4 Aroclor-1242					CAS #: 53469-21-9		
3.185	3.185	0.000	9840705	1000.00	951	80.00- 120.00	100.00
3.268	3.268	0.000	6627672	1000.00	910	47.35- 87.35	67.35
3.558	3.558	0.000	5137951	1000.00	891	32.21- 72.21	52.21
3.793	3.793	0.000	5298120	1000.00	915	33.84- 73.84	53.84
3.820	3.820	0.000	5972876	1000.00	899	40.70- 80.70	60.70
			Average of Peak Amounts =		913		

Data File: /chem/ecd1a.i/022310.b/004b0401.d

Date : 23-FEB-2010 06:32

Client ID: AR124201

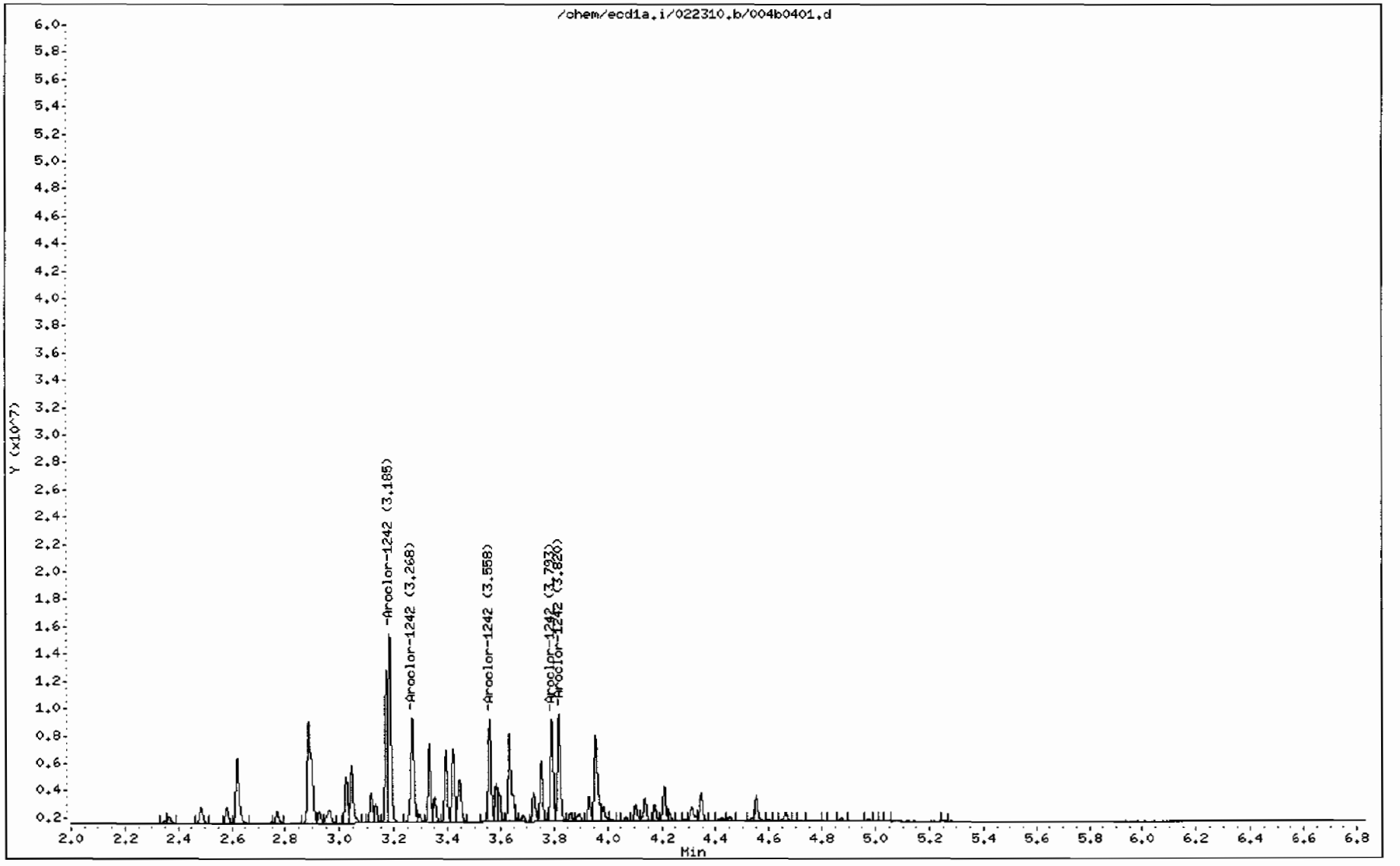
Sample Info: IWAR100219-42

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/005f0501.d
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801
Inj Date : 23-FEB-2010 06:43
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091217-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:28 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6		
2.859	2.859	0.000	9713657	1000.00	1040	80.00- 120.00	100.00
2.993	2.993	0.000	12425206	1000.00	1000	107.91- 147.91	127.91
3.246	3.246	0.000	13066639	1000.00	1070	114.52- 154.52	134.52
3.378	3.378	0.000	11011583	1000.00	1060	93.36- 133.36	113.36
3.611	3.611	0.000	7674135	1000.00	1120	59.00- 99.00	79.00

Average of Peak Amounts = 1.06e+03

Data File: /chem/ecd1a.i/022310.b/005f0501.d

Date : 23-FEB-2010 06:43

Client ID: AR124801

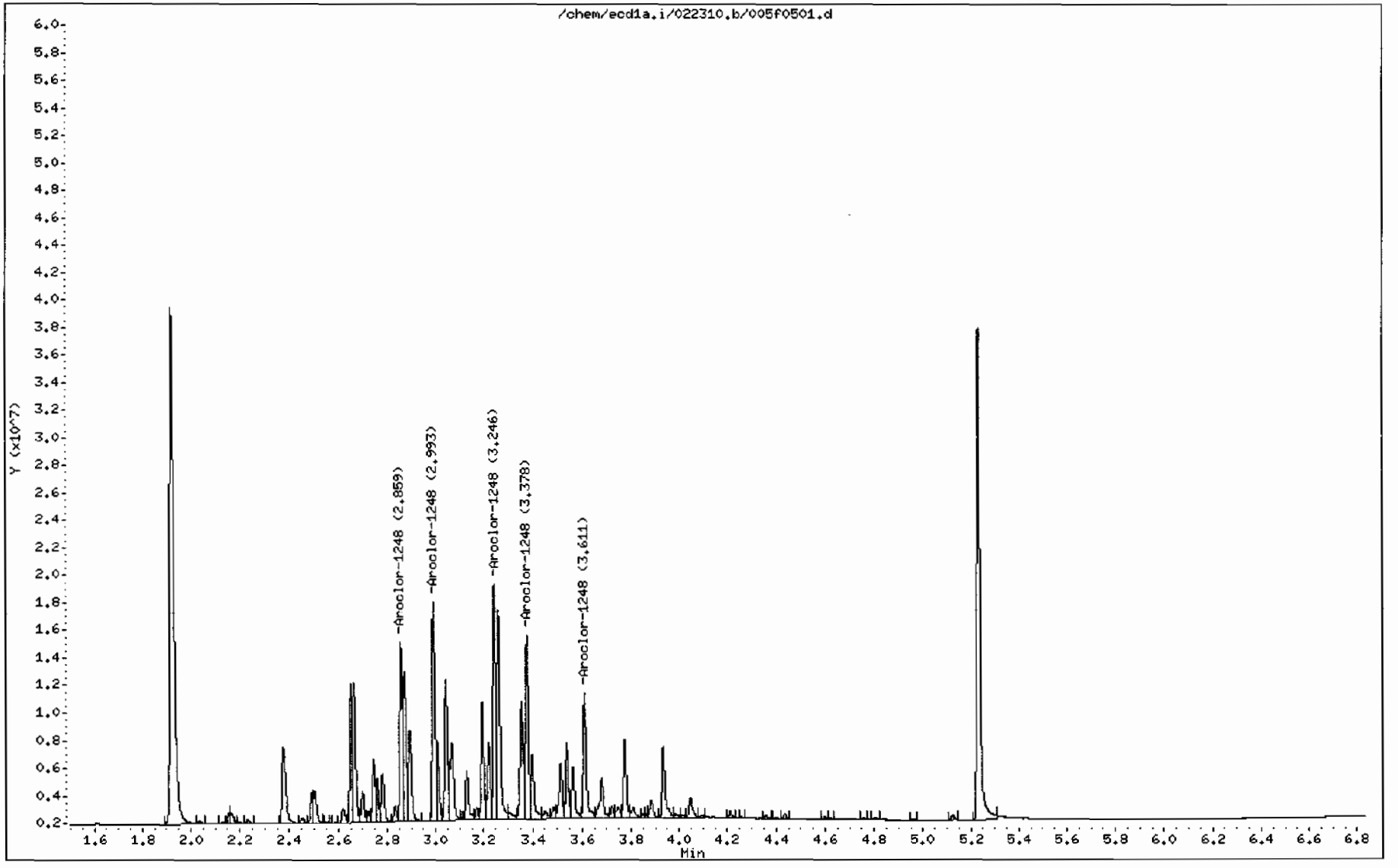
Sample Info: IWAR091217-48

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/005b0501.d
Lab Smp Id: WAR091217-48 Client Smp ID: AR124801
Inj Date : 23-FEB-2010 06:43
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR091217-48
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:30 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1248.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
5 Aroclor-1248					CAS #: 12672-29-6		
3.394	3.394	0.000	7212209	1000.00	949	80.00- 120.00	100.00
3.559	3.559	0.000	9005782	1000.00	962	104.87- 144.87	124.87
3.792	3.792	0.000	10350703	1000.00	972	123.52- 163.52	143.52
3.820	3.820	0.000	11558654	1000.00	955	140.27- 180.27	160.27
3.957	3.957	0.000	11120255	1000.00	967	134.19- 174.19	154.19
		Average of Peak Amounts =			961		

Data File: /chem/ecd1a.i/022310.b/005b0501.d

Date : 23-FEB-2010 06:43

Client ID: AR124801

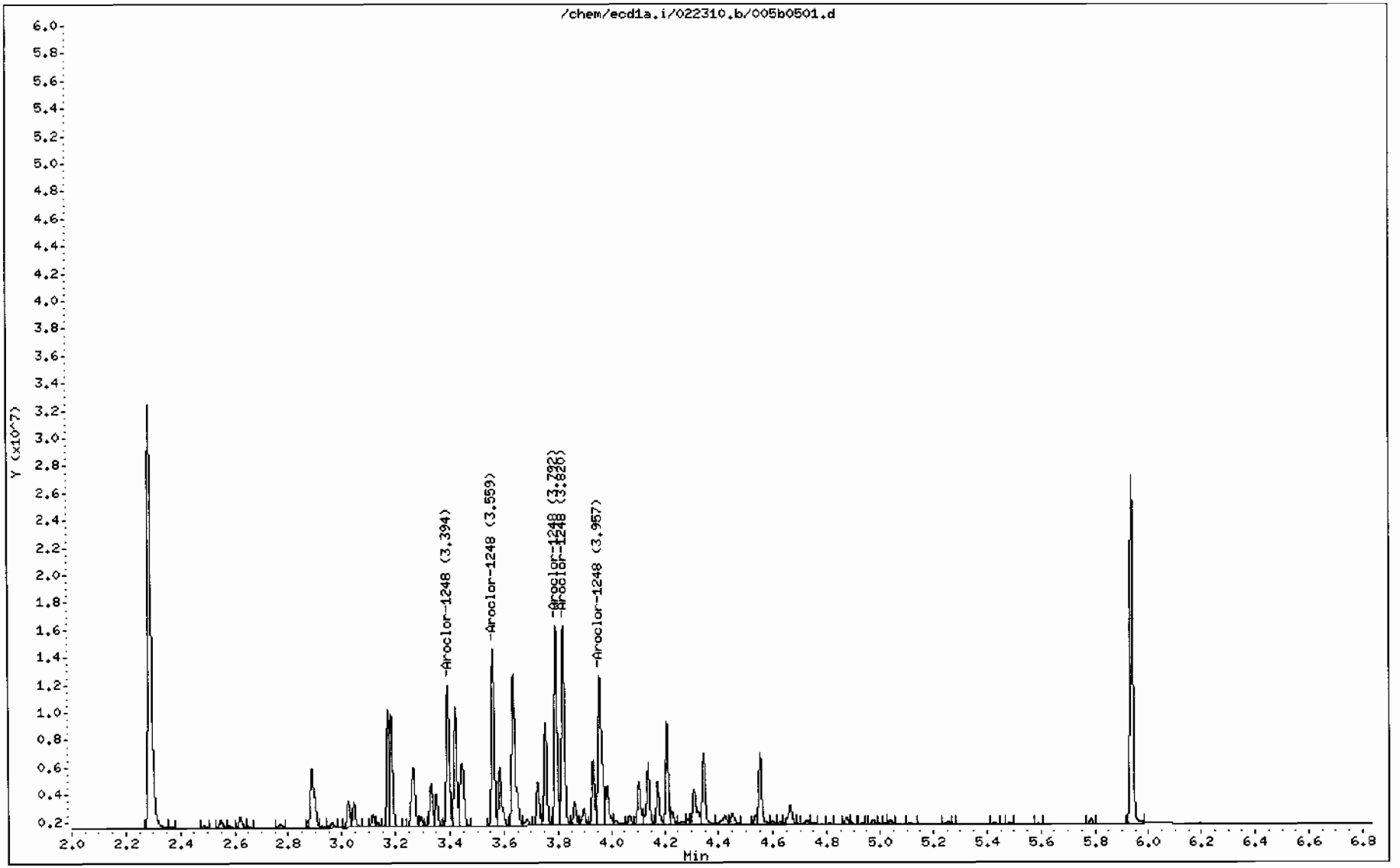
Sample Info: IWAR091217-48

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/006f0601.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 23-FEB-2010 06:53
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:28 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5		
2.378	2.378	0.000	6725058	1000.00	1080	80.00- 120.00	100.00
2.664	2.664	0.000	8433052	1000.00	1130	105.40- 145.40	125.40
2.745	2.745	0.000	5405991	1000.00	1110	60.39- 100.39	80.39
2.859	2.859	0.000	2624674	1000.00	1200	19.03- 59.03	39.03
3.247	3.247	0.000	3264733	1000.00	1200	28.55- 68.55	48.55

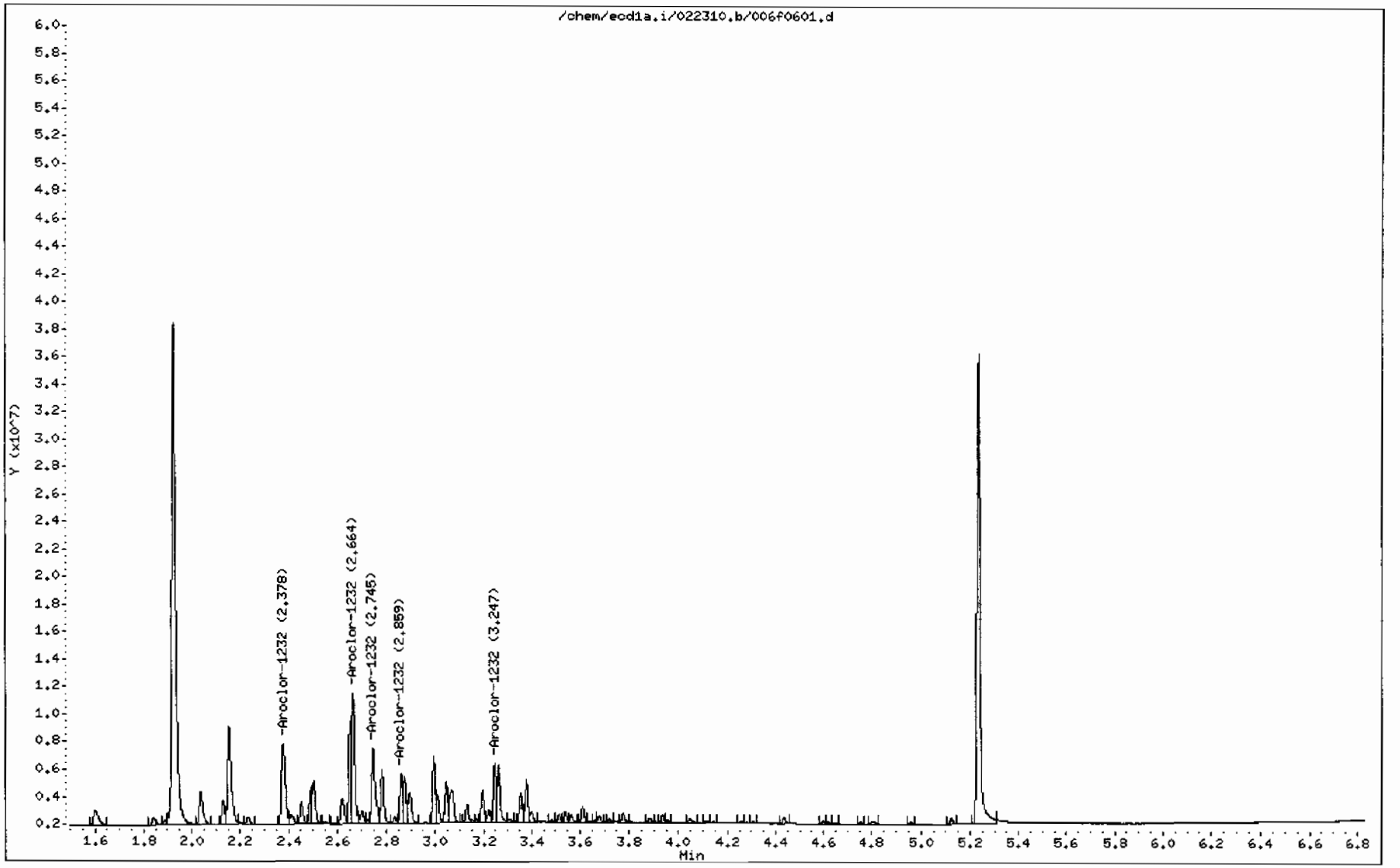
Average of Peak Amounts = 1.14e+03

Data File: /chem/ecd1a.i/022310.b/006f0601.d
Date : 23-FEB-2010 06:53
Client ID: AR123201
Sample Info: IWAR100104-32

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/006b0601.d
Lab Smp Id: WAR100104-32 Client Smp ID: AR123201
Inj Date : 23-FEB-2010 06:53
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-32
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:30 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1232.sub
Target Version: 3.50 Sample Matrix: None

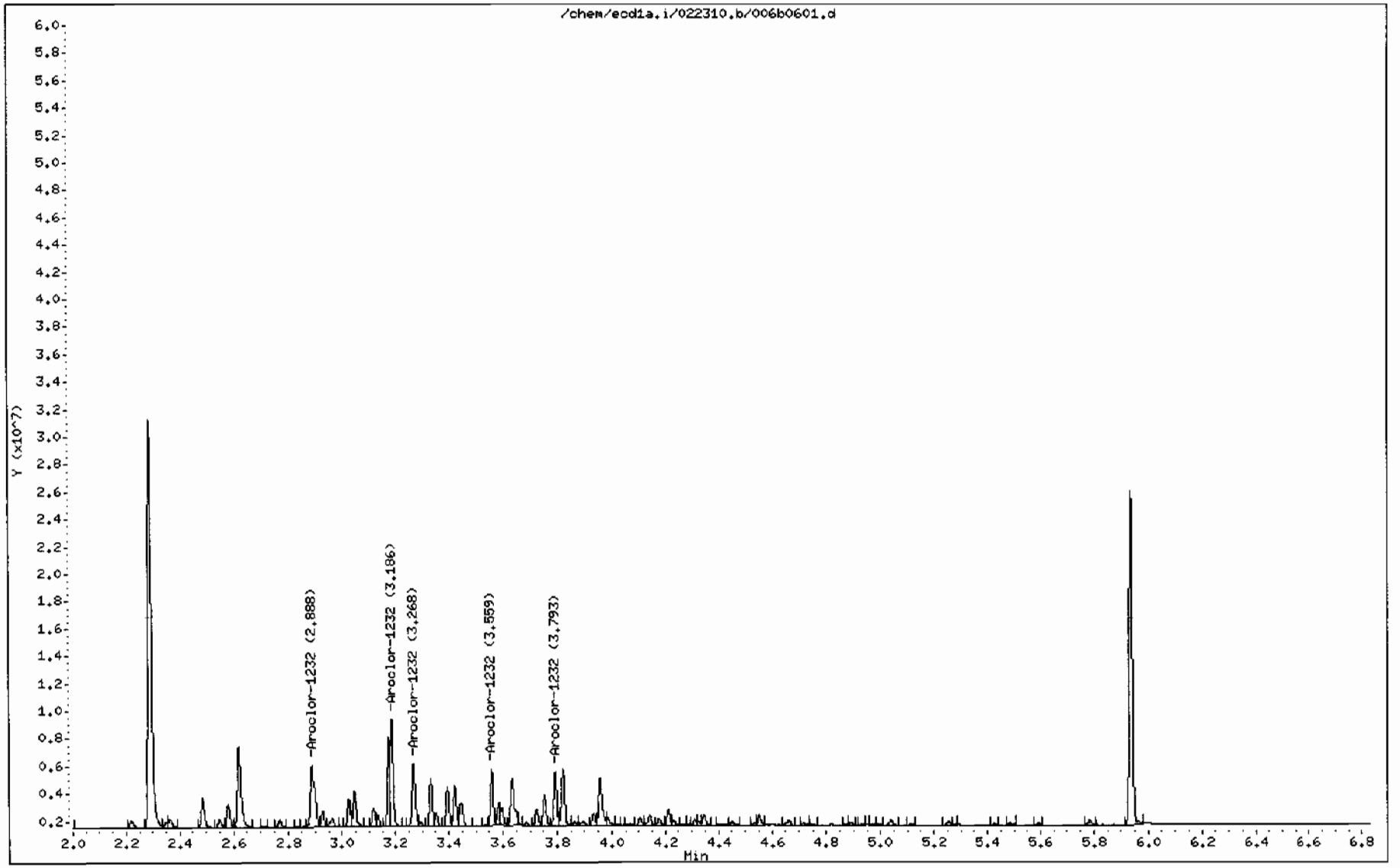
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
3 Aroclor-1232					CAS #: 11141-16-5		
2.888	2.888	0.000	5141093	1000.00	1040	80.00- 120.00	100.00
3.186	3.186	0.000	5852547	1000.00	1110	93.84- 133.84	113.84
3.268	3.268	0.000	3912245	1000.00	1040	56.10- 96.10	76.10
3.559	3.559	0.000	2879027	1000.00	1070	36.00- 76.00	56.00
3.793	3.793	0.000	2827708	1000.00	1070	35.00- 75.00	55.00
Average of Peak Amounts					1.07e+03		

Data File: /chem/ecd1a.i/022310.b/006b0601.d
Date : 23-FEB-2010 06:53
Client ID: AR123201
Sample Info: IWAR100104-32

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/007f0701.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 23-FEB-2010 07:04
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:28 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2		
2.035	2.035	0.000	4742763	1000.00	1080	80.00- 120.00	100.00
2.128	2.128	0.000	2645430	1000.00	1090	35.78- 75.78	55.78
2.153	2.153	0.000	11330059	1000.00	1090	218.89- 258.89	238.89

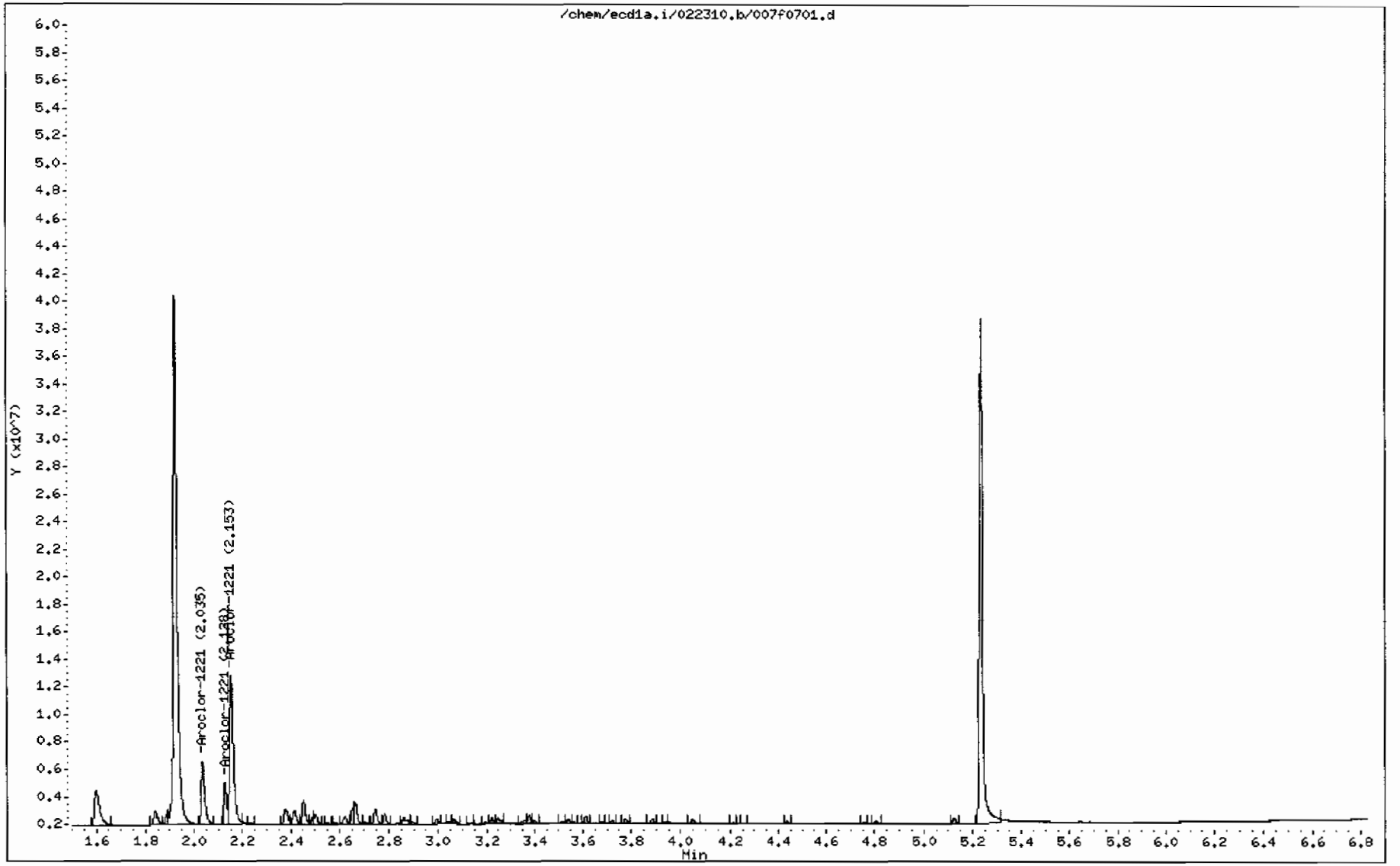
Average of Peak Amounts = 1.08e+03

Data File: /chem/ecd1a.i/022310.b/007f0701.d
Date : 23-FEB-2010 07:04
Client ID: AR122101
Sample Info: IWAR100104-21

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/007b0701.d
Lab Smp Id: WAR100104-21 Client Smp ID: AR122101
Inj Date : 23-FEB-2010 07:04
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100104-21
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:30 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 7 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1221.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
2 Aroclor-1221					CAS #: 11104-28-2		
2.485	2.485	0.000	3427584	1000.00	999	80.00- 120.00	100.00
2.579	2.579	0.000	2212120	1000.00	1030	44.54- 84.54	64.54
2.620	2.620	0.000	7673682	1000.00	1050	203.88- 243.88	223.88

Average of Peak Amounts = 1.02e+03

Data File: /chem/ecd1a.i/022310.b/007b0701.d

Date : 23-FEB-2010 07:04

Client ID: AR122101

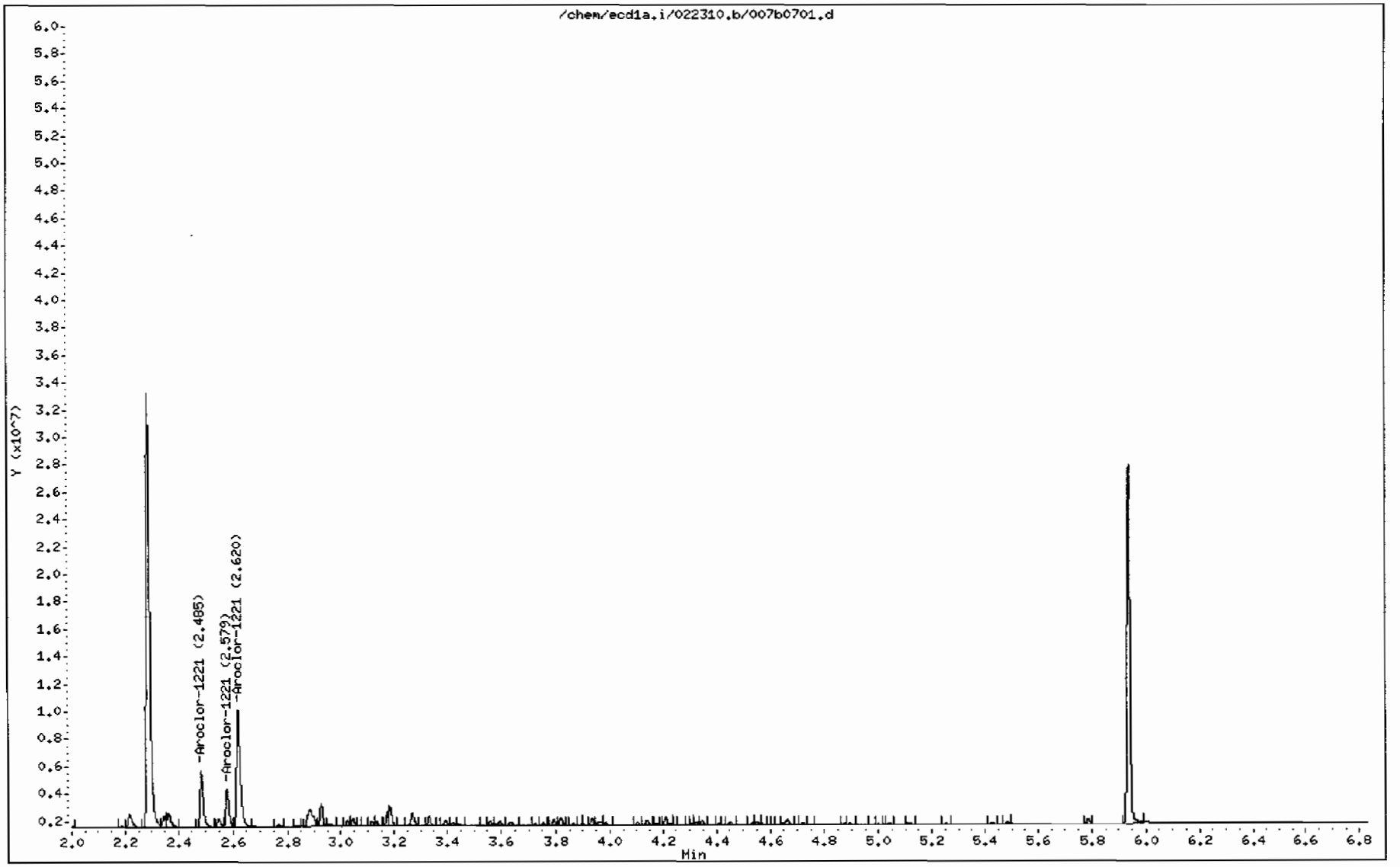
Sample Info: IWAR100104-21

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1

Column diameter: 0.25



GEL Laboratories LLC

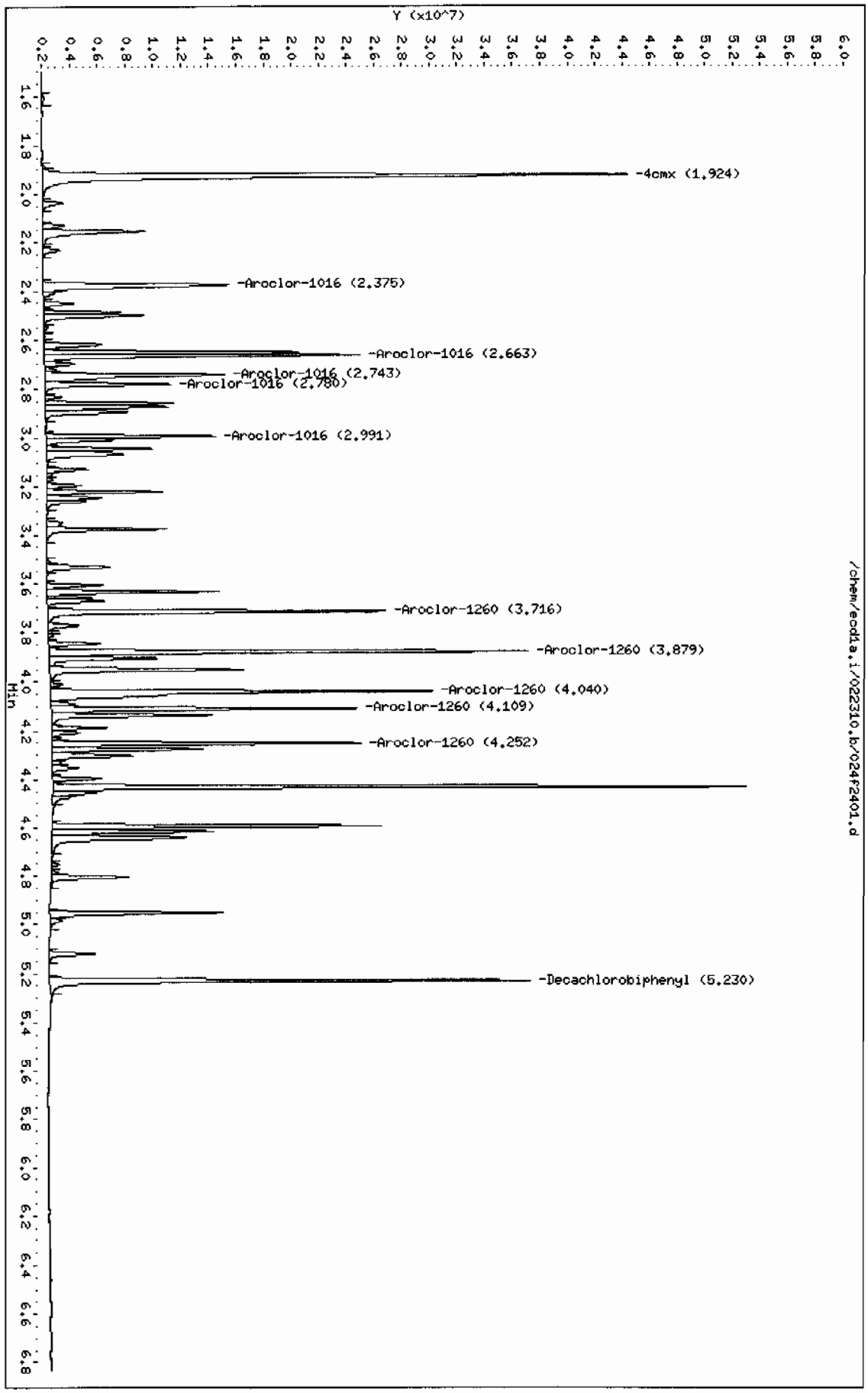
RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/024f2401.d
Lab Smp Id: WAR100203-60 02 Client Smp ID: AR166002
Inj Date : 23-FEB-2010 11:39
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 02
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 11:59 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 24 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.924	1.922	0.002	45129989	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.230	5.232	-0.002	28260393	100.000	92.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.375	2.376	-0.001	15394828	1000.00	1000	80.00- 120.00	100.00
2.663	2.663	0.000	19495086	1000.00	1070	106.63- 146.63	126.63
2.743	2.743	0.000	12413334	1000.00	1030	60.63- 100.63	80.63
2.780	2.781	-0.001	7438914	1000.00	1050	28.32- 68.32	48.32
2.991	2.992	-0.001	9410221	1000.00	1060	41.13- 81.13	61.13
Average of Peak Amounts =					1.04e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
3.716	3.718	-0.002	18833246	1000.00	1100	80.00- 120.00	100.00
3.879	3.881	-0.002	27496529	1000.00	1160	126.00- 166.00	146.00
4.040	4.042	-0.002	28237420	1000.00	1130	129.93- 169.93	149.93
4.109	4.111	-0.002	16492242	1000.00	1140	67.57- 107.57	87.57
4.252	4.254	-0.002	17043877	1000.00	1180	70.50- 110.50	90.50
Average of Peak Amounts =					1.14e+03		

Data File: /chem/ecd1a.i/022310.b/024f2401.d
Date : 23-FEB-2010 11:39
Client ID: AR166002
Sample Info: IWAR100203-60 02
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
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/022310.b/024b2401.d
Lab Smp Id: WAR100203-60 02 Client Smp ID: AR166002
Inj Date : 23-FEB-2010 11:39
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 02
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 11:58 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 24 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

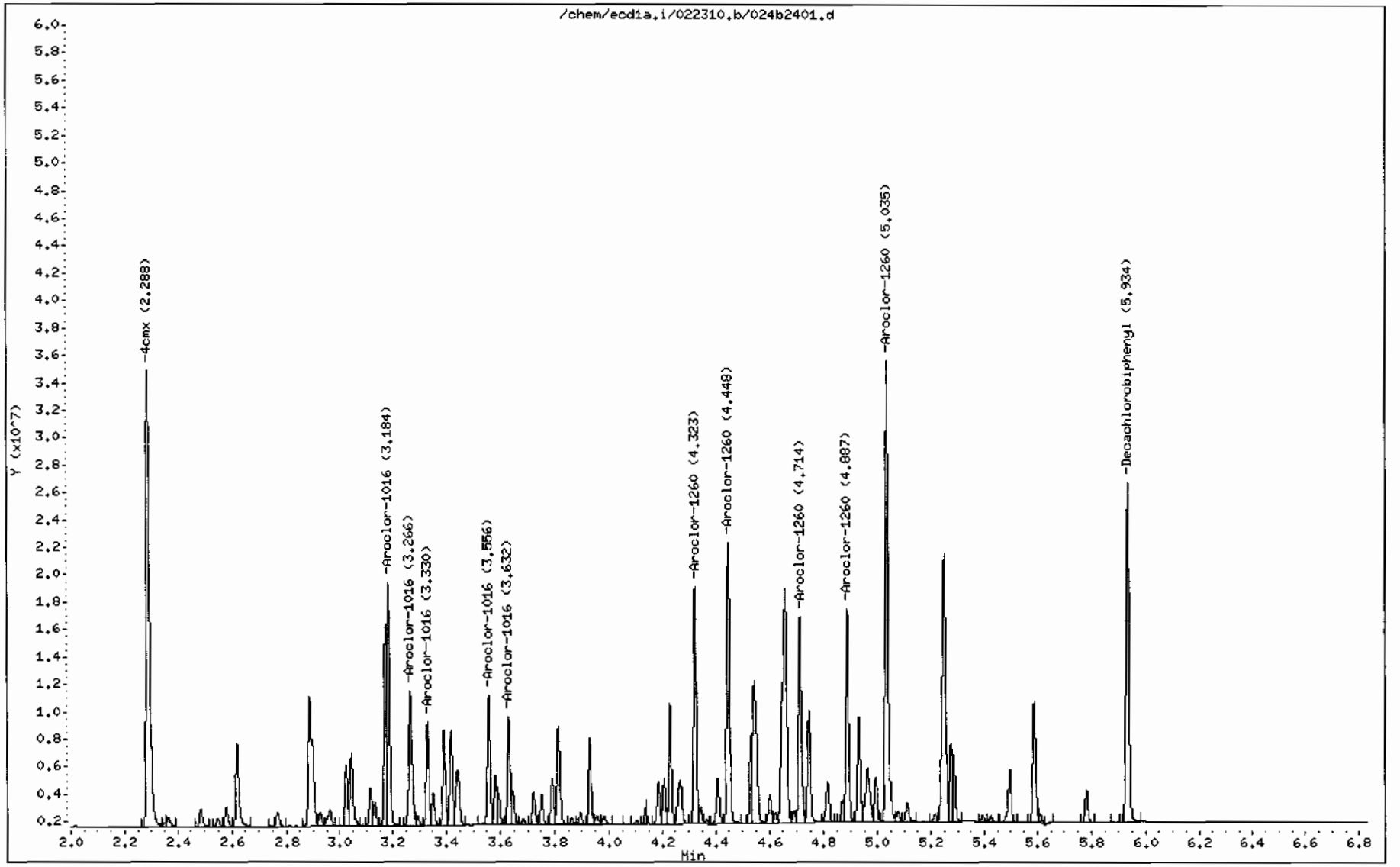
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.288	2.287	0.001	28887824	100.000	97.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.934	5.936	-0.002	19241247	100.000	91.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.184	3.183	0.001	12569120	1000.00	983	80.00- 120.00	100.00
3.266	3.267	-0.001	8309932	1000.00	932	46.11- 86.11	66.11
3.330	3.330	0.000	5168870	1000.00	956	21.12- 61.12	41.12
3.556	3.557	-0.001	6610603	1000.00	956	32.59- 72.59	52.59
3.632	3.632	0.000	6113618	1000.00	952	28.64- 68.64	48.64
Average of Peak Amounts =					956		
7 Aroclor-1260					CAS #: 11096-82-5		
4.323	4.324	-0.001	12198298	1000.00	924	80.00- 120.00	100.00
4.448	4.449	-0.001	14907421	1000.00	958	102.21- 142.21	122.21
4.714	4.716	-0.002	11108369	1000.00	938	71.06- 111.06	91.06
4.887	4.889	-0.002	11436352	1000.00	937	73.75- 113.75	93.75
5.035	5.036	-0.001	25613604	1000.00	966	189.98- 229.98	209.98
Average of Peak Amounts =					944		

Data File: /chem/ecd1a.i/022310.b/024b2401.d
Date : 23-FEB-2010 11:39
Client ID: AR166002
Sample Info: IWAR100203-60 02

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/033f3301.d
Lab Smp Id: WAR100203-60 03 Client Smp ID: AR166003
Inj Date : 23-FEB-2010 13:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 03
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

AMOUNTS

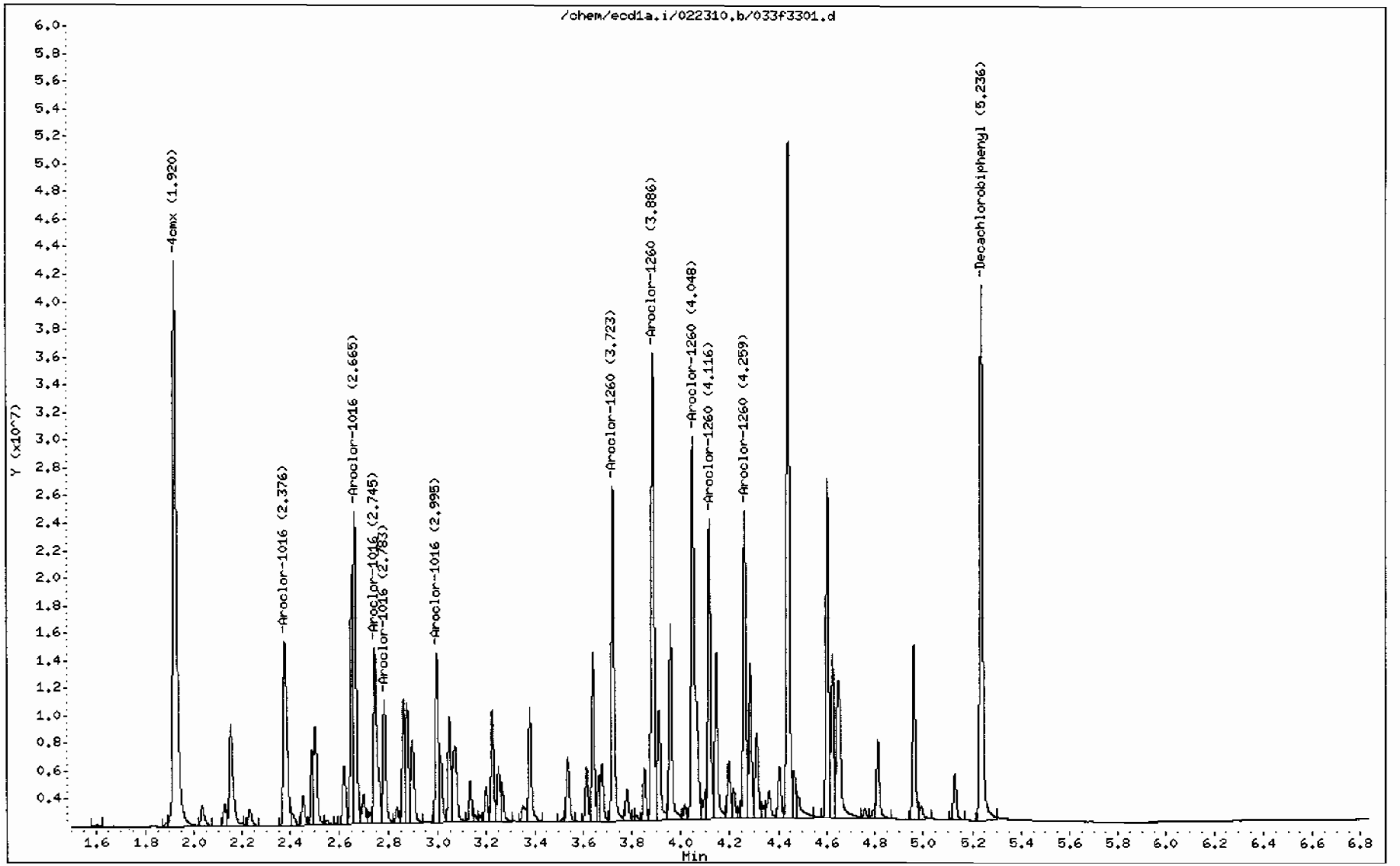
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.920	1.922	-0.002	45263843	100.000	105	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.236	5.232	0.004	32940859	100.000	107	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.376	2.376	0.000	15406865	1000.00	1000	80.00- 120.00	100.00
2.665	2.663	0.002	18903644	1000.00	1040	102.70- 142.70	122.70
2.745	2.743	0.002	12340530	1000.00	1020	60.10- 100.10	80.10
2.783	2.781	0.002	7441784	1000.00	1050	28.30- 68.30	48.30
2.995	2.992	0.003	9438124	1000.00	1060	41.26- 81.26	61.26
Average of Peak Amounts =					1.03e+03		
7 Aroclor-1260					CAS #: 11096-82-5		
3.723	3.718	0.005	19050200	1000.00	1120	80.00- 120.00	100.00
3.886	3.881	0.005	27594751	1000.00	1170	124.85- 164.85	144.85
4.048	4.042	0.006	29591497	1000.00	1180	135.33- 175.33	155.33
4.116	4.111	0.005	16955062	1000.00	1180	69.00- 109.00	89.00
4.259	4.254	0.005	17391128	1000.00	1200	71.29- 111.29	91.29
Average of Peak Amounts =					1.17e+03		

Data File: /chem/ecd1a.i/022310.b/033f3301.d
Date : 23-FEB-2010 13:34
Client ID: AR166003
Sample Info: IWAR100203-60 03

Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/033b3301.d
Lab Smp Id: WAR100203-60 03 Client Smp ID: AR166003
Inj Date : 23-FEB-2010 13:34
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 03
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None
Processing Host: hpclp1

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.286	2.287	-0.001	29225772	100.000	98.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.939	5.936	0.003	20169262	100.000	95.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.185	3.183	0.002	12786963	1000.00	1000	80.00- 120.00	100.00(M)
3.269	3.267	0.002	8380650	1000.00	940	45.54- 85.54	65.54
3.332	3.330	0.002	5191632	1000.00	960	20.60- 60.60	40.60
3.560	3.557	0.003	6505726	1000.00	941	30.88- 70.88	50.88
3.635	3.632	0.003	6146850	1000.00	957	37.35- 77.35	57.35
Average of Peak Amounts					959		
7 Aroclor-1260					CAS #: 11096-82-5		
4.328	4.324	0.004	12389421	1000.00	938	80.00- 120.00	100.00
4.452	4.449	0.003	15170982	1000.00	974	102.45- 142.45	122.45
4.719	4.716	0.003	11359505	1000.00	959	71.69- 111.69	91.69
4.892	4.889	0.003	11771505	1000.00	965	75.01- 115.01	95.01
5.040	5.036	0.004	26316051	1000.00	992	192.41- 232.41	212.41
Average of Peak Amounts =					966		

QC Flag Legend

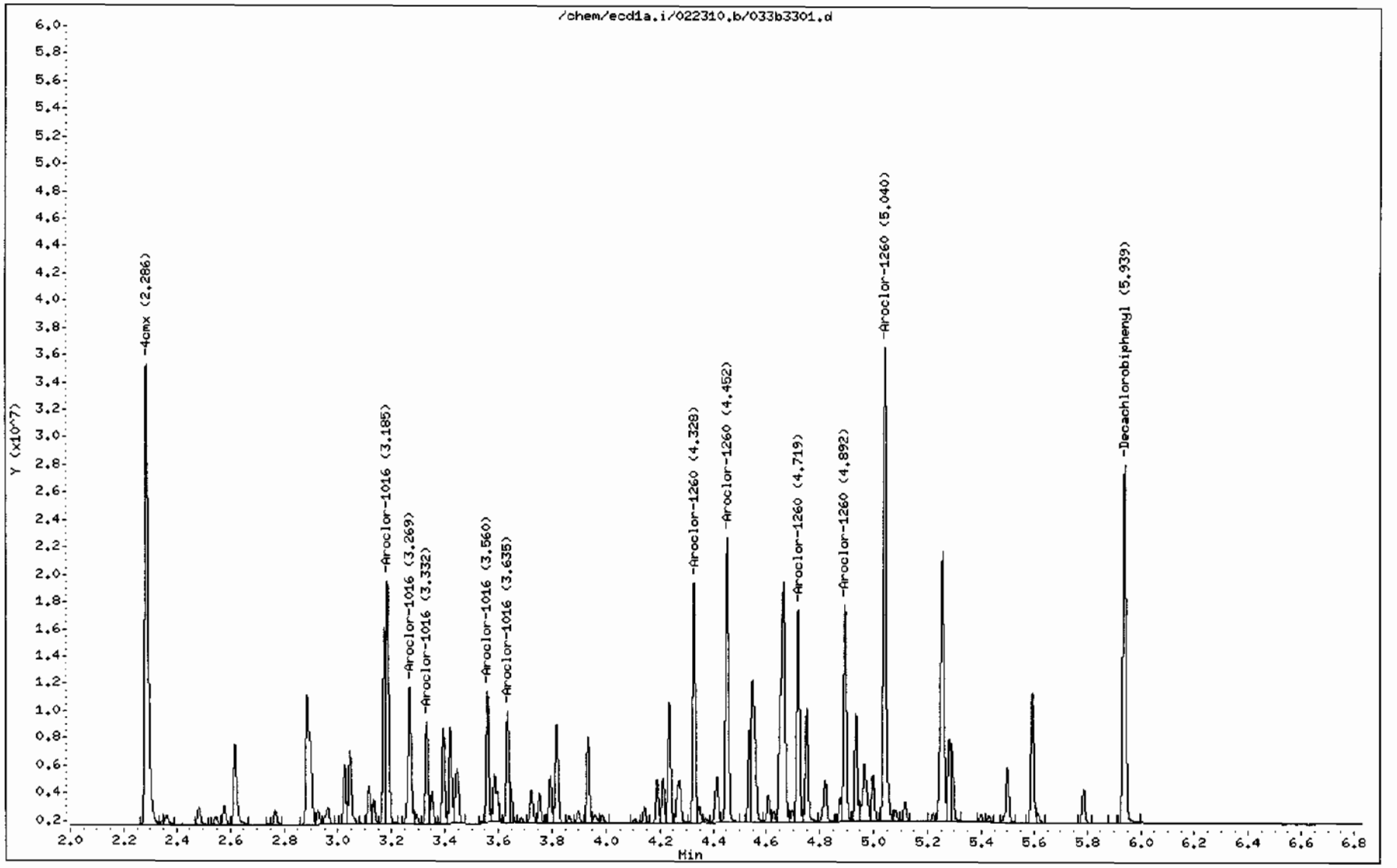
M - Compound response manually integrated.

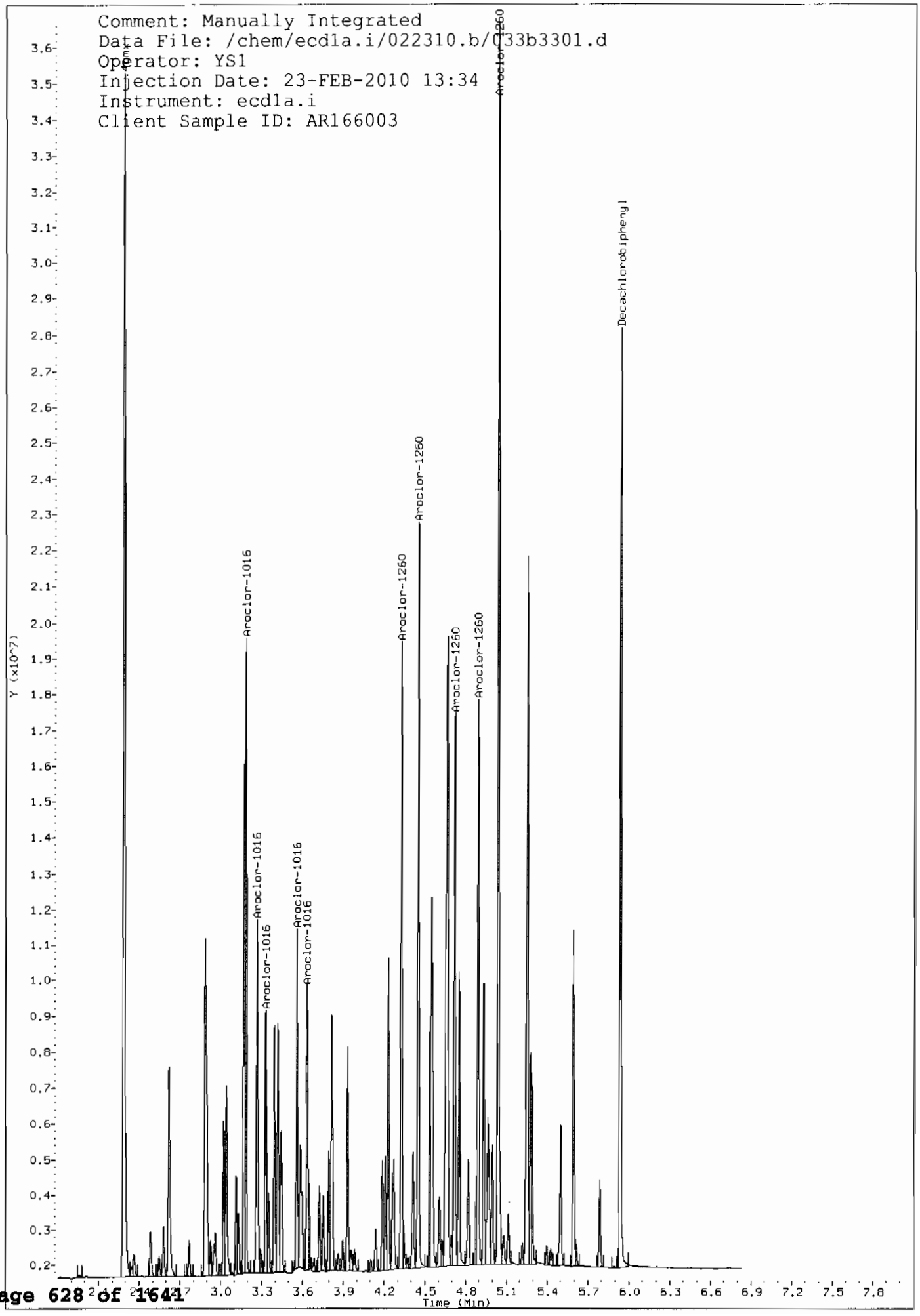
Data File: /chem/ecd1a.i/022310.b/033b3301.d
Date : 23-FEB-2010 13:34
Client ID: AR166003
Sample Info: IWAR100203-60 03

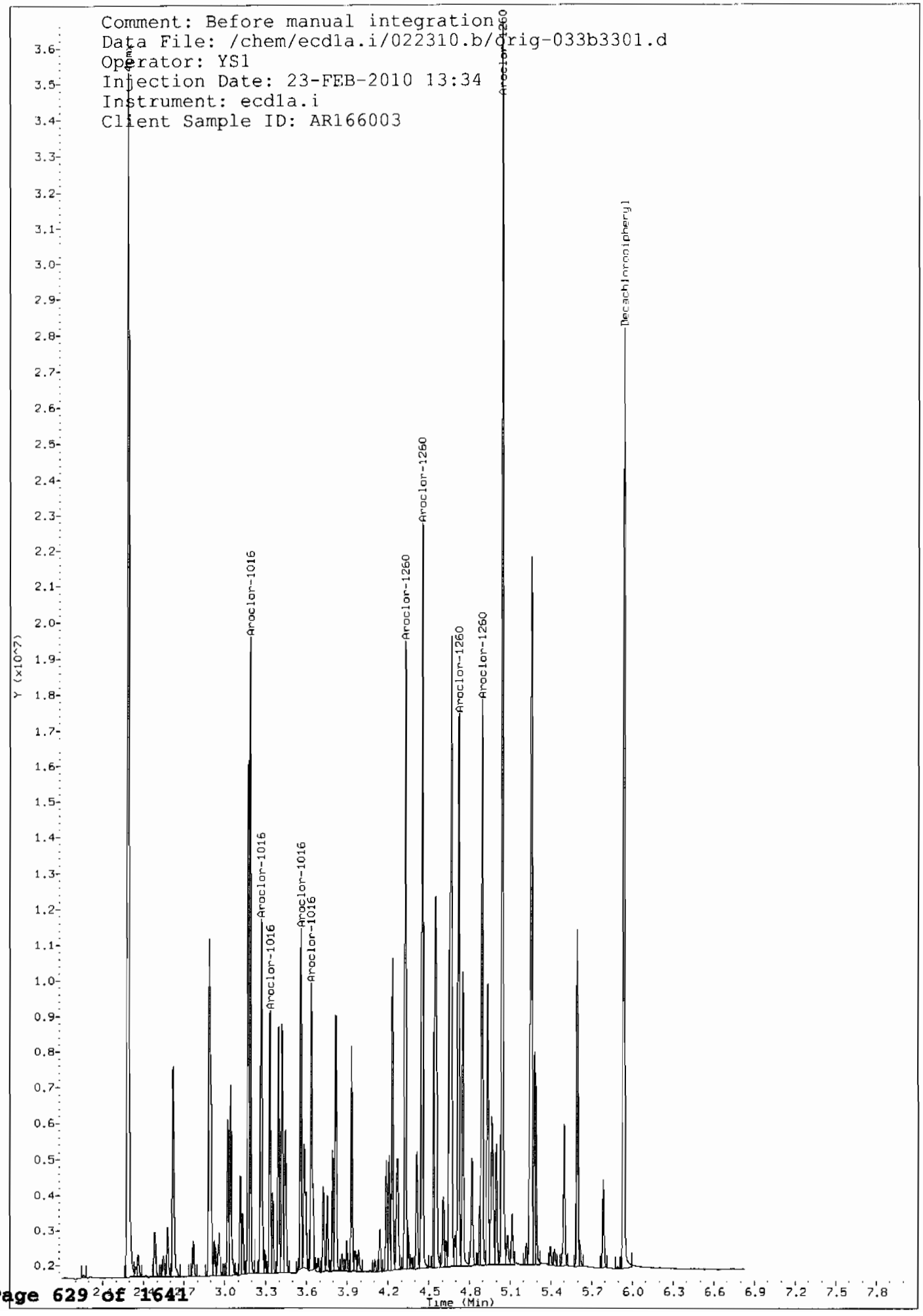
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd1a.i/022310.b/C33b3301.d
Operator: YS1
Injection Date: 23-FEB-2010 13:34
Instrument: ecd1a.i
Client Sample ID: AR166003
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/022310.b/Orig-033b3301.d
Operator: YS1
Injection Date: 23-FEB-2010 13:34
Instrument: ecd1a.i
Client Sample ID: AR166003
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)

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RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/040f4001.d
Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004
Inj Date : 23-FEB-2010 14:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 24-Feb-2010 07:45 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 40 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

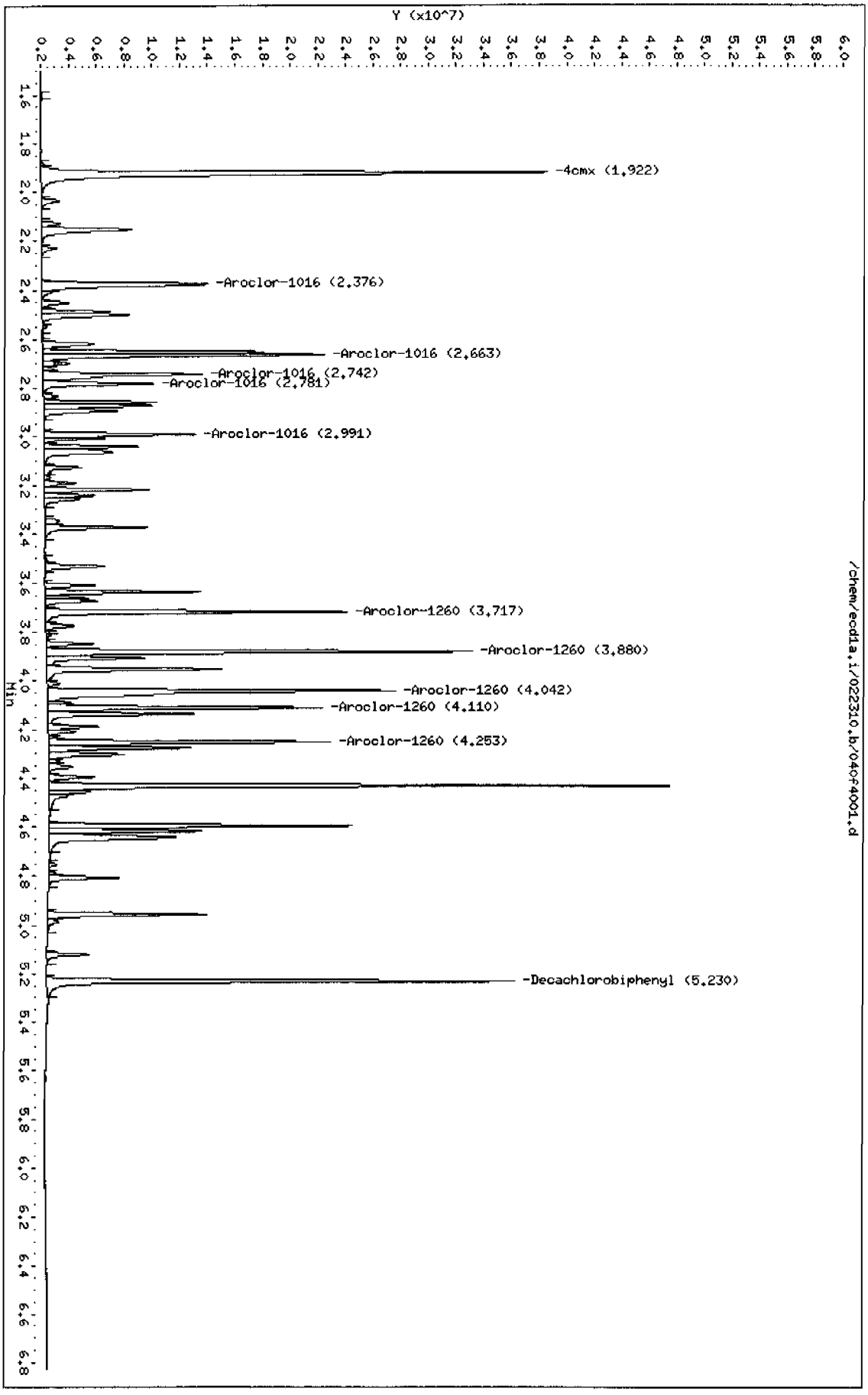
RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.922	1.922	0.000	40389763	100.000	93.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.230	5.232	-0.002	28685479	100.000	93.4	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.376	2.376	0.000	13817688	1000.00	898	80.00- 120.00	100.00
2.663	2.663	0.000	17049592	1000.00	935	103.39- 143.39	123.39
2.742	2.743	-0.001	11134455	1000.00	923	60.58- 100.58	80.58
2.781	2.781	0.000	6691207	1000.00	943	28.42- 68.42	48.42
2.991	2.992	-0.001	8530122	1000.00	957	41.73- 81.73	61.73
Average of Peak Amounts =					931		
7 Aroclor-1260					CAS #: 11096-82-5		
3.717	3.718	-0.001	17099844	1000.00	1000	80.00- 120.00	100.00
3.880	3.881	-0.001	24747363	1000.00	1050	124.72- 164.72	144.72
4.042	4.042	0.000	26431869	1000.00	1060	134.57- 174.57	154.57
4.110	4.111	-0.001	15156872	1000.00	1050	68.64- 108.64	88.64
4.253	4.254	-0.001	15656749	1000.00	1080	71.56- 111.56	91.56
Average of Peak Amounts =					1.05e+03		

Data File: /chem/ecd1a.i/022310.b/040f4001.d
Date : 23-FEB-2010 14:58
Client ID: AR166004
Sample Info: WAR100203-60 04

Instrument: ecd1a.i

Column phase: CLP1

Operator: YS1
Column diameter: 0.25



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RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/040b4001.d
Lab Smp Id: WAR100203-60 04 Client Smp ID: AR166004
Inj Date : 23-FEB-2010 14:58
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |WAR100203-60 04
Misc Info :
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 24-Feb-2010 07:45 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 40 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: AR1660.sub
Target Version: 3.50 Sample Matrix: None

RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.288	2.287	0.001	26211949	100.000	88.1	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.934	5.936	-0.002	18723354	100.000	88.5	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.183	3.183	0.000	11709612	1000.00	916	80.00- 120.00	100.00(M)
3.267	3.267	0.000	7582126	1000.00	850	44.75- 84.75	64.75
3.330	3.330	0.000	4699918	1000.00	869	20.14- 60.14	40.14
3.557	3.557	0.000	5937303	1000.00	858	30.70- 70.70	50.70
3.632	3.632	0.000	5456636	1000.00	849	26.60- 66.60	46.60
Average of Peak Amounts =					869		
7 Aroclor-1260					CAS #: 11096-82-5		
4.324	4.324	0.000	11326989	1000.00	858	80.00- 120.00	100.00
4.448	4.449	-0.001	13884105	1000.00	892	102.58- 142.58	122.58
4.715	4.716	-0.001	10466529	1000.00	884	72.40- 112.40	92.40
4.889	4.889	0.000	10840427	1000.00	888	75.70- 115.70	95.70
5.036	5.036	0.000	24256154	1000.00	914	194.14- 234.14	214.14
Average of Peak Amounts =					887		

QC Flag Legend

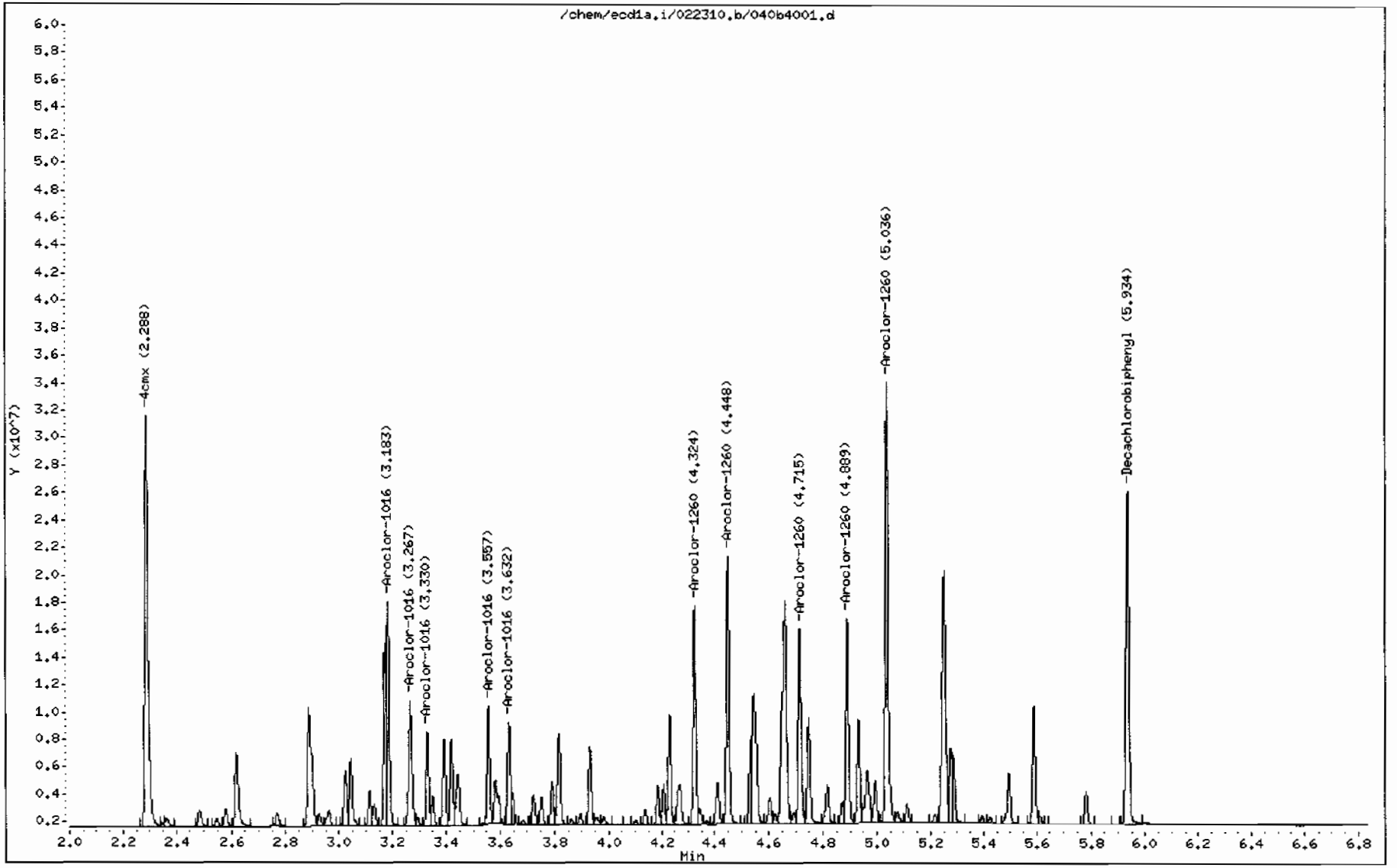
M - Compound response manually integrated.

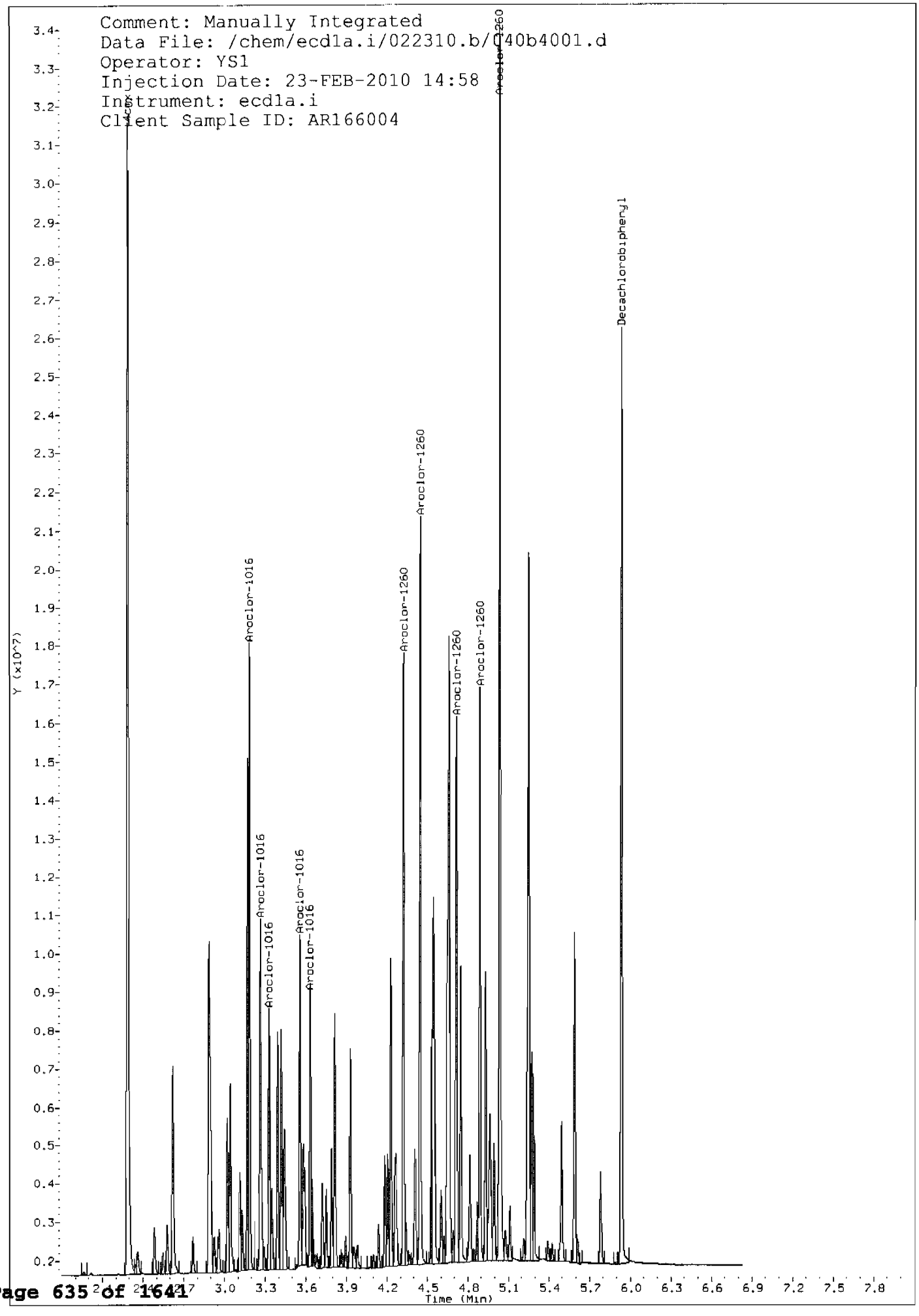
Data File: /chem/ecd1a.i/022310.b/040b4001.d
Date : 23-FEB-2010 14:58
Client ID: AR166004
Sample Info: IWAR100203-60 04

Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25

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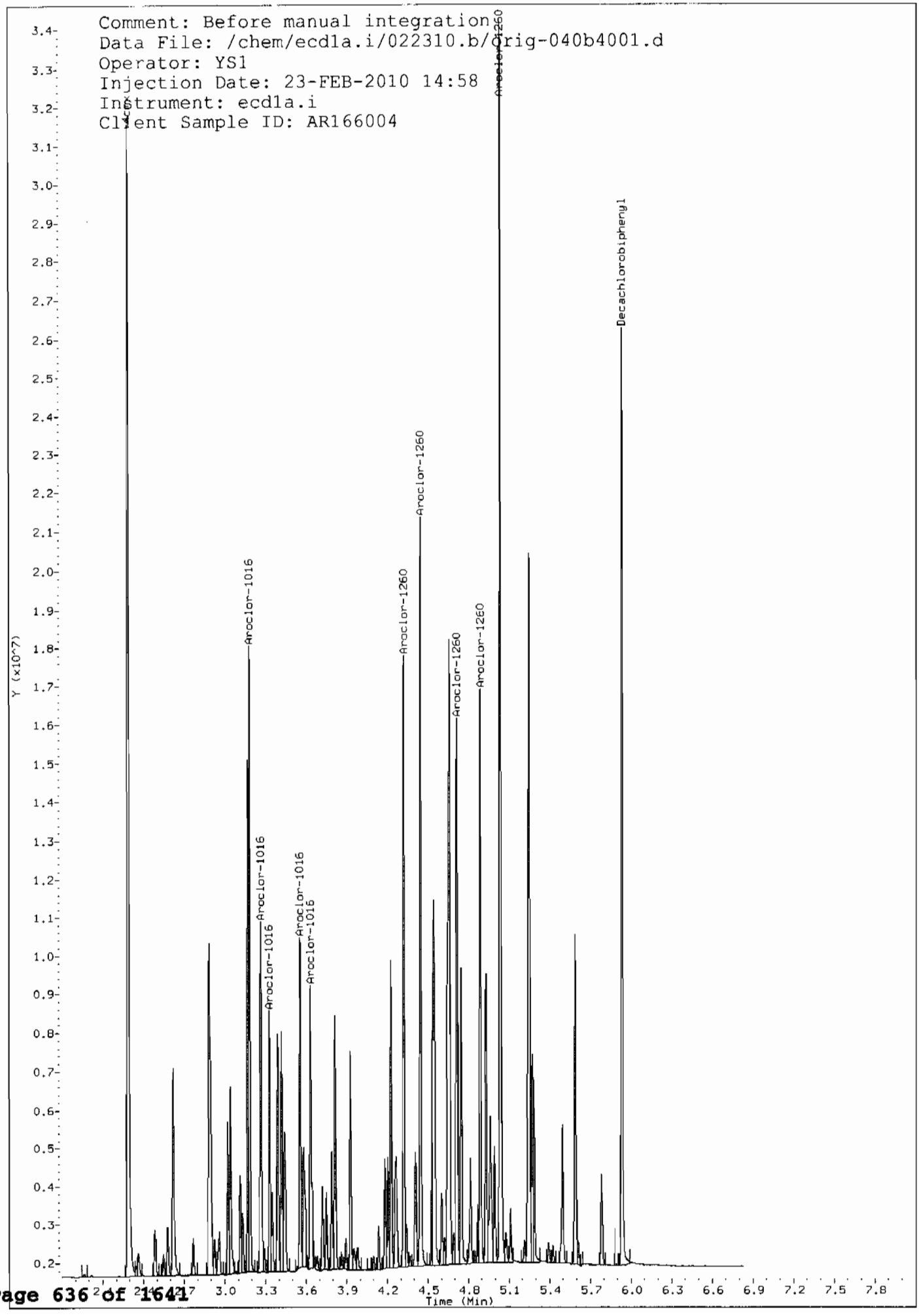
Data File: /chem/ecd1a.i/022310.b/040b4001.d
Operator: YS1
Injection Date: 23-FEB-2010 14:58
Instrument: ecd1a.i
Client Sample ID: AR166004
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Decachlorobiphenyl
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/022310.b/orig-040b4001.d
Operator: YS1
Injection Date: 23-FEB-2010 14:58
Instrument: ecd1a.i
Client Sample ID: AR166004
Aroclor-1260
Decachlorobiphenyl
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Y (x10^7)
Time (Min)

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.: 10-1861

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	02/22/10	0559	1.92	5.23
02	ZZZZZ	ZZZZZ	02/22/10	0610	1.92	5.23
03	ZZZZZ	ZZZZZ	02/22/10	0620	1.92	5.23
04	DDTANALOGSTD	WAR091219-DD	02/22/10	0631		
05	AR123201	WAR100104-32	02/22/10	0641		
06	AR122101	WAR100104-21	02/22/10	0652		
07	AR126201	WAR100104-62	02/22/10	0703		
08	AR166001	WAR100222-01	02/22/10	0713	1.92	5.23
09	AR166002	WAR100222-02	02/22/10	0724	1.92	5.23
10	AR166003	WAR100222-03	02/22/10	0734	1.92	5.23
11	AR166004	WAR100222-04	02/22/10	0745	1.92	5.23
12	AR166005	IAR100104-01	02/22/10	0755	1.92	5.23
13	AR166001	WAR100203-60	02/22/10	0806	1.92	5.23
14	AR125401	WAR100222-05	02/22/10	0816		
15	AR125402	WAR100222-06	02/22/10	0827		
16	AR125403	WAR100222-07	02/22/10	0837		
17	AR125404	WAR100222-08	02/22/10	0848		
18	AR125405	IAR100219-02	02/22/10	0859		
19	AR125401	WAR100219-54	02/22/10	0909		
20	AR124201	WAR100222-09	02/22/10	0920		
21	AR124202	WAR100222-10	02/22/10	0930		
22	AR124203	WAR100222-11	02/22/10	0941		
23	AR124204	WAR100222-12	02/22/10	0951		
24	AR124205	IAR100219-01	02/22/10	1002		
25	AR124201	WAR100219-42	02/22/10	1012		
26	AR124801	WAR100222-13	02/22/10	1023		
27	AR124802	WAR100222-14	02/22/10	1033		
28	AR124803	WAR100222-15	02/22/10	1044		
29	AR124805	IAR100211-01	02/22/10	1054		
30	AR124804	WAR100222-16	02/22/10	1105		
31	AR124801	WAR091217-48	02/22/10	1116		
32	AR126801	WAR100222-17	02/22/10	1126		

	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.

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.: 10-1861

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR126802	WAR100222-18	02/22/10	1137		
02	AR126803	WAR100222-19	02/22/10	1147		
03	AR126804	WAR100222-20	02/22/10	1158		
04	AR126805	IAR100104-05	02/22/10	1208		
05	AR126801	WAR100107-68	02/22/10	1219		
06	PIBLK02	WAR100219-99	02/22/10	1229	1.92	5.23
07	ZZZZZ	ZZZZZ	02/22/10	1240	1.92	5.23
08	ZZZZZ	ZZZZZ	02/22/10	1250	1.93	5.23
09	ZZZZZ	ZZZZZ	02/22/10	1301	1.92	5.23
10	ZZZZZ	ZZZZZ	02/22/10	1314	1.92	5.23
11	ZZZZZ	ZZZZZ	02/22/10	1326	1.92	5.23
12	ZZZZZ	ZZZZZ	02/22/10	1339	1.92	5.23
13	ZZZZZ	ZZZZZ	02/22/10	1351	1.92	5.23
14	ZZZZZ	ZZZZZ	02/22/10	1404	1.92	5.23
15	ZZZZZ	ZZZZZ	02/22/10	1417	1.92	5.23
16	ZZZZZ	ZZZZZ	02/22/10	1430	1.92	5.23
17	AR166002	WAR100203-60	02/22/10	1442	1.92	5.23
18	PIBLK03	WAR100219-99	02/22/10	1453	1.92	5.23
19	ZZZZZ	ZZZZZ	02/22/10	1503	1.92	5.23
20	ZZZZZ	ZZZZZ	02/22/10	1516	1.92	5.23
21	ZZZZZ	ZZZZZ	02/22/10	1528	1.92	5.23
22	ZZZZZ	ZZZZZ	02/22/10	1541	1.92	5.23
23	ZZZZZ	ZZZZZ	02/22/10	1554	1.92	5.23
24	ZZZZZ	ZZZZZ	02/22/10	1606	1.92	5.23
25	ZZZZZ	ZZZZZ	02/22/10	1619	1.92	5.23
26	ZZZZZ	ZZZZZ	02/22/10	1632	1.92	5.23
27	ZZZZZ	ZZZZZ	02/22/10	1644	1.92	5.23
28	ZZZZZ	ZZZZZ	02/22/10	1657	1.92	5.23
29	AR166003	WAR100203-60	02/22/10	1710	1.92	5.23
30	PIBLK04	WAR100219-99	02/22/10	1722	1.92	5.23
31	ZZZZZ	ZZZZZ	02/22/10	1735	1.92	5.23
32	ZZZZZ	ZZZZZ	02/22/10	1748	1.92	5.23

	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.

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.: 10-1861

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

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	WAR100219-99	02/22/10	0559	2.29	5.93
02	ZZZZZ	ZZZZZ	02/22/10	0610	2.29	5.94
03	ZZZZZ	ZZZZZ	02/22/10	0620	2.29	5.94
04	DDTANALOGSTD	WAR091219-DD	02/22/10	0631		
05	AR123201	WAR100104-32	02/22/10	0641		
06	AR122101	WAR100104-21	02/22/10	0652		
07	AR126201	WAR100104-62	02/22/10	0703		
08	AR166001	WAR100222-01	02/22/10	0713	2.29	5.94
09	AR166002	WAR100222-02	02/22/10	0724	2.29	5.94
10	AR166003	WAR100222-03	02/22/10	0734	2.29	5.94
11	AR166004	WAR100222-04	02/22/10	0745	2.29	5.94
12	AR166005	IAR100104-01	02/22/10	0755	2.29	5.94
13	AR166001	WAR100203-60	02/22/10	0806	2.29	5.94
14	AR125401	WAR100222-05	02/22/10	0816		
15	AR125402	WAR100222-06	02/22/10	0827		
16	AR125403	WAR100222-07	02/22/10	0837		
17	AR125404	WAR100222-08	02/22/10	0848		
18	AR125405	IAR100219-02	02/22/10	0859		
19	AR125401	WAR100219-54	02/22/10	0909		
20	AR124201	WAR100222-09	02/22/10	0920		
21	AR124202	WAR100222-10	02/22/10	0930		
22	AR124203	WAR100222-11	02/22/10	0941		
23	AR124204	WAR100222-12	02/22/10	0951		
24	AR124205	IAR100219-01	02/22/10	1002		
25	AR124201	WAR100219-42	02/22/10	1012		
26	AR124801	WAR100222-13	02/22/10	1023		
27	AR124802	WAR100222-14	02/22/10	1033		
28	AR124803	WAR100222-15	02/22/10	1044		
29	AR124805	IAR100211-01	02/22/10	1054		
30	AR124804	WAR100222-16	02/22/10	1105		
31	AR124801	WAR091217-48	02/22/10	1116		
32	AR126801	WAR100222-17	02/22/10	1126		

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.: 10-1861

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

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	AR126802	WAR100222-18	02/22/10	1137		
02	AR126803	WAR100222-19	02/22/10	1147		
03	AR126804	WAR100222-20	02/22/10	1158		
04	AR126805	IAR100104-05	02/22/10	1208		
05	AR126801	WAR100107-68	02/22/10	1219		
06	PIBLK02	WAR100219-99	02/22/10	1229	2.29	5.94
07	ZZZZZ	ZZZZZ	02/22/10	1240	2.29	5.94
08	ZZZZZ	ZZZZZ	02/22/10	1250	2.29	5.94
09	ZZZZZ	ZZZZZ	02/22/10	1301	2.29	5.94
10	ZZZZZ	ZZZZZ	02/22/10	1314	2.29	5.94
11	ZZZZZ	ZZZZZ	02/22/10	1326	2.29	5.94
12	ZZZZZ	ZZZZZ	02/22/10	1339	2.29	5.93
13	ZZZZZ	ZZZZZ	02/22/10	1351	2.29	5.93
14	ZZZZZ	ZZZZZ	02/22/10	1404	2.29	5.94
15	ZZZZZ	ZZZZZ	02/22/10	1417	2.29	5.93
16	ZZZZZ	ZZZZZ	02/22/10	1430	2.29	5.93
17	AR166002	WAR100203-60	02/22/10	1442	2.29	5.94
18	PIBLK03	WAR100219-99	02/22/10	1453	2.29	5.94
19	ZZZZZ	ZZZZZ	02/22/10	1503	2.29	5.94
20	ZZZZZ	ZZZZZ	02/22/10	1516	2.29	5.93
21	ZZZZZ	ZZZZZ	02/22/10	1528	2.29	5.93
22	ZZZZZ	ZZZZZ	02/22/10	1541	2.29	5.94
23	ZZZZZ	ZZZZZ	02/22/10	1554	2.29	5.93
24	ZZZZZ	ZZZZZ	02/22/10	1606	2.29	5.93
25	ZZZZZ	ZZZZZ	02/22/10	1619	2.29	5.94
26	ZZZZZ	ZZZZZ	02/22/10	1632	2.29	5.93
27	ZZZZZ	ZZZZZ	02/22/10	1644	2.29	5.93
28	ZZZZZ	ZZZZZ	02/22/10	1657	2.29	5.93
29	AR166003	WAR100203-60	02/22/10	1710	2.29	5.93
30	PIBLK04	WAR100219-99	02/22/10	1722	2.29	5.93
31	ZZZZZ	ZZZZZ	02/22/10	1735	2.29	5.93
32	ZZZZZ	ZZZZZ	02/22/10	1748	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.

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.: 10-1861

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	PIBLK01	WAR100219-99	02/23/10	0601	1.92	5.23
02	AR166001	WAR100203-60	02/23/10	0611	1.92	5.23
03	AR125401	WAR100219-54	02/23/10	0622		
04	AR124201	WAR100219-42	02/23/10	0632		
05	AR124801	WAR091217-48	02/23/10	0643		
06	AR123201	WAR100104-32	02/23/10	0653		
07	AR122101	WAR100104-21	02/23/10	0704		
08	AR126201	WAR100104-62	02/23/10	0715		
09	AR126801	WAR100107-68	02/23/10	0725		
10	DDTANALOGSTD	WAR091219-DD	02/23/10	0736		
11	PIBLK02	WAR100219-99	02/23/10	0746	1.92	5.23
12	ZZZZZ	ZZZZZ	02/23/10	0757		
13	ZZZZZ	ZZZZZ	02/23/10	0922	1.92	5.24
14	PBLK01	1202048657	02/23/10	0933	1.92	5.23
15	PBLK01LCS	1202048658	02/23/10	0946	1.92	5.23
16	ZZZZZ	ZZZZZ	02/23/10	0958	1.92	5.23
17	ZZZZZ	ZZZZZ	02/23/10	1011	1.92	5.23
18	ZZZZZ	ZZZZZ	02/23/10	1023	1.92	5.23
19	ZZZZZ	ZZZZZ	02/23/10	1036	1.92	5.23
20	ZZZZZ	ZZZZZ	02/23/10	1049	1.92	5.23
21	ZZZZZ	ZZZZZ	02/23/10	1101	1.92	5.23
22	ZZZZZ	ZZZZZ	02/23/10	1114	1.92	5.23
23	ZZZZZ	ZZZZZ	02/23/10	1127	1.92	5.23
24	AR166002	WAR100203-60	02/23/10	1139	1.92	5.23
25	PIBLK03	WAR100219-99	02/23/10	1150	1.92	5.23
26	ZZZZZ	ZZZZZ	02/23/10	1200	1.92	5.23
27	ZZZZZ	ZZZZZ	02/23/10	1213	1.92	5.23
28	ZZZZZ	ZZZZZ	02/23/10	1226	1.92	5.23
29	ZZZZZ	ZZZZZ	02/23/10	1238	1.92	5.23
30	ZZZZZ	ZZZZZ	02/23/10	1251	1.92	5.23
31	ZZZZZ	ZZZZZ	02/23/10	1303	1.92	5.23
32	ZZZZZ	ZZZZZ	02/23/10	1316	1.92	5.23

	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.

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.: 10-1861

GC Column: CLP1 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

Instrument ID: ECD1A

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 1.92 DCB: 5.23

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	DCB RT #
01	AR166003	WAR100203-60	02/23/10	1334	1.92	5.24
02	PIBLK04	WAR100219-99	02/23/10	1344	1.92	5.23
03	ZZZZZ	ZZZZZ	02/23/10	1355	1.92	5.23
04	RE15-10-7904MS	1202048659	02/23/10	1407	1.92	5.23
05	RE15-10-7904	247178001	02/23/10	1420	1.92	5.23
06	RE15-10-7904MSD	1202048660	02/23/10	1432	1.92	5.23
07	RE15-10-7903	247178002	02/23/10	1445	1.92	5.23
08	AR166004	WAR100203-60	02/23/10	1458	1.92	5.23
09	PIBLK05	WAR100219-99	02/23/10	1508	1.92	5.23
10	ZZZZZ	ZZZZZ	02/23/10	1519	1.92	5.23
11	ZZZZZ	ZZZZZ	02/23/10	1532	1.92	5.23
12	ZZZZZ	ZZZZZ	02/23/10	1544	1.92	5.23
13	ZZZZZ	ZZZZZ	02/23/10	1557	1.92	5.23
14	ZZZZZ	ZZZZZ	02/23/10	1609	1.92	5.23
15	ZZZZZ	ZZZZZ	02/23/10	1622	1.92	5.23
16	ZZZZZ	ZZZZZ	02/23/10	1635	1.92	5.23
17	ZZZZZ	ZZZZZ	02/23/10	1647	1.92	5.23
18	ZZZZZ	ZZZZZ	02/23/10	1700	1.92	5.23
19	ZZZZZ	ZZZZZ	02/23/10	1713	1.92	5.23
20	AR166005	WAR100203-60	02/23/10	1725	1.92	5.23
21	PIBLK06	WAR100219-99	02/23/10	1738	1.92	5.23
22	ZZZZZ	ZZZZZ	02/23/10	1751	1.92	5.23
23	ZZZZZ	ZZZZZ	02/23/10	1803	1.92	5.23
24	ZZZZZ	ZZZZZ	02/23/10	1816	1.92	5.23
25	ZZZZZ	ZZZZZ	02/23/10	1829	1.92	5.23
26	ZZZZZ	ZZZZZ	02/23/10	1841	1.92	5.23
27	ZZZZZ	ZZZZZ	02/23/10	1854	1.92	5.23
28	ZZZZZ	ZZZZZ	02/23/10	1907	1.92	5.23
29	ZZZZZ	ZZZZZ	02/23/10	1919	1.92	5.23
30	ZZZZZ	ZZZZZ	02/23/10	1932	1.92	5.23
31	AR166006	WAR100203-60	02/23/10	1945	1.92	5.23
32	PIBLK07	WAR100219-99	02/23/10	1957	1.92	5.23

	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.

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.: 10-1861

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

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	WAR100219-99	02/23/10	0601	2.29	5.93
02	AR166001	WAR100203-60	02/23/10	0611	2.29	5.94
03	AR125401	WAR100219-54	02/23/10	0622		
04	AR124201	WAR100219-42	02/23/10	0632		
05	AR124801	WAR091217-48	02/23/10	0643		
06	AR123201	WAR100104-32	02/23/10	0653		
07	AR122101	WAR100104-21	02/23/10	0704		
08	AR126201	WAR100104-62	02/23/10	0715		
09	AR126801	WAR100107-68	02/23/10	0725		
10	DDTANALOGSTD	WAR091219-DD	02/23/10	0736		
11	PIBLK02	WAR100219-99	02/23/10	0746	2.29	5.94
12	ZZZZZ	ZZZZZ	02/23/10	0757		
13	ZZZZZ	ZZZZZ	02/23/10	0922	2.29	5.94
14	PBLK01	1202048657	02/23/10	0933	2.29	5.94
15	PBLK01LCS	1202048658	02/23/10	0946	2.29	5.93
16	ZZZZZ	ZZZZZ	02/23/10	0958	2.29	5.93
17	ZZZZZ	ZZZZZ	02/23/10	1011	2.29	5.93
18	ZZZZZ	ZZZZZ	02/23/10	1023	2.29	5.93
19	ZZZZZ	ZZZZZ	02/23/10	1036	2.29	5.93
20	ZZZZZ	ZZZZZ	02/23/10	1049	2.29	5.93
21	ZZZZZ	ZZZZZ	02/23/10	1101	2.29	5.93
22	ZZZZZ	ZZZZZ	02/23/10	1114	2.29	5.93
23	ZZZZZ	ZZZZZ	02/23/10	1127	2.29	5.93
24	AR166002	WAR100203-60	02/23/10	1139	2.29	5.93
25	PIBLK03	WAR100219-99	02/23/10	1150	2.29	5.93
26	ZZZZZ	ZZZZZ	02/23/10	1200	2.29	5.93
27	ZZZZZ	ZZZZZ	02/23/10	1213	2.29	5.93
28	ZZZZZ	ZZZZZ	02/23/10	1226	2.29	5.93
29	ZZZZZ	ZZZZZ	02/23/10	1238	2.29	5.93
30	ZZZZZ	ZZZZZ	02/23/10	1251	2.29	5.93
31	ZZZZZ	ZZZZZ	02/23/10	1303	2.29	5.93
32	ZZZZZ	ZZZZZ	02/23/10	1316	2.29	5.93

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.: 10-1861

GC Column: CLP2 ID: 0.25 (mm) Init. Calib. Date(s): 02/22/10 02/22/10

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	AR166003	WAR100203-60	02/23/10	1334	2.29	5.94
02	PIBLK04	WAR100219-99	02/23/10	1344	2.29	5.94
03	ZZZZZ	ZZZZZ	02/23/10	1355	2.29	5.94
04	RE15-10-7904MS	1202048659	02/23/10	1407	2.29	5.93
05	RE15-10-7904	247178001	02/23/10	1420	2.29	5.93
06	RE15-10-7904MSD	1202048660	02/23/10	1432	2.29	5.93
07	RE15-10-7903	247178002	02/23/10	1445	2.29	5.93
08	AR166004	WAR100203-60	02/23/10	1458	2.29	5.93
09	PIBLK05	WAR100219-99	02/23/10	1508	2.29	5.94
10	ZZZZZ	ZZZZZ	02/23/10	1519	2.29	5.93
11	ZZZZZ	ZZZZZ	02/23/10	1532	2.29	5.93
12	ZZZZZ	ZZZZZ	02/23/10	1544	2.29	5.93
13	ZZZZZ	ZZZZZ	02/23/10	1557	2.29	5.93
14	ZZZZZ	ZZZZZ	02/23/10	1609	2.29	5.93
15	ZZZZZ	ZZZZZ	02/23/10	1622	2.29	5.93
16	ZZZZZ	ZZZZZ	02/23/10	1635	2.29	5.93
17	ZZZZZ	ZZZZZ	02/23/10	1647	2.29	5.93
18	ZZZZZ	ZZZZZ	02/23/10	1700	2.29	5.93
19	ZZZZZ	ZZZZZ	02/23/10	1713	2.29	5.93
20	AR166005	WAR100203-60	02/23/10	1725	2.29	5.93
21	PIBLK06	WAR100219-99	02/23/10	1738	2.29	5.93
22	ZZZZZ	ZZZZZ	02/23/10	1751	2.29	5.93
23	ZZZZZ	ZZZZZ	02/23/10	1803	2.29	5.93
24	ZZZZZ	ZZZZZ	02/23/10	1816	2.29	5.93
25	ZZZZZ	ZZZZZ	02/23/10	1829	2.29	5.93
26	ZZZZZ	ZZZZZ	02/23/10	1841	2.29	5.93
27	ZZZZZ	ZZZZZ	02/23/10	1854	2.29	5.93
28	ZZZZZ	ZZZZZ	02/23/10	1907	2.29	5.93
29	ZZZZZ	ZZZZZ	02/23/10	1919	2.29	5.93
30	ZZZZZ	ZZZZZ	02/23/10	1932	2.29	5.93
31	AR166006	WAR100203-60	02/23/10	1945	2.29	5.93
32	PIBLK07	WAR100219-99	02/23/10	1957	2.29	5.93

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.

FORM VIII PEST OLM03.0

Identification Summary

SDG Number: 10–1861

Client ID: LCS for batch 955560

Lab Sample ID: 1202048658

Data File:	015f1501.d	**Data File:**	015b1501.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	23–FEB–10 09:46	**Analyzed:**	23–FEB–10 09:46

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							6.27
Column 1	1	2.37	2.35 – 2.41	20.4		ug/kg	
	2	2.66	2.63 – 2.69	20		ug/kg	
	3	2.74	2.71 – 2.77	22.6		ug/kg	
	4	2.78	2.75 – 2.81	20.6		ug/kg	
	5	2.99	2.96 – 3.02	21.1		ug/kg	
					21		
Column 2	1	3.18	3.15 – 3.21	20.7		ug/kg	
	2	3.27	3.24 – 3.3	20.1		ug/kg	
	3	3.33	3.3 – 3.36	19.2		ug/kg	
	4	3.56	3.53 – 3.59	19.3		ug/kg	
	5	3.63	3.6 – 3.66	19.2		ug/kg	
					19.7		
Aroclor–1260							10.3
Column 1	1	3.72	3.69 – 3.75	24		ug/kg	
	2	3.88	3.85 – 3.91	24.9		ug/kg	
	3	4.04	4.01 – 4.07	25.5		ug/kg	
	4	4.11	4.08 – 4.14	25.3		ug/kg	
	5	4.25	4.22 – 4.28	25.2		ug/kg	
					25		
Column 2	1	4.32	4.29 – 4.35	21.4		ug/kg	
	2	4.45	4.42 – 4.48	22.4		ug/kg	
	3	4.71	4.69 – 4.75	22.3		ug/kg	
	4	4.89	4.86 – 4.92	22.7		ug/kg	
	5	5.04	5.01 – 5.07	23.9		ug/kg	
					22.5		

Identification Summary

SDG Number: 10–1861 **Client ID:** RE15–10–7904MS

Lab Sample ID: 1202048659

Data File:	036f3601.d	**Data File:**	036b3601.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	23–FEB–10 14:07	**Analyzed:**	23–FEB–10 14:07

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor–1016							3.69
Column 1	1	2.38	2.35 – 2.41	24		ug/kg	
	2	2.66	2.63 – 2.69	25.2		ug/kg	
	3	2.74	2.71 – 2.77	24.3		ug/kg	
	4	2.78	2.75 – 2.81	22.7		ug/kg	
	5	2.99	2.96 – 3.02	23.3		ug/kg	
					23.9		
Column 2	1	3.18	3.15 – 3.21	23.6		ug/kg	
	2	3.27	3.24 – 3.3	22.9		ug/kg	
	3	3.33	3.3 – 3.36	22.7		ug/kg	
	4	3.56	3.53 – 3.59	23.7		ug/kg	
	5	3.63	3.6 – 3.66	22.2		ug/kg	
					23		
Aroclor–1260							13
Column 1	1	3.72	3.69 – 3.75	30.5		ug/kg	
	2	3.88	3.85 – 3.91	28.6		ug/kg	
	3	4.04	4.01 – 4.07	31.9		ug/kg	
	4	4.11	4.08 – 4.14	29.7		ug/kg	
	5	4.25	4.22 – 4.28	31.6		ug/kg	
					30.4		
Column 2	1	4.32	4.29 – 4.35	26.3		ug/kg	
	2	4.45	4.42 – 4.48	26		ug/kg	
	3	4.71	4.69 – 4.75	26.7		ug/kg	
	4	4.89	4.86 – 4.92	26.2		ug/kg	
	5	5.03	5.01 – 5.07	28.5		ug/kg	
					26.7		

Identification Summary

SDG Number: 10-1861 **Client ID:** RE15-10-7904MSD

Lab Sample ID: 1202048660

Data File:	038f3801.d	**Data File:**	038b3801.d
Inst:	ECD1A.I_1	**Inst:**	ECD1A.I_2
Column:	CLP1	**Column:**	CLP2
Analyzed:	23-FEB-10 14:32	**Analyzed:**	23-FEB-10 14:32

Analyte	Peak	RT	RT Window	Conc.	Ave Conc.	Units	RPD
Aroclor-1016							2.3
Column 1	1	2.38	2.35 – 2.41	22.7		ug/kg	
	2	2.66	2.63 – 2.69	24.2		ug/kg	
	3	2.74	2.71 – 2.77	23.6		ug/kg	
	4	2.78	2.75 – 2.81	22.6		ug/kg	
	5	2.99	2.96 – 3.02	23.7		ug/kg	
					23.3		
Column 2	1	3.18	3.15 – 3.21	23.5		ug/kg	
	2	3.27	3.24 – 3.3	23		ug/kg	
	3	3.33	3.3 – 3.36	22.1		ug/kg	
	4	3.56	3.53 – 3.59	22.8		ug/kg	
	5	3.63	3.6 3.66	22.7		ug/kg	
					22.8		
Aroclor-1260							16.4
Column 1	1	3.72	3.69 – 3.75	30.9		ug/kg	
	2	3.88	3.85 – 3.91	33.1		ug/kg	
	3	4.04	4.01 – 4.07	33.4		ug/kg	
	4	4.11	4.08 – 4.14	34.6		ug/kg	
	5	4.25	4.22 – 4.28	32.8		ug/kg	
					32.9		
Column 2	1	4.32	4.29 – 4.35	26.3		ug/kg	
	2	4.45	4.42 – 4.48	28		ug/kg	
	3	4.71	4.69 – 4.75	28.8		ug/kg	
	4	4.89	4.86 – 4.92	27.3		ug/kg	
	5	5.03	5.01 – 5.07	29.3		ug/kg	
					27.9		

QUALITY CONTROL DATA

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-1861**			**Matrix:**	**SOIL**
Lab Sample ID:	**1202048657**				
Client Sample:	**QC for batch 955560**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**MB for batch 955560**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**955562**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**02/23/2010 09:33**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**02/22/2010 21:35**	**Aliquot:**	**30 g**	**Final Volume:**	**1 mL**
Data File:	**014f1401-1.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	014b1401-1.d		**2 CLP2**		

CAS No.	Parmname	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

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/014f1401-1.d
Lab Smp Id: 1202048657 Client Smp ID: PBLK01
Inj Date : 23-FEB-2010 09:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048657|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

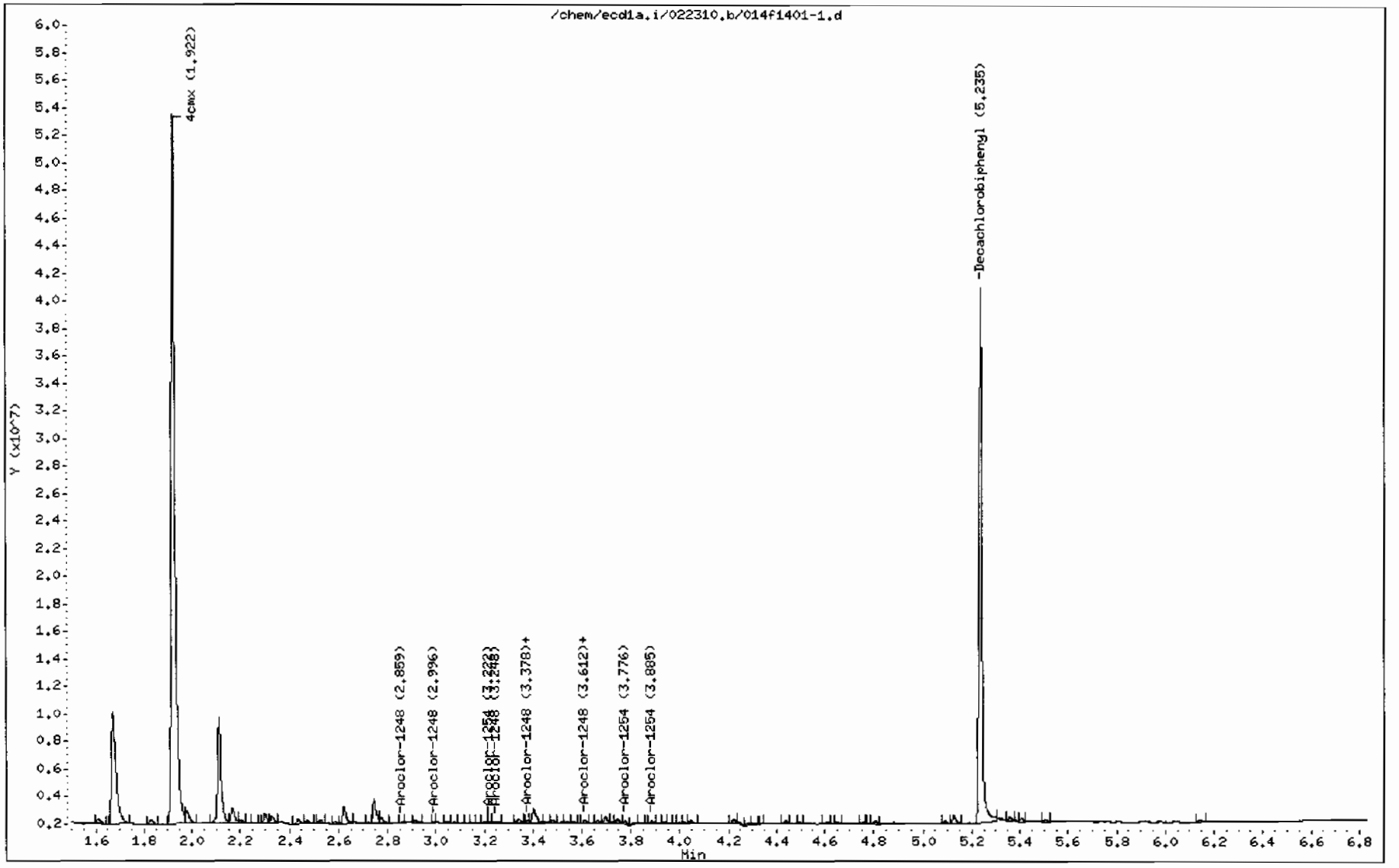
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.922	1.922	0.000	56103424	130.280	4.3	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.235	5.232	0.003	33191342	108.013	3.6	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/022310.b/014f1401-1.d
Date : 23-FEB-2010 09:33
Client ID: PBLK01
Sample Info: |120204865711|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/014b1401-1.d
Lab Smp Id: 1202048657 Client Smp ID: PBLK01
Inj Date : 23-FEB-2010 09:33
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048657|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|MB|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 14 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.sub
Target Version: 3.50 Sample Matrix: Soil
Processing Host: hpclp1

Concentration Formula: Amt * DF * Uf * Vt/(Vi * Ws * (100 - M)/100) * CpndVariable

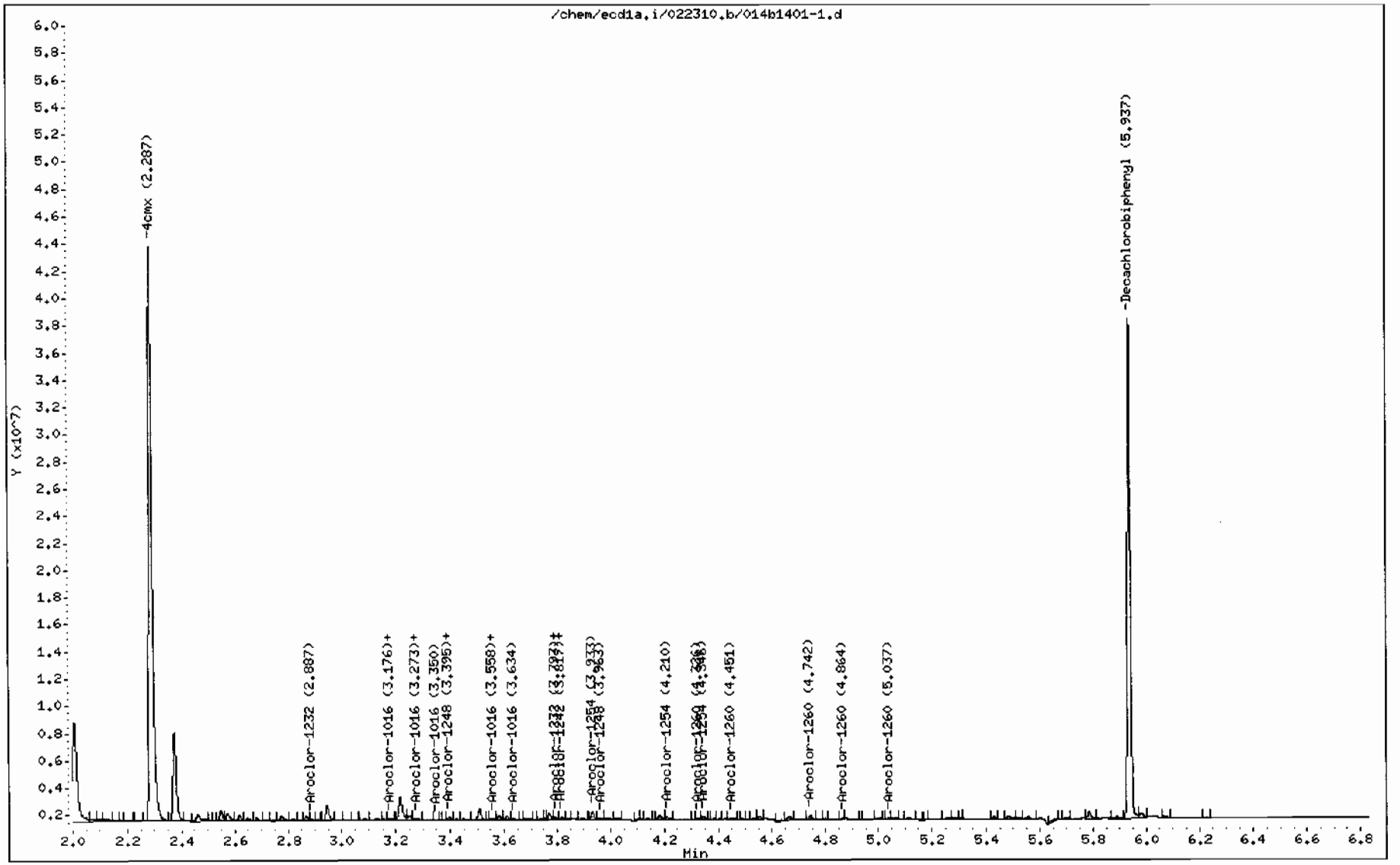
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	Correction factor
Vt	1.00000	Volume of final extract (mL)
Vi	1.00000	Volume injected (uL)
Ws	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.287	2.287	0.000	37645141	126.582	4.2	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.937	5.936	0.001	28139443	133.048	4.4	80.00- 120.00	100.00

Data File: /chem/ecd1a.i/022310.b/014b1401-1.d
Date : 23-FEB-2010 09:33
Client ID: PBLK01
Sample Info: |1202048657|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number:	10–1861			**Matrix:**	SOIL
Lab Sample ID:	1202048658				
Client Sample:	QC for batch 955560	**Client:**	LANL010	**Project:**	QC
Client ID:	LCS for batch 955560	**Method:**	SW846 8082	**SOP Ref:**	GL–OA–E–040
Batch ID:	955562	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	02/23/2010 09:46	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	02/22/2010 21:35	**Aliquot:**	30 g	**Final Volume:**	1 mL
Data File:	015f1501–1.d	**Column:**	1 CLP1	**Level:**	LOW
	015b1501–1.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674–11–2	Aroclor–1016		20.9	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		25.0	ug/kg	1.11	3.33	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/015f1501-1.d
Lab Smp Id: 1202048658 Client Smp ID: PBLK01LCS
Inj Date : 23-FEB-2010 09:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048658|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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	30.00000	Weight of sample extracted (g)
M	0.00000	% Moisture

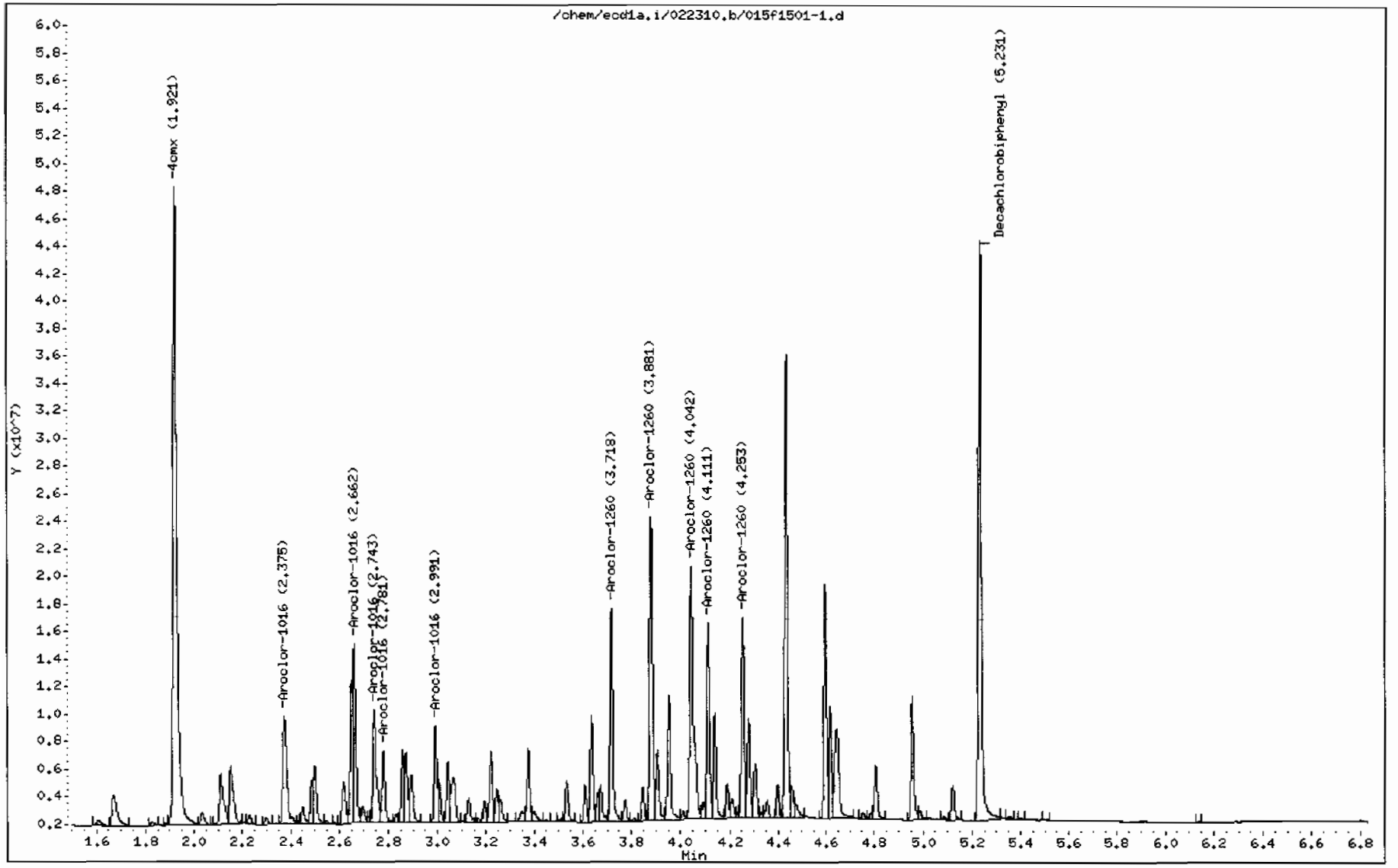
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.921	1.922	-0.001	51679416	120.007	4.0	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.231	5.232	-0.001	35301721	114.881	3.8	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.375	2.376	-0.001	9429591	612.934	20.4	80.00- 120.00	100.00
2.662	2.663	-0.001	10930394	599.352	20.0	102.70- 142.70	115.92
2.743	2.743	0.000	8197340	679.404	22.6	60.10- 100.10	86.93
2.781	2.781	0.000	4395462	619.419	20.6	28.30- 68.30	46.61

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.991	2.992	-0.001	5642845	633.160	21.1	41.26- 81.26	59.84
Average of Peak Concentrations =					21.0		
7 Aroclor-1260					CAS #: 11096-82-5		
3.718	3.718	0.000	12315343	721.359	24.0	80.00- 120.00	100.00
3.881	3.881	0.000	17696570	748.477	24.9	124.85- 164.85	143.70
4.042	4.042	0.000	19081400	764.132	25.5	135.33- 175.33	154.94
4.111	4.111	0.000	10914797	757.673	25.2	69.00- 109.00	88.63
4.253	4.254	-0.001	10925231	757.092	25.2	71.29- 111.29	88.71
Average of Peak Concentrations =					25.0		

Data File: /chem/ecd1a.i/022310.b/015f1501-1.d
Date : 23-FEB-2010 09:46
Client ID: PBLK01LCS
Sample Info: 1120204865811
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/015b1501-1.d
Lab Smp Id: 1202048658 Client Smp ID: PBLK01LCS
Inj Date : 23-FEB-2010 09:46
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048658|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|LCS|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.287	2.287	0.000	34183696	114.943	3.8	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.935	5.936	-0.001	26531622	125.446	4.2	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.183	3.183	0.000	7931205	620.120	20.7	80.00- 120.00	100.00(M)
3.266	3.267	-0.001	5364943	601.591	20.0	45.54- 85.54	67.64
3.330	3.330	0.000	3114989	576.208	19.2	20.60- 60.60	39.28
3.557	3.557	0.000	4004187	579.005	19.3	30.88- 70.88	50.49

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.633	3.632	0.001	3701445	576.081	19.2	28.07- 68.07	46.67
Average of Peak Concentrations -					19.7		
7 Aroclor-1260					CAS #: 11096-82-5		
4.324	4.324	0.000	8475187	641.785	21.4	80.00- 120.00	100.00
4.448	4.449	-0.001	10477659	673.077	22.4	102.45- 142.45	123.63
4.715	4.716	-0.001	7910805	667.945	22.3	71.69- 111.69	93.34
4.889	4.889	0.000	8326891	682.465	22.7	75.01- 115.01	98.25
5.036	5.036	0.000	18998961	716.208	23.9	192.41- 232.41	224.17
Average of Peak Concentrations -					22.5		

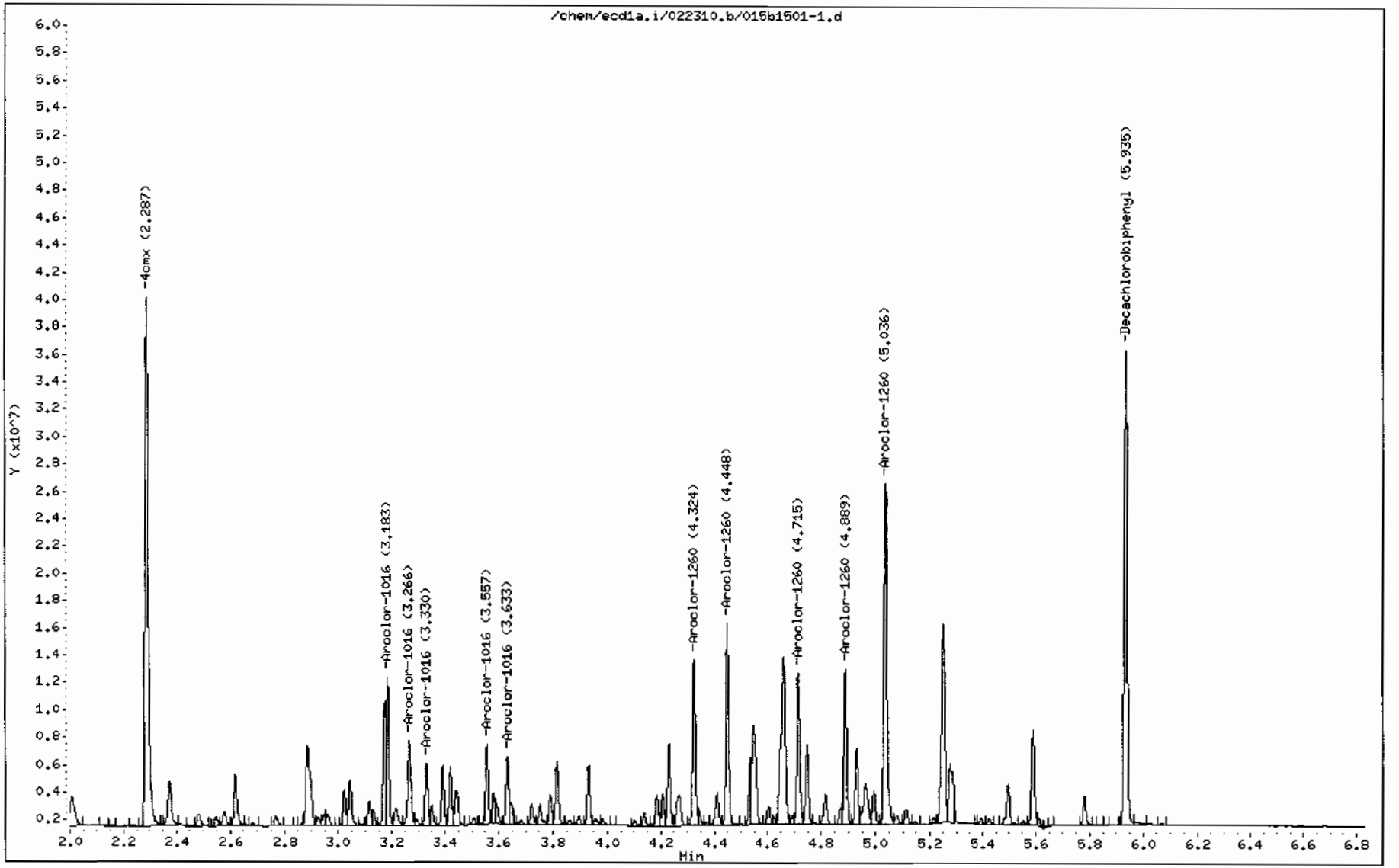
QC Flag Legend

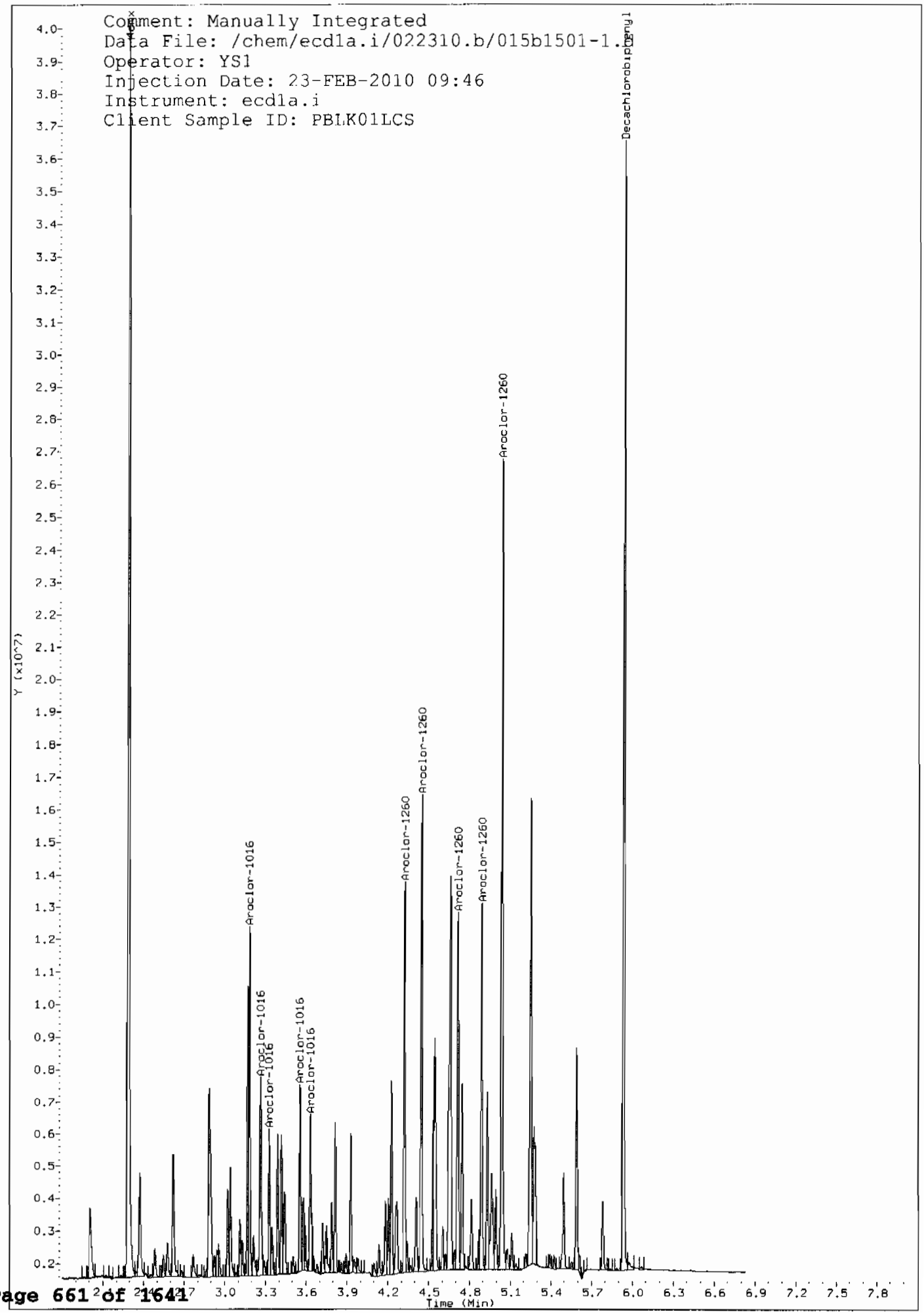
M - Compound response manually integrated.

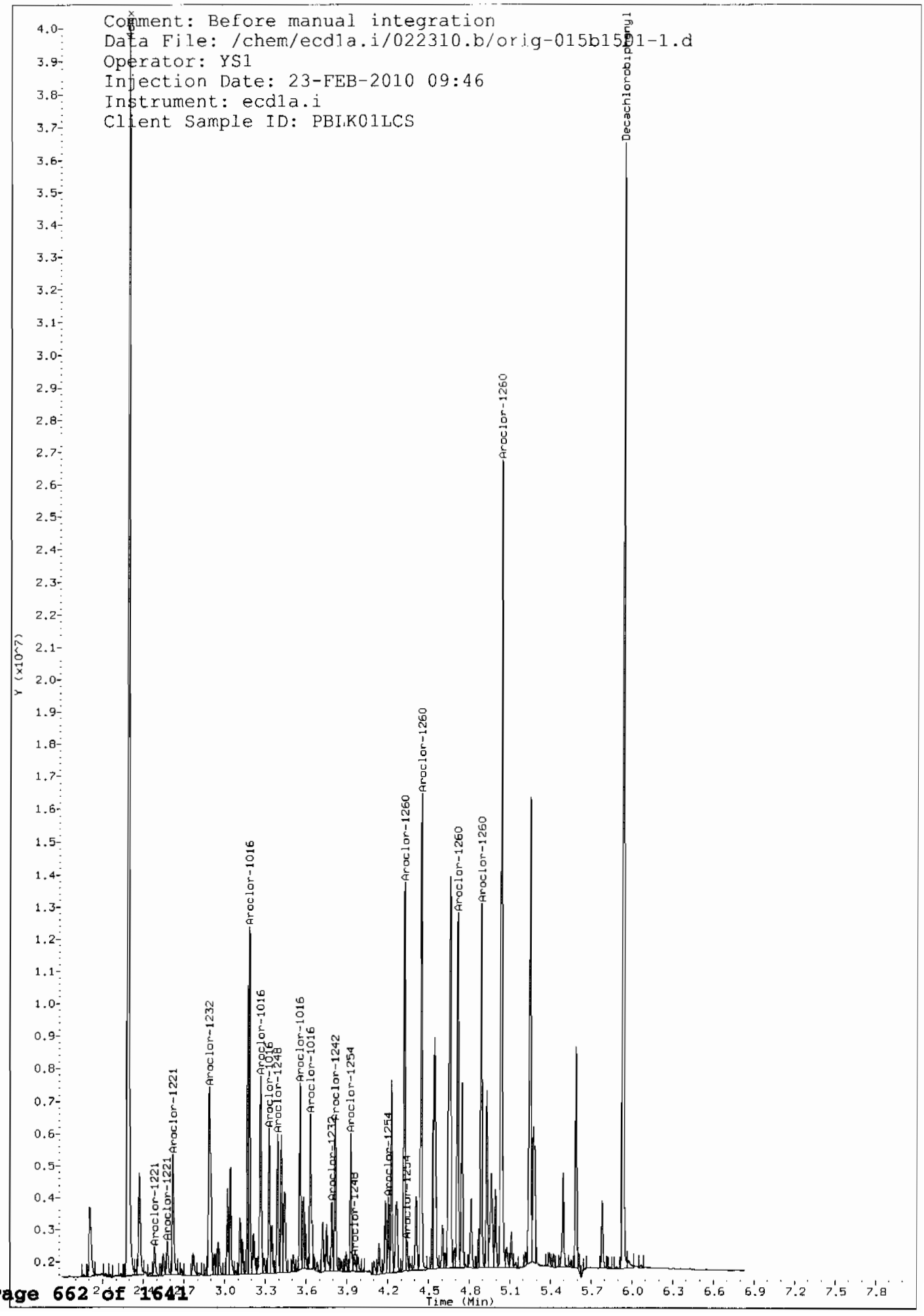
Data File: /chem/ecd1a.i/022310.b/015b1501-1.d
Date : 23-FEB-2010 09:46
Client ID: PBLK01LCS
Sample Info: |1202048658|1|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25




Comment: Manually Integrated
Data File: /chem/ecd1a.i/022310.b/015b1501-1.D
Operator: YS1
Injection Date: 23-FEB-2010 09:46
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/022310.b/orig-015b1501-1.d
Operator: YS1
Injection Date: 23-FEB-2010 09:46
Instrument: ecd1a.i
Client Sample ID: PBLK01LCS
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1016
Aroclor-1016
Aroclor-1016
Aroclor-1248
Aroclor-1016
Aroclor-1016
Aroclor-1232
Aroclor-1242
Aroclor-1254
Aroclor-1248
Aroclor-1254
Aroclor-1254
Aroclor-1221
Aroclor-1221
Aroclor-1221
Y (x10^7)
Time (Min)

PCB
Certificate of Analysis
Sample Summary

SDG Number:	**10-1861**	**Date Collected:**	**02/10/2010 12:00**	**Matrix:**	**R**
Lab Sample ID:	**1202048659**	**Date Received:**	**02/16/2010 08:50**	**%Moisture:**	**10.5**
Client Sample:	**QC for batch 955560**	**Client:**	**LANL010**	**Project:**	**QC**
Client ID:	**RE15-10-7904MS**	**Method:**	**SW846 8082**	**SOP Ref:**	**GL-OA-E-040**
Batch ID:	**955562**	**Inst:**	**ECD1A.I**	**Dilution:**	**1**
Run Date:	**02/23/2010 14:07**	**Analyst:**	**YS1**	**Inj. Vol:**	**1 uL**
Prep Date:	**02/22/2010 21:35**	**Aliquot:**	**30.02 g**	**Final Volume:**	**1 mL**
Data File:	**036f3601.d**	**Column:**	**1 CLP1**	**Level:**	**LOW**
	036b3601.d		**2 CLP2**		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		23.9	ug/kg	1.24	3.72	1
11104-28-2	Aroclor-1221	U	3.72	ug/kg	1.24	3.72	1
11141-16-5	Aroclor-1232	U	3.72	ug/kg	1.24	3.72	1
53469-21-9	Aroclor-1242	U	3.72	ug/kg	1.24	3.72	1
12672-29-6	Aroclor-1248	U	3.72	ug/kg	1.24	3.72	1
11097-69-1	Aroclor-1254	U	3.72	ug/kg	1.24	3.72	1
11096-82-5	Aroclor-1260		30.4	ug/kg	1.24	3.72	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/036f3601.d
Lab Smp Id: 1202048659 Client Smp ID: RE15-10-7904MS
Inj Date : 23-FEB-2010 14:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048659|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 35 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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	10.52500	% Moisture

Cpnd Variable Local Compound Variable

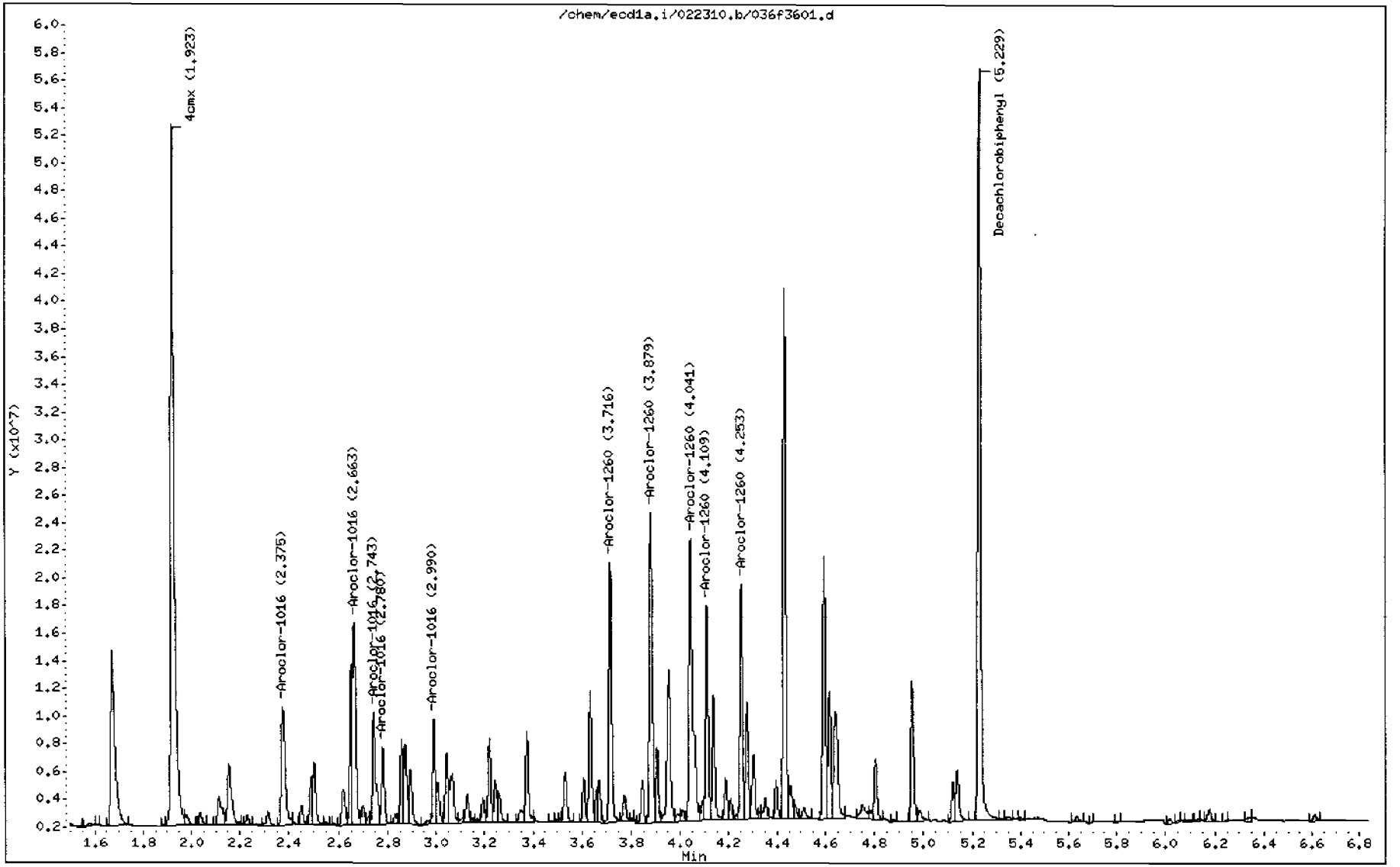
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.923	1.922	0.001	53635872	124.550	4.6	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.229	5.232	-0.003	43688227	142.173	5.3	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.375	2.376	-0.001	9930625	645.502	24.0	80.00- 120.00	100.00
2.663	2.663	0.000	12329668	676.079	25.2	102.70- 142.70	124.16
2.743	2.743	0.000	7864662	651.832	24.3	60.10- 100.10	79.20
2.780	2.781	-0.001	4324298	609.390	22.7	28.30- 68.30	43.55

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.990	2.992	-0.002	5571119	625.112	23.3	41.26- 81.26	56.10
Average of Peak Concentrations -					23.9		
7 Aroclor-1260					CAS #: 11096-82-5		
3.716	3.718	-0.002	14001015	820.095	30.5	80.00- 120.00	100.00
3.879	3.881	-0.002	18149995	767.654	28.6	124.85- 164.85	129.63
4.041	4.042	-0.001	21363963	855.539	31.8	135.33- 175.33	152.59
4.109	4.111	-0.002	11498683	798.205	29.7	69.00- 109.00	82.13
4.253	4.254	-0.001	12230086	847.515	31.6	71.29- 111.29	87.35
Average of Peak Concentrations -					30.4		

Data File: /chem/ecd1a.i/022310.b/036f3601.d
Date : 23-FEB-2010 14:07
Client ID: RE15-10-7904MS
Sample Info: |1202048659|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/036b3601.d
Lab Smp Id: 1202048659 Client Smp ID: RE15-10-7904MS
Inj Date : 23-FEB-2010 14:07
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048659|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|MS|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 35 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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	10.52500	% Moisture

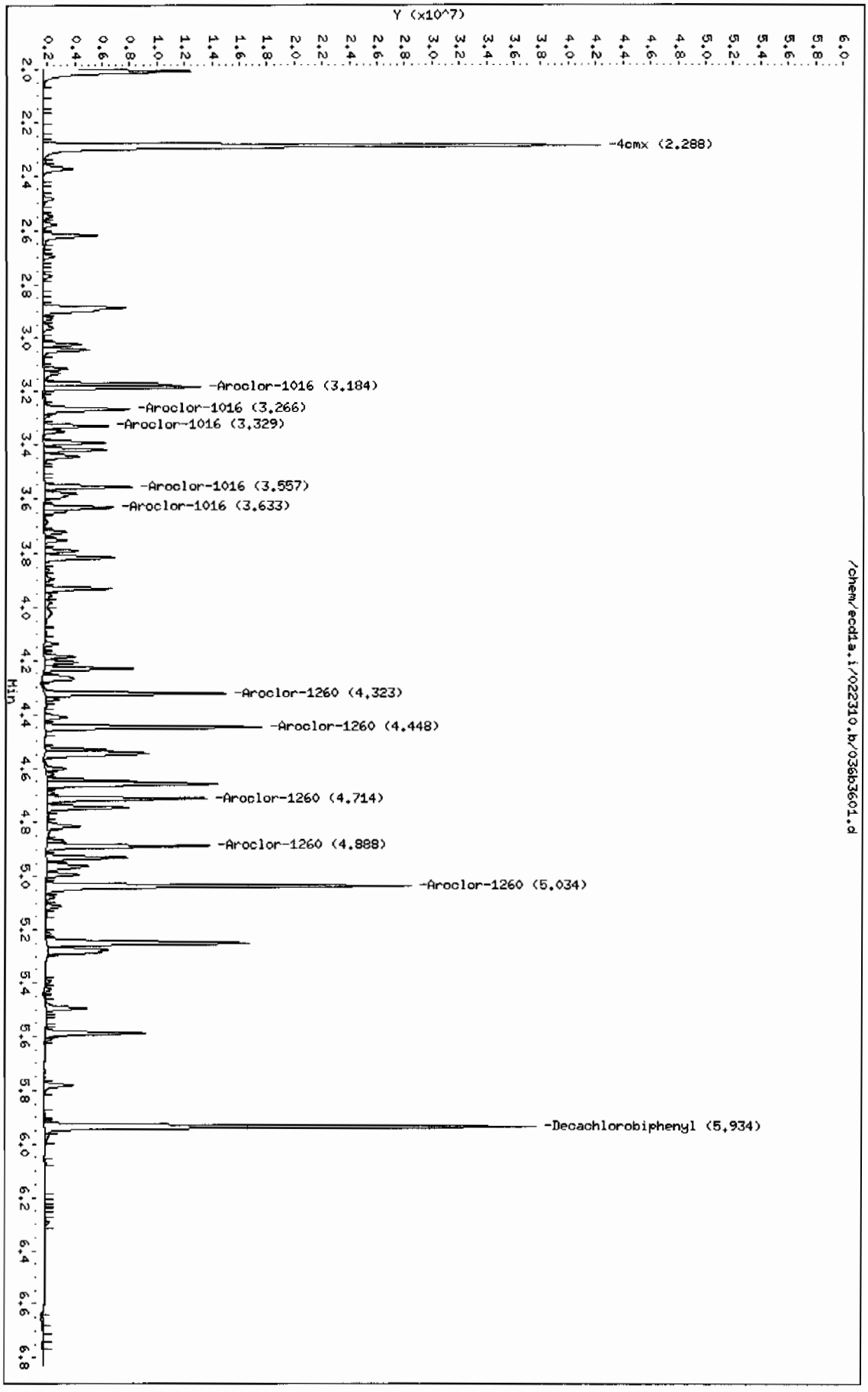
Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.288	2.287	0.001	35202337	118.368	4.4	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.934	5.936	-0.002	26928314	127.322	4.7	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.184	3.183	0.001	8121771	635.020	23.6	80.00- 120.00	100.00
3.266	3.267	-0.001	5485415	615.100	22.9	45.54- 85.54	67.54
3.329	3.330	-0.001	3298858	610.220	22.7	20.60- 60.60	40.62
3.557	3.557	0.000	4397840	635.927	23.7	30.88- 70.88	54.15

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.633	3.632	0.001	3825502	595.389	22.2	28.07- 68.07	47.10
Average of Peak Concentrations =					23.0		
7 Aroclor-1260					CAS #: 11096-82-5		
4.323	4.324	-0.001	9344708	707.630	26.3	80.00- 120.00	100.00
4.448	4.449	-0.001	10853862	697.244	26.0	102.45- 142.45	116.15
4.714	4.716	-0.002	8498295	717.549	26.7	71.69- 111.69	90.94
4.888	4.889	-0.001	8581400	703.325	26.2	75.01- 115.01	91.83
5.034	5.036	-0.002	20292312	764.963	28.5	192.41- 232.41	217.15
Average of Peak Concentrations =					26.7		

Data File: /chem/ecd1a.i/022310.b/036b3601.d
Date : 23-FEB-2010 14:07
Client ID: RE15-10-7904MS
Sample Info: |120204865911|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YS1
Column diameter: 0.25



PCB
Certificate of Analysis
Sample Summary

SDG Number:	10-1861	**Date Collected:**	02/10/2010 12:00	**Matrix:**	R
Lab Sample ID:	1202048660	**Date Received:**	02/16/2010 08:50	**%Moisture:**	10.5
Client Sample:	QC for batch 955560	**Client:**	LANL010	**Project:**	QC
Client ID:	RE15-10-7904MSD	**Method:**	SW846 8082	**SOP Ref:**	GL-OA-E-040
Batch ID:	955562	**Inst:**	ECD1A.I	**Dilution:**	1
Run Date:	02/23/2010 14:32	**Analyst:**	YS1	**Inj. Vol:**	1 uL
Prep Date:	02/22/2010 21:35	**Aliquot:**	30.17 g	**Final Volume:**	1 mL
Data File:	038f3801.d	**Column:**	1 CLP1	**Level:**	LOW
	038b3801.d		2 CLP2		

CAS No.	Parmname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	Column
12674-11-2	Aroclor-1016		23.3	ug/kg	1.23	3.70	1
11104-28-2	Aroclor-1221	U	3.70	ug/kg	1.23	3.70	1
11141-16-5	Aroclor-1232	U	3.70	ug/kg	1.23	3.70	1
53469-21-9	Aroclor-1242	U	3.70	ug/kg	1.23	3.70	1
12672-29-6	Aroclor-1248	U	3.70	ug/kg	1.23	3.70	1
11097-69-1	Aroclor-1254	U	3.70	ug/kg	1.23	3.70	1
11096-82-5	Aroclor-1260		32.9	ug/kg	1.23	3.70	1

GEL Laboratories LLC

RTX-CLPEST1 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/038f3801.d
Lab Smp Id: 1202048660 Client Smp ID: RE15-10-7904MSD
Inj Date : 23-FEB-2010 14:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048660|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-F-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036f3601.d
Als bottle: 36 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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	30.17000	Weight of sample extracted (g)
M	10.52500	% Moisture

Cpnd Variable Local Compound Variable

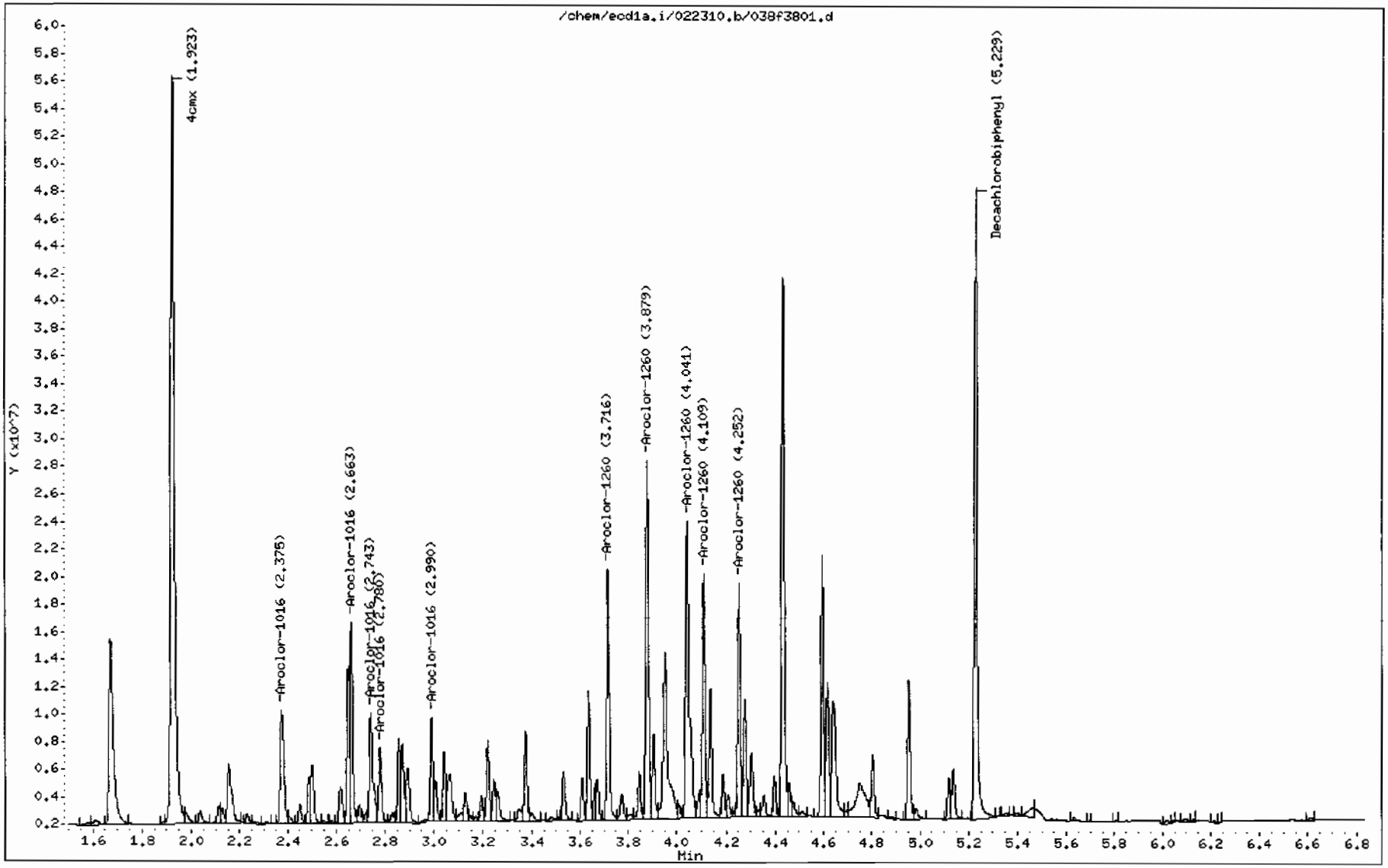
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
1.923	1.922	0.001	57197865	132.822	4.9	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.229	5.232	-0.003	37768217	122.908	4.6	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
2.375	2.376	-0.001	9416104	612.058	22.7	80.00- 120.00	100.00
2.663	2.663	0.000	11917717	653.491	24.2	102.70- 142.70	126.57
2.743	2.743	0.000	7676555	636.241	23.6	60.10- 100.10	81.53
2.780	2.781	-0.001	4333936	610.749	22.6	28.30- 68.30	46.03

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
2.990	2.992	-0.002	5690334	638.489	23.6	41.26- 81.26	60.43
Average of Peak Concentrations =					23.3		
7 Aroclor-1260					CAS #: 11096-82-5		
3.716	3.718	-0.002	14231849	833.616	30.9	80.00- 120.00	100.00
3.879	3.881	-0.002	21100257	892.436	33.0	124.85- 164.85	148.26
4.041	4.042	-0.001	22507755	901.344	33.4	135.33- 175.33	158.15
4.109	4.111	-0.002	13435627	932.662	34.5	69.00- 109.00	94.41
4.252	4.254	-0.002	12773686	885.185	32.8	71.29- 111.29	89.75
Average of Peak Concentrations =					32.9		

Data File: /chem/ecd1a.i/022310.b/038f3801.d
Date : 23-FEB-2010 14:32
Client ID: RE15-10-7904MSD
Sample Info: |1202048660|1|
Volume Injected (uL): 1.0
Column phase: CLP1

Instrument: ecd1a.i

Operator: YS1
Column diameter: 0.25



GEL Laboratories LLC

RTX-CLPEST2 30m/0.25 mm 1.0 INJ VOL

Data file : /chem/ecd1a.i/022310.b/038b3801.d
Lab Smp Id: 1202048660 Client Smp ID: RE15-10-7904MSD
Inj Date : 23-FEB-2010 14:32
Operator : YS1 Inst ID: ecd1a.i
Smp Info : |1202048660|1|
Misc Info : |ECD82P_1S|955562|SVA|QC A|SOIL|MSD|||
Comment :
Method : /chem/ecd1a.i/022310.b/ECD1-B-8082-022210.m
Meth Date : 23-Feb-2010 13:52 yip00818 Quant Type: ESTD
Cal Date : 22-FEB-2010 12:08 Cal File: 036b3601.d
Als bottle: 36 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 10-1861.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	30.17000	Weight of sample extracted (g)
M	10.52500	% Moisture

Cpnd Variable Local Compound Variable

RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
$ 11 4cmx					CAS #: 877-09-8		
2.288	2.287	0.001	37521194	126.165	4.7	80.00- 120.00	100.00
$ 12 Decachlorobiphenyl					CAS #: 2051-24-3		
5.934	5.936	-0.002	28489991	134.706	5.0	80.00- 120.00	100.00
1 Aroclor-1016					CAS #: 12674-11-2		
3.184	3.183	0.001	8116108	634.578	23.5	80.00- 120.00	100.00(M)
3.266	3.267	-0.001	5532140	620.339	23.0	45.54- 85.54	68.16
3.329	3.330	-0.001	3224475	596.461	22.1	20.60- 60.60	39.73
3.557	3.557	0.000	4263654	616.524	22.8	30.88- 70.88	52.53

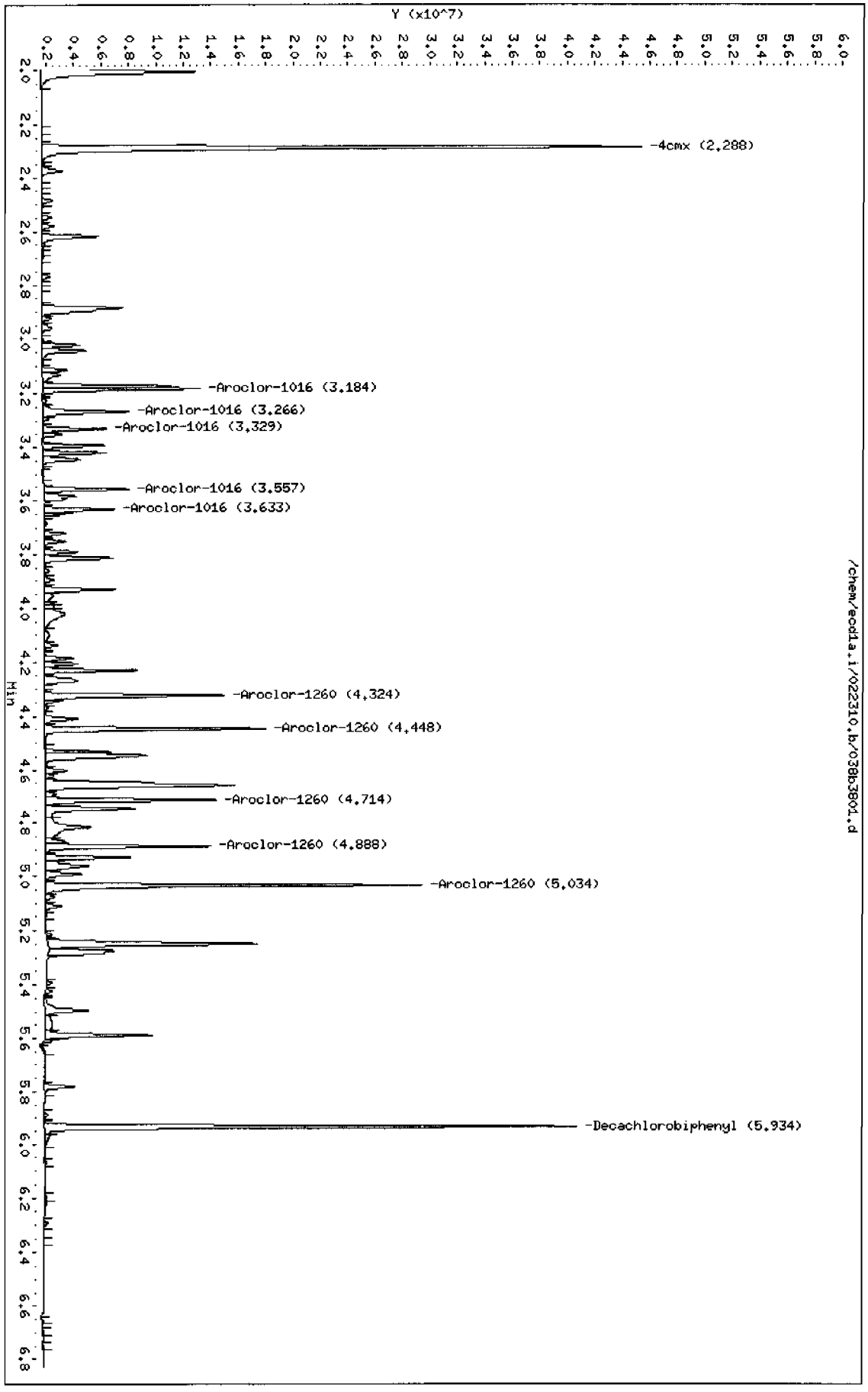
RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/Kg)	TARGET RANGE	RATIO
1 Aroclor-1016 (continued)							
3.633	3.632	0.001	3928366	611.399	22.6	28.07- 68.07	58.17
Average of Peak Concentrations =					22.8		
7 Aroclor-1260					CAS #: 11096-82-5		
4.324	4.324	0.000	9357537	708.601	26.2	80.00- 120.00	100.00
4.448	4.449	-0.001	11754060	755.072	28.0	102.45- 142.45	125.61
4.714	4.716	-0.002	9215541	778.110	28.8	71.69- 111.69	98.48
4.888	4.889	-0.001	9002739	737.857	27.3	75.01- 115.01	96.21
5.034	5.036	-0.002	20970827	790.541	29.3	192.41- 232.41	224.11
Average of Peak Concentrations =					27.9		

QC Flag Legend

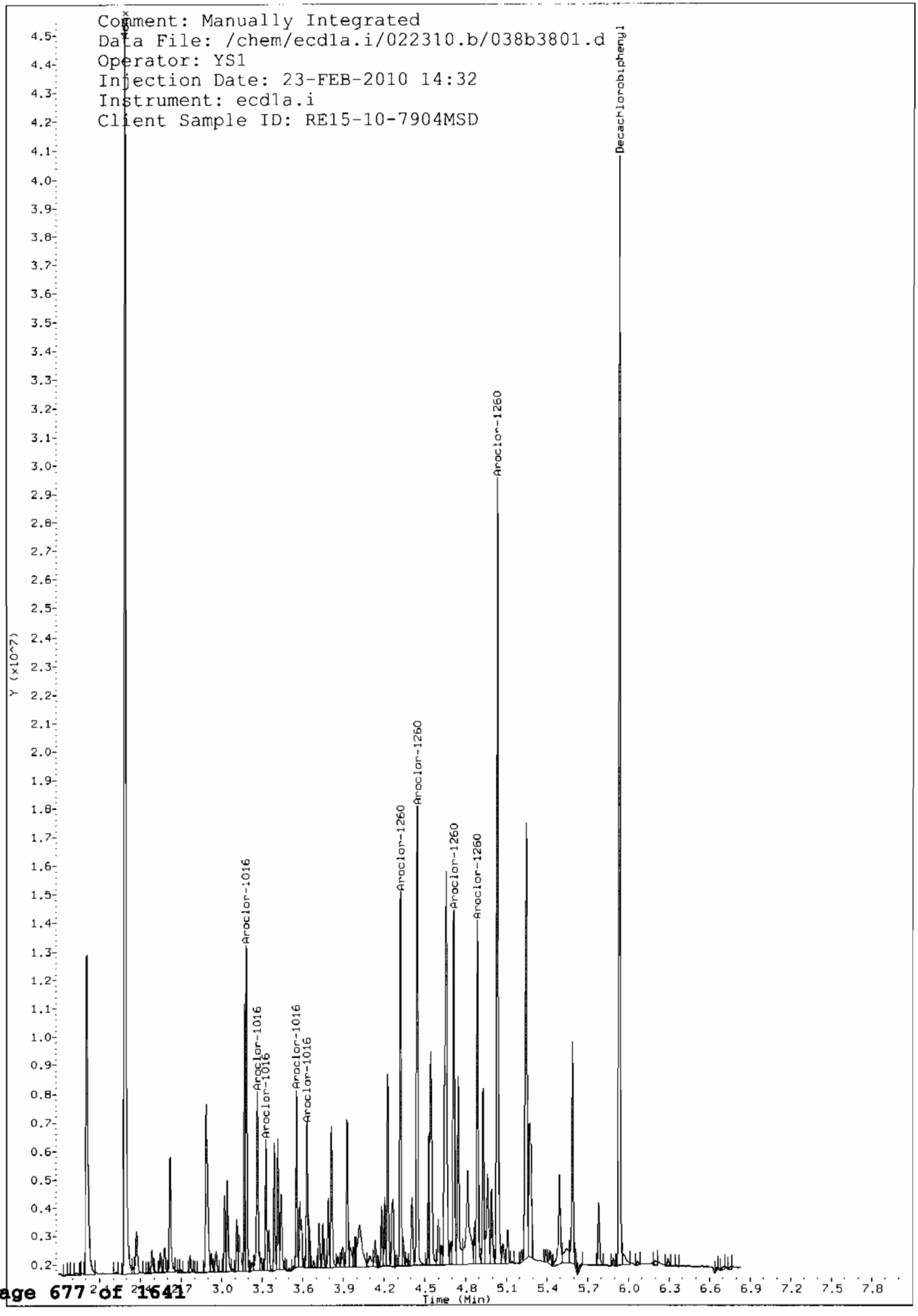
M - Compound response manually integrated.

Data File: /chem/ecd1a.i/022310.b/038b3801.d
Date : 23-FEB-2010 14:32
Client ID: RE15-10-7904MSD
Sample Info: |120204866011|
Volume Injected (uL): 1.0
Column phase: CLP2

Instrument: ecd1a.i
Operator: YSI
Column diameter: 0.25



Page 1


Comment: Manually Integrated
Data File: /chem/ecd1a.i/022310.b/038b3801.d
Operator: YS1
Injection Date: 23-FEB-2010 14:32
Instrument: ecd1a.i
Client Sample ID: RE15-10-7904MSD
Decachlorobiphenyl
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
Aroclor-1260
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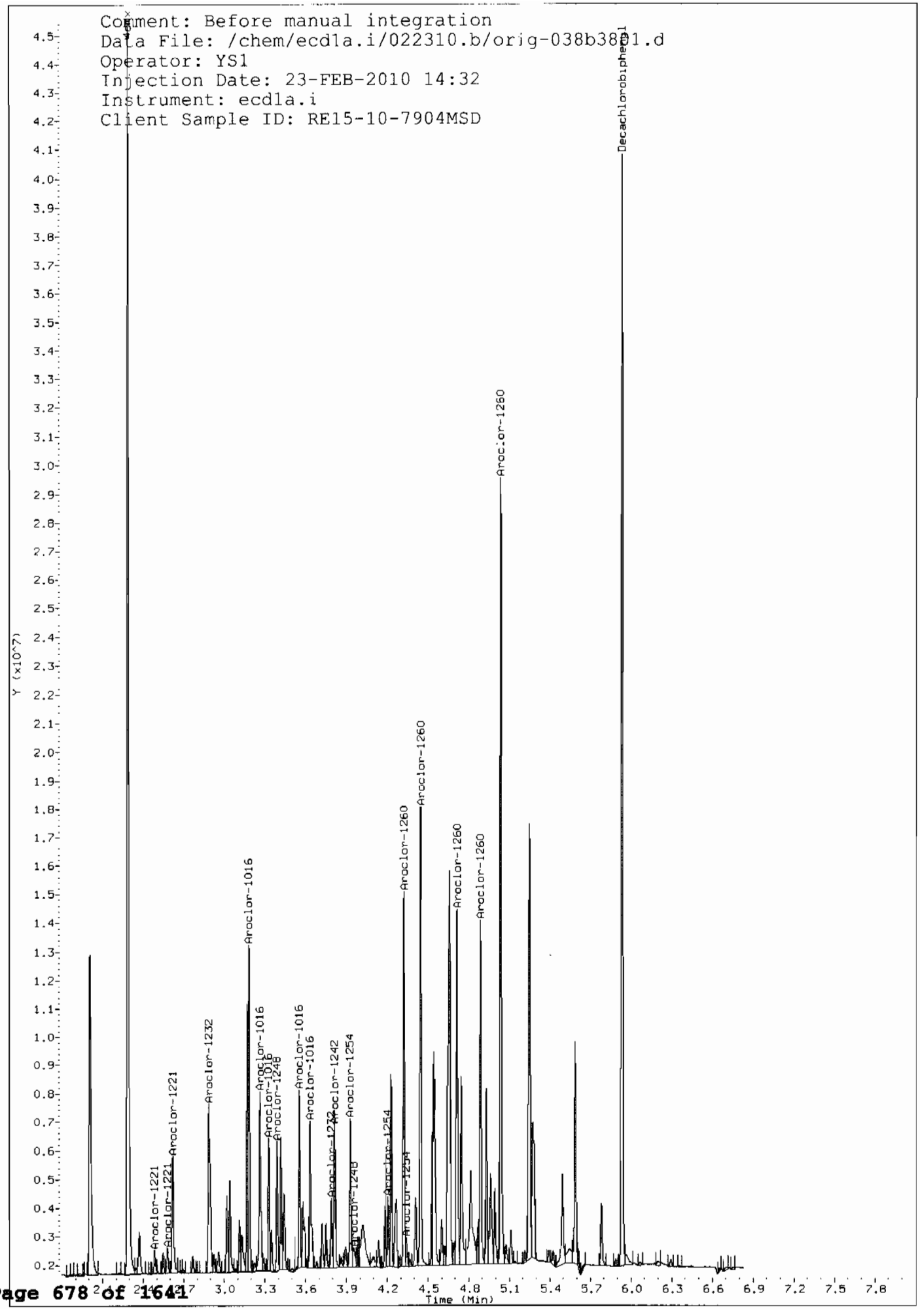
Aroclor-1016
Aroclor-1016
Aroclor-1016
Y (x10^7)
Time (Min)


Comment: Before manual integration
Data File: /chem/ecd1a.i/022310.b/orig-038b3801.d
Operator: YS1
Injection Date: 23-FEB-2010 14:32
Instrument: ecd1a.i
Client Sample ID: RE15-10-7904MSD
Decachlorobiphenyl
Aroclor-1260
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Aroclor-1221
Y (x10^7)
Time (Min)

MISCELLANEOUS DATA

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 02/23/2010 METHOD: ECD1-F-8082-022210.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/022210.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	YS1	22-FEB-2010 05:59		022210	1.0		CLEAN
002f0201.d	WAR100203-60 01	YS1	22-FEB-2010 06:10		022210	1.0		DUSE RE-ICAL
003f0301.d	AR1660-4	YS1	22-FEB-2010 06:20		022210	1.0		DUSE SCREEN
004f0401.d	WAR091219-DDT	YS1	22-FEB-2010 06:31		022210	1.0		DDT ANALOG STANDARD
005f0501.d	WAR100104-32	YS1	22-FEB-2010 06:41		022210	1.0		PATTERN ONLY
006f0601.d	WAR100104-21	YS1	22-FEB-2010 06:52		022210	1.0		PATTERN ONLY
007f0701.d	WAR100104-62	YS1	22-FEB-2010 07:03		022210	1.0		PATTERN ONLY
008f0801.d	WAR100222-01 60	YS1	22-FEB-2010 07:13		022210	1.0		AR1660 I-CAL LEVEL 1
009f0901.d	WAR100222-02 60	YS1	22-FEB-2010 07:24		022210	1.0		AR1660 I-CAL LEVEL 2
010f1001.d	WAR100222-03 60	YS1	22-FEB-2010 07:34		022210	1.0		AR1660 I-CAL LEVEL 3
011f1101.d	WAR100222-04 60	YS1	22-FEB-2010 07:45		022210	1.0		AR1660 I-CAL LEVEL 4
012f1201.d	IAR100104-01	YS1	22-FEB-2010 07:55		022210	1.0		AR1660 I-CAL LEVEL 5
013f1301.d	WAR100203-60 01	YS1	22-FEB-2010 08:06		022210	1.0		PASSED ON BOTH COLUMNS
014f1401.d	WAR100222-05 54	YS1	22-FEB-2010 08:16		022210	1.0		AR1254 I-CAL LEVEL 1
015f1501.d	WAR100222-06 54	YS1	22-FEB-2010 08:27		022210	1.0		AR1254 I-CAL LEVEL 2

Instrument Batch: /chem/ecd1a.i/022210.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	WAR100222-07 54	YS1	22-FEB-2010 08:37		022210		1.0	AR1254 I-CAL LEVEL 3
017f1701.d	WAR100222-08 54	YS1	22-FEB-2010 08:48		022210		1.0	AR1254 I-CAL LEVEL 4
018f1801.d	IAR100219-02	YS1	22-FEB-2010 08:59		022210		1.0	AR1254 I-CAL LEVEL 5
019f1901.d	WAR100219-54	YS1	22-FEB-2010 09:09		022210		1.0	PASSED ON BOTH COLUMNS
020f2001.d	WAR100222-09 42	YS1	22-FEB-2010 09:20		022210		1.0	AR1242 I-CAL LEVEL 1
021f2101.d	WAR100222-10 42	YS1	22-FEB-2010 09:30		022210		1.0	AR1242 I-CAL LEVEL 2
022f2201.d	WAR100222-11 42	YS1	22-FEB-2010 09:41		022210		1.0	AR1242 I-CAL LEVEL 3
023f2301.d	WAR100222-12 42	YS1	22-FEB-2010 09:51		022210		1.0	AR1242 I-CAL LEVEL 4
024f2401.d	IAR100219-01	YS1	22-FEB-2010 10:02		022210		1.0	AR1242 I-CAL LEVEL 5
025f2501.d	WAR100219-42	YS1	22-FEB-2010 10:12		022210		1.0	PASSED ON BOTH COLUMNS
026f2601.d	WAR100222-13 48	YS1	22-FEB-2010 10:23		022210		1.0	AR1248 I-CAL LEVEL 1
027f2701.d	WAR100222-14 48	YS1	22-FEB-2010 10:33		022210		1.0	AR1248 I-CAL LEVEL 2
028f2801.d	WAR100222-15 48	YS1	22-FEB-2010 10:44		022210		1.0	AR1248 I-CAL LEVEL 3
029f2901.d	IAR100211-01	YS1	22-FEB-2010 10:54		022210		1.0	AR1248 I-CAL LEVEL 5
030f3001.d	WAR100222-16	YS1	22-FEB-2010 11:05		022210		1.0	AR1248 I-CAL LEVEL 4
031f3101.d	WAR091217-48	YS1	22-FEB-2010 11:16		022210		1.0	PASSED ON BOTH COLUMNS
032f3201.d	WAR100222-17 68	YS1	22-FEB-2010 11:26		022210		1.0	AR1268 I-CAL LEVEL 1
033f3301.d	WAR100222-18 68	YS1	22-FEB-2010 11:37		022210		1.0	AR1268 I-CAL LEVEL 2
034f3401.d	WAR100222-19 68	YS1	22-FEB-2010 11:47		022210		1.0	AR1268 I-CAL LEVEL 3
035f3501.d	WAR100222-20 68	YS1	22-FEB-2010 11:58		022210		1.0	AR1268 I-CAL LEVEL 4

Instrument Batch: /chem/ecd1a.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	IAR100104-05	YS1	22-FEB-2010 12:08		022210	1.0		AR1268 I-CAL LEVEL 5
037f3701.d	WAR100107-68	YS1	22-FEB-2010 12:19		022210	1.0		PASSED ON BOTH COLUMNS
038f3801.d	WAR100219-99 02	YS1	22-FEB-2010 12:29		022210	1.0		CLEAN
039f3901-1.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1846	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901-2.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1848	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

039f3901.d	1202046866	YS1	22-FEB-2010 12:40	954781	10-1808		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001-1.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1846		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001-2.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1848		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	1202046867	YS1	22-FEB-2010 12:50	954781	10-1808		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
041f4101.d	246968001	YS1	22-FEB-2010 13:01	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
042f4201.d	246968002	YS1	22-FEB-2010 13:14	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	246968003	YS1	22-FEB-2010 13:26	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	246968004	YS1	22-FEB-2010 13:39	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	246968005	YS1	22-FEB-2010 13:51	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	246968006	YS1	22-FEB-2010 14:04	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	246968007	YS1	22-FEB-2010 14:17	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	246968008	YS1	22-FEB-2010 14:30	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	WAR100203-60 02	YS1	22-FEB-2010 14:42		022210		1.0		PASSED ON BOTH COLUMNS
050f5001.d	WAR100219-99 03	YS1	22-FEB-2010 14:53		022210		1.0		CLEAN
051f5101.d	246968009	YS1	22-FEB-2010 15:03	954781	10-1808		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
052f5201.d	246968010	YS1	22-FEB-2010 15:16	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
053f5301.d	246968011	YS1	22-FEB-2010 15:28	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
054f5401.d	246968012	YS1	22-FEB-2010 15:41	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	246968013	YS1	22-FEB-2010 15:54	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
056f5601.d	246968014	YS1	22-FEB-2010 16:06	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	246968015	YS1	22-FEB-2010 16:19	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	246968016	YS1	22-FEB-2010 16:32	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	246968017	YS1	22-FEB-2010 16:44	954781	10-1808	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	247121002	YS1	22-FEB-2010 16:57	954781	10-1846	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

061f6101.d	WAR100203-60 03	YS1	22-FEB-2010 17:10		022210		1.0		PASSED ON BOTH COLUMNS
062f6201.d	WAR100219-99 04	YS1	22-FEB-2010 17:22		022210		1.0		CLEAN
063f6301.d	247123001	YS1	22-FEB-2010 17:35	954781	10-1848		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
064f6401.d	1202046868	YS1	22-FEB-2010 17:48	954781	10-1848		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
065f6501.d	1202046869	YS1	22-FEB-2010 18:00	954781	10-1848		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
066f6601.d	WAR100203-60 04	YS1	22-FEB-2010 18:13		022210		1.0		PASSED ON BOTH COLUMNS
067f6701.d	WAR100219-99 05	YS1	22-FEB-2010 18:26		022210		1.0		CLEAN
068f6801.d	1202048527	YS1	22-FEB-2010 18:38	955479	10-1818		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
069f6901.d	1202048528	YS1	22-FEB-2010 18:51	955479	10-1818		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
070f7001.d	247043003	YS1	22-FEB-2010 19:04	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
071f7101.d	1202048529	YS1	22-FEB-2010 19:16	955479	10-1818		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
072f7201.d	1202048530	YS1	22-FEB-2010 19:29	955479	10-1818	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
073f7301.d	247043004	YS1	22-FEB-2010 19:42	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
074f7401.d	247043005	YS1	22-FEB-2010 19:54	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
075f7501.d	247043006	YS1	22-FEB-2010 20:07	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
076f7601.d	247043007	YS1	22-FEB-2010 20:20	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
077f7701.d	247043008	YS1	22-FEB-2010 20:32	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
078f7801.d	WAR100203-60 05	YS1	22-FEB-2010 20:45		022210	1.0		PASSED ON BOTH COLUMNS
079f7901.d	WAR100219-99 06	YS1	22-FEB-2010 20:58		022210	1.0		CLEAN
080f8001.d	247043009	YS1	22-FEB-2010 21:10	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
081f8101.d	247043010	YS1	22-FEB-2010 21:23	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
082f8201.d	247043011	YS1	22-FEB-2010 21:35	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
083f8301.d	247043012	YS1	22-FEB-2010 21:48	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
084f8401.d	247043013	YS1	22-FEB-2010 22:01	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
085f8501.d	247043014	YS1	22-FEB-2010 22:13	955479	10-1818	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

086f8601.d	247043015	YS1	22-FEB-2010 22:26	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
087f8701.d	247043016	YS1	22-FEB-2010 22:39	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
088f8801.d	247043017	YS1	22-FEB-2010 22:51	955479	10-1818		1.0	LANL	SURROGATE LOW RE
089f8901.d	247043018	YS1	22-FEB-2010 23:04	955479	10-1818		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
090f9001.d	WAR100203-60 C6	YS1	22-FEB-2010 23:17		022210		1.0		PASSED ON BOTH COLUMNS
091f9101.d	WAR100219-99 C7	YS1	22-FEB-2010 23:29		022210		1.0		CLEAN

Instrument Batch: /chem/ecdla.i/022210.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
092f9201.d	1660	YS1	22-FEB-2010 23:42		022210		1.0	DUSE SCREEN
093f9301.d	1660-4	YS1	22-FEB-2010 23:55		022210		1.0	DUSE SCREEN

GEL ORGANIC RUN LOG INSTRUMENT ID: ECD1

DATE: 02/24/2010 METHOD: ECD1-F-8082-022210.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/022310.b Injection Volume: 0.5 ul

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
001f0101.d	WAR100219-99 01	YS1	23-FEB-2010 06:01		022310	1.0		CLEAN
002f0201.d	WAR100203-60 01	YS1	23-FEB-2010 06:11		022310	1.0		PASSED ON BOTH COLUMNS
003f0301.d	WAR100219-54	YS1	23-FEB-2010 06:22		022310	1.0		PASSED ON BOTH COLUMNS
004f0401.d	WAR100219-42	YS1	23-FEB-2010 06:32		022310	1.0		PASSED ON BOTH COLUMNS
005f0501.d	WAR091217-48	YS1	23-FEB-2010 06:43		022310	1.0		PASSED ON BOTH COLUMNS
006f0601.d	WAR100104-32	YS1	23-FEB-2010 06:53		022310	1.0		PATTERN ONLY
007f0701.d	WAR100104-21	YS1	23-FEB-2010 07:04		022310	1.0		PATTERN ONLY
008f0801.d	WAR100104-62	YS1	23-FEB-2010 07:15		022310	1.0		PATTERN ONLY
009f0901.d	WAR100107-68	YS1	23-FEB-2010 07:25		022310	1.0		PATTERN ONLY
010f1001.d	WAR091219-DDT	YS1	23-FEB-2010 07:36		022310	1.0		DDT ANALOG STANDARD
011f1101.d	WAR100219-99 02	YS1	23-FEB-2010 07:46		022310	1.0		CLEAN
012f1201.d	acetone	YS1	23-FEB-2010 07:57		022310	1.0		ACETONE/HEXANE SCREEN FOR PREP
013f1301.d	surroge	YS1	23-FEB-2010 09:22		022310	1.0		SURROFGATE SCREEN FOR PREP
014f1401.d	12C2048657	YS1	23-FEB-2010 09:33	955562	10-1839	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
015f1501.d	12C2048658	YS1	23-FEB-2010 09:46	955562	10-1839	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022310.b Page: 1

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments

016f1601.d	247116002	YS1	23-FEB-2010 09:58	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
017f1701.d	247116003	YS1	23-FEB-2010 10:11	955562	10-1839	10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
018f1801.d	247116004	YS1	23-FEB-2010 10:23	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
019f1901.d	247116006	YS1	23-FEB-2010 10:36	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
020f2001.d	247116007	YS1	23-FEB-2010 10:49	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
021f2101.d	247116008	YS1	23-FEB-2010 11:01	955562	10-1839	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
022f2201.d	247116009	YS1	23-FEB-2010 11:14	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
023f2301.d	247116010	YS1	23-FEB-2010 11:27	955562	10-1839	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
024f2401.d	WAR100203-60 02	YS1	23-FEB-2010 11:39		022310	1.0		PASSED ON BOTH COLUMNS
025f2501.d	WAR100219-99 03	YS1	23-FEB-2010 11:50		022310	1.0		CLEAN
026f2601.d	247116011	YS1	23-FEB-2010 12:00	955562	10-1839	5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
027f2701.d	247116012	YS1	23-FEB-2010 12:13	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
028f2801.d	247116013	YS1	23-FEB-2010 12:26	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
029f2901.d	247116014	YS1	23-FEB-2010 12:38	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
030f3001.d	247116015	YS1	23-FEB-2010 12:51	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
031f3101.d	247116016	YS1	23-FEB-2010 13:03	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
032f3201.d	247116017	YS1	23-FEB-2010 13:16	955562	10-1839	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
033f3301.d	WAR100203-60 03	YS1	23-FEB-2010 13:34		022310	1.0		OK AR1260 1170 ON FRONT. NO HITS ABOVE THE PQL
034f3401.d	WAR100219-99 04	YS1	23-FEB-2010 13:44		022310	1.0		CLEAN
035f3501.d	MS	YS1	23-FEB-2010 13:55	955562	DUSE	1.0	LANL	DUSE WAS MS

Instrument Batch: /chem/ecd1a.i/022310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
036f3601.d	1202048659	YS1	23-FEB-2010 14:07	955562	10-1861	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
037f3701.d	247178001	YS1	23-FEB-2010 14:20	955562	10-1861	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
038f3801.d	1202048660	YS1	23-FEB-2010 14:32	955562	10-1861	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
039f3901.d	247178002	YS1	23-FEB-2010 14:45	955562	10-1861	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
040f4001.d	WAR100203-60 04	YS1	23-FEB-2010 14:58		022310	1.0		PASSED ON BOTH COLUMNS

041f4101.d	WAR100219-99 05	YS1	23-FEB-2010 15:08		022310		1.0		CLEAN
042f4201.d	1202050207	YS1	23-FEB-2010 15:19	956143	10-1896		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
043f4301.d	1202050208	YS1	23-FEB-2010 15:32	956143	10-1896		1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
044f4401.d	247325001	YS1	23-FEB-2010 15:44	956143	10-1896		10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
045f4501.d	247327002	YS1	23-FEB-2010 15:57	956143	10-1898		10.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
046f4601.d	247421002	YS1	23-FEB-2010 16:09	956143	10-1920		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
047f4701.d	247421003	YS1	23-FEB-2010 16:22	956143	10-1920		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
048f4801.d	247421004	YS1	23-FEB-2010 16:35	956143	10-1920		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
049f4901.d	247421005	YS1	23-FEB-2010 16:47	956143	10-1920		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
050f5001.d	247421006	YS1	23-FEB-2010 17:00	956143	10-1920		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
051f5101.d	247421007	YS1	23-FEB-2010 17:13	956143	10-1920		5.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
052f5201.d	WAR100203-60 05	YS1	23-FEB-2010 17:25		022310		1.0		PASSED ON BOTH COLUMNS
053f5301.d	WAR100219-99 06	YS1	23-FEB-2010 17:38		022310		1.0		CLEAN
054f5401.d	247450002	YS1	23-FEB-2010 17:51	956143	10-1937		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
055f5501.d	247450003	YS1	23-FEB-2010 18:03	956143	10-1937		1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER

Instrument Batch: /chem/ecd1a.i/022310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
056f5601.d	247450004	YS1	23-FEB-2010 18:16	956143	10-1937	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
057f5701.d	247450005	YS1	23-FEB-2010 18:29	956143	10-1937	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
058f5801.d	247450006	YS1	23-FEB-2010 18:41	956143	10-1937	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
059f5901.d	247450007	YS1	23-FEB-2010 18:54	956143	10-1937	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
060f6001.d	247552002	YS1	23-FEB-2010 19:07	956143	10-1970	1.0	LANL	UPLOAD BOTH COLUMNS, USE HIGHER
061f6101.d	1202050209	YS1	23-FEB-2010 19:19	956143	10-1970	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
062f6201.d	1202050210	YS1	23-FEB-2010 19:32	956143	10-1970	1.0	QC A	UPLOAD BOTH COLUMNS, USE HIGHER
063f6301.d	WAR100203-60 06	YS1	23-FEB-2010 19:45		022310	1.0		PASSED ON BOTH COLUMNS
064f6401.d	WAR100219-99 07	YS1	23-FEB-2010 19:57		022310	1.0		CLEAN

065f6501.d	1202048627	YS1	23-FEB-2010 20:10	955552	10026	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
066f6601.d	1202048628	YS1	23-FEB-2010 20:22	955552	10026	1.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
067f6701.d	247007001	YS1	23-FEB-2010 20:35	955552	10026	400.0	WSRS	UPLOAD BOTH COLUMNS, USE FRONT
068f6801.d	1202048629	YS1	23-FEB-2010 20:48	955552	10026	400.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
069f6901.d	1202048630	YS1	23-FEB-2010 21:00	955552	10026	400.0	QC A	UPLOAD BOTH COLUMNS, USE FRONT
070f7001.d	247007002	YS1	23-FEB-2010 21:13	955552	10026	500.0	WSRS	UPLOAD BOTH COLUMNS, USE FRONT
071f7101.d	WAR100203-60 07	YS1	23-FEB-2010 21:26		022310	1.0		PASSED ON BOTH COLUMNS
072f7201.d	WAR100219-99 08	YS1	23-FEB-2010 21:38		022310	1.0		CLEAN
073f7301.d	247273002	YS1	23-FEB-2010 21:51	955552	247273	100.0	LAID	UPLOAD BOTH COLUMNS, USE FRONT
074f7401.d	WAR100203-60 08	YS1	23-FEB-2010 22:04		022310	1.0		PASSED ON BOTH COLUMNS
075f7501.d	WAR100219-99 09	YS1	23-FEB-2010 22:16		022310	1.0		CLEAN

Instrument Batch: /chem/ecd1a.i/022310.b

Data File	GEL Lab Sample ID	Analyst	Injection Date/Time	Batch	SDG	Dilution	Client	Comments
076f7601.d	1248	YS1	23-FEB-2010 22:29		022310	1.0		DUSE SCREEN
077f7701.d		YS1	23-FEB-2010 22:44		022310	1.0		DUSE SCREEN
078f7801.d		YS1	23-FEB-2010 22:56		022310	1.0		DUSE SCREEN

Prep Logbook

Extraction of Semivolatile and Nonvolatile Organic Compounds from Soil, Sludge, and Other Miscellaneous Solid Samples

Batch ID: 955560 **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)
1202048657 MB	22–FEB–2010 21:35:00	30	H2SO4/KMn2		2	9	1	0.03333
1202048658 LCS	22–FEB–2010 21:35:00	30	H2SO4/KMn2		2	9	1	0.03333
247116002	22–FEB–2010 21:35:00	30.14	H2SO4/KMn2		2	9	1	0.03318
247116003	22–FEB–2010 21:35:00	30.07	H2SO4/KMn2		2	9	1	0.03326
247116004	22–FEB–2010 21:35:00	30.02	H2SO4/KMn2		2	9	1	0.03331
247116006	22–FEB–2010 21:35:00	30.16	H2SO4/KMn2		2	9	1	0.03316
247116007	22–FEB–2010 21:35:00	30.11	H2SO4/KMn2		2	9	1	0.03321
247116008	22–FEB–2010 21:35:00	30.08	H2SO4/KMn2		2	9	1	0.03324
247116009	22–FEB–2010 21:35:00	30.09	H2SO4/KMn2		2	9	1	0.03323
247116010	22–FEB–2010 21:35:00	30.01	H2SO4/KMn2		2	9	1	0.03332
247116011	22–FEB–2010 21:35:00	30.04	H2SO4/KMn2		2	9	1	0.03329
247116012	22–FEB–2010 21:35:00	30.02	H2SO4/KMn2		2	9	1	0.03331
247116013	22–FEB–2010 21:35:00	30.01	H2SO4/KMn2		2	9	1	0.03332
247116014	22–FEB–2010 21:35:00	30.13	H2SO4/KMn2		2	9	1	0.03319
247116015	22–FEB–2010 21:35:00	30.04	H2SO4/KMn2		2	9	1	0.03329
247116016	22–FEB–2010 21:35:00	30.03	H2SO4/KMn2		2	9	1	0.0333
247116017	22–FEB–2010 21:35:00	30.14	H2SO4/KMn2		2	9	1	0.03318
247178001	22–FEB–2010 21:35:00	30.11	H2SO4/KMn2		2	9	1	0.03321
1202048659 MS (247178001)	22–FEB–2010 21:35:00	30.02	H2SO4/KMn2		2	9	1	0.03331
1202048660 MSD (247178001)	22–FEB–2010 21:35:00	30.17	H2SO4/KMn2		2	9	1	0.03315
247178002	22–FEB–2010 21:35:00	30.01	H2SO4/KMn2		2	9	1	0.03332

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202048658	PCB Laboratory Control	WE100210–07	1	mL
MS	1202048659	PCB Laboratory Control	WE100210–07	1	mL
MSD	1202048660	PCB Laboratory Control	WE100210–07	1	mL
SURR	All	PEST LOW LEVEL SURROGATE 200 UG/L	UE091217–15	1	mL
REGNT	All	Acetone	100211–B1	150	mL
REGNT	All	1:1 sulfuric acid	1260695a	5	mL
REGNT	All	Hexane	1273340–B2	150	mL
REGNT	All	5% Potassium Permanganate	B1202457–F	5	mL
SOURC	All	SODIUM SULFATE	1269268	30	g

Comments:

Clean up Date: 2/22/10

Clean up Initials: AJS

Verified By: AV

Final Solvent: Hexane

Clean Up SOP: GL–OA–E–037

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1861

Sample Analysis

Sample ID	Client ID
247178001	RE15-10-7904
247178002	RE15-10-7903
247178003	RE15-10-7994
247178004	RE15-10-7997
247178005	RE15-10-7998
247178006	RE15-10-8000
247178007	RE15-10-7999
247178008	RE15-10-7995
247178009	RE15-10-7996
247178010	RE15-10-7993
247178011	RE15-10-8064
1202046575	Method Blank (MB) **ICP**
1202046580	Laboratory Control Sample (LCS)
1202046577	247178001(RE15-10-7904L) Serial Dilution (SD)
1202046576	247178001(RE15-10-7904D) Sample Duplicate (DUP)
1202046578	247178001(RE15-10-7904S) Matrix Spike (MS)
1202046579	247178001(RE15-10-7904SD) Matrix Spike Duplicate (MSD)
1202046581	Method Blank (MB) **ICP-MS**
1202046586	Laboratory Control Sample (LCS)
1202046583	247178001(RE15-10-7904L) Serial Dilution (SD)

1202046582	247178001(RE15-10-7904D) Sample Duplicate (DUP)
1202046584	247178001(RE15-10-7904S) Matrix Spike (MS)
1202046585	247178001(RE15-10-7904SD) Matrix Spike Duplicate (MSD)
1202055896	Method Blank (MB) **CVAA**
1202055897	Laboratory Control Sample (LCS)
1202055900	247178001(RE15-10-7904L) Serial Dilution (SD)
1202055898	247178001(RE15-10-7904D) Sample Duplicate (DUP)
1202055899	247178001(RE15-10-7904S) Matrix Spike (MS)
1202055901	247178001(RE15-10-7904SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	954672, 954674, 965482 and 958616
Prep Batch :	954671, 954673, 965478 and 958615
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-ICP was performed on a P E 5300 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 - 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 established acceptance criteria.

Continuing Calibration Verification (CCV) Requirements
All continuing calibration verification (CCV) bracketing this SDG met the acceptance criteria.

Quality Control (QC) Information

Method Blank (MB) Statement
The method blank analyzed with this SDG did not contain analytes of interest above the CRDL, with the exception of zinc. The samples in this SDG contained zinc at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.

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: 247178001 (RE15-10-7904).

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 barium, calcium and potassium, 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 antimony, barium, magnesium, selenium and potassium, 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 exceptions of aluminum, barium, calcium, iron, magnesium, manganese and potassium, as indicated by the "*" qualifiers.

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 247178004 (RE15-10-7997) and 247178011 (RE15-10-8064) required dilutions for uranium in order to bring over range concentrations within the linear calibration range of the instrument. 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: 804461 and 804473. 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:** 3/19/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178001 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7904 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	7170000	ug/Kg	*	7200	21200	21200	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-36-0	Antimony	1060	ug/Kg	UN	349	1060	1060	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-38-2	Arsenic	1.74	mg/kg		0.222	1.11	1.11	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-39-3	Barium	83800	ug/Kg	*N	106	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-41-7	Beryllium	0.893	mg/kg		0.0222	0.111	0.111	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-43-9	Cadmium	227	ug/Kg	J	106	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-70-2	Calcium	1370000	ug/Kg	*N	8470	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-47-3	Chromium	26300	ug/Kg		159	529	529	1	P	HSC	03/11/10 01:34	031010-2	954672
7440-48-4	Cobalt	1300	ug/Kg		159	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-50-8	Copper	6670	ug/Kg		318	1060	1060	1	P	HSC	03/11/10 01:34	031010-2	954672
7439-89-6	Iron	13900000	ug/Kg	*	8470	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-92-1	Lead	7400	ug/Kg		265	1060	1060	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-95-4	Magnesium	1120000	ug/Kg	*N	9000	31800	31800	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-96-5	Manganese	242000	ug/Kg	*	212	1060	1060	1	P	HSC	03/15/10 14:55	031510A-1	954672
7439-97-6	Mercury	11.9	ug/kg	J	4.51	13.3	13.3	1	AV	JXL1	03/04/10 12:04	030410S1-6	958616
7440-02-0	Nickel	4.86	mg/kg		0.111	0.444	0.444	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-09-7	Potassium	774000	ug/Kg	*N	6770	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7782-49-2	Selenium	1.11	mg/kg	UN	0.554	1.11	1.11	2	MS	BAJ	03/13/10 21:36	100313-5	954674
7440-22-4	Silver	529	ug/Kg	U	106	529	529	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-23-5	Sodium	83400	ug/Kg		7410	26500	26500	1	P	HSC	03/15/10 14:55	031510A-1	954672
7440-28-0	Thallium	0.109	mg/kg	J	0.0652	0.217	0.217	2	MS	SKJ	03/16/10 23:10	100316-4	965482
7440-61-1	Uranium	1.07	mg/kg		0.0146	0.0444	0.0444	2	MS	BAJ	03/14/10 09:57	100313-3	954674
7440-62-2	Vanadium	11900	ug/Kg		106	529	529	1	P	HSC	03/11/10 01:34	031010-2	954672
7440-66-6	Zinc	53700	ug/Kg		349	1060	1060	1	P	HSC	03/11/10 01:34	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.528	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.504	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.505	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.514	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178002 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7903 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 81

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6620000	ug/Kg	*	8040	23600	23600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-36-0	Antimony	1180	ug/Kg	UN	390	1180	1180	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-38-2	Arsenic	1.93	mg/kg		0.232	1.16	1.16	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-39-3	Barium	76700	ug/Kg	*N	118	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-41-7	Beryllium	0.746	mg/kg		0.0232	0.116	0.116	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-43-9	Cadmium	327	ug/Kg	J	118	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-70-2	Calcium	1550000	ug/Kg	*N	9460	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-47-3	Chromium	7470	ug/Kg		177	591	591	1	P	HSC	03/11/10 02:09	031010-2	954672
7440-48-4	Cobalt	2880	ug/Kg		177	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-50-8	Copper	7120	ug/Kg		355	1180	1180	1	P	HSC	03/11/10 02:09	031010-2	954672
7439-89-6	Iron	16500000	ug/Kg	*	9460	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-92-1	Lead	15200	ug/Kg		296	1180	1180	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-95-4	Magnesium	1100000	ug/Kg	*N	10000	35500	35500	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-96-5	Manganese	498000	ug/Kg	*	236	1180	1180	1	P	HSC	03/15/10 15:20	031510A-1	954672
7439-97-6	Mercury	8.87	ug/kg	J	4.74	13.9	13.9	1	AV	JXL1	03/04/10 12:14	030410S1-6	958616
7440-02-0	Nickel	4.41	mg/kg		0.116	0.463	0.463	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-09-7	Potassium	964000	ug/Kg	*N	7570	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7782-49-2	Selenium	1.16	mg/kg	UN	0.579	1.16	1.16	2	MS	BAJ	03/13/10 21:54	100313-5	954674
7440-22-4	Silver	591	ug/Kg	U	118	591	591	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-23-5	Sodium	107000	ug/Kg		8280	29600	29600	1	P	HSC	03/15/10 15:20	031510A-1	954672
7440-28-0	Thallium	0.078	mg/kg	J	0.0685	0.228	0.228	2	MS	SKJ	03/16/10 23:31	100316-4	965482
7440-61-1	Uranium	5.11	mg/kg		0.0153	0.0463	0.0463	2	MS	BAJ	03/14/10 10:05	100313-3	954674
7440-62-2	Vanadium	17300	ug/Kg		118	591	591	1	P	HSC	03/11/10 02:09	031010-2	954672
7440-66-6	Zinc	65000	ug/Kg		390	1180	1180	1	P	HSC	03/11/10 02:09	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.525	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.536	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.534	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.544	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178003 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7994 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 89

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5970000	ug/Kg	*	7300	21500	21500	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-36-0	Antimony	1070	ug/Kg	UN	354	1070	1070	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-38-2	Arsenic	1.57	mg/kg		0.224	1.12	1.12	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-39-3	Barium	52300	ug/Kg	*N	107	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-41-7	Beryllium	0.809	mg/kg		0.0224	0.112	0.112	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-43-9	Cadmium	176	ug/Kg	J	107	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-70-2	Calcium	1620000	ug/Kg	*N	8590	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-47-3	Chromium	16800	ug/Kg		161	537	537	1	P	HSC	03/11/10 02:16	031010-2	954672
7440-48-4	Cobalt	1930	ug/Kg		161	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-50-8	Copper	6090	ug/Kg		322	1070	1070	1	P	HSC	03/11/10 02:16	031010-2	954672
7439-89-6	Iron	11700000	ug/Kg	*	8590	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-92-1	Lead	8340	ug/Kg		268	1070	1070	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-95-4	Magnesium	1310000	ug/Kg	*N	9130	32200	32200	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-96-5	Manganese	255000	ug/Kg	*	215	1070	1070	1	P	HSC	03/15/10 15:24	031510A-1	954672
7439-97-6	Mercury	13.7	ug/kg		4.46	13.1	13.1	1	AV	JXL1	03/04/10 12:16	030410S1-6	958616
7440-02-0	Nickel	5.37	mg/kg		0.112	0.447	0.447	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-09-7	Potassium	1040000	ug/Kg	*N	6870	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7782-49-2	Selenium	1.12	mg/kg	UN	0.559	1.12	1.12	2	MS	BAJ	03/13/10 22:05	100313-5	954674
7440-22-4	Silver	537	ug/Kg	U	107	537	537	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-23-5	Sodium	120000	ug/Kg		7520	26800	26800	1	P	HSC	03/15/10 15:24	031510A-1	954672
7440-28-0	Thallium	0.0834	mg/kg	J	0.0647	0.216	0.216	2	MS	SKJ	03/16/10 23:34	100316-4	965482
7440-61-1	Uranium	0.876	mg/kg		0.0148	0.0447	0.0447	2	MS	BAJ	03/14/10 10:07	100313-3	954674
7440-62-2	Vanadium	11300	ug/Kg		107	537	537	1	P	HSC	03/11/10 02:16	031010-2	954672
7440-66-6	Zinc	44500	ug/Kg		354	1070	1070	1	P	HSC	03/11/10 02:16	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.524	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.503	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.515	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.522	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178004 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7997 **LEVEL:** Low **DATE RECEIVED** 16-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	4110000	ug/Kg	*	8460	24900	24900	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-36-0	Antimony	1240	ug/Kg	UN	411	1240	1240	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-38-2	Arsenic	1.44	mg/kg		0.237	1.19	1.19	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-39-3	Barium	41300	ug/Kg	*N	124	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-41-7	Beryllium	0.723	mg/kg		0.0237	0.119	0.119	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-43-9	Cadmium	215	ug/Kg	J	124	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-70-2	Calcium	1060000	ug/Kg	*N	9950	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-47-3	Chromium	5120	ug/Kg		187	622	622	1	P	HSC	03/11/10 02:37	031010-2	954672
7440-48-4	Cobalt	1690	ug/Kg		187	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-50-8	Copper	15900	ug/Kg		373	1240	1240	1	P	HSC	03/11/10 02:37	031010-2	954672
7439-89-6	Iron	8390000	ug/Kg	*	9950	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-92-1	Lead	11000	ug/Kg		311	1240	1240	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-95-4	Magnesium	754000	ug/Kg	*N	10600	37300	37300	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-96-5	Manganese	232000	ug/Kg	*	249	1240	1240	1	P	HSC	03/15/10 15:28	031510A-1	954672
7439-97-6	Mercury	8.18	ug/kg	J	4.79	14.1	14.1	1	AV	JXL1	03/04/10 12:18	030410S1-6	958616
7440-02-0	Nickel	4.01	mg/kg		0.119	0.474	0.474	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-09-7	Potassium	664000	ug/Kg	*N	7960	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7782-49-2	Selenium	1.19	mg/kg	UN	0.593	1.19	1.19	2	MS	BAJ	03/13/10 22:09	100313-5	954674
7440-22-4	Silver	622	ug/Kg	U	124	622	622	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-23-5	Sodium	57100	ug/Kg		8710	31100	31100	1	P	HSC	03/15/10 15:28	031510A-1	954672
7440-28-0	Thallium	0.0999	mg/kg	J	0.072	0.24	0.24	2	MS	SKJ	03/16/10 23:37	100316-4	965482
7440-61-1	Uranium	27.3	mg/kg		0.0782	0.237	0.237	10	MS	BAJ	03/14/10 10:36	100313-3	954674
7440-62-2	Vanadium	8270	ug/Kg		124	622	622	1	P	HSC	03/11/10 02:37	031010-2	954672
7440-66-6	Zinc	35500	ug/Kg		411	1240	1240	1	P	HSC	03/11/10 02:37	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.522	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.548	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.553	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.541	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178005 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7998 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 86

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	5340000	ug/Kg	*	7520	22100	22100	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-36-0	Antimony	1110	ug/Kg	UN	365	1110	1110	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-38-2	Arsenic	1.53	mg/kg		0.22	1.1	1.1	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-39-3	Barium	59500	ug/Kg	*N	111	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-41-7	Beryllium	0.671	mg/kg		0.022	0.11	0.11	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-43-9	Cadmium	212	ug/Kg	J	111	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-70-2	Calcium	1480000	ug/Kg	*N	8850	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-47-3	Chromium	9860	ug/Kg		166	553	553	1	P	HSC	03/11/10 02:44	031010-2	954672
7440-48-4	Cobalt	2190	ug/Kg		166	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-50-8	Copper	6450	ug/Kg		332	1110	1110	1	P	HSC	03/11/10 02:44	031010-2	954672
7439-89-6	Iron	11900000	ug/Kg	*	8850	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-92-1	Lead	12300	ug/Kg		277	1110	1110	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-95-4	Magnesium	1200000	ug/Kg	*N	9400	33200	33200	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-96-5	Manganese	333000	ug/Kg	*	221	1110	1110	1	P	HSC	03/15/10 15:31	031510A-1	954672
7439-97-6	Mercury	5.16	ug/kg	J	4.55	13.4	13.4	1	AV	JXLJ	03/04/10 12:24	030410S1-6	958616
7440-02-0	Nickel	4.27	mg/kg		0.11	0.44	0.44	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-09-7	Potassium	931000	ug/Kg	*N	7080	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7782-49-2	Selenium	1.1	mg/kg	UN	0.55	1.1	1.1	2	MS	BAJ	03/13/10 22:12	100313-5	954674
7440-22-4	Silver	553	ug/Kg	U	111	553	553	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-23-5	Sodium	73600	ug/Kg		7750	27700	27700	1	P	HSC	03/15/10 15:31	031510A-1	954672
7440-28-0	Thallium	0.0768	mg/kg	J	0.069	0.23	0.23	2	MS	SKJ	03/16/10 23:40	100316-4	965482
7440-61-1	Uranium	4.02	mg/kg		0.0145	0.044	0.044	2	MS	BAJ	03/14/10 10:14	100313-3	954674
7440-62-2	Vanadium	12700	ug/Kg		111	553	553	1	P	HSC	03/11/10 02:44	031010-2	954672
7440-66-6	Zinc	50300	ug/Kg		365	1110	1110	1	P	HSC	03/11/10 02:44	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.524	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.527	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.52	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.504	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178006 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-8000 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 88

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	9290000	ug/Kg	*	7160	21100	21100	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-36-0	Antimony	1050	ug/Kg	UN	348	1050	1050	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-38-2	Arsenic	2.19	mg/kg		0.228	1.14	1.14	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-39-3	Barium	87300	ug/Kg	*N	105	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-41-7	Beryllium	0.914	mg/kg		0.0228	0.114	0.114	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-43-9	Cadmium	202	ug/Kg	J	105	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-70-2	Calcium	1980000	ug/Kg	*N	8430	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-47-3	Chromium	11100	ug/Kg		158	527	527	1	P	HSC	03/11/10 02:51	031010-2	954672
7440-48-4	Cobalt	3620	ug/Kg		158	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-50-8	Copper	6540	ug/Kg		316	1050	1050	1	P	HSC	03/11/10 02:51	031010-2	954672
7439-89-6	Iron	13500000	ug/Kg	*	8430	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-92-1	Lead	9820	ug/Kg		263	1050	1050	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-95-4	Magnesium	1880000	ug/Kg	*N	8960	31600	31600	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-96-5	Manganese	275000	ug/Kg	*	211	1050	1050	1	P	HSC	03/15/10 15:35	031510A-1	954672
7439-97-6	Mercury	44.2	ug/kg		4.45	13.1	13.1	1	AV	JXL1	03/04/10 12:26	030410S1-6	958616
7440-02-0	Nickel	8.25	mg/kg		0.114	0.455	0.455	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-09-7	Potassium	1430000	ug/Kg	*N	6740	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7782-49-2	Selenium	1.14	mg/kg	UN	0.569	1.14	1.14	2	MS	BAJ	03/13/10 22:16	100313-5	954674
7440-22-4	Silver	116	ug/Kg	J	105	527	527	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-23-5	Sodium	130000	ug/Kg		7370	26300	26300	1	P	HSC	03/15/10 15:35	031510A-1	954672
7440-28-0	Thallium	0.158	mg/kg	J	0.0659	0.22	0.22	2	MS	SKJ	03/16/10 23:43	100316-4	965482
7440-61-1	Uranium	0.844	mg/kg		0.015	0.0455	0.0455	2	MS	BAJ	03/14/10 10:16	100313-3	954674
7440-62-2	Vanadium	17700	ug/Kg		105	527	527	1	P	HSC	03/11/10 02:51	031010-2	954672
7440-66-6	Zinc	37600	ug/Kg		348	1050	1050	1	P	HSC	03/11/10 02:51	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.541	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.501	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.523	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.519	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178007 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7999 **LEVEL:** Low **DATE RECEIVED** 16-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	4810000	ug/Kg	*	7010	20600	20600	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-36-0	Antimony	1030	ug/Kg	UN	340	1030	1030	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-38-2	Arsenic	1.51	mg/kg		0.21	1.05	1.05	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-39-3	Barium	61200	ug/Kg	*N	103	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-41-7	Beryllium	0.671	mg/kg		0.021	0.105	0.105	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-43-9	Cadmium	194	ug/Kg	J	103	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-70-2	Calcium	1800000	ug/Kg	*N	8250	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-47-3	Chromium	10700	ug/Kg		155	515	515	1	P	HSC	03/11/10 02:59	031010-2	954672
7440-48-4	Cobalt	2540	ug/Kg		155	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-50-8	Copper	13000	ug/Kg		309	1030	1030	1	P	HSC	03/11/10 02:59	031010-2	954672
7439-89-6	Iron	10200000	ug/Kg	*	8250	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-92-1	Lead	20500	ug/Kg		258	1030	1030	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-95-4	Magnesium	1040000	ug/Kg	*N	8760	30900	30900	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-96-5	Manganese	353000	ug/Kg	*	206	1030	1030	1	P	HSC	03/15/10 15:39	031510A-1	954672
7439-97-6	Mercury	8.17	ug/kg	J	4.16	12.2	12.2	1	AV	JXL1	03/04/10 12:28	030410S1-6	958616
7440-02-0	Nickel	3.72	mg/kg		0.105	0.42	0.42	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-09-7	Potassium	960000	ug/Kg	*N	6600	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7782-49-2	Selenium	1.05	mg/kg	UN	0.525	1.05	1.05	2	MS	BAJ	03/13/10 22:20	100313-5	954674
7440-22-4	Silver	515	ug/Kg	U	103	515	515	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-23-5	Sodium	73800	ug/Kg		7220	25800	25800	1	P	HSC	03/15/10 15:39	031510A-1	954672
7440-28-0	Thallium	0.089	mg/kg	J	0.0701	0.234	0.234	2	MS	SKJ	03/16/10 23:52	100316-4	965482
7440-61-1	Uranium	15.5	mg/kg		0.0139	0.042	0.042	2	MS	BAJ	03/14/10 10:17	100313-3	954674
7440-62-2	Vanadium	11600	ug/Kg		103	515	515	1	P	HSC	03/11/10 02:59	031010-2	954672
7440-66-6	Zinc	41000	ug/Kg		340	1030	1030	1	P	HSC	03/11/10 02:59	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.589	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.578	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.596	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.52	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178008 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7995 **LEVEL:** Low **DATE RECEIVED** 16-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	3940000	ug/Kg	*	8390	24700	24700	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-36-0	Antimony	1230	ug/Kg	UN	407	1230	1230	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-38-2	Arsenic	1.38	mg/kg		0.267	1.34	1.34	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-39-3	Barium	47000	ug/Kg	*N	123	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-41-7	Beryllium	0.761	mg/kg		0.0267	0.134	0.134	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-43-9	Cadmium	284	ug/Kg	J	123	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-70-2	Calcium	1360000	ug/Kg	*N	9870	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-47-3	Chromium	5270	ug/Kg		185	617	617	1	P	HSC	03/11/10 03:06	031010-2	954672
7440-48-4	Cobalt	1700	ug/Kg		185	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-50-8	Copper	15600	ug/Kg		370	1230	1230	1	P	HSC	03/11/10 03:06	031010-2	954672
7439-89-6	Iron	10300000	ug/Kg	*	9870	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-92-1	Lead	15200	ug/Kg		308	1230	1230	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-95-4	Magnesium	694000	ug/Kg	*N	10500	37000	37000	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-96-5	Manganese	296000	ug/Kg	*	247	1230	1230	1	P	HSC	03/15/10 15:42	031510A-1	954672
7439-97-6	Mercury	12.6	ug/kg	J	5.41	15.9	15.9	1	AV	JXL1	03/04/10 12:30	030410S1-6	958616
7440-02-0	Nickel	3.39	mg/kg		0.134	0.535	0.535	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-09-7	Potassium	667000	ug/Kg	*N	7900	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7782-49-2	Selenium	1.34	mg/kg	UN	0.668	1.34	1.34	2	MS	BAJ	03/13/10 22:23	100313-5	954674
7440-22-4	Silver	617	ug/Kg	U	123	617	617	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-23-5	Sodium	96200	ug/Kg		8640	30800	30800	1	P	HSC	03/15/10 15:42	031510A-1	954672
7440-28-0	Thallium	0.260	mg/kg	U	0.0779	0.26	0.26	2	MS	SKJ	03/16/10 23:55	100316-4	965482
7440-61-1	Uranium	19.3	mg/kg		0.0176	0.0535	0.0535	2	MS	BAJ	03/14/10 10:19	100313-3	954674
7440-62-2	Vanadium	8710	ug/Kg		123	617	617	1	P	HSC	03/11/10 03:06	031010-2	954672
7440-66-6	Zinc	49400	ug/Kg		407	1230	1230	1	P	HSC	03/11/10 03:06	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.546	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.504	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.508	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.519	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178009 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7996 **LEVEL:** Low **DATE RECEIVED** 16-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	3970000	ug/Kg	*	7310	21500	21500	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-36-0	Antimony	1080	ug/Kg	UN	355	1080	1080	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-38-2	Arsenic	1.36	mg/kg		0.203	1.02	1.02	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-39-3	Barium	33200	ug/Kg	*N	108	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-41-7	Beryllium	0.624	mg/kg		0.0203	0.102	0.102	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-43-9	Cadmium	151	ug/Kg	J	108	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-70-2	Calcium	1010000	ug/Kg	*N	8610	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-47-3	Chromium	8550	ug/Kg		161	538	538	1	P	HSC	03/11/10 03:13	031010-2	954672
7440-48-4	Cobalt	1370	ug/Kg		161	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-50-8	Copper	7330	ug/Kg		323	1080	1080	1	P	HSC	03/11/10 03:13	031010-2	954672
7439-89-6	Iron	9440000	ug/Kg	*	8610	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-92-1	Lead	9260	ug/Kg		269	1080	1080	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-95-4	Magnesium	628000	ug/Kg	*N	9140	32300	32300	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-96-5	Manganese	205000	ug/Kg	*	215	1080	1080	1	P	HSC	03/15/10 15:46	031510A-1	954672
7439-97-6	Mercury	12.7	ug/kg		4.13	12.2	12.2	1	AV	JXL1	03/04/10 12:32	030410S1-6	958616
7440-02-0	Nickel	2.52	mg/kg		0.102	0.407	0.407	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-09-7	Potassium	569000	ug/Kg	*N	6880	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7782-49-2	Selenium	1.02	mg/kg	UN	0.508	1.02	1.02	2	MS	BAJ	03/13/10 22:27	100313-5	954674
7440-22-4	Silver	538	ug/Kg	U	108	538	538	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-23-5	Sodium	90700	ug/Kg		7530	26900	26900	1	P	HSC	03/15/10 15:46	031510A-1	954672
7440-28-0	Thallium	0.228	mg/kg	U	0.0685	0.228	0.228	2	MS	SKJ	03/16/10 23:58	100316-4	965482
7440-61-1	Uranium	6.46	mg/kg		0.0134	0.0407	0.0407	2	MS	BAJ	03/14/10 10:21	100313-3	954674
7440-62-2	Vanadium	7820	ug/Kg		108	538	538	1	P	HSC	03/11/10 03:13	031010-2	954672
7440-66-6	Zinc	41800	ug/Kg		355	1080	1080	1	P	HSC	03/11/10 03:13	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.549	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.581	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.583	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.517	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178010 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-7993 **LEVEL:** Low **DATE RECEIVED** 16-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	3440000	ug/Kg	*	7770	22800	22800	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-36-0	Antimony	1140	ug/Kg	UN	377	1140	1140	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-38-2	Arsenic	1.55	mg/kg		0.241	1.21	1.21	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-39-3	Barium	40700	ug/Kg	*N	114	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-41-7	Beryllium	0.710	mg/kg		0.0241	0.121	0.121	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-43-9	Cadmium	145	ug/Kg	J	114	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-70-2	Calcium	1190000	ug/Kg	*N	9140	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-47-3	Chromium	9210	ug/Kg		171	571	571	1	P	HSC	03/11/10 03:20	031010-2	954672
7440-48-4	Cobalt	1700	ug/Kg		171	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-50-8	Copper	7370	ug/Kg		343	1140	1140	1	P	HSC	03/11/10 03:20	031010-2	954672
7439-89-6	Iron	9580000	ug/Kg	*	9140	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-92-1	Lead	10300	ug/Kg		286	1140	1140	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-95-4	Magnesium	740000	ug/Kg	*N	9710	34300	34300	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-96-5	Manganese	252000	ug/Kg	*	228	1140	1140	1	P	HSC	03/15/10 15:50	031510A-1	954672
7439-97-6	Mercury	8.79	ug/kg	J	4.78	14.1	14.1	1	AV	JXL1	03/04/10 12:33	030410S1-6	958616
7440-02-0	Nickel	4.95	mg/kg		0.121	0.483	0.483	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-09-7	Potassium	776000	ug/Kg	*N	7310	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7782-49-2	Selenium	1.21	mg/kg	UN	0.603	1.21	1.21	2	MS	BAJ	03/13/10 22:31	100313-5	954674
7440-22-4	Silver	141	ug/Kg	J	114	571	571	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-23-5	Sodium	126000	ug/Kg		8000	28600	28600	1	P	HSC	03/15/10 15:50	031510A-1	954672
7440-28-0	Thallium	0.245	mg/kg	U	0.0735	0.245	0.245	2	MS	SKJ	03/17/10 00:02	100316-4	965482
7440-61-1	Uranium	3.08	mg/kg		0.0159	0.0483	0.0483	2	MS	BAJ	03/14/10 10:23	100313-3	954674
7440-62-2	Vanadium	8970	ug/Kg		114	571	571	1	P	HSC	03/11/10 03:20	031010-2	954672
7440-66-6	Zinc	48200	ug/Kg		377	1140	1140	1	P	HSC	03/11/10 03:20	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.546	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.517	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.532	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.509	g	50	mL	03/16/10	AXG2

METALS
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INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247178011 **BASIS:** Dry Weight **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-8064 **LEVEL:** Low **DATE RECEIVED** 16-FEB-10

MATRIX: SOIL **%SOLIDS:** 71

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	6850000	ug/Kg	*	9240	27200	27200	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-36-0	Antimony	1360	ug/Kg	UN	448	1360	1360	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-38-2	Arsenic	2.02	mg/kg		0.282	1.41	1.41	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-39-3	Barium	66700	ug/Kg	*N	136	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-41-7	Beryllium	1.16	mg/kg		0.0282	0.141	0.141	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-43-9	Cadmium	349	ug/Kg	J	136	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-70-2	Calcium	1740000	ug/Kg	*N	10900	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-47-3	Chromium	6580	ug/Kg		204	680	680	1	P	HSC	03/11/10 03:27	031010-2	954672
7440-48-4	Cobalt	2650	ug/Kg		204	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-50-8	Copper	28600	ug/Kg		408	1360	1360	1	P	HSC	03/11/10 03:27	031010-2	954672
7439-89-6	Iron	11800000	ug/Kg	*	10900	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-92-1	Lead	21300	ug/Kg		340	1360	1360	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-95-4	Magnesium	1160000	ug/Kg	*N	11600	40800	40800	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-96-5	Manganese	284000	ug/Kg	*	272	1360	1360	1	P	HSC	03/15/10 15:53	031510A-1	954672
7439-97-6	Mercury	16.4	ug/kg	U	5.58	16.4	16.4	1	AV	JXL1	03/04/10 12:35	030410S1-6	958616
7440-02-0	Nickel	4.83	mg/kg		0.141	0.564	0.564	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-09-7	Potassium	1070000	ug/Kg	*N	8700	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7782-49-2	Selenium	1.41	mg/kg	UN	0.705	1.41	1.41	2	MS	BAJ	03/13/10 22:34	100313-5	954674
7440-22-4	Silver	680	ug/Kg	U	136	680	680	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-23-5	Sodium	61300	ug/Kg		9510	34000	34000	1	P	HSC	03/15/10 15:53	031510A-1	954672
7440-28-0	Thallium	0.274	mg/kg	U	0.0822	0.274	0.274	2	MS	SKJ	03/17/10 00:05	100316-4	965482
7440-61-1	Uranium	30.3	mg/kg		0.0931	0.282	0.282	10	MS	BAJ	03/14/10 10:33	100313-3	954674
7440-62-2	Vanadium	14200	ug/Kg		136	680	680	1	P	HSC	03/11/10 03:27	031010-2	954672
7440-66-6	Zinc	47500	ug/Kg		448	1360	1360	1	P	HSC	03/11/10 03:27	031010-2	954672

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954672	954671	SW846 3050B	0.519	g	50	mL	02/23/10	AXG2
954674	954673	SW846 3050B	0.5	g	50	mL	02/23/10	AXG2
958616	958615	SW846 7471A Prep	0.516	g	30	mL	03/03/10	TXB3
965482	965478	SW846 3050B	0.515	g	50	mL	03/16/10	AXG2

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.18	ug/L	5	ug/L	103.6	90.0 - 110.0	AV	04-MAR-10 10:15	030410S1-6
	Chromium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	10-MAR-10 17:06	031010-2
	Copper	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	10-MAR-10 17:06	031010-2
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	10-MAR-10 17:06	031010-2
	Zinc	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	10-MAR-10 17:06	031010-2
	Arsenic	49.8	ug/L	50	ug/L	99.7	90.0 - 110.0	MS	13-MAR-10 21:03	100313-5
	Beryllium	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	13-MAR-10 21:03	100313-5
	Nickel	49	ug/L	50	ug/L	98	90.0 - 110.0	MS	13-MAR-10 21:03	100313-5
	Selenium	52.1	ug/L	50	ug/L	104.2	90.0 - 110.0	MS	13-MAR-10 21:03	100313-5
	Uranium	51.5	ug/L	50	ug/L	103.1	90.0 - 110.0	MS	14-MAR-10 09:41	100313-3
	Aluminum	5160	ug/L	5000	ug/L	103.2	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Antimony	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Barium	515	ug/L	500	ug/L	103	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Calcium	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Cobalt	516	ug/L	500	ug/L	103.2	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Iron	5060	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Lead	505	ug/L	500	ug/L	101	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Magnesium	5140	ug/L	5000	ug/L	102.8	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Manganese	522	ug/L	500	ug/L	104.3	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Potassium	2520	ug/L	2500	ug/L	100.7	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Silver	258	ug/L	250	ug/L	103.2	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Sodium	2430	ug/L	2500	ug/L	97	90.0 - 110.0	P	15-MAR-10 11:45	031510A-1
	Thallium	49.5	ug/L	50	ug/L	99	90.0 - 110.0	MS	16-MAR-10 21:39	100316-4
CCV01										
	Mercury	5.26	ug/L	5	ug/L	105.2	80.0 - 120.0	AV	04-MAR-10 10:20	030410S1-6
	Chromium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	10-MAR-10 17:55	031010-2
	Copper	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	10-MAR-10 17:55	031010-2
	Vanadium	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	10-MAR-10 17:55	031010-2
	Zinc	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	10-MAR-10 17:55	031010-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Arsenic	49.7	ug/L	50	ug/L	99.3	90.0 – 110.0	MS	13-MAR-10 21:21	100313-5
	Beryllium	49.8	ug/L	50	ug/L	99.6	90.0 – 110.0	MS	13-MAR-10 21:21	100313-5
	Nickel	49.3	ug/L	50	ug/L	98.7	90.0 – 110.0	MS	13-MAR-10 21:21	100313-5
	Selenium	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	13-MAR-10 21:21	100313-5
	Uranium	52.1	ug/L	50	ug/L	104.3	90.0 – 110.0	MS	14-MAR-10 09:50	100313-3
	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Antimony	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Barium	492	ug/L	500	ug/L	98.3	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Cadmium	490	ug/L	500	ug/L	98	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Calcium	4960	ug/L	5000	ug/L	99.2	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Cobalt	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Iron	4830	ug/L	5000	ug/L	96.6	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Lead	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Magnesium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Manganese	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Potassium	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Silver	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Sodium	9760	ug/L	10000	ug/L	97.7	90.0 – 110.0	P	15-MAR-10 12:07	031510A-1
	Thallium	48.2	ug/L	50	ug/L	96.4	90.0 – 110.0	MS	16-MAR-10 21:54	100316-4
CCV02										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	04-MAR-10 10:44	030410S1-6
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	10-MAR-10 18:15	031010-2
	Copper	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	10-MAR-10 18:15	031010-2
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	10-MAR-10 18:15	031010-2
	Zinc	499	ug/L	500	ug/L	99.7	90.0 – 110.0	P	10-MAR-10 18:15	031010-2
	Arsenic	50.1	ug/L	50	ug/L	100.3	90.0 – 110.0	MS	13-MAR-10 21:58	100313-5
	Beryllium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	13-MAR-10 21:58	100313-5
	Nickel	50.1	ug/L	50	ug/L	100.1	90.0 – 110.0	MS	13-MAR-10 21:58	100313-5
	Selenium	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	13-MAR-10 21:58	100313-5
	Uranium	53.8	ug/L	50	ug/L	107.6	90.0 – 110.0	MS	14-MAR-10 10:09	100313-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Aluminum	5070	ug/L	5000	ug/L	101.3	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Antimony	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Barium	495	ug/L	500	ug/L	99	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Cadmium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Calcium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Cobalt	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Lead	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Magnesium	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Manganese	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Potassium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Sodium	9810	ug/L	10000	ug/L	98.1	90.0 – 110.0	P	15-MAR-10 12:26	031510A-1
	Thallium	48.8	ug/L	50	ug/L	97.7	90.0 – 110.0	MS	16-MAR-10 22:03	100316-4
CCV03										
	Mercury	5.34	ug/L	5	ug/L	106.9	80.0 – 120.0	AV	04-MAR-10 11:08	030410S1-6
	Chromium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	10-MAR-10 18:44	031010-2
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	10-MAR-10 18:44	031010-2
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	10-MAR-10 18:44	031010-2
	Zinc	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	10-MAR-10 18:44	031010-2
	Arsenic	49.8	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	13-MAR-10 22:38	100313-5
	Beryllium	52.3	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	13-MAR-10 22:38	100313-5
	Nickel	49.7	ug/L	50	ug/L	99.5	90.0 – 110.0	MS	13-MAR-10 22:38	100313-5
	Selenium	51.3	ug/L	50	ug/L	102.7	90.0 – 110.0	MS	13-MAR-10 22:38	100313-5
	Uranium	52.9	ug/L	50	ug/L	105.7	90.0 – 110.0	MS	14-MAR-10 10:26	100313-3
	Aluminum	4880	ug/L	5000	ug/L	97.7	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Antimony	468	ug/L	500	ug/L	93.5	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Barium	471	ug/L	500	ug/L	94.2	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Cadmium	469	ug/L	500	ug/L	93.7	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Calcium	4740	ug/L	5000	ug/L	94.7	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	470	ug/L	500	ug/L	94	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Iron	4700	ug/L	5000	ug/L	93.9	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Lead	469	ug/L	500	ug/L	93.8	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Magnesium	4720	ug/L	5000	ug/L	94.5	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Manganese	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Potassium	4760	ug/L	5000	ug/L	95.2	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Silver	475	ug/L	500	ug/L	95	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Sodium	9410	ug/L	10000	ug/L	94.1	90.0 – 110.0	P	15-MAR-10 13:00	031510A-1
	Thallium	47.8	ug/L	50	ug/L	95.5	90.0 – 110.0	MS	16-MAR-10 22:18	100316-4
CCV04										
	Mercury	5.28	ug/L	5	ug/L	105.6	80.0 – 120.0	AV	04-MAR-10 11:32	030410S1-6
	Chromium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	10-MAR-10 19:06	031010-2
	Copper	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	10-MAR-10 19:06	031010-2
	Vanadium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	10-MAR-10 19:06	031010-2
	Zinc	489	ug/L	500	ug/L	97.7	90.0 – 110.0	P	10-MAR-10 19:06	031010-2
	Uranium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	14-MAR-10 10:38	100313-3
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Antimony	476	ug/L	500	ug/L	95.2	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Barium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Cadmium	475	ug/L	500	ug/L	94.9	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Calcium	4770	ug/L	5000	ug/L	95.4	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Cobalt	473	ug/L	500	ug/L	94.6	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Iron	5000	ug/L	5000	ug/L	100	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Lead	473	ug/L	500	ug/L	94.5	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Magnesium	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Manganese	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Potassium	4690	ug/L	5000	ug/L	93.8	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Silver	483	ug/L	500	ug/L	96.6	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Sodium	9970	ug/L	10000	ug/L	99.7	90.0 – 110.0	P	15-MAR-10 13:44	031510A-1
	Thallium	48.2	ug/L	50	ug/L	96.4	90.0 – 110.0	MS	16-MAR-10 22:37	100316-4

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV05										
	Mercury	5.32	ug/L	5	ug/L	106.4	80.0 – 120.0	AV	04–MAR–10 11:56	030410S1–6
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	10–MAR–10 20:04	031010–2
	Copper	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	10–MAR–10 20:04	031010–2
	Vanadium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	10–MAR–10 20:04	031010–2
	Zinc	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	10–MAR–10 20:04	031010–2
	Aluminum	4800	ug/L	5000	ug/L	96	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Antimony	495	ug/L	500	ug/L	99.1	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Barium	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Calcium	4890	ug/L	5000	ug/L	97.8	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Cobalt	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Iron	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Lead	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Magnesium	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Manganese	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Potassium	4690	ug/L	5000	ug/L	93.8	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Silver	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Sodium	10700	ug/L	10000	ug/L	107.4	90.0 – 110.0	P	15–MAR–10 13:58	031510A–1
	Thallium	49.7	ug/L	50	ug/L	99.4	90.0 – 110.0	MS	16–MAR–10 22:58	100316–4
CCV06										
	Mercury	5.14	ug/L	5	ug/L	102.9	80.0 – 120.0	AV	04–MAR–10 12:20	030410S1–6
	Chromium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	10–MAR–10 20:53	031010–2
	Copper	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	10–MAR–10 20:53	031010–2
	Vanadium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	10–MAR–10 20:53	031010–2
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	10–MAR–10 20:53	031010–2
	Aluminum	5030	ug/L	5000	ug/L	100.6	90.0 – 110.0	P	15–MAR–10 14:41	031510A–1
	Antimony	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	15–MAR–10 14:41	031510A–1
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	15–MAR–10 14:41	031510A–1
	Cadmium	500	ug/L	500	ug/L	99.9	90.0 – 110.0	P	15–MAR–10 14:41	031510A–1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 – 110.0	P	15–MAR–10 14:41	031510A–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Cobalt	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Iron	5180	ug/L	5000	ug/L	103.5	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Lead	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Magnesium	5110	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Manganese	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Potassium	4870	ug/L	5000	ug/L	97.5	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Silver	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Sodium	10300	ug/L	10000	ug/L	103	90.0 - 110.0	P	15-MAR-10 14:41	031510A-1
	Thallium	49.9	ug/L	50	ug/L	99.9	90.0 - 110.0	MS	16-MAR-10 23:25	100316-4
CCV07										
	Mercury	5.27	ug/L	5	ug/L	105.4	80.0 - 120.0	AV	04-MAR-10 12:43	030410S1-6
	Chromium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	10-MAR-10 21:56	031010-2
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	10-MAR-10 21:56	031010-2
	Vanadium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	10-MAR-10 21:56	031010-2
	Zinc	491	ug/L	500	ug/L	98.1	90.0 - 110.0	P	10-MAR-10 21:56	031010-2
	Aluminum	4980	ug/L	5000	ug/L	99.6	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Antimony	498	ug/L	500	ug/L	99.5	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Barium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Calcium	5010	ug/L	5000	ug/L	100.1	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Cobalt	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Iron	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Lead	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Manganese	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Potassium	4800	ug/L	5000	ug/L	96	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Silver	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Sodium	10400	ug/L	10000	ug/L	104.1	90.0 - 110.0	P	15-MAR-10 15:13	031510A-1
	Thallium	50.2	ug/L	50	ug/L	100.4	90.0 - 110.0	MS	16-MAR-10 23:46	100316-4

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
CCV08										
	Chromium	493	ug/L	500	ug/L	98.7	90.0 – 110.0	P	10-MAR-10 23:01	031010-2
	Copper	487	ug/L	500	ug/L	97.4	90.0 – 110.0	P	10-MAR-10 23:01	031010-2
	Vanadium	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	10-MAR-10 23:01	031010-2
	Zinc	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	10-MAR-10 23:01	031010-2
	Aluminum	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Antimony	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Barium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Cadmium	497	ug/L	500	ug/L	99.3	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Calcium	4990	ug/L	5000	ug/L	99.8	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Cobalt	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Iron	5100	ug/L	5000	ug/L	102	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Lead	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Magnesium	4970	ug/L	5000	ug/L	99.5	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Manganese	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Potassium	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Silver	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Sodium	10300	ug/L	10000	ug/L	103.2	90.0 – 110.0	P	15-MAR-10 15:57	031510A-1
	Thallium	50.3	ug/L	50	ug/L	100.6	90.0 – 110.0	MS	17-MAR-10 00:08	100316-4
CCV09										
	Chromium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	11-MAR-10 00:04	031010-2
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	11-MAR-10 00:04	031010-2
	Vanadium	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	11-MAR-10 00:04	031010-2
	Zinc	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	11-MAR-10 00:04	031010-2
CCV10										
	Chromium	542	ug/L	500	ug/L	108.3	90.0 – 110.0	P	11-MAR-10 01:08	031010-2
	Copper	490	ug/L	500	ug/L	98	90.0 – 110.0	P	11-MAR-10 01:08	031010-2
	Vanadium	529	ug/L	500	ug/L	105.7	90.0 – 110.0	P	11-MAR-10 01:08	031010-2
	Zinc	541	ug/L	500	ug/L	108.2	90.0 – 110.0	P	11-MAR-10 01:08	031010-2
CCV11										
	Chromium	546	ug/L	500	ug/L	109.2	90.0 – 110.0	P	11-MAR-10 02:24	031010-2

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Copper	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	11-MAR-10 02:24	031010-2
	Vanadium	535	ug/L	500	ug/L	107	90.0 – 110.0	P	11-MAR-10 02:24	031010-2
	Zinc	548	ug/L	500	ug/L	109.5	90.0 – 110.0	P	11-MAR-10 02:24	031010-2
CCV12										
	Chromium	542	ug/L	500	ug/L	108.5	90.0 – 110.0	P	11-MAR-10 03:34	031010-2
	Copper	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	11-MAR-10 03:34	031010-2
	Vanadium	531	ug/L	500	ug/L	106.2	90.0 – 110.0	P	11-MAR-10 03:34	031010-2
	Zinc	543	ug/L	500	ug/L	108.6	90.0 – 110.0	P	11-MAR-10 03:34	031010-2

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.193	ug/L	.2	ug/L	96.5	70.0 – 130.0	AV	04–MAR–10 10:18	030410S1–6
	Nickel	2.31	ug/L	2	ug/L	115.6	70.0 – 130.0	MS	13–MAR–10 21:11	100313–5
	Arsenic	5.72	ug/L	5	ug/L	114.4	70.0 – 130.0	MS	13–MAR–10 21:11	100313–5
	Selenium	5.78	ug/L	5	ug/L	115.5	70.0 – 130.0	MS	13–MAR–10 21:11	100313–5
	Beryllium	.535	ug/L	.5	ug/L	107	70.0 – 130.0	MS	13–MAR–10 21:11	100313–5
	Uranium	.212	ug/L	.2	ug/L	106	70.0 – 130.0	MS	14–MAR–10 09:45	100313–3
	Thallium	1.25	ug/L	1	ug/L	124.8	70.0 – 130.0	MS	16–MAR–10 21:45	100316–4
PQL01										
	Copper	9.95	ug/L	10	ug/L	99.5	70.0 – 130.0	P	10–MAR–10 17:21	031010–2
	Zinc	12	ug/L	10	ug/L	120.2	70.0 – 130.0	P	10–MAR–10 17:21	031010–2
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 – 130.0	P	10–MAR–10 17:21	031010–2
	Vanadium	4.54	ug/L	5	ug/L	90.9	70.0 – 130.0	P	10–MAR–10 17:21	031010–2
	Aluminum	209	ug/L	200	ug/L	104.5	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Lead	11.9	ug/L	10	ug/L	118.9	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Manganese	9.82	ug/L	10	ug/L	98.2	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Silver	4.89	ug/L	5	ug/L	97.8	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Antimony	9.84	ug/L	10	ug/L	98.4	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Cadmium	4.74	ug/L	5	ug/L	94.8	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Calcium	204	ug/L	200	ug/L	101.9	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Cobalt	4.42	ug/L	5	ug/L	88.4	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Barium	5.15	ug/L	5	ug/L	103	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Sodium	285	ug/L	300	ug/L	95.1	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Potassium	157	ug/L	150	ug/L	104.8	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Magnesium	293	ug/L	300	ug/L	97.5	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
	Iron	99.7	ug/L	100	ug/L	99.7	70.0 – 130.0	P	15–MAR–10 11:52	031510A–1
PQL02										
	Calcium	194	ug/L	200	ug/L	97.2	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Aluminum	207	ug/L	200	ug/L	103.5	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Iron	111	ug/L	100	ug/L	111.4	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Lead	11	ug/L	10	ug/L	109.8	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1

METALS
–2b–
CRDL Standard for AA & ICP

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source

ICP CRDL Standard Source

Instrument ID: ICPMS3,ICPMS4,ICPMS5,MER536,OPTIMA1,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
	Magnesium	300	ug/L	300	ug/L	99.9	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Manganese	10.5	ug/L	10	ug/L	105.1	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Potassium	134	ug/L	150	ug/L	89.6	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Silver	5.27	ug/L	5	ug/L	105.4	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Sodium	363	ug/L	300	ug/L	121	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Antimony	12.6	ug/L	10	ug/L	125.8	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Barium	4.96	ug/L	5	ug/L	99.3	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Cadmium	4.71	ug/L	5	ug/L	94.3	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1
	Cobalt	4.75	ug/L	5	ug/L	95	70.0 – 130.0	P	15–MAR–10 14:01	031510A–1

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	–0.092	+/–.2	J	0.068	0.2	SOL	AV	04–MAR–10 10:16	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 17:13	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 17:13	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 17:13	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 17:13	031010–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–MAR–10 21:07	100313–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–MAR–10 21:07	100313–5
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–MAR–10 21:07	100313–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–MAR–10 21:07	100313–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	14–MAR–10 09:43	100313–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 11:49	031510A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–MAR–10 11:49	031510A–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 11:49	031510A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 11:49	031510A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 11:49	031510A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	15–MAR–10 11:49	031510A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 11:49	031510A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	15–MAR–10 11:49	031510A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 11:49	031510A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 11:49	031510A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	15–MAR–10 11:49	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 11:49	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 11:49	031510A–1
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	16–MAR–10 21:42	100316–4
CCB01										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	04–MAR–10 10:22	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 18:02	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 18:02	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 18:02	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 18:02	031010–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–MAR–10 21:25	100313–5

Metals
–3a–
Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–MAR–10 21:25	100313–5
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–MAR–10 21:25	100313–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–MAR–10 21:25	100313–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	14–MAR–10 09:52	100313–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 12:11	031510A–1
	Antimony	7.46	+/–10	J	3.3	10.0	SOL	P	15–MAR–10 12:11	031510A–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 12:11	031510A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 12:11	031510A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 12:11	031510A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	15–MAR–10 12:11	031510A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 12:11	031510A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	15–MAR–10 12:11	031510A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 12:11	031510A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 12:11	031510A–1
	Potassium	105.87	+/–250	J	64.0	250	SOL	P	15–MAR–10 12:11	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 12:11	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 12:11	031510A–1
	Thallium	0.306	+/–1	J	0.3	1.0	SOL	MS	16–MAR–10 21:57	100316–4
CCB02										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	04–MAR–10 10:46	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 18:22	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 18:22	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 18:22	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 18:22	031010–2
	Arsenic	1.0	+/–5	U	1.0	5.0	SOL	MS	13–MAR–10 22:01	100313–5
	Beryllium	0.1	+/–.5	U	0.1	0.5	SOL	MS	13–MAR–10 22:01	100313–5
	Nickel	0.5	+/–2	U	0.5	2.0	SOL	MS	13–MAR–10 22:01	100313–5
	Selenium	2.5	+/–5	U	2.5	5.0	SOL	MS	13–MAR–10 22:01	100313–5
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	14–MAR–10 10:10	100313–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 12:29	031510A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–MAR–10 12:29	031510A–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 12:29	031510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 12:29	031510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	15-MAR-10 12:29	031510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	15-MAR-10 12:29	031510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	15-MAR-10 12:29	031510A-1
	Lead	4.43	+/-10	J	2.5	10.0	SOL	P	15-MAR-10 12:29	031510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	15-MAR-10 12:29	031510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	15-MAR-10 12:29	031510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	15-MAR-10 12:29	031510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 12:29	031510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	15-MAR-10 12:29	031510A-1
	Thallium	0.525	+/-1	J	0.3	1.0	SOL	MS	16-MAR-10 22:06	100316-4
CCB03										
	Mercury	0.068	+/-.2	U	0.068	0.2	SOL	AV	04-MAR-10 11:11	030410S1-6
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	10-MAR-10 18:51	031010-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	10-MAR-10 18:51	031010-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	10-MAR-10 18:51	031010-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	10-MAR-10 18:51	031010-2
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	13-MAR-10 22:41	100313-5
	Beryllium	0.1	+/-.5	U	0.1	0.5	SOL	MS	13-MAR-10 22:41	100313-5
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	13-MAR-10 22:41	100313-5
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	13-MAR-10 22:41	100313-5
	Uranium	0.066	+/-.2	U	0.066	0.2	SOL	MS	14-MAR-10 10:28	100313-3
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	15-MAR-10 13:04	031510A-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	15-MAR-10 13:04	031510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 13:04	031510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 13:04	031510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	15-MAR-10 13:04	031510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	15-MAR-10 13:04	031510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	15-MAR-10 13:04	031510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	15-MAR-10 13:04	031510A-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 13:04	031510A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 13:04	031510A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	15–MAR–10 13:04	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 13:04	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 13:04	031510A–1
	Thallium	0.318	+/–1	J	0.3	1.0	SOL	MS	16–MAR–10 22:21	100316–4
CCB04										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	04–MAR–10 11:34	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 19:13	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 19:13	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 19:13	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 19:13	031010–2
	Uranium	0.066	+/–.2	U	0.066	0.2	SOL	MS	14–MAR–10 10:39	100313–3
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 13:48	031510A–1
	Antimony	4.33	+/–10	J	3.3	10.0	SOL	P	15–MAR–10 13:48	031510A–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 13:48	031510A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 13:48	031510A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 13:48	031510A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	15–MAR–10 13:48	031510A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 13:48	031510A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	15–MAR–10 13:48	031510A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 13:48	031510A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 13:48	031510A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	15–MAR–10 13:48	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 13:48	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 13:48	031510A–1
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	16–MAR–10 22:40	100316–4
CCB05										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	04–MAR–10 11:58	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 20:11	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 20:11	031010–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 20:11	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 20:11	031010–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 14:05	031510A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–MAR–10 14:05	031510A–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 14:05	031510A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 14:05	031510A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 14:05	031510A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	15–MAR–10 14:05	031510A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 14:05	031510A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	15–MAR–10 14:05	031510A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 14:05	031510A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 14:05	031510A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	15–MAR–10 14:05	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 14:05	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 14:05	031510A–1
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	16–MAR–10 23:01	100316–4
CCB06										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	04–MAR–10 12:22	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 21:00	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 21:00	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 21:00	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 21:00	031010–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 14:44	031510A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–MAR–10 14:44	031510A–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 14:44	031510A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 14:44	031510A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 14:44	031510A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	15–MAR–10 14:44	031510A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 14:44	031510A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	15–MAR–10 14:44	031510A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 14:44	031510A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 14:44	031510A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	15–MAR–10 14:44	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 14:44	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 14:44	031510A–1
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	16–MAR–10 23:28	100316–4
CCB07										
	Mercury	0.068	+/–.2	U	0.068	0.2	SOL	AV	04–MAR–10 12:45	030410S1–6
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 22:03	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 22:03	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 22:03	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 22:03	031010–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 15:17	031510A–1
	Antimony	3.3	+/–10	U	3.3	10.0	SOL	P	15–MAR–10 15:17	031510A–1
	Barium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 15:17	031510A–1
	Cadmium	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 15:17	031510A–1
	Calcium	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 15:17	031510A–1
	Cobalt	1.5	+/–5	U	1.5	5.0	SOL	P	15–MAR–10 15:17	031510A–1
	Iron	80.0	+/–250	U	80.0	250	SOL	P	15–MAR–10 15:17	031510A–1
	Lead	2.5	+/–10	U	2.5	10.0	SOL	P	15–MAR–10 15:17	031510A–1
	Magnesium	85.0	+/–300	U	85.0	300	SOL	P	15–MAR–10 15:17	031510A–1
	Manganese	2.0	+/–10	U	2.0	10.0	SOL	P	15–MAR–10 15:17	031510A–1
	Potassium	64.0	+/–250	U	64.0	250	SOL	P	15–MAR–10 15:17	031510A–1
	Silver	1.0	+/–5	U	1.0	5.0	SOL	P	15–MAR–10 15:17	031510A–1
	Sodium	70.0	+/–250	U	70.0	250	SOL	P	15–MAR–10 15:17	031510A–1
	Thallium	0.3	+/–1	U	0.3	1.0	SOL	MS	16–MAR–10 23:49	100316–4
CCB08										
	Chromium	1.5	+/–5	U	1.5	5.0	SOL	P	10–MAR–10 23:08	031010–2
	Copper	3.0	+/–10	U	3.0	10.0	SOL	P	10–MAR–10 23:08	031010–2
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	10–MAR–10 23:08	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	10–MAR–10 23:08	031010–2
	Aluminum	68.0	+/–200	U	68.0	200	SOL	P	15–MAR–10 16:01	031510A–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Antimony	3.73	+/-10	J	3.3	10.0	SOL	P	15-MAR-10 16:01	031510A-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 16:01	031510A-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 16:01	031510A-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	15-MAR-10 16:01	031510A-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	15-MAR-10 16:01	031510A-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	15-MAR-10 16:01	031510A-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	15-MAR-10 16:01	031510A-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	15-MAR-10 16:01	031510A-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	15-MAR-10 16:01	031510A-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	15-MAR-10 16:01	031510A-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	15-MAR-10 16:01	031510A-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	15-MAR-10 16:01	031510A-1
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	17-MAR-10 00:11	100316-4
CCB09										
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-MAR-10 00:11	031010-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-MAR-10 00:11	031010-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-MAR-10 00:11	031010-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-MAR-10 00:11	031010-2
CCB10										
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-MAR-10 01:15	031010-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-MAR-10 01:15	031010-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-MAR-10 01:15	031010-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-MAR-10 01:15	031010-2
CCB11										
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-MAR-10 02:31	031010-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-MAR-10 02:31	031010-2
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	11-MAR-10 02:31	031010-2
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	11-MAR-10 02:31	031010-2
CCB12										
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	11-MAR-10 03:41	031010-2
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	11-MAR-10 03:41	031010-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Vanadium	1.0	+/–5	U	1.0	5.0	SOL	P	11–MAR–10 03:41	031010–2
	Zinc	3.3	+/–10	U	3.3	10.0	SOL	P	11–MAR–10 03:41	031010–2

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10–1861
Contract: LANL01004
Matrix: SOIL

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202046575								
	Aluminum	6710	ug/Kg	+/–19700	U	P	6710	19700
	Antimony	325	ug/Kg	+/–986	U	P	325	986
	Barium	98.6	ug/Kg	+/–493	U	P	98.6	493
	Calcium	7890	ug/Kg	+/–24700	U	P	7890	24700
	Cobalt	148	ug/Kg	+/–493	U	P	148	493
	Iron	7890	ug/Kg	+/–24700	U	P	7890	24700
	Magnesium	8380	ug/Kg	+/–29600	U	P	8380	29600
	Potassium	6310	ug/Kg	+/–24700	U	P	6310	24700
	Sodium	6900	ug/Kg	+/–24700	U	P	6900	24700
	Zinc	1630	ug/Kg	+/–986		P	325	986
	Vanadium	98.6	ug/Kg	+/–493	U	P	98.6	493
	Silver	98.6	ug/Kg	+/–493	U	P	98.6	493
	Manganese	197	ug/Kg	+/–986	U	P	197	986
	Lead	397	ug/Kg	+/–986	J	P	247	986
	Copper	296	ug/Kg	+/–986	U	P	296	986
	Chromium	148	ug/Kg	+/–493	U	P	148	493
	Cadmium	98.6	ug/Kg	+/–493	U	P	98.6	493
1202046581								
	Arsenic	0.192	mg/kg	+/–0.96	U	MS	0.192	0.96
	Nickel	0.096	mg/kg	+/–0.384	U	MS	0.096	0.384
	Selenium	0.48	mg/kg	+/–0.96	U	MS	0.48	0.96
	Uranium	0.0127	mg/kg	+/–0.0384	U	MS	0.0127	0.0384
	Thallium	0.0581	mg/kg	+/–0.194	U	MS	0.0581	0.194
	Beryllium	0.0192	mg/kg	+/–0.096	U	MS	0.0192	0.096
1202055896								
	Mercury	–7.51	ug/kg	+/–10.8	J	AV	3.68	10.8

METALS
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Interference Check Sample

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA1

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	521000	ug/L	500000	ug/L	104	80.0 – 120.0	15–MAR–10 11:56	031510A–1
	Antimony	–5.19	ug/L					15–MAR–10 11:56	031510A–1
	Barium	7.77	ug/L					15–MAR–10 11:56	031510A–1
	Cadmium	4.35	ug/L					15–MAR–10 11:56	031510A–1
	Calcium	489000	ug/L	500000	ug/L	97.8	80.0 – 120.0	15–MAR–10 11:56	031510A–1
	Cobalt	2.58	ug/L					15–MAR–10 11:56	031510A–1
	Iron	187000	ug/L	200000	ug/L	93.4	80.0 – 120.0	15–MAR–10 11:56	031510A–1
	Lead	3.14	ug/L					15–MAR–10 11:56	031510A–1
	Magnesium	495000	ug/L	500000	ug/L	99	80.0 – 120.0	15–MAR–10 11:56	031510A–1
	Manganese	0.493	ug/L					15–MAR–10 11:56	031510A–1
	Potassium	–83.1	ug/L					15–MAR–10 11:56	031510A–1
	Silver	–1.32	ug/L					15–MAR–10 11:56	031510A–1
	Sodium	3.37	ug/L					15–MAR–10 11:56	031510A–1
ICSAB01									
	Aluminum	522000	ug/L	500000	ug/L	104	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Antimony	532	ug/L	500	ug/L	106	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Barium	504	ug/L	500	ug/L	101	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Cadmium	470	ug/L	500	ug/L	94	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Calcium	490000	ug/L	500000	ug/L	98	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Cobalt	451	ug/L	500	ug/L	90.2	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Iron	187000	ug/L	200000	ug/L	93.5	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Lead	496	ug/L	500	ug/L	99.2	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Magnesium	496000	ug/L	500000	ug/L	99.3	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Manganese	491	ug/L	500	ug/L	98.2	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Potassium	5240	ug/L	5000	ug/L	105	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Silver	262	ug/L	250	ug/L	105	80.0 – 120.0	15–MAR–10 11:59	031510A–1
	Sodium	5150	ug/L	5000	ug/L	103	80.0 – 120.0	15–MAR–10 11:59	031510A–1

METALS
–4–
Interference Check Sample

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Chromium	–1.2	ug/L					10–MAR–10 17:27	031010–2
	Copper	2.5	ug/L					10–MAR–10 17:27	031010–2
	Vanadium	0.158	ug/L					10–MAR–10 17:27	031010–2
	Zinc	0.584	ug/L					10–MAR–10 17:27	031010–2
ICSAB01									
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	10–MAR–10 17:34	031010–2
	Copper	561	ug/L	500	ug/L	112	80.0 – 120.0	10–MAR–10 17:34	031010–2
	Vanadium	516	ug/L	500	ug/L	103	80.0 – 120.0	10–MAR–10 17:34	031010–2
	Zinc	499	ug/L	500	ug/L	99.8	80.0 – 120.0	10–MAR–10 17:34	031010–2

METALS
–4–
Interference Check Sample

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Uranium	0.21	ug/L					14–MAR–10 09:46	100313–3
ICSAB01									
	Uranium	21.6	ug/L	20	ug/L	108	80.0 – 120.0	14–MAR–10 09:48	100313–3

METALS
–4–
Interference Check Sample

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS4

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Thallium	0.072	ug/L					16–MAR–10 21:48	100316–4
ICSAB01									
	Thallium	18.5	ug/L	20	ug/L	92.5	80.0 – 120.0	16–MAR–10 21:51	100316–4

METALS
–4–
Interference Check Sample

SDG No: 10–1861

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Arsenic	–0.247	ug/L					13–MAR–10 21:14	100313–5
	Beryllium	0.074	ug/L					13–MAR–10 21:14	100313–5
	Nickel	3.29	ug/L					13–MAR–10 21:14	100313–5
	Selenium	–1.57	ug/L					13–MAR–10 21:14	100313–5
ICSAB01									
	Arsenic	20.8	ug/L	20	ug/L	104	80.0 – 120.0	13–MAR–10 21:18	100313–5
	Beryllium	18.9	ug/L	20	ug/L	94.6	80.0 – 120.0	13–MAR–10 21:18	100313–5
	Nickel	22.7	ug/L	23.31	ug/L	97.2	80.0 – 120.0	13–MAR–10 21:18	100313–5
	Selenium	19.9	ug/L	20	ug/L	99.5	80.0 – 120.0	13–MAR–10 21:18	100313–5

METALS
-5a-

Matrix Spike Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 247178001 **Spike ID:** 1202046578

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/Kg		10500000		7170000		552000	605	N/A	P
Antimony	ug/Kg	75-125	46800		349	U	55200	84.7		P
Barium	ug/Kg	75-125	114000		83800		55200	54.7	N	P
Cadmium	ug/Kg	75-125	57300		227	J	55200	103		P
Calcium	ug/Kg	75-125	1520000		1370000		552000	27.9	N	P
Chromium	ug/Kg	75-125	78000		26300		55200	93.7		P
Cobalt	ug/Kg	75-125	55400		1300		55200	98		P
Copper	ug/Kg	75-125	61100		6670		55200	98.6		P
Iron	ug/Kg		13400000		13900000		552000	-79.5	N/A	P
Lead	ug/Kg	75-125	65200		7400		55200	105		P
Magnesium	ug/Kg	75-125	1800000		1120000		552000	122		P
Manganese	ug/Kg		315000		242000		55200	132	N/A	P
Potassium	ug/Kg	75-125	1500000		774000		552000	132	N	P
Silver	ug/Kg	75-125	57800		106	U	55200	105		P
Sodium	ug/Kg	75-125	647000		83400		552000	102		P
Vanadium	ug/Kg	75-125	66700		11900		55200	99.1		P
Zinc	ug/Kg	75-125	107000		53700		55200	95.8		P

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 247178001 **Spike ID:** 1202046579

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/Kg	75-125	40200		349	U	54600	73.7	N	P
Barium	ug/Kg	75-125	324000		83800		54600	441	N	P
Cadmium	ug/Kg	75-125	57100		227	J	54600	104		P
Calcium	ug/Kg	75-125	2040000		1370000		546000	124		P
Chromium	ug/Kg	75-125	89100		26300		54600	115		P
Cobalt	ug/Kg	75-125	56000		1300		54600	100		P
Copper	ug/Kg	75-125	63800		6670		54600	105		P
Iron	ug/Kg		17300000		13900000		546000	631	N/A	P
Lead	ug/Kg	75-125	69500		7400		54600	114		P
Magnesium	ug/Kg	75-125	2310000		1120000		546000	218	N	P
Manganese	ug/Kg		400000		242000		54600	290	N/A	P
Potassium	ug/Kg	75-125	1840000		774000		546000	195	N	P
Silver	ug/Kg	75-125	57700		106	U	54600	106		P
Sodium	ug/Kg	75-125	667000		83400		546000	107		P
Vanadium	ug/Kg	75-125	71200		11900		54600	109		P
Zinc	ug/Kg	75-125	120000		53700		54600	122		P
Aluminum	ug/Kg		14600000		7170000		546000	1360	N/A	P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 247178001 **Spike ID:** 1202046584

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75-125	9.81		1.74		8.37	96.4		MS
Beryllium	mg/kg	75-125	5.5		0.893		5.23	88		MS
Nickel	mg/kg	75-125	9.75		4.86		5.23	93.5		MS
Selenium	mg/kg	75-125	1.67		0.554	U	2.09	77		MS
Thallium	mg/kg	75-125	10.3		0.109	J	10.7	94.7		MS
Uranium	mg/kg	75-125	6.33		1.07		5.23	101		MS

METALS
–5a–

Matrix Spike Duplicate Summary

SDG NO. 10–1861 **Client ID** RE15–10–7904SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 247178001 **Spike ID:** 1202046585

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	mg/kg	75–125	10.3		1.74		8.84	97.3		MS
Beryllium	mg/kg	75–125	5.88		0.893		5.52	90.4		MS
Nickel	mg/kg	75–125	9.92		4.86		5.52	91.5		MS
Selenium	mg/kg	75–125	1.66		0.554	U	2.21	72.5	N	MS
Thallium	mg/kg	75–125	10.9		0.109	J	10.9	98.6		MS
Uranium	mg/kg	75–125	6.88		1.07		5.52	105		MS

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904S

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 247178001 **Spike ID:** 1202055899

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	154		11.9	J	116	122		AV

METALS
-5a-
Matrix Spike Duplicate Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904SD

Contract: LANL01004 **Level:** Low

Matrix: SOIL **% Solids:** 89

Sample ID: 247178001 **Spike ID:** 1202055901

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/kg	75-125	169		11.9	J	129	122		AV

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1861

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15–10–7904D

Sample ID: 247178001 **Duplicate ID:** 1202046576 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20%	7170000		6670000		7.19		P
Antimony	ug/Kg		349	U	347	U			P
Barium	ug/Kg	+/–20%	83800		80800		3.69		P
Cadmium	ug/Kg	+/–525	227	J	172	J	27.6		P
Calcium	ug/Kg	+/–20%	1370000		1310000		4.11		P
Chromium	ug/Kg	+/–20%	26300		22700		14.7		P
Cobalt	ug/Kg	+/–525	1300		1150		12		P
Copper	ug/Kg	+/–20%	6670		6480		2.87		P
Iron	ug/Kg	+/–20%	13900000		12400000		11		P
Lead	ug/Kg	+/–20%	7400		7350		.702		P
Magnesium	ug/Kg	+/–20%	1120000		1040000		7.25		P
Manganese	ug/Kg	+/–20%	242000		236000		2.44		P
Potassium	ug/Kg	+/–20%	774000		716000		7.81		P
Silver	ug/Kg		106	U	105	U			P
Sodium	ug/Kg	+/–26300	83400		77400		7.49		P
Vanadium	ug/Kg	+/–20%	11900		11000		8.39		P
Zinc	ug/Kg	+/–20%	53700		49100		8.97		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1861

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15–10–7904SD

Sample ID: 1202046578 **Duplicate ID:** 1202046579 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/Kg	+/–20	10500000		14600000		32.4	*	P
Antimony	ug/Kg	+/–20	46800		40200		15.1		P
Barium	ug/Kg	+/–20	114000		324000		96	*	P
Cadmium	ug/Kg	+/–20	57300		57100		.417		P
Calcium	ug/Kg	+/–20	1520000		2040000		29.4	*	P
Chromium	ug/Kg	+/–20	78000		89100		13.2		P
Cobalt	ug/Kg	+/–20	55400		56000		1.08		P
Copper	ug/Kg	+/–20	61100		63800		4.26		P
Iron	ug/Kg	+/–20	13400000		17300000		25.3	*	P
Lead	ug/Kg	+/–20	65200		69500		6.31		P
Magnesium	ug/Kg	+/–20	1800000		2310000		25.2	*	P
Manganese	ug/Kg	+/–20	315000		400000		24	*	P
Potassium	ug/Kg	+/–20	1500000		1840000		20.1	*	P
Silver	ug/Kg	+/–20	57800		57700		.237		P
Sodium	ug/Kg	+/–20	647000		667000		2.99		P
Vanadium	ug/Kg	+/–20	66700		71200		6.64		P
Zinc	ug/Kg	+/–20	107000		120000		12.3		P

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1861

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15–10–7904D

Sample ID: 247178001 **Duplicate ID:** 1202046582 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–1.04	1.74		1.91		8.96		MS
Beryllium	mg/kg	+/–20%	0.893		0.968		8.06		MS
Nickel	mg/kg	+/–20%	4.86		4.83		.812		MS
Selenium	mg/kg		0.554	U	0.522	U			MS
Thallium	mg/kg	+/–.218	0.109	J	0.0781	J	32.7		MS
Uranium	mg/kg	+/–20%	1.07		0.894		17.8		MS

Metals
–6–
Duplicate Sample Summary

SDG No.: 10–1861

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15–10–7904SD

Sample ID: 1202046584 **Duplicate ID:** 1202046585 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	mg/kg	+/–20	9.81		10.3		5.25		MS
Beryllium	mg/kg	+/–20	5.5		5.88		6.8		MS
Nickel	mg/kg	+/–20	9.75		9.92		1.64		MS
Selenium	mg/kg	+/–20	1.67		1.66		.709		MS
Thallium	mg/kg	+/–20	10.3		10.9		5.69		MS
Uranium	mg/kg	+/–20	6.33		6.88		8.2		MS

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15-10-7904D

Sample ID: 247178001 **Duplicate ID:** 1202055898 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-11.2	11.9	J	16.8		34.3		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1861

Contract: LANL01004 **Lab Code:** GEL

Matrix: SOLID **Level:** Low **Client ID:** RE15-10-7904SD

Sample ID: 1202055899 **Duplicate ID:** 1202055901 **Percent Solids for Dup:** 89

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	154		169		9.74		AV

METALS
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Laboratory Control Sample Summary

SDG NO. 10-1861

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202046580								
	Aluminum	ug/Kg	10500000	10300000		98.2	56-144	P
	Antimony	ug/Kg	173000	134000		77.6	71-130	P
	Barium	ug/Kg	198000	227000		115	80-120	P
	Cadmium	ug/Kg	60700	67600		111	81-120	P
	Calcium	ug/Kg	9870000	10700000		108	83-117	P
	Chromium	ug/Kg	236000	253000		107	80-120	P
	Cobalt	ug/Kg	91200	105000		115	81-120	P
	Copper	ug/Kg	174000	182000		105	81-118	P
	Iron	ug/Kg	18000000	20600000		115	51-149	P
	Lead	ug/Kg	86000	95800		111	79-121	P
	Magnesium	ug/Kg	4000000	4300000		107	79-122	P
	Manganese	ug/Kg	558000	644000		115	81-119	P
	Potassium	ug/Kg	4300000	4350000		101	74-127	P
	Silver	ug/Kg	30100	35400		117	66-134	P
	Sodium	ug/Kg	1020000	1160000		114	74-127	P
	Vanadium	ug/Kg	115000	126000		110	79-121	P
	Zinc	ug/Kg	594000	633000		106	80-121	P

METALS
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Laboratory Control Sample Summary

SDG NO. 10-1861

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

SDG NO. 10-1861

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202046586								
	Arsenic	mg/kg	104	127		122	78-123	MS
	Beryllium	mg/kg	77.6	87.2		112	84-116	MS
	Nickel	mg/kg	134	156		116	78-123	MS
	Selenium	mg/kg	286	341		119	77-123	MS
	Thallium	mg/kg	121	126		104	78-122	MS
	Uranium	mg/kg	2.13	2.01		94.5	73-127	MS

METALS
–7–
Laboratory Control Sample Summary

SDG NO. 10–1861

Contract: LANL01004

Aqueous LCS Source: **Solid LCS Source:** ERA

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202055897								
	Mercury	ug/kg	5150	5670		110	71.6–128.3	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 247178001 **Serial Dilution ID:** 1202046577

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	67800		66000		2.65		10	P
Antimony	3.3	U	16.5	U				P
Barium	792		775		2.15		10	P
Cadmium	2.15	J	5	U	100			P
Calcium	12900		12300		4.65		10	P
Chromium	248		260		4.84		10	P
Cobalt	12.3		10.2	J	17.1			P
Copper	63		58.5		7.14			P
Iron	131000		131000		0		10	P
Lead	69.9		74		5.87			P
Magnesium	10600		10400		1.89		10	P
Manganese	2290		2210		3.71		10	P
Potassium	7310		7200		1.5		10	P
Silver	1	U	5	U				P
Sodium	788		870	J	10.4			P
Vanadium	113		114		.442		10	P
Zinc	507		530		4.54		10	P

METALS
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Serial Dilution Sample Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 247178001 **Serial Dilution ID:** 1202046583

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Arsenic	7.86		10.3	J	30.4			MS
Beryllium	4.03		4.9		21.6			MS
Nickel	21.9		26.2		19.6			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.5	J	1.5	U	100			MS
Uranium	4.82		5.3		9.96			MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1861 **Client ID** RE15-10-7904L

Contract: LANL01004

Matrix: SOLID **Level:** Low

Sample ID: 247178001 **Serial Dilution ID:** 1202055900

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.179	J	.34	U	100			AV

METALS
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SAMPLE PREPARATION SUMMARY

SDG No: 10-1861 **Method Type:** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 954671							
1202046575	MB for batch 954671	MB	S	23-FEB-10	.507g	50mL	
1202046580	LCS for batch 954671	LCS	S	23-FEB-10	.503g	50mL	
1202046578	RE15-10-7904S	MS	S	23-FEB-10	.506g	50mL	
1202046579	RE15-10-7904SD	MSD	S	23-FEB-10	.512g	50mL	
1202046576	RE15-10-7904D	DUP	S	23-FEB-10	.532g	50mL	
247178001	RE15-10-7904	SAMPLE	S	23-FEB-10	.528g	50mL	
247178002	RE15-10-7903	SAMPLE	S	23-FEB-10	.525g	50mL	
247178003	RE15-10-7994	SAMPLE	S	23-FEB-10	.524g	50mL	
247178004	RE15-10-7997	SAMPLE	S	23-FEB-10	.522g	50mL	
247178005	RE15-10-7998	SAMPLE	S	23-FEB-10	.524g	50mL	
247178006	RE15-10-8000	SAMPLE	S	23-FEB-10	.541g	50mL	
247178007	RE15-10-7999	SAMPLE	S	23-FEB-10	.589g	50mL	
247178008	RE15-10-7995	SAMPLE	S	23-FEB-10	.546g	50mL	
247178009	RE15-10-7996	SAMPLE	S	23-FEB-10	.549g	50mL	
247178010	RE15-10-7993	SAMPLE	S	23-FEB-10	.546g	50mL	
247178011	RE15-10-8064	SAMPLE	S	23-FEB-10	.519g	50mL	

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1861 **Method Type** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 954673							
1202046581	MB for batch 954673	MB	S	23–FEB–10	.521g	50mL	
1202046586	LCS for batch 954673	LCS	S	23–FEB–10	.503g	50mL	
1202046584	RE15–10–7904S	MS	S	23–FEB–10	.534g	50mL	
1202046585	RE15–10–7904SD	MSD	S	23–FEB–10	.506g	50mL	
1202046582	RE15–10–7904D	DUP	S	23–FEB–10	.535g	50mL	
247178001	RE15–10–7904	SAMPLE	S	23–FEB–10	.504g	50mL	
247178002	RE15–10–7903	SAMPLE	S	23–FEB–10	.536g	50mL	
247178003	RE15–10–7994	SAMPLE	S	23–FEB–10	.503g	50mL	
247178004	RE15–10–7997	SAMPLE	S	23–FEB–10	.548g	50mL	
247178005	RE15–10–7998	SAMPLE	S	23–FEB–10	.527g	50mL	
247178006	RE15–10–8000	SAMPLE	S	23–FEB–10	.501g	50mL	
247178007	RE15–10–7999	SAMPLE	S	23–FEB–10	.578g	50mL	
247178008	RE15–10–7995	SAMPLE	S	23–FEB–10	.504g	50mL	
247178009	RE15–10–7996	SAMPLE	S	23–FEB–10	.581g	50mL	
247178010	RE15–10–7993	SAMPLE	S	23–FEB–10	.517g	50mL	
247178011	RE15–10–8064	SAMPLE	S	23–FEB–10	.5g	50mL	
Batch Number 965478							
1202046581	MB for batch 954673	MB	S	16–MAR–10	.516g	50mL	
1202046586	LCS for batch 954673	LCS	S	16–MAR–10	.508g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1861 **Method Type** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
1202046584	RE15-10-7904S	MS	S	16-MAR-10	.52g	50mL	
1202046585	RE15-10-7904SD	MSD	S	16-MAR-10	.511g	50mL	
1202046582	RE15-10-7904D	DUP	S	16-MAR-10	.512g	50mL	
247178001	RE15-10-7904	SAMPLE	S	16-MAR-10	.514g	50mL	
247178002	RE15-10-7903	SAMPLE	S	16-MAR-10	.544g	50mL	
247178003	RE15-10-7994	SAMPLE	S	16-MAR-10	.522g	50mL	
247178004	RE15-10-7997	SAMPLE	S	16-MAR-10	.541g	50mL	
247178005	RE15-10-7998	SAMPLE	S	16-MAR-10	.504g	50mL	
247178006	RE15-10-8000	SAMPLE	S	16-MAR-10	.519g	50mL	
247178007	RE15-10-7999	SAMPLE	S	16-MAR-10	.52g	50mL	
247178008	RE15-10-7995	SAMPLE	S	16-MAR-10	.519g	50mL	
247178009	RE15-10-7996	SAMPLE	S	16-MAR-10	.517g	50mL	
247178010	RE15-10-7993	SAMPLE	S	16-MAR-10	.509g	50mL	
247178011	RE15-10-8064	SAMPLE	S	16-MAR-10	.515g	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1861 **Method Type** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 958615							
1202055896	MB for batch 958615	MB	S	03-MAR-10	.554g	30mL	
1202055897	LCS for batch 958615	LCS	S	03-MAR-10	.209g	30mL	
1202055899	RE15-10-7904S	MS	S	03-MAR-10	.579g	30mL	
1202055901	RE15-10-7904SD	MSD	S	03-MAR-10	.521g	30mL	
1202055898	RE15-10-7904D	DUP	S	03-MAR-10	.6g	30mL	
247178001	RE15-10-7904	SAMPLE	S	03-MAR-10	.505g	30mL	
247178002	RE15-10-7903	SAMPLE	S	03-MAR-10	.534g	30mL	
247178003	RE15-10-7994	SAMPLE	S	03-MAR-10	.515g	30mL	
247178004	RE15-10-7997	SAMPLE	S	03-MAR-10	.553g	30mL	
247178005	RE15-10-7998	SAMPLE	S	03-MAR-10	.52g	30mL	
247178006	RE15-10-8000	SAMPLE	S	03-MAR-10	.523g	30mL	
247178007	RE15-10-7999	SAMPLE	S	03-MAR-10	.596g	30mL	
247178008	RE15-10-7995	SAMPLE	S	03-MAR-10	.508g	30mL	
247178009	RE15-10-7996	SAMPLE	S	03-MAR-10	.583g	30mL	
247178010	RE15-10-7993	SAMPLE	S	03-MAR-10	.532g	30mL	
247178011	RE15-10-8064	SAMPLE	S	03-MAR-10	.516g	30mL	

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 13-MAR-10 **End Date:** 14-MAR-10

Client Sdg: 10-1861
Method MS
Data File: 100313-5

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	20:52			X		X											X		X						
S10	1	20:56			X		X											X		X						
S100	1	21:00			X		X											X		X						
ICV01	1	21:03			X		X											X		X						
ICB01	1	21:07			X		X											X		X						
CRDL01	1	21:11			X		X											X		X						
ICSA01	1	21:14			X		X											X		X						
ICSAB01	1	21:18			X		X											X		X						
CCV01	1	21:21			X		X											X		X						
CCB01	1	21:25			X		X											X		X						
1202046581	2	21:29			X		X											X		X						
1202046586	40	21:32			X		X											X		X						
247178001	2	21:36			X		X											X		X						
1202046582	2	21:40			X		X											X		X						
1202046584	2	21:43			X		X											X		X						
1202046585	2	21:47			X		X											X		X						
1202046583	10	21:50			X		X											X		X						
247178002	2	21:54			X		X											X		X						
CCV02	1	21:58			X		X											X		X						
CCB02	1	22:01			X		X											X		X						
247178003	2	22:05			X		X											X		X						
247178004	2	22:09			X		X											X		X						
247178005	2	22:12			X		X											X		X						
247178006	2	22:16			X		X											X		X						
247178007	2	22:20			X		X											X		X						
247178008	2	22:23			X		X											X		X						
247178009	2	22:27			X		X											X		X						
247178010	2	22:31			X		X											X		X						
247178011	2	22:34			X		X											X		X						
CCV03	1	22:38			X		X											X		X						
CCB03	1	22:41			X		X											X		X						

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 10-MAR-10
End Date: 11-MAR-10
Client Sdg: 10-1861
Method P
Data File: 031010-2

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	16:32								X		X													X	X
S0.1	1	16:40								X		X													X	X
S0.5	1	16:47								X		X													X	X
SCAL	1	16:54								X		X													X	X
S10	1	17:01																								
ICV01	1	17:06								X		X													X	X
ICB01	1	17:13								X		X													X	X
PQL01	1	17:21								X		X													X	X
ICSA01	1	17:27								X		X													X	X
ICSAB01	1	17:34								X		X													X	X
LR01	1	17:41								X		X													X	X
LR02	1	17:48								X		X													X	X
CCV01	1	17:55								X		X													X	X
CCB01	1	18:02								X		X													X	X
CCV02	1	18:15								X		X													X	X
CCB02	1	18:22								X		X													X	X
LR03	1	18:29								X		X													X	X
LR04	1	18:36								X		X													X	X
CCV03	1	18:44								X		X													X	X
CCB03	1	18:51								X		X													X	X
CCV04	1	19:06								X		X													X	X
CCB04	1	19:13								X		X													X	X
ZZZZZZ	1	19:21																								
ZZZZZZ	1	19:29																								
ZZZZZZ	1	19:36																								
ZZZZZZ	1	19:43																								
ZZZZZZ	1	19:50																								
ZZZZZZ	1	19:57																								
CCV05	1	20:04								X		X													X	X
CCB05	1	20:11								X		X													X	X
ZZZZZZ	1	20:19																								
ZZZZZZ	1	20:26																								
ZZZZZZ	1	20:32																								
ZZZZZZ	1	20:39																								
ZZZZZZ	5	20:46																								
CCV06	1	20:53								X		X													X	X
CCB06	1	21:00								X		X													X	X
ZZZZZZ	1	21:08																								
ZZZZZZ	1	21:15																								
ZZZZZZ	1	21:22																								

Metals
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Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	21:29																								
ZZZZZZ	1	21:36																								
ZZZZZZ	1	21:43																								
ZZZZZZ	5	21:50																								
CCV07	1	21:56							X		X													X	X
CCB07	1	22:03							X		X													X	X
ZZZZZZ	1	22:11																								
ZZZZZZ	1	22:18																								
ZZZZZZ	1	22:26																								
ZZZZZZ	1	22:33																								
ZZZZZZ	1	22:40																								
ZZZZZZ	1	22:47																								
ZZZZZZ	1	22:54																								
CCV08	1	23:01							X		X													X	X
CCB08	1	23:08							X		X													X	X
ZZZZZZ	1	23:15																								
ZZZZZZ	1	23:23																								
ZZZZZZ	1	23:29																								
ZZZZZZ	1	23:36																								
ZZZZZZ	1	23:43																								
ZZZZZZ	1	23:50																								
ZZZZZZ	5	23:58																								
CCV09	1	00:04							X		X													X	X
CCB09	1	00:11							X		X													X	X
ZZZZZZ	1	00:19																								
ZZZZZZ	1	00:26																								
ZZZZZZ	1	00:33																								
ZZZZZZ	1	00:40																								
ZZZZZZ	1	00:47																								
ZZZZZZ	1	00:54																								
ZZZZZZ	1	01:01																								
CCV10	1	01:08							X		X													X	X
CCB10	1	01:15							X		X													X	X
1202046575	1	01:21							X		X													X	X
1202046580	1	01:28							X		X													X	X
247178001	1	01:34							X		X													X	X
1202046576	1	01:42							X		X													X	X
1202046578	1	01:49							X		X													X	X
1202046579	1	01:56							X		X													X	X
1202046577	5	02:03							X		X													X	X

Metals
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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
247178002	1	02:09								X		X													X	X
247178003	1	02:16								X		X													X	X
CCV11	1	02:24								X		X													X	X
CCB11	1	02:31								X		X													X	X
247178004	1	02:37								X		X													X	X
247178005	1	02:44								X		X													X	X
247178006	1	02:51								X		X													X	X
247178007	1	02:59								X		X													X	X
247178008	1	03:06								X		X													X	X
247178009	1	03:13								X		X													X	X
247178010	1	03:20								X		X													X	X
247178011	1	03:27								X		X													X	X
CCV12	1	03:34								X		X													X	X
CCB12	1	03:41								X		X													X	X

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: MER536
Start Date: 04–MAR–10
End Date: 04–MAR–10
Client Sdg: 10–1861
Method AV
Data File: 030410S1–6

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	10:03															X									
S0.2	1	10:04															X									
S0.5	1	10:06															X									
S2.0	1	10:08															X									
S5.0	1	10:10															X									
S10	1	10:12															X									
ICV01	1	10:15															X									
ICB01	1	10:16															X									
CRDL01	1	10:18															X									
CCV01	1	10:20															X									
CCB01	1	10:22															X									
ZZZZZZ	1	10:25																								
ZZZZZZ	10	10:27																								
ZZZZZZ	1	10:29																								
ZZZZZZ	1	10:31																								
ZZZZZZ	1	10:33																								
ZZZZZZ	1	10:35																								
ZZZZZZ	5	10:37																								
ZZZZZZ	1	10:38																								
ZZZZZZ	1	10:40																								
ZZZZZZ	1	10:42																								
CCV02	1	10:44															X									
CCB02	1	10:46															X									
ZZZZZZ	1	10:48																								
ZZZZZZ	1	10:50																								
ZZZZZZ	1	10:52																								
ZZZZZZ	1	10:54																								
ZZZZZZ	1	10:56																								
ZZZZZZ	1	10:58																								
ZZZZZZ	1	11:00																								
ZZZZZZ	1	11:02																								
ZZZZZZ	1	11:04																								
ZZZZZZ	1	11:06																								
CCV03	1	11:08															X									
CCB03	1	11:11															X									
ZZZZZZ	1	11:13																								
ZZZZZZ	1	11:14																								
ZZZZZZ	10	11:16																								
ZZZZZZ	1	11:18																								
ZZZZZZ	1	11:20																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	11:22																								
ZZZZZZ	1	11:24																								
ZZZZZZ	5	11:26																								
ZZZZZZ	1	11:28																								
ZZZZZZ	1	11:30																								
CCV04	1	11:32														X										
CCB04	1	11:34														X										
ZZZZZZ	1	11:36																								
ZZZZZZ	1	11:38																								
ZZZZZZ	1	11:40																								
ZZZZZZ	1	11:42																								
ZZZZZZ	1	11:44																								
ZZZZZZ	1	11:46																								
ZZZZZZ	1	11:48																								
ZZZZZZ	1	11:50																								
ZZZZZZ	1	11:52																								
ZZZZZZ	1	11:54																								
CCV05	1	11:56														X										
CCB05	1	11:58														X										
1202055896	1	12:00														X										
1202055897	10	12:02														X										
247178001	1	12:04														X										
1202055898	1	12:06														X										
1202055899	1	12:08														X										
1202055901	1	12:10														X										
1202055900	5	12:12														X										
247178002	1	12:14														X										
247178003	1	12:16														X										
247178004	1	12:18														X										
CCV06	1	12:20														X										
CCB06	1	12:22														X										
247178005	1	12:24														X										
247178006	1	12:26														X										
247178007	1	12:28														X										
247178008	1	12:30														X										
247178009	1	12:32														X										
247178010	1	12:33														X										
247178011	1	12:35														X										
ZZZZZZ	1	12:37																								
ZZZZZZ	1	12:39																								

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	12:41																								
CCV07	1	12:43															X									
CCB07	1	12:45															X									

Metals
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Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS3
Start Date: 13-MAR-10
End Date: 14-MAR-10
Client Sdg: 10-1861
Method MS
Data File: 100313-3

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	09:36																						X		
S10	1	09:38																						X		
S100	1	09:40																						X		
ICV01	1	09:41																						X		
ICB01	1	09:43																						X		
CRDL01	1	09:45																						X		
ICSA01	1	09:46																						X		
ICSAB01	1	09:48																						X		
CCV01	1	09:50																						X		
CCB01	1	09:52																						X		
1202046581	2	09:53																						X		
1202046586	40	09:55																						X		
247178001	2	09:57																						X		
1202046582	2	09:58																						X		
1202046584	2	10:00																						X		
1202046585	2	10:02																						X		
1202046583	10	10:04																						X		
247178002	2	10:05																						X		
247178003	2	10:07																						X		
CCV02	1	10:09																						X		
CCB02	1	10:10																						X		
ZZZZZZ	2	10:12																								
247178005	2	10:14																						X		
247178006	2	10:16																						X		
247178007	2	10:17																						X		
247178008	2	10:19																						X		
247178009	2	10:21																						X		
247178010	2	10:23																						X		
ZZZZZZ	2	10:24																								
CCV03	1	10:26																						X		
CCB03	1	10:28																						X		
ZZZZZZ	10	10:31																								
247178011	10	10:33																						X		
247178004	10	10:36																						X		
CCV04	1	10:38																						X		
CCB04	1	10:39																						X		

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS4
Start Date: 16-MAR-10 **End Date:** 17-MAR-10

Client Sdg: 10-1861
Method MS
Data File: 100316-4

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	21:30																					X			
S10	1	21:33																					X			
S100	1	21:36																					X			
ICV01	1	21:39																					X			
ICB01	1	21:42																					X			
CRDL01	1	21:45																					X			
ICSA01	1	21:48																					X			
ICSAB01	1	21:51																					X			
CCV01	1	21:54																					X			
CCB01	1	21:57																					X			
LR01	1	22:00																					X			
CCV02	1	22:03																					X			
CCB02	1	22:06																					X			
ZZZZZZ	2	22:09																								
ZZZZZZ	2	22:12																								
ZZZZZZ	100	22:15																								
CCV03	1	22:18																					X			
CCB03	1	22:21																					X			
ZZZZZZ	100	22:24																								
ZZZZZZ	100	22:27																								
ZZZZZZ	100	22:30																								
ZZZZZZ	500	22:34																								
CCV04	1	22:37																					X			
CCB04	1	22:40																					X			
ZZZZZZ	2	22:43																								
ZZZZZZ	2	22:46																								
ZZZZZZ	2	22:49																								
ZZZZZZ	2	22:52																								
ZZZZZZ	10	22:55																								
CCV05	1	22:58																					X			
CCB05	1	23:01																					X			
1202046581	2	23:04																					X			
1202046586	40	23:07																					X			
247178001	2	23:10																					X			
1202046582	2	23:13																					X			
1202046584	2	23:16																					X			
1202046585	2	23:19																					X			
1202046583	10	23:22																					X			
CCV06	1	23:25																					X			
CCB06	1	23:28																					X			

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																							
247178002	2	23:31																				X			
247178003	2	23:34																				X			
247178004	2	23:37																				X			
247178005	2	23:40																				X			
247178006	2	23:43																				X			
CCV07	1	23:46																				X			
CCB07	1	23:49																				X			
247178007	2	23:52																				X			
247178008	2	23:55																				X			
247178009	2	23:58																				X			
247178010	2	00:02																				X			
247178011	2	00:05																				X			
CCV08	1	00:08																				X			
CCB08	1	00:11																				X			

Metals
-14-
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA1
Start Date: 15-MAR-10
End Date: 15-MAR-10
Client Sdg: 10-1861
Method P
Data File: 031510A-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	11:29	X	X		X		X	X		X		X	X	X	X			X		X	X				
S0.1	1	11:33		X		X		X			X			X		X			X		X					
S0.5	1	11:36	X	X		X		X	X		X			X	X	X			X		X					
SCAL	1	11:39	X	X		X		X	X		X		X	X	X	X			X		X	X				
S10	1	11:43	X						X				X		X							X				
ICV01	1	11:45	X	X		X		X	X		X		X	X	X	X			X		X	X				
ICB01	1	11:49	X	X		X		X	X		X		X	X	X	X			X		X	X				
PQL01	1	11:52	X	X		X		X	X		X		X	X	X	X			X		X	X				
ICSA01	1	11:56	X	X		X		X	X		X		X	X	X	X			X		X	X				
ICSAB01	1	11:59	X	X		X		X	X		X		X	X	X	X			X		X	X				
LR01	1	12:01	X	X		X		X	X		X		X	X	X	X			X		X	X				
LR02	1	12:04	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCV01	1	12:07	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB01	1	12:11	X	X		X		X	X		X		X	X	X	X			X		X	X				
LR03	1	12:22	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCV02	1	12:26	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB02	1	12:29	X	X		X		X	X		X		X	X	X	X			X		X	X				
ZZZZZZ	1	12:33																								
ZZZZZZ	1	12:37																								
ZZZZZZ	1	12:40																								
ZZZZZZ	1	12:45																								
ZZZZZZ	1	12:49																								
ZZZZZZ	1	12:53																								
ZZZZZZ	5	12:57																								
CCV03	1	13:00	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB03	1	13:04	X	X		X		X	X		X		X	X	X	X			X		X	X				
ZZZZZZ	1	13:08																								
ZZZZZZ	10	13:12																								
ZZZZZZ	10	13:15																								
ZZZZZZ	10	13:19																								
ZZZZZZ	1	13:22																								
ZZZZZZ	1	13:26																								
ZZZZZZ	10	13:30																								
ZZZZZZ	10	13:33																								
ZZZZZZ	10	13:37																								
ZZZZZZ	10	13:40																								
CCV04	1	13:44	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB04	1	13:48	X	X		X		X	X		X		X	X	X	X			X		X	X				
ZZZZZZ	10	13:54																								
CCV05	1	13:58	X	X		X		X	X		X		X	X	X	X			X		X	X				

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
PQL02	1	14:01	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB05	1	14:05	X	X		X		X	X		X		X	X	X	X			X		X	X				
ZZZZZZ	5	14:08																								
ZZZZZZ	5	14:12																								
ZZZZZZ	5	14:16																								
ZZZZZZ	5	14:19																								
ZZZZZZ	5	14:23																								
ZZZZZZ	5	14:26																								
ZZZZZZ	5	14:30																								
ZZZZZZ	5	14:33																								
ZZZZZZ	5	14:37																								
CCV06	1	14:41	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB06	1	14:44	X	X		X		X	X		X		X	X	X	X			X		X	X				
1202046575	1	14:48	X	X		X		X	X		X		X	X	X	X			X		X	X				
1202046580	1	14:51	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178001	1	14:55	X	X		X		X	X		X		X	X	X	X			X		X	X				
1202046576	1	14:59	X	X		X		X	X		X		X	X	X	X			X		X	X				
1202046578	1	15:02	X	X		X		X	X		X		X	X	X	X			X		X	X				
1202046579	1	15:06	X	X		X		X	X		X		X	X	X	X			X		X	X				
1202046577	5	15:10	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCV07	1	15:13	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB07	1	15:17	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178002	1	15:20	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178003	1	15:24	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178004	1	15:28	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178005	1	15:31	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178006	1	15:35	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178007	1	15:39	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178008	1	15:42	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178009	1	15:46	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178010	1	15:50	X	X		X		X	X		X		X	X	X	X			X		X	X				
247178011	1	15:53	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCV08	1	15:57	X	X		X		X	X		X		X	X	X	X			X		X	X				
CCB08	1	16:01	X	X		X		X	X		X		X	X	X	X			X		X	X				

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1861

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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. 10-1861

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 15-JUN-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1861

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	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	-0.48147	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	-0.21356	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
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	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	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

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	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	2.85580	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	0.44491	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	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
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	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	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	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-1861
Contract: LANL01004
Instrument: OPTIMA3 **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	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	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	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
GEL Job No: 10-1861
Contract: LANL01004
Instrument: OPTIMA3
Effective Dates: 01-FEB-10
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	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	-0.63547	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
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	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	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
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	0.00000	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
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	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	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	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	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	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	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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	0.81635	-4.04400	0.00000
Strontium	421.552	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	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
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
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
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

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
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

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
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Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

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: GEL
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

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
Contract: LANL01004
Instrument: OPTIMA1
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861
Effective Dates: 01-FEB-10

Parmname	Wavelength	Vanadium	Zinc
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
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Linear Ranges

SDG NO. 10–1861

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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
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Linear Ranges

SDG NO. 10-1861

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
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
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

METALS
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Linear Ranges

SDG NO. 10-1861

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS3

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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
Arsenic	1000	1000	ug/L	01-FEB-10
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1861

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS4

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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. 10-1861

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA1

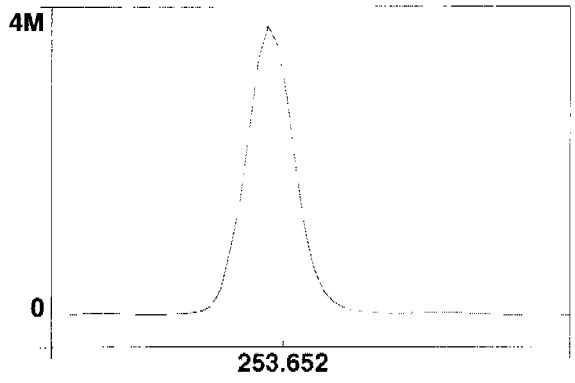
Analyte	Integration Time (sec)	LDR	Units	Effective Date
Selenium	20	10000	ug/L	01-FEB-10
Silver	20	1000	ug/L	01-FEB-10
Sodium	20	500000	ug/L	01-FEB-10
Thallium	20	10000	ug/L	01-FEB-10
Uranium	20	15000	ug/L	01-FEB-10
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10
Aluminum	20	500000	ug/L	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
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

Raw Data

Method: Hg_ReAlign
Result: 031910C

Sample ID: Hg_ReAlign

Hg 253.652 **Rep: 1**



Intensity: 3722924.5 cps
Conc:

1

==========

Analysis Begun

Start Time: 3/15/2010 11:29:57 **Plasma On Time: 3/12/2010 12:50:39**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\031510.sif
Batch ID:
Results Data Set: 031510A
Results Library: c:\pe\optima1\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 3/15/2010 11:29:59**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	91620.5	91620.5	99.8	%	11:30:30
1	Al 396.153Radial†	-171.5	-171.8	[0.00]	µg/L	11:30:30
1	Ca 317.933Radial†	342.6	343.2	[0.00]	µg/L	11:30:51
1	Fe 238.204 Radial†	13.4	13.4	[0.00]	µg/L	11:30:51
1	K 766.490 Radial†	342.3	342.9	[0.00]	µg/L	11:30:30
1	Mg 279.077 IEC†	7.9	7.9	[0.00]	µg/L	11:30:51
1	Na 589.592 Radial†	186.4	186.7	[0.00]	µg/L	11:30:30
1	Sr 421.552†	101.7	101.8	[0.00]	µg/L	11:30:30
1	Sc 361.383	1976453.9	1976453.9	101.35	%	11:31:53
1	Y 371.029	1350040.9	1350040.9	101.25	%	11:31:53
1	Ag 328.068†	-573.3	-565.6	[0.00]	µg/L	11:31:59
1	As 188.979†	-4.1	-4.0	[0.00]	µg/L	11:32:19
1	B 249.677†	294.5	290.6	[0.00]	µg/L	11:31:59
1	Ba 233.527†	-34.3	-33.8	[0.00]	µg/L	11:32:19
1	Be 313.107†	-1581.6	-1560.5	[0.00]	µg/L	11:31:59
1	Cd 226.502†	-162.7	-160.5	[0.00]	µg/L	11:32:19
1	Co 228.616†	32.2	31.7	[0.00]	µg/L	11:32:19
1	Cr 267.716†	77.2	76.2	[0.00]	µg/L	11:31:59
1	Cu 324.752†	4223.4	4167.2	[0.00]	µg/L	11:31:59
1	Mn 257.610†	-744.1	-734.1	[0.00]	µg/L	11:32:19
1	Mo 202.031†	17.9	17.7	[0.00]	µg/L	11:32:19
1	Ni 231.604†	359.8	355.0	[0.00]	µg/L	11:32:19
1	P 214.914†	285.0	281.2	[0.00]	µg/L	11:32:19
1	Pb 220.353†	33.3	32.9	[0.00]	µg/L	11:32:19
1	S 181.975 Axial†	18.2	18.0	[0.00]	µg/L	11:32:19
1	Sb 206.836†	32.0	31.6	[0.00]	µg/L	11:32:19
1	Se 196.026†	26.4	26.1	[0.00]	µg/L	11:32:19
1	SiO2†	2771.2	2734.2	[0.00]	µg/L	11:31:59
1	Si 251.611†	415.4	409.9	[0.00]	µg/L	11:32:19
1	Sn 189.927†	-0.7	-0.7	[0.00]	µg/L	11:32:19
1	Ti 334.940†	-689.4	-680.3	[0.00]	µg/L	11:31:59
1	Tl 190.801†	-30.5	-30.1	[0.00]	µg/L	11:32:19
1	U 409.014†	-35.8	-35.3	[0.00]	µg/L	11:31:59
1	V 292.402†	105.3	103.9	[0.00]	µg/L	11:31:59
1	Zn 213.857†	660.0	651.2	[0.00]	µg/L	11:32:19
2	Sc RADIAL	91483.8	91483.8	99.7	%	11:30:56
2	Al 396.153Radial†	-153.1	-153.6	[0.00]	µg/L	11:30:56
2	Ca 317.933Radial†	342.9	344.0	[0.00]	µg/L	11:31:17
2	Fe 238.204 Radial†	13.4	13.5	[0.00]	µg/L	11:31:17
2	K 766.490 Radial†	453.7	455.2	[0.00]	µg/L	11:30:56
2	Mg 279.077 IEC†	10.3	10.3	[0.00]	µg/L	11:31:17
2	Na 589.592 Radial†	229.7	230.4	[0.00]	µg/L	11:30:56
2	Sr 421.552†	153.8	154.3	[0.00]	µg/L	11:30:56
2	Sc 361.383	1951395.6	1951395.6	100.07	%	11:32:25
2	Y 371.029	1334482.9	1334482.9	100.09	%	11:32:25
2	Ag 328.068†	-472.5	-472.2	[0.00]	µg/L	11:32:31
2	As 188.979†	-2.4	-2.4	[0.00]	µg/L	11:32:51

2	B 249.677†	253.1	253.0	[0.00]	µg/L	11:32:31
2	Ba 233.527†	-25.4	-25.4	[0.00]	µg/L	11:32:51
2	Be 313.107†	-1547.5	-1546.5	[0.00]	µg/L	11:32:31
2	Cd 226.502†	-161.6	-161.5	[0.00]	µg/L	11:32:51
2	Co 228.616†	33.7	33.6	[0.00]	µg/L	11:32:51
2	Cr 267.716†	107.8	107.8	[0.00]	µg/L	11:32:31
2	Cu 324.752†	4205.3	4202.5	[0.00]	µg/L	11:32:31
2	Mn 257.610†	-748.6	-748.1	[0.00]	µg/L	11:32:51
2	Mo 202.031†	11.8	11.8	[0.00]	µg/L	11:32:51
2	Ni 231.604†	352.5	352.2	[0.00]	µg/L	11:32:51
2	P 214.914†	286.4	286.2	[0.00]	µg/L	11:32:51
2	Pb 220.353†	48.1	48.1	[0.00]	µg/L	11:32:51
2	S 181.975 Axial†	26.6	26.6	[0.00]	µg/L	11:32:51
2	Sb 206.836†	25.9	25.8	[0.00]	µg/L	11:32:51
2	Se 196.026†	27.3	27.3	[0.00]	µg/L	11:32:51
2	SiO2†	2720.8	2719.1	[0.00]	µg/L	11:32:31
2	Si 251.611†	419.8	419.5	[0.00]	µg/L	11:32:51
2	Sn 189.927†	-8.1	-8.1	[0.00]	µg/L	11:32:51
2	Ti 334.940†	-736.5	-736.0	[0.00]	µg/L	11:32:31
2	Tl 190.801†	-36.3	-36.3	[0.00]	µg/L	11:32:51
2	U 409.014†	-49.1	-49.1	[0.00]	µg/L	11:32:31
2	V 292.402†	92.2	92.1	[0.00]	µg/L	11:32:31
2	Zn 213.857†	655.7	655.2	[0.00]	µg/L	11:32:51
3	Sc RADIAL	92224.4	92224.4	100	%	11:31:22
3	Al 396.153Radial†	-162.7	-161.9	[0.00]	µg/L	11:31:22
3	Ca 317.933Radial†	337.4	335.7	[0.00]	µg/L	11:31:43
3	Fe 238.204 Radial†	12.4	12.4	[0.00]	µg/L	11:31:43
3	K 766.490 Radial†	419.4	417.4	[0.00]	µg/L	11:31:22
3	Mg 279.077 IEC†	9.0	9.0	[0.00]	µg/L	11:31:43
3	Na 589.592 Radial†	154.1	153.4	[0.00]	µg/L	11:31:22
3	Sr 421.552†	150.6	149.8	[0.00]	µg/L	11:31:22
3	Sc 361.383	1922510.9	1922510.9	98.584	%	11:32:57
3	Y 371.029	1315440.0	1315440.0	98.659	%	11:32:57
3	Ag 328.068†	-525.1	-532.7	[0.00]	µg/L	11:33:03
3	As 188.979†	-3.6	-3.7	[0.00]	µg/L	11:33:23
3	B 249.677†	284.4	288.4	[0.00]	µg/L	11:33:03
3	Ba 233.527†	-21.7	-22.0	[0.00]	µg/L	11:33:23
3	Be 313.107†	-1547.3	-1569.5	[0.00]	µg/L	11:33:03
3	Cd 226.502†	-171.4	-173.9	[0.00]	µg/L	11:33:23
3	Co 228.616†	37.4	37.9	[0.00]	µg/L	11:33:23
3	Cr 267.716†	91.7	93.0	[0.00]	µg/L	11:33:03
3	Cu 324.752†	4241.2	4302.1	[0.00]	µg/L	11:33:03
3	Mn 257.610†	-725.6	-736.0	[0.00]	µg/L	11:33:23
3	Mo 202.031†	7.4	7.5	[0.00]	µg/L	11:33:23
3	Ni 231.604†	359.9	365.1	[0.00]	µg/L	11:33:23
3	P 214.914†	292.3	296.5	[0.00]	µg/L	11:33:23
3	Pb 220.353†	37.3	37.8	[0.00]	µg/L	11:33:23
3	S 181.975 Axial†	23.9	24.2	[0.00]	µg/L	11:33:23
3	Sb 206.836†	25.8	26.2	[0.00]	µg/L	11:33:23
3	Se 196.026†	11.9	12.1	[0.00]	µg/L	11:33:23
3	SiO2†	2732.6	2771.8	[0.00]	µg/L	11:33:03
3	Si 251.611†	429.6	435.7	[0.00]	µg/L	11:33:23
3	Sn 189.927†	-6.8	-6.9	[0.00]	µg/L	11:33:23
3	Ti 334.940†	-648.6	-657.9	[0.00]	µg/L	11:33:03
3	Tl 190.801†	-36.1	-36.6	[0.00]	µg/L	11:33:23
3	U 409.014†	-34.7	-35.2	[0.00]	µg/L	11:33:03
3	V 292.402†	100.2	101.6	[0.00]	µg/L	11:33:03
3	Zn 213.857†	659.0	668.5	[0.00]	µg/L	11:33:23

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1950120.2	26994.11	1.38%	100.00	%
Sc RADIAL	91776.3	394.09	0.43%	100	%
Y 371.029	1333321.3	17329.70	1.30%	100.00	%
Ag 328.068†	-523.5	47.37	9.05%	[0.00]	µg/L
Al 396.153Radial†	-162.4	9.12	5.61%	[0.00]	µg/L
As 188.979†	-3.4	0.85	25.07%	[0.00]	µg/L
B 249.677†	277.3	21.13	7.62%	[0.00]	µg/L
Ba 233.527†	-27.1	6.08	22.43%	[0.00]	µg/L

Be 313.107†	-1558.8	11.57	0.74%	[0.00]	µg/L
Ca 317.933Radial†	341.0	4.54	1.33%	[0.00]	µg/L
Cd 226.502†	-165.3	7.43	4.50%	[0.00]	µg/L
Co 228.616†	34.4	3.16	9.17%	[0.00]	µg/L
Cr 267.716†	92.3	15.79	17.11%	[0.00]	µg/L
Cu 324.752†	4223.9	69.98	1.66%	[0.00]	µg/L
Fe 238.204 Radial†	13.1	0.62	4.76%	[0.00]	µg/L
K 766.490 Radial†	405.2	57.12	14.10%	[0.00]	µg/L
Mg 279.077 IEC†	9.1	1.24	13.62%	[0.00]	µg/L
Mn 257.610†	-739.4	7.57	1.02%	[0.00]	µg/L
Mo 202.031†	12.4	5.10	41.29%	[0.00]	µg/L
Na 589.592 Radial†	190.1	38.63	20.32%	[0.00]	µg/L
Ni 231.604†	357.4	6.78	1.90%	[0.00]	µg/L
P 214.914†	288.0	7.77	2.70%	[0.00]	µg/L
Pb 220.353†	39.6	7.75	19.58%	[0.00]	µg/L
S 181.975 Axial†	22.9	4.44	19.37%	[0.00]	µg/L
Sb 206.836†	27.9	3.24	11.63%	[0.00]	µg/L
Se 196.026†	21.8	8.46	38.82%	[0.00]	µg/L
SiO2†	2741.7	27.16	0.99%	[0.00]	µg/L
Si 251.611†	421.7	13.08	3.10%	[0.00]	µg/L
Sn 189.927†	-5.2	3.96	75.60%	[0.00]	µg/L
Sr 421.552†	135.3	29.10	21.50%	[0.00]	µg/L
Ti 334.940†	-691.4	40.23	5.82%	[0.00]	µg/L
Tl 190.801†	-34.4	3.68	10.70%	[0.00]	µg/L
U 409.014†	-39.9	7.96	19.95%	[0.00]	µg/L
V 292.402†	99.2	6.23	6.28%	[0.00]	µg/L
Zn 213.857†	658.3	9.04	1.37%	[0.00]	µg/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/15/2010 11:33:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	89510.7	89510.7	97.5	%	11:34:04
1	K 766.490 Radial†	2425.8	2082.0	[1000]	µg/L	11:34:04
1	Sr 421.552†	16303.1	16580.4	[100]	µg/L	11:34:04
1	Sc 361.383	1879310.6	1879310.6	96.369	%	11:34:26
1	Y 371.029	1285094.3	1285094.3	96.383	%	11:34:26
1	Ag 328.068†	11541.5	12499.9	[100]	µg/L	11:34:31
1	As 188.979†	67.6	73.5	[100]	µg/L	11:34:52
1	B 249.677†	2325.7	2136.0	[100]	µg/L	11:34:31
1	Ba 233.527†	4357.6	4548.8	[100]	µg/L	11:34:52
1	Be 313.107†	160891.9	168512.8	[100]	µg/L	11:34:26
1	Cd 226.502†	3845.7	4155.9	[100]	µg/L	11:34:52
1	Co 228.616†	2294.8	2346.9	[100]	µg/L	11:34:52
1	Cr 267.716†	4513.9	4591.7	[100]	µg/L	11:34:52
1	Cu 324.752†	19310.9	15814.5	[100]	µg/L	11:34:31
1	Mn 257.610†	31224.8	33140.7	[100]	µg/L	11:34:31
1	Mo 202.031†	1029.8	1056.2	[100]	µg/L	11:34:52
1	Ni 231.604†	2112.8	1835.0	[100]	µg/L	11:34:52
1	P 214.914†	583.4	317.4	[500]	µg/L	11:34:52
1	Pb 220.353†	430.7	407.3	[100]	µg/L	11:34:52
1	S 181.975 Axial†	86.2	66.6	[200]	µg/L	11:34:52
1	Sb 206.836†	132.4	109.5	[100]	µg/L	11:34:52
1	Se 196.026†	112.6	95.1	[100]	µg/L	11:34:52
1	SiO2†	8360.3	5933.6	[1069.5]	µg/L	11:34:31
1	Si 251.611†	7435.7	7294.1	[500]	µg/L	11:34:31
1	Sn 189.927†	256.3	271.1	[100]	µg/L	11:34:52
1	Ti 334.940†	40077.6	42279.0	[100]	µg/L	11:34:31
1	Tl 190.801†	68.9	105.9	[100]	µg/L	11:34:52
1	U 409.014†	1098.8	1180.0	[100]	µg/L	11:34:31
1	V 292.402†	8200.3	8410.1	[100]	µg/L	11:34:31
1	Zn 213.857†	4886.8	4412.7	[100]	µg/L	11:34:52
2	Sc RADIAL	89405.2	89405.2	97.4	%	11:34:10
2	K 766.490 Radial†	2440.9	2100.5	[1000]	µg/L	11:34:10
2	Sr 421.552†	16307.1	16604.2	[100]	µg/L	11:34:10
2	Sc 361.383	1882297.7	1882297.7	96.522	%	11:34:58
2	Y 371.029	1285720.5	1285720.5	96.430	%	11:34:58
2	Ag 328.068†	11392.6	12326.6	[100]	µg/L	11:35:04
2	As 188.979†	67.5	73.3	[100]	µg/L	11:35:24
2	B 249.677†	2285.2	2090.2	[100]	µg/L	11:35:04
2	Ba 233.527†	4330.4	4513.5	[100]	µg/L	11:35:24
2	Be 313.107†	161250.5	168619.5	[100]	µg/L	11:34:58
2	Cd 226.502†	3835.1	4138.6	[100]	µg/L	11:35:24
2	Co 228.616†	2287.4	2335.4	[100]	µg/L	11:35:24
2	Cr 267.716†	4491.9	4561.5	[100]	µg/L	11:35:24
2	Cu 324.752†	19267.0	15737.3	[100]	µg/L	11:35:04
2	Mn 257.610†	31050.4	32908.6	[100]	µg/L	11:35:04
2	Mo 202.031†	1026.8	1051.5	[100]	µg/L	11:35:24
2	Ni 231.604†	2107.8	1826.3	[100]	µg/L	11:35:24
2	P 214.914†	593.3	326.7	[500]	µg/L	11:35:24
2	Pb 220.353†	424.3	400.0	[100]	µg/L	11:35:24
2	S 181.975 Axial†	85.4	65.5	[200]	µg/L	11:35:24
2	Sb 206.836†	134.3	111.2	[100]	µg/L	11:35:24
2	Se 196.026†	124.9	107.6	[100]	µg/L	11:35:24
2	SiO2†	8279.1	5835.7	[1069.5]	µg/L	11:35:04
2	Si 251.611†	7449.5	7296.2	[500]	µg/L	11:35:04
2	Sn 189.927†	250.6	264.8	[100]	µg/L	11:35:24
2	Ti 334.940†	39751.0	41874.7	[100]	µg/L	11:35:04
2	Tl 190.801†	71.6	108.6	[100]	µg/L	11:35:24
2	U 409.014†	1022.9	1099.6	[100]	µg/L	11:35:04
2	V 292.402†	8140.1	8334.2	[100]	µg/L	11:35:04

2	Zn 213.857†	4870.5	4387.7	[100]	µg/L	11:35:24
3	Sc RADIAL	88651.9	88651.9	96.6	%	11:34:15
3	K 766.490 Radial†	2427.0	2107.4	[1000]	µg/L	11:34:15
3	Sr 421.552†	16234.3	16671.2	[100]	µg/L	11:34:15
3	Sc 361.383	1886984.7	1886984.7	96.762	%	11:35:30
3	Y 371.029	1290984.6	1290984.6	96.825	%	11:35:30
3	Ag 328.068†	11456.5	12363.4	[100]	µg/L	11:35:36
3	As 188.979†	68.7	74.4	[100]	µg/L	11:35:56
3	B 249.677†	2344.5	2145.6	[100]	µg/L	11:35:36
3	Ba 233.527†	4368.8	4542.1	[100]	µg/L	11:35:56
3	Be 313.107†	162323.2	169313.1	[100]	µg/L	11:35:30
3	Cd 226.502†	3862.2	4156.7	[100]	µg/L	11:35:56
3	Co 228.616†	2304.0	2346.7	[100]	µg/L	11:35:56
3	Cr 267.716†	4510.7	4569.3	[100]	µg/L	11:35:56
3	Cu 324.752†	19332.4	15755.3	[100]	µg/L	11:35:36
3	Mn 257.610†	31344.0	33132.2	[100]	µg/L	11:35:36
3	Mo 202.031†	1036.9	1059.3	[100]	µg/L	11:35:56
3	Ni 231.604†	2099.9	1812.7	[100]	µg/L	11:35:56
3	P 214.914†	591.5	323.3	[500]	µg/L	11:35:56
3	Pb 220.353†	426.7	401.3	[100]	µg/L	11:35:56
3	S 181.975 Axial†	85.0	64.9	[200]	µg/L	11:35:56
3	Sb 206.836†	134.9	111.6	[100]	µg/L	11:35:56
3	Se 196.026†	117.3	99.4	[100]	µg/L	11:35:56
3	SiO2†	8330.9	5867.9	[1069.5]	µg/L	11:35:36
3	Si 251.611†	7509.6	7339.2	[500]	µg/L	11:35:36
3	Sn 189.927†	251.2	264.8	[100]	µg/L	11:35:56
3	Ti 334.940†	40126.7	42160.6	[100]	µg/L	11:35:36
3	Tl 190.801†	67.7	104.3	[100]	µg/L	11:35:56
3	U 409.014†	1113.1	1190.2	[100]	µg/L	11:35:36
3	V 292.402†	8228.1	8404.2	[100]	µg/L	11:35:36
3	Zn 213.857†	4887.1	4392.3	[100]	µg/L	11:35:56

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1882864.3	3868.28	0.21%	96.551	%
Sc RADIAL	89189.3	468.34	0.53%	97.2	%
Y 371.029	1287266.5	3235.16	0.25%	96.546	%
Ag 328.068†	12396.6	91.32	0.74%	[100]	µg/L
As 188.979†	73.7	0.60	0.81%	[100]	µg/L
B 249.677†	2123.9	29.58	1.39%	[100]	µg/L
Ba 233.527†	4534.8	18.74	0.41%	[100]	µg/L
Be 313.107†	168815.1	434.52	0.26%	[100]	µg/L
Cd 226.502†	4150.4	10.24	0.25%	[100]	µg/L
Co 228.616†	2343.0	6.60	0.28%	[100]	µg/L
Cr 267.716†	4574.1	15.68	0.34%	[100]	µg/L
Cu 324.752†	15769.1	40.39	0.26%	[100]	µg/L
K 766.490 Radial†	2096.6	13.14	0.63%	[1000]	µg/L
Mn 257.610†	33060.5	131.60	0.40%	[100]	µg/L
Mo 202.031†	1055.7	3.93	0.37%	[100]	µg/L
Ni 231.604†	1824.7	11.22	0.62%	[100]	µg/L
P 214.914†	322.5	4.67	1.45%	[500]	µg/L
Pb 220.353†	402.9	3.89	0.97%	[100]	µg/L
S 181.975 Axial†	65.7	0.82	1.25%	[200]	µg/L
Sb 206.836†	110.8	1.12	1.01%	[100]	µg/L
Se 196.026†	100.7	6.37	6.32%	[100]	µg/L
SiO2†	5879.1	49.91	0.85%	[1069.5]	µg/L
Si 251.611†	7309.8	25.42	0.35%	[500]	µg/L
Sn 189.927†	266.9	3.65	1.37%	[100]	µg/L
Sr 421.552†	16618.6	47.03	0.28%	[100]	µg/L
Ti 334.940†	42104.8	207.87	0.49%	[100]	µg/L
Tl 190.801†	106.2	2.15	2.03%	[100]	µg/L
U 409.014†	1156.6	49.62	4.29%	[100]	µg/L
V 292.402†	8382.8	42.20	0.50%	[100]	µg/L
Zn 213.857†	4397.5	13.30	0.30%	[100]	µg/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/15/2010 11:36:05
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	89510.2	89510.2	97.5	%	11:36:36
1	Al 396.153Radial†	10022.5	10438.6	[5000]	µg/L	11:36:36
1	Ca 317.933Radial†	13615.1	13618.9	[5000]	µg/L	11:36:36
1	K 766.490 Radial†	10741.3	10608.0	[5000]	µg/L	11:36:36
1	Mg 279.077 IEC†	380.4	381.0	[5000]	µg/L	11:36:56
1	Sr 421.552†	81568.3	83498.0	[500]	µg/L	11:36:36
1	Sc 361.383	1897841.8	1897841.8	97.319	%	11:38:00
1	Y 371.029	1293037.2	1293037.2	96.979	%	11:38:00
1	Ag 328.068†	59258.2	61414.1	[500]	µg/L	11:38:05
1	As 188.979†	338.2	350.9	[500]	µg/L	11:38:26
1	B 249.677†	10766.0	10785.3	[500]	µg/L	11:38:05
1	Ba 233.527†	22222.4	22861.7	[500]	µg/L	11:38:05
1	Be 313.107†	821778.5	845974.2	[500]	µg/L	11:38:00
1	Cd 226.502†	19942.6	20657.2	[500]	µg/L	11:38:05
1	Co 228.616†	11435.0	11715.5	[500]	µg/L	11:38:05
1	Cr 267.716†	22375.5	22899.5	[500]	µg/L	11:38:05
1	Cu 324.752†	79317.8	77278.8	[500]	µg/L	11:38:05
1	Mn 257.610†	159576.3	164711.4	[500]	µg/L	11:38:00
1	Mo 202.031†	5124.7	5253.5	[500]	µg/L	11:38:26
1	Ni 231.604†	9110.9	9004.5	[500]	µg/L	11:38:05
1	P 214.914†	1785.8	1547.0	[2500]	µg/L	11:38:26
1	Pb 220.353†	1938.2	1952.0	[500]	µg/L	11:38:26
1	S 181.975 Axial†	336.7	323.0	[1000]	µg/L	11:38:26
1	Sb 206.836†	583.4	571.6	[500]	µg/L	11:38:26
1	Se 196.026†	542.2	535.3	[500]	µg/L	11:38:26
1	SiO2†	31266.0	29385.5	[5347.5]	µg/L	11:38:05
1	Si 251.611†	35967.8	36536.9	[2500]	µg/L	11:38:05
1	Sn 189.927†	1281.7	1322.3	[500]	µg/L	11:38:26
1	Ti 334.940†	207749.7	214163.8	[500]	µg/L	11:38:00
1	Tl 190.801†	468.9	516.1	[500]	µg/L	11:38:26
1	U 409.014†	5480.0	5670.8	[500]	µg/L	11:38:05
1	V 292.402†	40847.8	41873.8	[500]	µg/L	11:38:05
1	Zn 213.857†	22032.6	21981.2	[500]	µg/L	11:38:05
2	Sc RADIAL	89291.8	89291.8	97.3	%	11:37:02
2	Al 396.153Radial†	10044.2	10486.1	[5000]	µg/L	11:37:02
2	Ca 317.933Radial†	13583.0	13620.0	[5000]	µg/L	11:37:02
2	K 766.490 Radial†	10806.1	10701.7	[5000]	µg/L	11:37:02
2	Mg 279.077 IEC†	375.4	376.8	[5000]	µg/L	11:37:22
2	Sr 421.552†	81771.8	83911.7	[500]	µg/L	11:37:02
2	Sc 361.383	1890449.6	1890449.6	96.940	%	11:38:33
2	Y 371.029	1288760.5	1288760.5	96.658	%	11:38:33
2	Ag 328.068†	59154.1	61544.8	[500]	µg/L	11:38:39
2	As 188.979†	327.0	340.7	[500]	µg/L	11:38:59
2	B 249.677†	10682.4	10742.3	[500]	µg/L	11:38:39
2	Ba 233.527†	22077.9	22801.9	[500]	µg/L	11:38:39
2	Be 313.107†	819353.0	846774.1	[500]	µg/L	11:38:33
2	Cd 226.502†	19919.8	20713.9	[500]	µg/L	11:38:39
2	Co 228.616†	11376.6	11701.2	[500]	µg/L	11:38:39
2	Cr 267.716†	22365.8	22979.5	[500]	µg/L	11:38:39
2	Cu 324.752†	78918.8	77185.9	[500]	µg/L	11:38:39
2	Mn 257.610†	158797.4	164549.1	[500]	µg/L	11:38:33
2	Mo 202.031†	4954.0	5098.0	[500]	µg/L	11:38:59
2	Ni 231.604†	9066.8	8995.6	[500]	µg/L	11:38:39
2	P 214.914†	1751.3	1518.6	[2500]	µg/L	11:38:59
2	Pb 220.353†	1887.7	1907.7	[500]	µg/L	11:38:59
2	S 181.975 Axial†	329.0	316.5	[1000]	µg/L	11:38:59
2	Sb 206.836†	566.3	556.3	[500]	µg/L	11:38:59
2	Se 196.026†	541.5	536.8	[500]	µg/L	11:38:59
2	SiO2†	31146.6	29388.0	[5347.5]	µg/L	11:38:39

2	Si 251.611†	35836.2	36545.6	[2500]	µg/L	11:38:39
2	Sn 189.927†	1231.3	1275.4	[500]	µg/L	11:38:59
2	Ti 334.940†	207272.2	214506.0	[500]	µg/L	11:38:33
2	Tl 190.801†	456.2	505.0	[500]	µg/L	11:38:59
2	U 409.014†	5428.8	5640.0	[500]	µg/L	11:38:39
2	V 292.402†	40680.7	41865.5	[500]	µg/L	11:38:39
2	Zn 213.857†	21901.3	21934.3	[500]	µg/L	11:38:39
3	Sc RADIAL	89439.1	89439.1	97.5	%	11:37:28
3	Al 396.153Radial†	10053.9	10479.0	[5000]	µg/L	11:37:28
3	Ca 317.933Radial†	13637.8	13653.2	[5000]	µg/L	11:37:28
3	K 766.490 Radial†	10856.6	10735.2	[5000]	µg/L	11:37:28
3	Mg 279.077 IEC†	374.1	374.8	[5000]	µg/L	11:37:48
3	Sr 421.552†	81787.7	83789.6	[500]	µg/L	11:37:28
3	Sc 361.383	1893335.5	1893335.5	97.088	%	11:39:06
3	Y 371.029	1290896.1	1290896.1	96.818	%	11:39:06
3	Ag 328.068†	54177.5	56325.9	[500]	µg/L	11:39:12
3	As 188.979†	274.4	286.0	[500]	µg/L	11:39:32
3	B 249.677†	9770.9	9786.6	[500]	µg/L	11:39:12
3	Ba 233.527†	19477.8	20089.0	[500]	µg/L	11:39:12
3	Be 313.107†	738978.9	762701.1	[500]	µg/L	11:39:06
3	Cd 226.502†	17448.4	18137.1	[500]	µg/L	11:39:12
3	Co 228.616†	9901.5	10164.1	[500]	µg/L	11:39:12
3	Cr 267.716†	18777.3	19248.1	[500]	µg/L	11:39:12
3	Cu 324.752†	69282.5	67136.5	[500]	µg/L	11:39:12
3	Mn 257.610†	143847.1	148900.7	[500]	µg/L	11:39:06
3	Mo 202.031†	4023.4	4131.7	[500]	µg/L	11:39:32
3	Ni 231.604†	7905.5	7785.2	[500]	µg/L	11:39:12
3	P 214.914†	1478.1	1234.4	[2500]	µg/L	11:39:32
3	Pb 220.353†	1599.3	1607.7	[500]	µg/L	11:39:32
3	S 181.975 Axial†	285.3	271.0	[1000]	µg/L	11:39:32
3	Sb 206.836†	477.7	464.1	[500]	µg/L	11:39:32
3	Se 196.026†	453.1	444.9	[500]	µg/L	11:39:32
3	SiO2†	28242.6	26347.9	[5347.5]	µg/L	11:39:12
3	Si 251.611†	32295.4	32842.3	[2500]	µg/L	11:39:12
3	Sn 189.927†	989.0	1023.9	[500]	µg/L	11:39:32
3	Ti 334.940†	185280.4	191528.7	[500]	µg/L	11:39:06
3	Tl 190.801†	399.2	445.5	[500]	µg/L	11:39:32
3	U 409.014†	4650.5	4829.8	[500]	µg/L	11:39:12
3	V 292.402†	35231.9	36189.3	[500]	µg/L	11:39:12
3	Zn 213.857†	19231.4	19149.9	[500]	µg/L	11:39:12

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1893875.6	3725.57	0.20%	97.116	%
Sc RADIAL	89413.7	111.41	0.12%	97.4	%
Y 371.029	1290897.9	2138.35	0.17%	96.818	%
Ag 328.068†	59761.6	2976.14	4.98%	[500]	µg/L
Al 396.153Radial†	10467.9	25.61	0.24%	[5000]	µg/L
As 188.979†	325.9	34.91	10.71%	[500]	µg/L
B 249.677†	10438.1	564.57	5.41%	[500]	µg/L
Ba 233.527†	21917.5	1583.79	7.23%	[500]	µg/L
Be 313.107†	818483.1	48310.30	5.90%	[500]	µg/L
Ca 317.933Radial†	13630.7	19.51	0.14%	[5000]	µg/L
Cd 226.502†	19836.1	1471.65	7.42%	[500]	µg/L
Co 228.616†	11193.6	891.63	7.97%	[500]	µg/L
Cr 267.716†	21709.0	2131.57	9.82%	[500]	µg/L
Cu 324.752†	73867.0	5829.02	7.89%	[500]	µg/L
K 766.490 Radial†	10681.6	65.90	0.62%	[5000]	µg/L
Mg 279.077 IEC†	377.5	3.17	0.84%	[5000]	µg/L
Mn 257.610†	159387.1	9081.82	5.70%	[500]	µg/L
Mo 202.031†	4827.7	607.77	12.59%	[500]	µg/L
Ni 231.604†	8595.1	701.40	8.16%	[500]	µg/L
P 214.914†	1433.3	172.83	12.06%	[2500]	µg/L
Pb 220.353†	1822.4	187.31	10.28%	[500]	µg/L
S 181.975 Axial†	303.5	28.36	9.34%	[1000]	µg/L
Sb 206.836†	530.7	58.16	10.96%	[500]	µg/L
Se 196.026†	505.7	52.65	10.41%	[500]	µg/L
SiO2†	28373.8	1754.49	6.18%	[5347.5]	µg/L
Si 251.611†	35308.3	2135.59	6.05%	[2500]	µg/L

Sn 189.927†	1207.2	160.47	13.29%	[500] µg/L
Sr 421.552†	83733.1	212.58	0.25%	[500] µg/L
Ti 334.940†	206732.8	13168.29	6.37%	[500] µg/L
Tl 190.801†	488.9	37.97	7.77%	[500] µg/L
U 409.014†	5380.2	476.90	8.86%	[500] µg/L
V 292.402†	39976.2	3279.56	8.20%	[500] µg/L
Zn 213.857†	21021.8	1621.26	7.71%	[500] µg/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/15/2010 11:39:42
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	90270.1	90270.1	98.4	%	11:40:12
1	Al 396.153Radial†	19999.5	20495.6	[10000]	µg/L	11:40:12
1	Ca 317.933Radial†	26745.9	26851.2	[10000]	µg/L	11:40:12
1	Fe 238.204 Radial†	803.6	803.9	[10000]	µg/L	11:40:33
1	K 766.490 Radial†	21121.0	21068.3	[10000]	µg/L	11:40:12
1	Mg 279.077 IEC†	739.0	742.2	[10000]	µg/L	11:40:33
1	Na 589.592 Radial†	19525.5	19661.1	[10000]	µg/L	11:40:12
1	Sr 421.552†	161633.1	164194.6	[1000]	µg/L	11:40:12
1	Sc 361.383	1898909.2	1898909.2	97.374	%	11:41:36
1	Y 371.029	1293078.3	1293078.3	96.982	%	11:41:36
1	Ag 328.068†	119195.9	122934.0	[1000]	µg/L	11:41:42
1	As 188.979†	678.5	700.2	[1000]	µg/L	11:42:03
1	B 249.677†	21287.5	21584.2	[1000]	µg/L	11:41:42
1	Ba 233.527†	43937.4	45149.4	[1000]	µg/L	11:41:42
1	Be 313.107†	1613136.3	1658199.2	[1000]	µg/L	11:41:36
1	Cd 226.502†	39624.2	40858.1	[1000]	µg/L	11:41:42
1	Co 228.616†	22510.5	23083.1	[1000]	µg/L	11:41:42
1	Cr 267.716†	44439.3	45545.5	[1000]	µg/L	11:41:42
1	Cu 324.752†	154129.3	154062.0	[1000]	µg/L	11:41:42
1	Mn 257.610†	313266.4	322454.2	[1000]	µg/L	11:41:42
1	Mo 202.031†	10145.2	10406.5	[1000]	µg/L	11:42:03
1	Ni 231.604†	17588.0	17704.8	[1000]	µg/L	11:41:42
1	P 214.914†	3265.3	3065.3	[5000]	µg/L	11:42:03
1	Pb 220.353†	3809.2	3872.4	[1000]	µg/L	11:42:03
1	S 181.975 Axial†	645.9	640.4	[2000]	µg/L	11:42:03
1	Sb 206.836†	1132.9	1135.6	[1000]	µg/L	11:42:03
1	Se 196.026†	1065.3	1072.2	[1000]	µg/L	11:42:03
1	SiO2†	59914.9	58789.0	[10695]	µg/L	11:41:42
1	Si 251.611†	71564.0	73072.2	[5000]	µg/L	11:41:42
1	Sn 189.927†	2553.1	2627.1	[1000]	µg/L	11:42:03
1	Ti 334.940†	409638.0	421376.7	[1000]	µg/L	11:41:36
1	Tl 190.801†	955.6	1015.8	[1000]	µg/L	11:42:03
1	U 409.014†	11013.8	11350.7	[1000]	µg/L	11:41:42
1	V 292.402†	81579.1	83680.0	[1000]	µg/L	11:41:42
1	Zn 213.857†	42835.9	43332.8	[1000]	µg/L	11:41:42
2	Sc RADIAL	90333.0	90333.0	98.4	%	11:40:38
2	Al 396.153Radial†	20020.6	20502.9	[10000]	µg/L	11:40:38
2	Ca 317.933Radial†	26779.3	26866.1	[10000]	µg/L	11:40:38
2	Fe 238.204 Radial†	802.0	801.7	[10000]	µg/L	11:40:59
2	K 766.490 Radial†	21182.4	21115.6	[10000]	µg/L	11:40:38
2	Mg 279.077 IEC†	738.6	741.4	[10000]	µg/L	11:40:59
2	Na 589.592 Radial†	19632.7	19756.2	[10000]	µg/L	11:40:38
2	Sr 421.552†	162361.0	164819.6	[1000]	µg/L	11:40:38
2	Sc 361.383	1912226.7	1912226.7	98.057	%	11:42:09
2	Y 371.029	1300476.2	1300476.2	97.537	%	11:42:09
2	Ag 328.068†	119105.2	121989.0	[1000]	µg/L	11:42:15
2	As 188.979†	646.5	662.7	[1000]	µg/L	11:42:36
2	B 249.677†	21290.3	21434.9	[1000]	µg/L	11:42:15
2	Ba 233.527†	43958.6	44856.8	[1000]	µg/L	11:42:15
2	Be 313.107†	1626653.0	1660446.3	[1000]	µg/L	11:42:09
2	Cd 226.502†	39679.1	40630.7	[1000]	µg/L	11:42:15
2	Co 228.616†	22542.7	22955.0	[1000]	µg/L	11:42:15
2	Cr 267.716†	44289.5	45074.9	[1000]	µg/L	11:42:15
2	Cu 324.752†	153650.9	152471.7	[1000]	µg/L	11:42:15
2	Mn 257.610†	312006.2	318928.4	[1000]	µg/L	11:42:15
2	Mo 202.031†	9803.0	9984.9	[1000]	µg/L	11:42:36
2	Ni 231.604†	17613.3	17604.9	[1000]	µg/L	11:42:15
2	P 214.914†	3173.5	2948.4	[5000]	µg/L	11:42:36
2	Pb 220.353†	3698.1	3731.8	[1000]	µg/L	11:42:36

2	S 181.975 Axial†	632.9	622.5	[2000]	µg/L	11:42:36
2	Sb 206.836†	1098.4	1092.3	[1000]	µg/L	11:42:36
2	Se 196.026†	1024.5	1023.0	[1000]	µg/L	11:42:36
2	SiO2†	59997.4	58444.7	[10695]	µg/L	11:42:15
2	Si 251.611†	71681.0	72679.8	[5000]	µg/L	11:42:15
2	Sn 189.927†	2437.7	2491.2	[1000]	µg/L	11:42:36
2	Ti 334.940†	413113.2	421991.0	[1000]	µg/L	11:42:09
2	Tl 190.801†	937.3	990.3	[1000]	µg/L	11:42:36
2	U 409.014†	11006.6	11264.6	[1000]	µg/L	11:42:15
2	V 292.402†	81429.6	82944.1	[1000]	µg/L	11:42:15
2	Zn 213.857†	42860.0	43051.1	[1000]	µg/L	11:42:15
3	Sc RADIAL	90443.3	90443.3	98.5	%	11:41:04
3	Al 396.153Radial†	20022.6	20480.2	[10000]	µg/L	11:41:04
3	Ca 317.933Radial†	26876.5	26931.7	[10000]	µg/L	11:41:04
3	Fe 238.204 Radial†	802.6	801.3	[10000]	µg/L	11:41:25
3	K 766.490 Radial†	21151.3	21057.8	[10000]	µg/L	11:41:04
3	Mg 279.077 IEC†	741.1	742.9	[10000]	µg/L	11:41:25
3	Na 589.592 Radial†	19574.2	19672.5	[10000]	µg/L	11:41:04
3	Sr 421.552†	162285.8	164542.2	[1000]	µg/L	11:41:04
3	Sc 361.383	1920877.2	1920877.2	98.500	%	11:42:42
3	Y 371.029	1309166.1	1309166.1	98.188	%	11:42:42
3	Ag 328.068†	108682.6	110860.6	[1000]	µg/L	11:42:48
3	As 188.979†	534.2	545.7	[1000]	µg/L	11:43:09
3	B 249.677†	19257.0	19272.8	[1000]	µg/L	11:42:48
3	Ba 233.527†	38521.1	39134.6	[1000]	µg/L	11:42:48
3	Be 313.107†	1460784.6	1484582.1	[1000]	µg/L	11:42:42
3	Cd 226.502†	34616.6	35308.9	[1000]	µg/L	11:42:48
3	Co 228.616†	19455.1	19716.9	[1000]	µg/L	11:42:48
3	Cr 267.716†	36976.0	37446.5	[1000]	µg/L	11:42:48
3	Cu 324.752†	133912.8	131727.6	[1000]	µg/L	11:42:48
3	Mn 257.610†	269449.1	274290.6	[1000]	µg/L	11:42:48
3	Mo 202.031†	7955.6	8064.3	[1000]	µg/L	11:43:09
3	Ni 231.604†	15266.7	15141.7	[1000]	µg/L	11:42:48
3	P 214.914†	2686.6	2439.5	[5000]	µg/L	11:43:09
3	Pb 220.353†	3112.0	3119.8	[1000]	µg/L	11:43:09
3	S 181.975 Axial†	550.5	535.9	[2000]	µg/L	11:43:09
3	Sb 206.836†	928.5	914.8	[1000]	µg/L	11:43:09
3	Se 196.026†	891.1	882.9	[1000]	µg/L	11:43:09
3	SiO2†	53788.6	51865.8	[10695]	µg/L	11:42:48
3	Si 251.611†	63861.3	64411.8	[5000]	µg/L	11:42:48
3	Sn 189.927†	1954.6	1989.6	[1000]	µg/L	11:43:09
3	Ti 334.940†	367405.9	373690.6	[1000]	µg/L	11:42:42
3	Tl 190.801†	809.6	856.3	[1000]	µg/L	11:43:09
3	U 409.014†	9309.9	9491.5	[1000]	µg/L	11:42:48
3	V 292.402†	70026.5	70993.4	[1000]	µg/L	11:42:48
3	Zn 213.857†	37138.4	37045.5	[1000]	µg/L	11:42:48

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1910671.0	11066.31	0.58%	97.977	%
Sc RADIAL	90348.8	87.66	0.10%	98.4	%
Y 371.029	1300906.9	8052.58	0.62%	97.569	%
Ag 328.068†	118594.5	6714.40	5.66%	[1000]	µg/L
Al 396.153Radial†	20492.9	11.63	0.06%	[10000]	µg/L
As 188.979†	636.2	80.56	12.66%	[1000]	µg/L
B 249.677†	20764.0	1293.54	6.23%	[1000]	µg/L
Ba 233.527†	43046.9	3391.34	7.88%	[1000]	µg/L
Be 313.107†	1601075.8	100892.83	6.30%	[1000]	µg/L
Ca 317.933Radial†	26883.0	42.81	0.16%	[10000]	µg/L
Cd 226.502†	38932.6	3140.23	8.07%	[1000]	µg/L
Co 228.616†	21918.3	1907.59	8.70%	[1000]	µg/L
Cr 267.716†	42689.0	4546.16	10.65%	[1000]	µg/L
Cu 324.752†	146087.1	12461.12	8.53%	[1000]	µg/L
Fe 238.204 Radial†	802.3	1.41	0.18%	[10000]	µg/L
K 766.490 Radial†	21080.6	30.81	0.15%	[10000]	µg/L
Mg 279.077 IEC†	742.2	0.78	0.10%	[10000]	µg/L
Mn 257.610†	305224.4	26847.41	8.80%	[1000]	µg/L
Mo 202.031†	9485.2	1248.46	13.16%	[1000]	µg/L
Na 589.592 Radial†	19696.6	51.93	0.26%	[10000]	µg/L

Ni 231.604†	16817.1	1451.83	8.63%	[1000]	µg/L
P 214.914†	2817.7	332.73	11.81%	[5000]	µg/L
Pb 220.353†	3574.7	400.13	11.19%	[1000]	µg/L
S 181.975 Axial†	599.6	55.88	9.32%	[2000]	µg/L
Sb 206.836†	1047.5	116.99	11.17%	[1000]	µg/L
Se 196.026†	992.7	98.25	9.90%	[1000]	µg/L
SiO2†	56366.5	3901.52	6.92%	[10695]	µg/L
Si 251.611†	70054.6	4890.76	6.98%	[5000]	µg/L
Sn 189.927†	2369.3	335.83	14.17%	[1000]	µg/L
Sr 421.552†	164518.8	313.18	0.19%	[1000]	µg/L
Ti 334.940†	405686.1	27710.64	6.83%	[1000]	µg/L
Tl 190.801†	954.1	85.67	8.98%	[1000]	µg/L
U 409.014†	10702.2	1049.44	9.81%	[1000]	µg/L
V 292.402†	79205.8	7121.67	8.99%	[1000]	µg/L
Zn 213.857†	41143.1	3551.47	8.63%	[1000]	µg/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/15/2010 11:43:18
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc RADIAL	90416.5	90416.5	98.5	%	11:43:49
1	Al 396.153Radial†	100299.0	101969.8	[50000]	µg/L	11:43:49
1	Ca 317.933Radial†	130831.1	132457.8	[50000]	µg/L	11:43:49
1	Fe 238.204 Radial†	1599.7	1610.6	[20000]	µg/L	11:44:09
1	Mg 279.077 IEC†	3644.4	3690.2	[50000]	µg/L	11:44:09
1	Na 589.592 Radial†	39060.9	39458.2	[20000]	µg/L	11:43:49
1	Sc 361.383	1907153.6	1907153.6	97.797	%	11:45:13
1	Y 371.029	1288608.6	1288608.6	96.647	%	11:45:13
2	Sc RADIAL	90099.1	90099.1	98.2	%	11:44:15
2	Al 396.153Radial†	100105.2	102131.1	[50000]	µg/L	11:44:15
2	Ca 317.933Radial†	130787.2	132880.9	[50000]	µg/L	11:44:15
2	Fe 238.204 Radial†	1587.8	1604.3	[20000]	µg/L	11:44:35
2	Mg 279.077 IEC†	3640.1	3698.8	[50000]	µg/L	11:44:35
2	Na 589.592 Radial†	39102.0	39639.7	[20000]	µg/L	11:44:15
2	Sc 361.383	1915091.2	1915091.2	98.204	%	11:45:20
2	Y 371.029	1296720.5	1296720.5	97.255	%	11:45:20
3	Sc RADIAL	90441.6	90441.6	98.5	%	11:44:41
3	Al 396.153Radial†	100506.5	102152.2	[50000]	µg/L	11:44:41
3	Ca 317.933Radial†	131386.1	132984.0	[50000]	µg/L	11:44:41
3	Fe 238.204 Radial†	1592.8	1603.2	[20000]	µg/L	11:45:01
3	Mg 279.077 IEC†	3650.2	3695.0	[50000]	µg/L	11:45:01
3	Na 589.592 Radial†	39253.3	39642.4	[20000]	µg/L	11:44:41
3	Sc 361.383	1917926.5	1917926.5	98.349	%	11:45:28
3	Y 371.029	1299619.5	1299619.5	97.472	%	11:45:28

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	1913390.4	5584.20	0.29%	98.117	%
Sc RADIAL	90319.1	190.92	0.21%	98.4	%
Y 371.029	1294982.8	5707.40	0.44%	97.125	%
Al 396.153Radial†	102084.4	99.75	0.10%	[50000]	µg/L
Ca 317.933Radial†	132774.2	278.87	0.21%	[50000]	µg/L
Fe 238.204 Radial†	1606.0	4.02	0.25%	[20000]	µg/L
Mg 279.077 IEC†	3694.6	4.32	0.12%	[50000]	µg/L
Na 589.592 Radial†	39580.1	105.58	0.27%	[20000]	µg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	118.8	0.00000	0.999988	
Al 396.153Radial	3	Lin Thru 0	0.0	2.042	0.00000	0.999997	
As 188.979	3	Lin Thru 0	0.0	0.6401	0.00000	0.999861	
B 249.677	3	Lin Thru 0	0.0	20.79	0.00000	0.999996	
Ba 233.527	3	Lin Thru 0	0.0	43.22	0.00000	0.999964	
Be 313.107	3	Lin Thru 0	0.0	1609	0.00000	0.999951	
Ca 317.933Radial	3	Lin Thru 0	0.0	2.657	0.00000	0.999994	
Cd 226.502	3	Lin Thru 0	0.0	39.10	0.00000	0.999956	
Co 228.616	3	Lin Thru 0	0.0	22.02	0.00000	0.999948	
Cr 267.716	3	Lin Thru 0	0.0	42.86	0.00000	0.999959	
Cu 324.752	3	Lin Thru 0	0.0	146.5	0.00000	0.999967	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0803	0.00000	1.000000	
K 766.490 Radial	3	Lin Thru 0	0.0	2.114	0.00000	0.999986	
Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0739	0.00000	0.999997	
Mn 257.610	3	Lin Thru 0	0.0	308.1	0.00000	0.999825	
Mo 202.031	3	Lin Thru 0	0.0	9.528	0.00000	0.999928	
Na 589.592 Radia	2	Lin Thru 0	0.0	1.977	0.00000	0.999998	

Ni 231.604	3	Lin Thru 0	0.0	16.90	0.00000	0.999936
P 214.914	3	Lin Thru 0	0.0	0.5661	0.00000	0.999899
Pb 220.353	3	Lin Thru 0	0.0	3.592	0.00000	0.999911
S 181.975 Axial	3	Lin Thru 0	0.0	0.3008	0.00000	0.999955
Sb 206.836	3	Lin Thru 0	0.0	1.051	0.00000	0.999975
Se 196.026	3	Lin Thru 0	0.0	0.9965	0.00000	0.999972
SiO2	3	Lin Thru 0	0.0	5.279	0.00000	0.999990
Si 251.611	3	Lin Thru 0	0.0	14.04	0.00000	0.999988
Sn 189.927	3	Lin Thru 0	0.0	2.381	0.00000	0.999913
Sr 421.552	3	Lin Thru 0	0.0	165.1	0.00000	0.999975
Ti 334.940	3	Lin Thru 0	0.0	407.4	0.00000	0.999967
Tl 190.801	3	Lin Thru 0	0.0	0.9597	0.00000	0.999906
U 409.014	3	Lin Thru 0	0.0	10.72	0.00000	0.999973
V 292.402	3	Lin Thru 0	0.0	79.39	0.00000	0.999980
Zn 213.857	3	Lin Thru 0	0.0	41.34	0.00000	0.999946

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/15/2010 11:45:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90599.3	90599.3	98.7	%			11:46:09
1	Al 396.153Radial†	10308.8	10605.1	5180.5	µg/L	5180.5	ppb	11:46:09
1	Ca 317.933Radial†	13689.2	13526.1	5090.0	µg/L	5090.0	ppb	11:46:09
1	Fe 238.204 Radial†	409.8	402.0	5018.6	µg/L	5018.6	ppb	11:46:29
1	K 766.490 Radial†	5640.4	5308.5	2511.6	µg/L	2511.6	ppb	11:46:09
1	Mg 279.077 IEC†	383.0	378.9	5129.5	µg/L	5129.5	ppb	11:46:29
1	Na 589.592 Radial†	4931.6	4805.5	2430.6	µg/L	2430.6	ppb	11:46:09
1	Sr 421.552†	85900.8	86881.4	526.18	µg/L	526.18	ppb	11:46:09
1	Sc 361.383	1934695.1	1934695.1	99.209	%			11:47:33
1	Y 371.029	1318969.1	1318969.1	98.924	%			11:47:33
1	Ag 328.068†	30368.7	31134.3	265.93	µg/L	265.93	ppb	11:47:39
1	As 188.979†	322.9	328.8	511.36	µg/L	511.36	ppb	11:47:59
1	B 249.677†	11455.2	11269.2	540.27	µg/L	540.27	ppb	11:47:39
1	Ba 233.527†	22869.2	23078.6	534.92	µg/L	534.92	ppb	11:47:39
1	Be 313.107†	431727.3	436728.2	271.25	µg/L	271.25	ppb	11:47:33
1	Cd 226.502†	20338.4	20665.9	528.51	µg/L	528.51	ppb	11:47:39
1	Co 228.616†	11845.6	11905.6	540.04	µg/L	540.04	ppb	11:47:39
1	Cr 267.716†	22264.0	22349.2	521.81	µg/L	521.81	ppb	11:47:39
1	Cu 324.752†	81459.3	77884.8	532.56	µg/L	532.56	ppb	11:47:39
1	Mn 257.610†	163567.7	165611.2	537.45	µg/L	537.45	ppb	11:47:33
1	Mo 202.031†	5445.9	5477.0	575.05	µg/L	575.05	ppb	11:47:59
1	Ni 231.604†	9215.6	8931.6	527.84	µg/L	527.84	ppb	11:47:39
1	P 214.914†	1808.2	1534.7	2660.6	µg/L	2660.6	ppb	11:47:59
1	Pb 220.353†	1950.0	1925.9	536.84	µg/L	536.84	ppb	11:47:59
1	S 181.975 Axial†	817.5	801.1	2663.6	µg/L	2663.6	ppb	11:47:59
1	Sb 206.836†	579.0	555.7	532.30	µg/L	532.30	ppb	11:47:59
1	Se 196.026†	2722.0	2721.9	2743.1	µg/L	2743.1	ppb	11:47:59
1	SiO2†	58697.0	56423.2	10688	µg/L	10688	ppb	11:47:39
1	Si 251.611†	69891.4	70027.0	4988.4	µg/L	4988.4	ppb	11:47:39
1	Sn 189.927†	1356.5	1372.6	577.07	µg/L	577.07	ppb	11:47:59
1	Ti 334.940†	206415.1	208752.2	512.14	µg/L	512.14	ppb	11:47:33
1	Tl 190.801†	495.8	534.2	561.79	µg/L	561.79	ppb	11:47:59
1	U 409.014†	5433.2	5516.4	513.55	µg/L	513.55	ppb	11:47:39
1	V 292.402†	42132.7	42369.4	539.12	µg/L	539.12	ppb	11:47:39
1	Zn 213.857†	22635.9	22158.1	532.22	µg/L	532.22	ppb	11:47:39
2	Sc RADIAL	90282.4	90282.4	98.4	%			11:46:35
2	Al 396.153Radial†	10189.0	10520.0	5139.0	µg/L	5139.0	ppb	11:46:35
2	Ca 317.933Radial†	13606.6	13490.8	5076.7	µg/L	5076.7	ppb	11:46:35
2	Fe 238.204 Radial†	412.8	406.5	5074.8	µg/L	5074.8	ppb	11:46:56
2	K 766.490 Radial†	5651.6	5339.9	2526.5	µg/L	2526.5	ppb	11:46:35
2	Mg 279.077 IEC†	380.6	377.8	5115.2	µg/L	5115.2	ppb	11:46:56
2	Na 589.592 Radial†	4914.1	4805.2	2430.4	µg/L	2430.4	ppb	11:46:35
2	Sr 421.552†	85531.7	86811.6	525.76	µg/L	525.76	ppb	11:46:35
2	Sc 361.383	1924341.2	1924341.2	98.678	%			11:48:06
2	Y 371.029	1312706.0	1312706.0	98.454	%			11:48:06
2	Ag 328.068†	30011.9	30937.5	264.26	µg/L	264.26	ppb	11:48:12
2	As 188.979†	319.9	327.6	509.40	µg/L	509.40	ppb	11:48:32
2	B 249.677†	11319.7	11194.0	536.62	µg/L	536.62	ppb	11:48:12
2	Ba 233.527†	22675.4	23006.3	533.25	µg/L	533.25	ppb	11:48:12
2	Be 313.107†	428245.9	435541.6	270.51	µg/L	270.51	ppb	11:48:06
2	Cd 226.502†	20127.8	20562.7	525.86	µg/L	525.86	ppb	11:48:12
2	Co 228.616†	11698.2	11820.4	536.17	µg/L	536.17	ppb	11:48:12
2	Cr 267.716†	22115.4	22319.3	521.11	µg/L	521.11	ppb	11:48:12
2	Cu 324.752†	80647.0	77503.4	529.96	µg/L	529.96	ppb	11:48:12
2	Mn 257.610†	162245.0	165157.9	535.98	µg/L	535.98	ppb	11:48:06
2	Mo 202.031†	5353.0	5412.4	568.27	µg/L	568.27	ppb	11:48:32
2	Ni 231.604†	9129.4	8894.2	525.64	µg/L	525.64	ppb	11:48:12
2	P 214.914†	1783.3	1519.2	2633.4	µg/L	2633.4	ppb	11:48:32
2	Pb 220.353†	1919.8	1906.0	531.26	µg/L	531.26	ppb	11:48:32

2	S 181.975 Axial†	801.9	789.7	2625.6 µg/L	2625.6 ppb	11:48:32
2	Sb 206.836†	579.5	559.4	535.71 µg/L	535.71 ppb	11:48:32
2	Se 196.026†	2666.0	2680.0	2701.2 µg/L	2701.2 ppb	11:48:32
2	SiO2†	58234.2	56272.6	10659 µg/L	10659 ppb	11:48:12
2	Si 251.611†	69463.1	69972.0	4984.5 µg/L	4984.5 ppb	11:48:12
2	Sn 189.927†	1339.1	1362.3	572.74 µg/L	572.74 ppb	11:48:32
2	Ti 334.940†	205026.7	208464.7	511.43 µg/L	511.43 ppb	11:48:06
2	Tl 190.801†	485.7	526.6	553.92 µg/L	553.92 ppb	11:48:32
2	U 409.014†	5370.6	5482.4	510.37 µg/L	510.37 ppb	11:48:12
2	V 292.402†	41702.4	42161.9	536.44 µg/L	536.44 ppb	11:48:12
2	Zn 213.857†	22471.6	22114.3	531.18 µg/L	531.18 ppb	11:48:12
3	Sc RADIAL	90208.9	90208.9	98.3 %		11:47:01
3	Al 396.153Radial†	10203.8	10543.6	5152.7 µg/L	5152.7 ppb	11:47:01
3	Ca 317.933Radial†	13672.8	13569.4	5106.3 µg/L	5106.3 ppb	11:47:01
3	Fe 238.204 Radial†	412.6	406.7	5075.3 µg/L	5075.3 ppb	11:47:21
3	K 766.490 Radial†	5622.1	5314.6	2514.5 µg/L	2514.5 ppb	11:47:01
3	Mg 279.077 IEC†	385.0	382.6	5178.5 µg/L	5178.5 ppb	11:47:21
3	Na 589.592 Radial†	4884.9	4779.6	2417.4 µg/L	2417.4 ppb	11:47:01
3	Sr 421.552†	85548.4	86899.5	526.29 µg/L	526.29 ppb	11:47:01
3	Sc 361.383	1933839.6	1933839.6	99.165 %		11:48:40
3	Y 371.029	1318227.3	1318227.3	98.868 %		11:48:40
3	Ag 328.068†	27782.2	28539.6	243.63 µg/L	243.63 ppb	11:48:45
3	As 188.979†	261.1	266.7	414.47 µg/L	414.47 ppb	11:49:06
3	B 249.677†	10413.7	10224.1	489.84 µg/L	489.84 ppb	11:48:45
3	Ba 233.527†	20363.5	20562.1	476.57 µg/L	476.57 ppb	11:48:45
3	Be 313.107†	392633.2	397497.5	246.89 µg/L	246.89 ppb	11:48:40
3	Cd 226.502†	17941.8	18258.1	466.85 µg/L	466.85 ppb	11:48:45
3	Co 228.616†	10356.4	10409.2	472.09 µg/L	472.09 ppb	11:48:45
3	Cr 267.716†	18846.0	18912.3	441.57 µg/L	441.57 ppb	11:48:45
3	Cu 324.752†	71926.1	68307.7	467.20 µg/L	467.20 ppb	11:48:45
3	Mn 257.610†	149498.4	151496.4	491.64 µg/L	491.64 ppb	11:48:40
3	Mo 202.031†	4370.9	4395.3	461.52 µg/L	461.52 ppb	11:49:06
3	Ni 231.604†	8132.4	7843.4	463.54 µg/L	463.54 ppb	11:48:45
3	P 214.914†	1549.6	1274.6	2206.3 µg/L	2206.3 ppb	11:49:06
3	Pb 220.353†	1627.3	1601.5	446.37 µg/L	446.37 ppb	11:49:06
3	S 181.975 Axial†	685.8	668.6	2223.0 µg/L	2223.0 ppb	11:49:06
3	Sb 206.836†	484.6	460.8	441.03 µg/L	441.03 ppb	11:49:06
3	Se 196.026†	2302.9	2300.4	2320.3 µg/L	2320.3 ppb	11:49:06
3	SiO2†	53296.6	51003.6	9661.2 µg/L	9661.2 ppb	11:48:45
3	Si 251.611†	63215.0	63325.5	4511.0 µg/L	4511.0 ppb	11:48:45
3	Sn 189.927†	1072.2	1086.5	456.90 µg/L	456.90 ppb	11:49:06
3	Ti 334.940†	186655.4	188918.2	463.44 µg/L	463.44 ppb	11:48:40
3	Tl 190.801†	429.7	467.6	492.01 µg/L	492.01 ppb	11:49:06
3	U 409.014†	4690.4	4769.8	443.90 µg/L	443.90 ppb	11:48:45
3	V 292.402†	36545.8	36754.3	467.27 µg/L	467.27 ppb	11:48:45
3	Zn 213.857†	19971.8	19481.6	467.87 µg/L	467.87 ppb	11:48:45

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1930958.6	99.017	%	0.2947				0.30%
Sc RADIAL	90363.5	98.5	%	0.23				0.23%
Y 371.029	1316634.1	98.748	%	0.2567				0.26%
Ag 328.068†	30203.8	257.94	µg/L	12.421	257.94	ppb	12.421	4.82%
QC value within limits for Ag 328.068 Recovery = 103.18%								
Al 396.153Radial†	10556.2	5157.4	µg/L	21.16	5157.4	ppb	21.16	0.41%
QC value within limits for Al 396.153Radial Recovery = 103.15%								
As 188.979†	307.7	478.41	µg/L	55.383	478.41	ppb	55.383	11.58%
QC value within limits for As 188.979 Recovery = 95.68%								
B 249.677†	10895.8	522.24	µg/L	28.121	522.24	ppb	28.121	5.38%
QC value within limits for B 249.677 Recovery = 104.45%								
Ba 233.527†	22215.6	514.91	µg/L	33.215	514.91	ppb	33.215	6.45%
QC value within limits for Ba 233.527 Recovery = 102.98%								
Be 313.107†	423255.8	262.88	µg/L	13.859	262.88	ppb	13.859	5.27%
QC value within limits for Be 313.107 Recovery = 105.15%								
Ca 317.933Radial†	13528.8	5091.0	µg/L	14.83	5091.0	ppb	14.83	0.29%
QC value within limits for Ca 317.933Radial Recovery = 101.82%								
Cd 226.502†	19828.9	507.07	µg/L	34.855	507.07	ppb	34.855	6.87%
QC value within limits for Cd 226.502 Recovery = 101.41%								
Co 228.616†	11378.4	516.10	µg/L	38.162	516.10	ppb	38.162	7.39%

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   QC value within limits for Co 228.616  Recovery = 103.22%
Cr 267.716†            21193.6      494.83 µg/L        46.125      494.83 ppb        46.125   9.32%
   QC value within limits for Cr 267.716  Recovery = 98.97%
Cu 324.752†            74565.3      509.91 µg/L        37.009      509.91 ppb        37.009   7.26%
   QC value within limits for Cu 324.752  Recovery = 101.98%
Fe 238.204 Radial†       405.1      5056.2 µg/L         32.60      5056.2 ppb         32.60   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.12%
K 766.490 Radial†       5321.0      2517.5 µg/L          7.88      2517.5 ppb          7.88   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 100.70%
Mg 279.077 IEC†          379.8      5141.1 µg/L         33.22      5141.1 ppb         33.22   0.65%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.82%
Mn 257.610†           160755.2      521.69 µg/L        26.035      521.69 ppb        26.035   4.99%
   QC value within limits for Mn 257.610  Recovery = 104.34%
Mo 202.031†             5094.9      534.95 µg/L        63.680      534.95 ppb        63.680  11.90%
   QC value within limits for Mo 202.031  Recovery = 106.99%
Na 589.592 Radial†      4796.8      2426.1 µg/L          7.53      2426.1 ppb          7.53   0.31%
   QC value within limits for Na 589.592 Radial  Recovery = 97.05%
Ni 231.604†             8556.4      505.67 µg/L        36.503      505.67 ppb        36.503   7.22%
   QC value within limits for Ni 231.604  Recovery = 101.13%
P 214.914†              1442.8      2500.1 µg/L        254.79      2500.1 ppb        254.79  10.19%
   QC value within limits for P 214.914  Recovery = 100.01%
Pb 220.353†             1811.1      504.82 µg/L        50.702      504.82 ppb        50.702  10.04%
   QC value within limits for Pb 220.353  Recovery = 100.96%
S 181.975 Axial†         753.1      2504.0 µg/L        244.16      2504.0 ppb        244.16   9.75%
   QC value within limits for S 181.975 Axial  Recovery = 100.16%
Sb 206.836†              525.3      503.02 µg/L        53.709      503.02 ppb        53.709  10.68%
   QC value within limits for Sb 206.836  Recovery = 100.60%
Se 196.026†             2567.4      2588.2 µg/L        232.94      2588.2 ppb        232.94   9.00%
   QC value within limits for Se 196.026  Recovery = 103.53%
SiO2†                  54566.5       10336 µg/L         584.6       10336 ppb         584.6   5.66%
   QC value within limits for SiO2  Recovery = 96.64%
Si 251.611†            67774.8      4827.9 µg/L        274.49      4827.9 ppb        274.49   5.69%
   QC value within limits for Si 251.611  Recovery = 96.56%
Sn 189.927†             1273.8      535.57 µg/L        68.166      535.57 ppb        68.166  12.73%
   QC value within limits for Sn 189.927  Recovery = 107.11%
Sr 421.552†            86864.2      526.08 µg/L         0.281      526.08 ppb         0.281   0.05%
   QC value within limits for Sr 421.552  Recovery = 105.22%
Ti 334.940†           202045.0      495.67 µg/L        27.912      495.67 ppb        27.912   5.63%
   QC value within limits for Ti 334.940  Recovery = 99.13%
Tl 190.801†              509.5      535.91 µg/L        38.221      535.91 ppb        38.221   7.13%
   QC value within limits for Tl 190.801  Recovery = 107.18%
U 409.014†              5256.2      489.27 µg/L        39.327      489.27 ppb        39.327   8.04%
   QC value within limits for U 409.014  Recovery = 97.85%
V 292.402†             40428.5      514.28 µg/L        40.733      514.28 ppb        40.733   7.92%
   QC value within limits for V 292.402  Recovery = 102.86%
Zn 213.857†            21251.3      510.42 µg/L        36.856      510.42 ppb        36.856   7.22%
   QC value within limits for Zn 213.857  Recovery = 102.08%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/15/2010 11:49:15
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89480.7	89480.7	97.5	%			11:49:46
1	Al 396.153Radial†	-136.8	22.1	10.785	µg/L	10.785	ppb	11:49:46
1	Ca 317.933Radial†	326.4	-6.2	-2.3252	µg/L	-2.3252	ppb	11:50:06
1	Fe 238.204 Radial†	13.6	0.9	10.969	µg/L	10.969	ppb	11:50:06
1	K 766.490 Radial†	403.3	8.5	3.9996	µg/L	3.9996	ppb	11:49:46
1	Mg 279.077 IEC†	8.8	-0.0	-0.0920	µg/L	-0.0920	ppb	11:50:06
1	Na 589.592 Radial†	186.4	1.0	0.5291	µg/L	0.5291	ppb	11:49:46
1	Sr 421.552†	94.0	-39.0	-0.2359	µg/L	-0.2359	ppb	11:49:46
1	Sc 361.383	1933191.8	1933191.8	99.132	%			11:51:08
1	Y 371.029	1321547.6	1321547.6	99.117	%			11:51:08
1	Ag 328.068†	-613.8	-95.7	-0.8046	µg/L	-0.8046	ppb	11:51:14
1	As 188.979†	-1.9	1.4	2.2522	µg/L	2.2522	ppb	11:51:34
1	B 249.677†	310.6	36.0	1.7258	µg/L	1.7258	ppb	11:51:14
1	Ba 233.527†	-19.3	7.6	0.1755	µg/L	0.1755	ppb	11:51:34
1	Be 313.107†	-1523.0	22.5	0.0139	µg/L	0.0139	ppb	11:51:14
1	Cd 226.502†	-172.3	-8.5	-0.2185	µg/L	-0.2185	ppb	11:51:34
1	Co 228.616†	33.7	-0.4	-0.0189	µg/L	-0.0189	ppb	11:51:34
1	Cr 267.716†	108.8	17.5	0.4075	µg/L	0.4075	ppb	11:51:14
1	Cu 324.752†	4161.7	-25.8	-0.1739	µg/L	-0.1739	ppb	11:51:14
1	Mn 257.610†	-711.3	21.9	0.0717	µg/L	0.0717	ppb	11:51:34
1	Mo 202.031†	27.6	15.5	1.6298	µg/L	1.6298	ppb	11:51:34
1	Ni 231.604†	343.6	-10.8	-0.6401	µg/L	-0.6401	ppb	11:51:34
1	P 214.914†	291.7	6.3	11.095	µg/L	11.095	ppb	11:51:34
1	Pb 220.353†	39.4	0.2	0.0592	µg/L	0.0592	ppb	11:51:34
1	S 181.975 Axial†	20.9	-1.9	-6.2023	µg/L	-6.2023	ppb	11:51:34
1	Sb 206.836†	24.9	-2.7	-2.5908	µg/L	-2.5908	ppb	11:51:34
1	Se 196.026†	21.5	-0.2	-0.1276	µg/L	-0.1276	ppb	11:51:34
1	SiO2†	2672.3	-46.0	-8.7101	µg/L	-8.7101	ppb	11:51:14
1	Si 251.611†	385.7	-32.7	-2.3277	µg/L	-2.3277	ppb	11:51:34
1	Sn 189.927†	-0.3	4.9	2.0625	µg/L	2.0625	ppb	11:51:34
1	Ti 334.940†	-583.8	102.5	0.2515	µg/L	0.2515	ppb	11:51:14
1	Tl 190.801†	-36.2	-2.2	-2.2485	µg/L	-2.2485	ppb	11:51:34
1	U 409.014†	-22.8	16.9	1.5724	µg/L	1.5724	ppb	11:51:14
1	V 292.402†	96.6	-1.7	-0.0084	µg/L	-0.0084	ppb	11:51:14
1	Zn 213.857†	619.7	-33.2	-0.8001	µg/L	-0.8001	ppb	11:51:34
2	Sc RADIAL	89289.4	89289.4	97.3	%			11:50:12
2	Al 396.153Radial†	-161.3	-3.3	-1.6618	µg/L	-1.6618	ppb	11:50:12
2	Ca 317.933Radial†	332.2	0.5	0.1908	µg/L	0.1908	ppb	11:50:32
2	Fe 238.204 Radial†	14.3	1.6	19.980	µg/L	19.980	ppb	11:50:32
2	K 766.490 Radial†	431.0	37.9	17.919	µg/L	17.919	ppb	11:50:12
2	Mg 279.077 IEC†	9.9	1.1	14.968	µg/L	14.968	ppb	11:50:32
2	Na 589.592 Radial†	159.1	-26.6	-13.475	µg/L	-13.475	ppb	11:50:12
2	Sr 421.552†	164.5	33.8	0.2046	µg/L	0.2046	ppb	11:50:12
2	Sc 361.383	1925354.4	1925354.4	98.730	%			11:51:40
2	Y 371.029	1316011.7	1316011.7	98.702	%			11:51:40
2	Ag 328.068†	-537.4	-20.8	-0.1691	µg/L	-0.1691	ppb	11:51:46
2	As 188.979†	-4.1	-0.8	-1.1912	µg/L	-1.1912	ppb	11:52:06
2	B 249.677†	320.1	46.9	2.2474	µg/L	2.2474	ppb	11:51:46
2	Ba 233.527†	-4.8	22.3	0.5163	µg/L	0.5163	ppb	11:52:06
2	Be 313.107†	-1443.6	96.6	0.0600	µg/L	0.0600	ppb	11:51:46
2	Cd 226.502†	-173.3	-10.2	-0.2629	µg/L	-0.2629	ppb	11:52:06
2	Co 228.616†	38.1	4.2	0.1895	µg/L	0.1895	ppb	11:52:06
2	Cr 267.716†	103.5	12.5	0.2930	µg/L	0.2930	ppb	11:51:46
2	Cu 324.752†	4196.9	27.0	0.1880	µg/L	0.1880	ppb	11:51:46
2	Mn 257.610†	-704.2	26.2	0.0851	µg/L	0.0851	ppb	11:52:06
2	Mo 202.031†	23.7	11.6	1.2221	µg/L	1.2221	ppb	11:52:06
2	Ni 231.604†	349.8	-3.2	-0.1882	µg/L	-0.1882	ppb	11:52:06
2	P 214.914†	289.1	4.9	8.6347	µg/L	8.6347	ppb	11:52:06
2	Pb 220.353†	36.3	-2.8	-0.7973	µg/L	-0.7973	ppb	11:52:06

2	S 181.975 Axial†	21.2	-1.4	-4.8092 µg/L	-4.8092 ppb	11:52:06
2	Sb 206.836†	32.4	4.9	4.7090 µg/L	4.7090 ppb	11:52:06
2	Se 196.026†	15.7	-5.9	-5.8720 µg/L	-5.8720 ppb	11:52:06
2	SiO2†	2648.5	-59.1	-11.196 µg/L	-11.196 ppb	11:51:46
2	Si 251.611†	416.8	0.5	0.0346 µg/L	0.0346 ppb	11:52:06
2	Sn 189.927†	-0.8	4.5	1.8804 µg/L	1.8804 ppb	11:52:06
2	Ti 334.940†	-649.3	33.7	0.0815 µg/L	0.0815 ppb	11:51:46
2	Tl 190.801†	-31.5	2.4	2.5406 µg/L	2.5406 ppb	11:52:06
2	U 409.014†	41.7	82.1	7.6561 µg/L	7.6561 ppb	11:51:46
2	V 292.402†	145.6	48.3	0.6240 µg/L	0.6240 ppb	11:51:46
2	Zn 213.857†	619.7	-30.6	-0.7417 µg/L	-0.7417 ppb	11:52:06
3	Sc RADIAL	89535.6	89535.6	97.6 %		11:50:38
3	Al 396.153Radial†	-121.6	37.8	18.489 µg/L	18.489 ppb	11:50:38
3	Ca 317.933Radial†	332.0	-0.6	-0.2352 µg/L	-0.2352 ppb	11:50:58
3	Fe 238.204 Radial†	15.5	2.8	34.656 µg/L	34.656 ppb	11:50:58
3	K 766.490 Radial†	448.7	54.8	25.939 µg/L	25.939 ppb	11:50:38
3	Mg 279.077 IEC†	7.9	-1.0	-13.371 µg/L	-13.371 ppb	11:50:58
3	Na 589.592 Radial†	176.2	-9.6	-4.8481 µg/L	-4.8481 ppb	11:50:38
3	Sr 421.552†	122.4	-9.9	-0.0598 µg/L	-0.0598 ppb	11:50:38
3	Sc 361.383	1937352.4	1937352.4	99.345 %		11:52:13
3	Y 371.029	1325913.5	1325913.5	99.444 %		11:52:13
3	Ag 328.068†	-550.0	-30.1	-0.2507 µg/L	-0.2507 ppb	11:52:18
3	As 188.979†	0.1	3.5	5.4441 µg/L	5.4441 ppb	11:52:39
3	B 249.677†	326.0	50.8	2.4246 µg/L	2.4246 ppb	11:52:18
3	Ba 233.527†	-25.6	1.3	0.0301 µg/L	0.0301 ppb	11:52:39
3	Be 313.107†	-1417.6	131.9	0.0819 µg/L	0.0819 ppb	11:52:18
3	Cd 226.502†	-173.4	-9.3	-0.2400 µg/L	-0.2400 ppb	11:52:39
3	Co 228.616†	25.3	-9.0	-0.4066 µg/L	-0.4066 ppb	11:52:39
3	Cr 267.716†	71.2	-20.7	-0.4827 µg/L	-0.4827 ppb	11:52:18
3	Cu 324.752†	4175.0	-21.5	-0.1399 µg/L	-0.1399 ppb	11:52:18
3	Mn 257.610†	-697.5	37.3	0.1241 µg/L	0.1241 ppb	11:52:39
3	Mo 202.031†	22.0	9.7	1.0239 µg/L	1.0239 ppb	11:52:39
3	Ni 231.604†	368.0	13.0	0.7680 µg/L	0.7680 ppb	11:52:39
3	P 214.914†	283.2	-2.9	-5.0418 µg/L	-5.0418 ppb	11:52:39
3	Pb 220.353†	46.3	7.0	1.9568 µg/L	1.9568 ppb	11:52:39
3	S 181.975 Axial†	18.0	-4.8	-15.970 µg/L	-15.970 ppb	11:52:39
3	Sb 206.836†	30.9	3.2	3.0720 µg/L	3.0720 ppb	11:52:39
3	Se 196.026†	20.5	-1.2	-1.0441 µg/L	-1.0441 ppb	11:52:39
3	SiO2†	2662.5	-61.6	-11.676 µg/L	-11.676 ppb	11:52:18
3	Si 251.611†	393.0	-26.1	-1.8624 µg/L	-1.8624 ppb	11:52:39
3	Sn 189.927†	3.8	9.0	3.7972 µg/L	3.7972 ppb	11:52:39
3	Ti 334.940†	-605.1	82.2	0.2029 µg/L	0.2029 ppb	11:52:18
3	Tl 190.801†	-32.8	1.4	1.4369 µg/L	1.4369 ppb	11:52:39
3	U 409.014†	-68.8	-29.4	-2.7466 µg/L	-2.7466 ppb	11:52:18
3	V 292.402†	96.7	-1.9	-0.0239 µg/L	-0.0239 ppb	11:52:18
3	Zn 213.857†	636.5	-17.6	-0.4309 µg/L	-0.4309 ppb	11:52:39

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1931966.2	99.069	%	0.3124				0.32%
Sc RADIAL	89435.2	97.4	%	0.14				0.14%
Y 371.029	1321157.6	99.088	%	0.3722				0.38%
Ag 328.068†	-48.8	-0.4081	µg/L	0.34579	-0.4081	ppb	0.34579	84.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	18.9	9.2042	µg/L	10.16808	9.2042	ppb	10.16808	110.47%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.4	2.1684	µg/L	3.31842	2.1684	ppb	3.31842	153.04%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	44.6	2.1326	µg/L	0.36330	2.1326	ppb	0.36330	17.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.4	0.2406	µg/L	0.24955	0.2406	ppb	0.24955	103.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	83.7	0.0519	µg/L	0.03473	0.0519	ppb	0.03473	66.86%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.1	-0.7899	µg/L	1.34660	-0.7899	ppb	1.34660	170.48%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-9.3	-0.2405	µg/L	0.02220	-0.2405	ppb	0.02220	9.23%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-1.8	-0.0787	µg/L	0.30252	-0.0787	ppb	0.30252	384.46%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 3.1      0.0726 µg/L       0.48426      0.0726 ppb        0.48426 667.20%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                -6.7     -0.0419 µg/L       0.19986     -0.0419 ppb        0.19986 476.57%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          1.8      21.868 µg/L       11.9555      21.868 ppb        11.9555  54.67%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          33.7      15.952 µg/L       11.1010      15.952 ppb        11.1010  69.59%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.0      0.5019 µg/L      14.17878      0.5019 ppb       14.17878 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                28.5      0.0937 µg/L       0.02722      0.0937 ppb        0.02722  29.06%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                12.3      1.2919 µg/L       0.30893      1.2919 ppb        0.30893  23.91%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -11.7     -5.9315 µg/L       7.06482     -5.9315 ppb        7.06482 119.11%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                -0.3     -0.0201 µg/L       0.71896     -0.0201 ppb        0.71896 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  2.8      4.8961 µg/L       8.69400      4.8961 ppb        8.69400 177.57%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 1.4      0.4062 µg/L       1.40946      0.4062 ppb        1.40946 346.96%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -2.7     -8.9938 µg/L       6.08151     -8.9938 ppb        6.08151  67.62%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.8      1.7301 µg/L       3.83047      1.7301 ppb        3.83047 221.41%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -2.4     -2.3479 µg/L       3.08617     -2.3479 ppb        3.08617 131.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     -55.6     -10.528 µg/L        1.5921     -10.528 ppb         1.5921  15.12%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               -19.4     -1.3852 µg/L       1.25141     -1.3852 ppb        1.25141  90.34%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 6.1      2.5800 µg/L       1.05804      2.5800 ppb        1.05804  41.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -5.0     -0.0304 µg/L       0.22169     -0.0304 ppb        0.22169 729.72%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                72.8      0.1786 µg/L       0.08755      0.1786 ppb        0.08755  49.01%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 0.5      0.5764 µg/L       2.50783      0.5764 ppb        2.50783 435.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 23.2      2.1606 µg/L       5.22619      2.1606 ppb        5.22619 241.88%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 14.9      0.1972 µg/L       0.36965      0.1972 ppb        0.36965 187.42%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -27.1     -0.6575 µg/L       0.19847     -0.6575 ppb        0.19847  30.18%
   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: 3/15/2010 11:52:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89060.1	89060.1	97.0	%			11:53:19
1	Al 396.153Radial†	259.6	430.0	210.30	µg/L	210.30	ppb	11:53:19
1	Ca 317.933Radial†	857.7	542.9	204.31	µg/L	204.31	ppb	11:53:39
1	Fe 238.204 Radial†	19.7	7.2	89.848	µg/L	89.848	ppb	11:53:39
1	K 766.490 Radial†	808.8	428.3	202.64	µg/L	202.64	ppb	11:53:19
1	Mg 279.077 IEC†	30.4	22.3	301.75	µg/L	301.75	ppb	11:53:39
1	Na 589.592 Radial†	754.5	587.3	297.06	µg/L	297.06	ppb	11:53:19
1	Sr 421.552†	915.8	808.4	4.8957	µg/L	4.8957	ppb	11:53:19
1	Sc 361.383	1946662.7	1946662.7	99.823	%			11:54:41
1	Y 371.029	1331681.4	1331681.4	99.877	%			11:54:41
1	Ag 328.068†	17.4	540.9	4.5938	µg/L	4.5938	ppb	11:54:47
1	As 188.979†	14.7	18.1	28.271	µg/L	28.271	ppb	11:55:07
1	B 249.677†	1293.1	1018.1	48.931	µg/L	48.931	ppb	11:55:07
1	Ba 233.527†	199.3	226.8	5.2557	µg/L	5.2557	ppb	11:55:07
1	Be 313.107†	6622.0	8192.5	5.0901	µg/L	5.0901	ppb	11:54:47
1	Cd 226.502†	22.4	187.8	4.7986	µg/L	4.7986	ppb	11:55:07
1	Co 228.616†	141.9	107.8	4.8917	µg/L	4.8917	ppb	11:55:07
1	Cr 267.716†	286.3	194.4	4.5400	µg/L	4.5400	ppb	11:55:07
1	Cu 324.752†	5746.8	1533.1	10.481	µg/L	10.481	ppb	11:54:47
1	Mn 257.610†	2500.7	3244.6	10.515	µg/L	10.515	ppb	11:55:07
1	Mo 202.031†	106.0	93.8	9.8491	µg/L	9.8491	ppb	11:55:07
1	Ni 231.604†	451.7	95.1	5.6222	µg/L	5.6222	ppb	11:55:07
1	P 214.914†	384.1	96.8	170.05	µg/L	170.05	ppb	11:55:07
1	Pb 220.353†	82.1	42.7	11.844	µg/L	11.844	ppb	11:55:07
1	S 181.975 Axial†	53.7	30.8	102.51	µg/L	102.51	ppb	11:55:07
1	Sb 206.836†	38.5	10.7	10.276	µg/L	10.276	ppb	11:55:07
1	Se 196.026†	56.7	35.0	35.200	µg/L	35.200	ppb	11:55:07
1	SiO2†	3800.4	1065.5	201.82	µg/L	201.82	ppb	11:54:47
1	Si 251.611†	1787.7	1369.2	97.532	µg/L	97.532	ppb	11:55:07
1	Sn 189.927†	26.3	31.6	13.280	µg/L	13.280	ppb	11:55:07
1	Ti 334.940†	1368.3	2062.1	5.0415	µg/L	5.0415	ppb	11:54:47
1	Tl 190.801†	-17.2	17.1	17.923	µg/L	17.923	ppb	11:55:07
1	U 409.014†	566.3	607.2	56.614	µg/L	56.614	ppb	11:54:47
1	V 292.402†	512.9	414.6	5.3548	µg/L	5.3548	ppb	11:54:47
1	Zn 213.857†	1088.5	432.1	10.389	µg/L	10.389	ppb	11:55:07
2	Sc RADIAL	89866.3	89866.3	97.9	%			11:53:45
2	Al 396.153Radial†	264.1	432.1	211.35	µg/L	211.35	ppb	11:53:45
2	Ca 317.933Radial†	859.0	536.3	201.81	µg/L	201.81	ppb	11:54:05
2	Fe 238.204 Radial†	22.2	9.6	119.23	µg/L	119.23	ppb	11:54:05
2	K 766.490 Radial†	646.6	255.2	120.76	µg/L	120.76	ppb	11:53:45
2	Mg 279.077 IEC†	30.7	22.3	301.84	µg/L	301.84	ppb	11:54:05
2	Na 589.592 Radial†	736.5	562.0	284.25	µg/L	284.25	ppb	11:53:45
2	Sr 421.552†	935.0	819.5	4.9632	µg/L	4.9632	ppb	11:53:45
2	Sc 361.383	1939680.7	1939680.7	99.465	%			11:55:13
2	Y 371.029	1325025.3	1325025.3	99.378	%			11:55:13
2	Ag 328.068†	88.1	612.1	5.1907	µg/L	5.1907	ppb	11:55:19
2	As 188.979†	19.1	22.6	35.219	µg/L	35.219	ppb	11:55:39
2	B 249.677†	1290.3	1020.0	49.007	µg/L	49.007	ppb	11:55:39
2	Ba 233.527†	205.9	234.1	5.4240	µg/L	5.4240	ppb	11:55:39
2	Be 313.107†	6547.2	8141.2	5.0582	µg/L	5.0582	ppb	11:55:19
2	Cd 226.502†	38.5	204.0	5.2087	µg/L	5.2087	ppb	11:55:39
2	Co 228.616†	138.7	105.0	4.7667	µg/L	4.7667	ppb	11:55:39
2	Cr 267.716†	305.2	214.5	5.0088	µg/L	5.0088	ppb	11:55:39
2	Cu 324.752†	5704.5	1511.3	10.338	µg/L	10.338	ppb	11:55:19
2	Mn 257.610†	2433.5	3186.0	10.327	µg/L	10.327	ppb	11:55:39
2	Mo 202.031†	112.9	101.1	10.620	µg/L	10.620	ppb	11:55:39
2	Ni 231.604†	440.5	85.4	5.0476	µg/L	5.0476	ppb	11:55:39
2	P 214.914†	374.6	88.6	155.65	µg/L	155.65	ppb	11:55:39
2	Pb 220.353†	84.4	45.3	12.592	µg/L	12.592	ppb	11:55:39

2	S 181.975 Axial†	57.0	34.4	114.41 µg/L	114.41 ppb	11:55:39
2	Sb 206.836†	37.1	9.4	9.0666 µg/L	9.0666 ppb	11:55:39
2	Se 196.026†	55.4	33.8	34.102 µg/L	34.102 ppb	11:55:39
2	SiO2†	3847.2	1126.2	213.32 µg/L	213.32 ppb	11:55:19
2	Si 251.611†	1779.8	1367.7	97.425 µg/L	97.425 ppb	11:55:39
2	Sn 189.927†	26.7	32.1	13.512 µg/L	13.512 ppb	11:55:39
2	Ti 334.940†	1370.6	2069.3	5.0593 µg/L	5.0593 ppb	11:55:19
2	Tl 190.801†	-14.3	20.0	20.955 µg/L	20.955 ppb	11:55:39
2	U 409.014†	517.4	560.1	52.217 µg/L	52.217 ppb	11:55:19
2	V 292.402†	459.2	362.5	4.6972 µg/L	4.6972 ppb	11:55:19
2	Zn 213.857†	1056.2	403.6	9.7009 µg/L	9.7009 ppb	11:55:39
3	Sc RADIAL	89196.3	89196.3	97.2 %		11:54:10
3	Al 396.153Radial†	249.8	419.4	205.16 µg/L	205.16 ppb	11:54:10
3	Ca 317.933Radial†	861.9	545.8	205.40 µg/L	205.40 ppb	11:54:31
3	Fe 238.204 Radial†	19.7	7.2	89.853 µg/L	89.853 ppb	11:54:31
3	K 766.490 Radial†	698.3	313.3	148.24 µg/L	148.24 ppb	11:54:10
3	Mg 279.077 IEC†	28.5	20.2	273.98 µg/L	273.98 ppb	11:54:31
3	Na 589.592 Radial†	712.7	543.1	274.71 µg/L	274.71 ppb	11:54:10
3	Sr 421.552†	932.4	824.0	4.9906 µg/L	4.9906 ppb	11:54:10
3	Sc 361.383	1952151.6	1952151.6	100.10 %		11:55:45
3	Y 371.029	1333582.3	1333582.3	100.02 %		11:55:45
3	Ag 328.068†	53.5	577.0	4.8900 µg/L	4.8900 ppb	11:55:51
3	As 188.979†	11.2	14.6	22.751 µg/L	22.751 ppb	11:56:12
3	B 249.677†	1153.8	875.2	42.058 µg/L	42.058 ppb	11:56:12
3	Ba 233.527†	179.1	206.0	4.7725 µg/L	4.7725 ppb	11:56:12
3	Be 313.107†	5724.3	7277.1	4.5213 µg/L	4.5213 ppb	11:55:51
3	Cd 226.502†	-0.4	164.9	4.2105 µg/L	4.2105 ppb	11:56:12
3	Co 228.616†	114.0	79.5	3.6066 µg/L	3.6066 ppb	11:56:12
3	Cr 267.716†	255.9	163.3	3.8133 µg/L	3.8133 ppb	11:56:12
3	Cu 324.752†	5573.7	1344.0	9.1907 µg/L	9.1907 ppb	11:55:51
3	Mn 257.610†	1921.2	2658.6	8.6154 µg/L	8.6154 ppb	11:56:12
3	Mo 202.031†	99.7	87.3	9.1622 µg/L	9.1622 ppb	11:56:12
3	Ni 231.604†	423.8	65.9	3.8966 µg/L	3.8966 ppb	11:56:12
3	P 214.914†	362.5	74.2	130.17 µg/L	130.17 ppb	11:56:12
3	Pb 220.353†	80.1	40.4	11.225 µg/L	11.225 ppb	11:56:12
3	S 181.975 Axial†	48.2	25.2	83.750 µg/L	83.750 ppb	11:56:12
3	Sb 206.836†	38.5	10.6	10.189 µg/L	10.189 ppb	11:56:12
3	Se 196.026†	41.3	19.4	19.550 µg/L	19.550 ppb	11:56:12
3	SiO2†	3718.2	972.6	184.24 µg/L	184.24 ppb	11:55:51
3	Si 251.611†	1577.3	1153.9	82.201 µg/L	82.201 ppb	11:56:12
3	Sn 189.927†	20.9	26.1	11.002 µg/L	11.002 ppb	11:56:12
3	Ti 334.940†	1189.3	1879.4	4.5953 µg/L	4.5953 ppb	11:55:51
3	Tl 190.801†	-9.4	25.0	26.129 µg/L	26.129 ppb	11:56:12
3	U 409.014†	479.4	518.8	48.363 µg/L	48.363 ppb	11:55:51
3	V 292.402†	428.0	328.4	4.2535 µg/L	4.2535 ppb	11:55:51
3	Zn 213.857†	1000.1	340.7	8.1891 µg/L	8.1891 ppb	11:56:12

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1946165.0	99.797	%	0.3205				0.32%
Sc RADIAL	89374.3	97.4	%	0.47				0.48%
Y 371.029	1330096.3	99.758	%	0.3370				0.34%
Ag 328.068†	576.7	4.8915	µg/L	0.29841	4.8915	ppb	0.29841	6.10%
QC value within limits for Ag 328.068 Recovery = 97.83%								
Al 396.153Radial†	427.2	208.94	µg/L	3.312	208.94	ppb	3.312	1.59%
QC value within limits for Al 396.153Radial Recovery = 104.47%								
As 188.979†	18.4	28.747	µg/L	6.2474	28.747	ppb	6.2474	21.73%
QC value within limits for As 188.979 Recovery = 95.82%								
B 249.677†	971.1	46.665	µg/L	3.9900	46.665	ppb	3.9900	8.55%
QC value within limits for B 249.677 Recovery = 93.33%								
Ba 233.527†	222.3	5.1507	µg/L	0.33821	5.1507	ppb	0.33821	6.57%
QC value within limits for Ba 233.527 Recovery = 103.01%								
Be 313.107†	7870.3	4.8899	µg/L	0.31958	4.8899	ppb	0.31958	6.54%
QC value within limits for Be 313.107 Recovery = 97.80%								
Ca 317.933Radial†	541.7	203.84	µg/L	1.843	203.84	ppb	1.843	0.90%
QC value within limits for Ca 317.933Radial Recovery = 101.92%								
Cd 226.502†	185.6	4.7393	µg/L	0.50175	4.7393	ppb	0.50175	10.59%
QC value within limits for Cd 226.502 Recovery = 94.79%								
Co 228.616†	97.4	4.4217	µg/L	0.70863	4.4217	ppb	0.70863	16.03%

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   QC value within limits for Co 228.616  Recovery = 88.43%
Cr 267.716†              190.8      4.4540 µg/L       0.60233      4.4540 ppb        0.60233  13.52%
   QC value within limits for Cr 267.716  Recovery = 89.08%
Cu 324.752†             1462.8      10.003 µg/L        0.7074      10.003 ppb         0.7074   7.07%
   QC value within limits for Cu 324.752  Recovery = 100.03%
Fe 238.204 Radial†        8.0      99.645 µg/L       16.9646      99.645 ppb        16.9646  17.03%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.64%
K 766.490 Radial†        332.3      157.21 µg/L        41.668      157.21 ppb         41.668  26.50%
   QC value within limits for K 766.490 Radial  Recovery = 104.81%
Mg 279.077 IEC†           21.6      292.52 µg/L        16.057      292.52 ppb         16.057   5.49%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.51%
Mn 257.610†             3029.7      9.8192 µg/L       1.04677      9.8192 ppb        1.04677  10.66%
   QC value within limits for Mn 257.610  Recovery = 98.19%
Mo 202.031†               94.1      9.8771 µg/L       0.72930      9.8771 ppb        0.72930   7.38%
   QC value within limits for Mo 202.031  Recovery = 98.77%
Na 589.592 Radial†       564.2      285.34 µg/L        11.214      285.34 ppb         11.214   3.93%
   QC value within limits for Na 589.592 Radial  Recovery = 95.11%
Ni 231.604†               82.1      4.8555 µg/L       0.87870      4.8555 ppb        0.87870  18.10%
   QC value within limits for Ni 231.604  Recovery = 97.11%
P 214.914†                86.5      151.96 µg/L        20.195      151.96 ppb         20.195  13.29%
   QC value within limits for P 214.914  Recovery = 101.30%
Pb 220.353†               42.8      11.887 µg/L        0.6846      11.887 ppb         0.6846   5.76%
   QC value within limits for Pb 220.353  Recovery = 118.87%
S 181.975 Axial†          30.1      100.22 µg/L        15.456      100.22 ppb         15.456  15.42%
   QC value within limits for S 181.975 Axial  Recovery = 100.22%
Sb 206.836†               10.2      9.8438 µg/L       0.67451      9.8438 ppb        0.67451   6.85%
   QC value within limits for Sb 206.836  Recovery = 98.44%
Se 196.026†               29.4      29.617 µg/L        8.7358      29.617 ppb         8.7358  29.50%
   QC value within limits for Se 196.026  Recovery = 98.72%
SiO2†                   1054.7      199.79 µg/L        14.646      199.79 ppb         14.646   7.33%
   QC value within limits for SiO2  Recovery = 93.80%
Si 251.611†             1296.9      92.386 µg/L        8.8206      92.386 ppb         8.8206   9.55%
   QC value within limits for Si 251.611  Recovery = 92.39%
Sn 189.927†               29.9      12.598 µg/L        1.3873      12.598 ppb         1.3873  11.01%
   QC value within limits for Sn 189.927  Recovery = 125.98%
Sr 421.552†              817.3      4.9498 µg/L       0.04887      4.9498 ppb        0.04887   0.99%
   QC value within limits for Sr 421.552  Recovery = 99.00%
Ti 334.940†             2003.6      4.8987 µg/L       0.26293      4.8987 ppb        0.26293   5.37%
   QC value within limits for Ti 334.940  Recovery = 97.97%
Tl 190.801†               20.7      21.669 µg/L        4.1492      21.669 ppb         4.1492  19.15%
   QC value within limits for Tl 190.801  Recovery = 108.34%
U 409.014†               562.0      52.398 µg/L        4.1282      52.398 ppb         4.1282   7.88%
   QC value within limits for U 409.014  Recovery = 104.80%
V 292.402†               368.5      4.7685 µg/L       0.55410      4.7685 ppb        0.55410  11.62%
   QC value within limits for V 292.402  Recovery = 95.37%
Zn 213.857†              392.2      9.4262 µg/L       1.12520      9.4262 ppb        1.12520  11.94%
   QC value within limits for Zn 213.857  Recovery = 94.26%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 103
Date Collected: 3/15/2010 11:56:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88273.2	88273.2	96.2	%			11:57:00
1	Al 396.153Radial†	1021584.2	1062288.1	520100	µg/L	520100	ppb	11:56:55
1	Ca 317.933Radial†	1243997.1	1293023.9	486570	µg/L	486570	ppb	11:56:55
1	Fe 238.204 Radial†	14394.8	14953.0	186240	µg/L	186240	ppb	11:57:00
1	K 766.490 Radial†	213.8	-182.9	-86.527	µg/L	-86.527	ppb	11:57:00
1	Mg 279.077 IEC†	35146.9	36532.6	494010	µg/L	494010	ppb	11:57:00
1	Na 589.592 Radial†	175.5	-7.7	-3.8711	µg/L	-3.8711	ppb	11:57:00
1	Sr 421.552†	742.3	636.4	3.8543	µg/L	3.8543	ppb	11:57:00
1	Sc 361.383	1819924.8	1819924.8	93.324	%			11:57:36
1	Y 371.029	1232317.1	1232317.1	92.425	%			11:57:36
1	Ag 328.068†	-2239.7	-1876.4	-1.2848	µg/L	-1.2848	ppb	11:57:56
1	As 188.979†	25.4	30.6	-34.399	µg/L	-34.399	ppb	11:57:56
1	B 249.677†	1414.6	1238.5	-37.614	µg/L	-37.614	ppb	11:57:36
1	Ba 233.527†	293.1	341.2	7.9443	µg/L	7.9443	ppb	11:57:56
1	Be 313.107†	-1968.1	-550.1	-0.3535	µg/L	-0.3535	ppb	11:57:36
1	Cd 226.502†	780.6	1001.7	4.5707	µg/L	4.5707	ppb	11:57:56
1	Co 228.616†	85.8	57.5	2.5398	µg/L	2.5398	ppb	11:57:56
1	Cr 267.716†	12.9	-78.5	-1.8151	µg/L	-1.8151	ppb	11:57:56
1	Cu 324.752†	-1208.8	-5519.2	-2.6586	µg/L	-2.6586	ppb	11:57:56
1	Mn 257.610†	5866.1	7025.2	0.5161	µg/L	0.5161	ppb	11:57:36
1	Mo 202.031†	-63.3	-80.1	-1.3346	µg/L	-1.3346	ppb	11:57:56
1	Ni 231.604†	277.4	-60.1	-1.1399	µg/L	-1.1399	ppb	11:57:56
1	P 214.914†	289.9	22.6	41.873	µg/L	41.873	ppb	11:57:56
1	Pb 220.353†	-88.1	-134.0	4.8313	µg/L	4.8313	ppb	11:57:56
1	S 181.975 Axial†	-27.7	-52.7	-175.08	µg/L	-175.08	ppb	11:57:56
1	Sb 206.836†	25.4	-0.6	-7.9897	µg/L	-7.9897	ppb	11:57:56
1	Se 196.026†	-150.1	-182.7	-1.5016	µg/L	-1.5016	ppb	11:57:56
1	SiO2†	2392.2	-178.4	-33.788	µg/L	-33.788	ppb	11:57:56
1	Si 251.611†	448.1	58.5	4.1674	µg/L	4.1674	ppb	11:57:56
1	Sn 189.927†	-97.8	-99.5	8.0736	µg/L	8.0736	ppb	11:57:56
1	Ti 334.940†	10973.1	12449.4	-0.7931	µg/L	-0.7931	ppb	11:57:36
1	Tl 190.801†	-3.8	30.3	-36.214	µg/L	-36.214	ppb	11:57:56
1	U 409.014†	-75.5	-41.0	-59.390	µg/L	-59.390	ppb	11:57:36
1	V 292.402†	2168.8	2224.8	4.3136	µg/L	4.3136	ppb	11:57:56
1	Zn 213.857†	2114.1	1607.1	2.0785	µg/L	2.0785	ppb	11:57:56
2	Sc RADIAL	88155.2	88155.2	96.1	%			11:57:12
2	Al 396.153Radial†	1019241.1	1061269.8	519600	µg/L	519600	ppb	11:57:06
2	Ca 317.933Radial†	1245464.8	1296282.4	487800	µg/L	487800	ppb	11:57:06
2	Fe 238.204 Radial†	14451.7	15032.2	187230	µg/L	187230	ppb	11:57:12
2	K 766.490 Radial†	280.5	-113.2	-53.541	µg/L	-53.541	ppb	11:57:12
2	Mg 279.077 IEC†	35235.4	36673.7	495920	µg/L	495920	ppb	11:57:12
2	Na 589.592 Radial†	200.2	18.2	9.2237	µg/L	9.2237	ppb	11:57:12
2	Sr 421.552†	702.8	596.3	3.6116	µg/L	3.6116	ppb	11:57:12
2	Sc 361.383	1823854.3	1823854.3	93.525	%			11:58:05
2	Y 371.029	1235018.6	1235018.6	92.627	%			11:58:05
2	Ag 328.068†	-2252.9	-1885.4	-1.2907	µg/L	-1.2907	ppb	11:58:25
2	As 188.979†	20.7	25.5	-42.737	µg/L	-42.737	ppb	11:58:25
2	B 249.677†	1381.6	1199.9	-39.981	µg/L	-39.981	ppb	11:58:05
2	Ba 233.527†	279.4	325.8	7.5869	µg/L	7.5869	ppb	11:58:25
2	Be 313.107†	-2028.8	-610.5	-0.3911	µg/L	-0.3911	ppb	11:58:05
2	Cd 226.502†	764.2	982.5	3.9682	µg/L	3.9682	ppb	11:58:25
2	Co 228.616†	80.1	51.2	2.2554	µg/L	2.2554	ppb	11:58:25
2	Cr 267.716†	25.2	-65.4	-1.5080	µg/L	-1.5080	ppb	11:58:25
2	Cu 324.752†	-1131.3	-5433.5	-1.8885	µg/L	-1.8885	ppb	11:58:25
2	Mn 257.610†	5895.1	7042.6	0.5024	µg/L	0.5024	ppb	11:58:05
2	Mo 202.031†	-63.6	-80.4	-1.3248	µg/L	-1.3248	ppb	11:58:25
2	Ni 231.604†	297.7	-39.2	0.1143	µg/L	0.1143	ppb	11:58:25
2	P 214.914†	295.2	27.7	49.788	µg/L	49.788	ppb	11:58:25
2	Pb 220.353†	-100.8	-147.4	1.0779	µg/L	1.0779	ppb	11:58:25

2	S 181.975 Axial†	-24.0	-48.6	-161.63 µg/L	-161.63 ppb	11:58:25
2	Sb 206.836†	29.6	3.8	-3.8124 µg/L	-3.8124 ppb	11:58:25
2	Se 196.026†	-149.3	-181.4	1.3785 µg/L	1.3785 ppb	11:58:25
2	SiO2†	2420.0	-154.2	-29.200 µg/L	-29.200 ppb	11:58:25
2	Si 251.611†	447.6	56.9	4.0555 µg/L	4.0555 ppb	11:58:25
2	Sn 189.927†	-94.5	-95.9	9.7402 µg/L	9.7402 ppb	11:58:25
2	Ti 334.940†	11018.6	12472.8	-0.8672 µg/L	-0.8672 ppb	11:58:05
2	Tl 190.801†	0.5	34.9	-31.532 µg/L	-31.532 ppb	11:58:25
2	U 409.014†	-60.9	-25.2	-58.130 µg/L	-58.130 ppb	11:58:05
2	V 292.402†	2105.9	2152.5	3.2804 µg/L	3.2804 ppb	11:58:25
2	Zn 213.857†	2112.4	1600.3	1.7544 µg/L	1.7544 ppb	11:58:25
3	Sc RADIAL	87413.8	87413.8	95.2 %		11:57:23
3	Al 396.153Radial†	1019243.0	1070272.1	524010 µg/L	524010 ppb	11:57:18
3	Ca 317.933Radial†	1245816.5	1307649.6	492080 µg/L	492080 ppb	11:57:18
3	Fe 238.204 Radial†	14310.3	15011.4	186970 µg/L	186970 ppb	11:57:23
3	K 766.490 Radial†	165.8	-231.0	-109.31 µg/L	-109.31 ppb	11:57:23
3	Mg 279.077 IEC†	34890.5	36622.7	495230 µg/L	495230 ppb	11:57:23
3	Na 589.592 Radial†	190.1	9.4	4.7643 µg/L	4.7643 ppb	11:57:23
3	Sr 421.552†	709.7	609.8	3.6930 µg/L	3.6930 ppb	11:57:23
3	Sc 361.383	1827958.2	1827958.2	93.736 %		11:58:34
3	Y 371.029	1237561.7	1237561.7	92.818 %		11:58:34
3	Ag 328.068†	-2264.8	-1892.7	-1.3723 µg/L	-1.3723 ppb	11:58:54
3	As 188.979†	20.7	25.4	-43.263 µg/L	-43.263 ppb	11:58:54
3	B 249.677†	1390.6	1206.2	-39.543 µg/L	-39.543 ppb	11:58:34
3	Ba 233.527†	287.7	334.0	7.7770 µg/L	7.7770 ppb	11:58:54
3	Be 313.107†	-1996.5	-571.1	-0.3666 µg/L	-0.3666 ppb	11:58:34
3	Cd 226.502†	784.3	1002.1	4.4987 µg/L	4.4987 ppb	11:58:54
3	Co 228.616†	94.3	66.2	2.9347 µg/L	2.9347 ppb	11:58:54
3	Cr 267.716†	52.1	-36.7	-0.8402 µg/L	-0.8402 ppb	11:58:54
3	Cu 324.752†	-1187.3	-5490.6	-2.3270 µg/L	-2.3270 ppb	11:58:54
3	Mn 257.610†	5887.3	7020.2	0.4606 µg/L	0.4606 ppb	11:58:34
3	Mo 202.031†	-60.1	-76.5	-0.9242 µg/L	-0.9242 ppb	11:58:54
3	Ni 231.604†	295.1	-42.7	-0.0969 µg/L	-0.0969 ppb	11:58:54
3	P 214.914†	298.6	30.6	56.445 µg/L	56.445 ppb	11:58:54
3	Pb 220.353†	-94.0	-139.9	3.5075 µg/L	3.5075 ppb	11:58:54
3	S 181.975 Axial†	-22.7	-47.2	-156.80 µg/L	-156.80 ppb	11:58:54
3	Sb 206.836†	29.8	3.9	-3.7817 µg/L	-3.7817 ppb	11:58:54
3	Se 196.026†	-159.9	-192.3	-10.363 µg/L	-10.363 ppb	11:58:54
3	SiO2†	2405.8	-175.1	-33.176 µg/L	-33.176 ppb	11:58:54
3	Si 251.611†	438.9	46.5	3.3124 µg/L	3.3124 ppb	11:58:54
3	Sn 189.927†	-101.1	-102.6	7.3021 µg/L	7.3021 ppb	11:58:54
3	Ti 334.940†	10973.9	12398.6	-0.9272 µg/L	-0.9272 ppb	11:58:34
3	Tl 190.801†	9.4	44.4	-22.539 µg/L	-22.539 ppb	11:58:54
3	U 409.014†	-153.3	-123.6	-67.536 µg/L	-67.536 ppb	11:58:34
3	V 292.402†	2106.9	2148.5	3.2576 µg/L	3.2576 ppb	11:58:54
3	Zn 213.857†	2089.3	1570.6	1.0883 µg/L	1.0883 ppb	11:58:54

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1823912.4	93.528	%	0.2060				0.22%
Sc RADIAL	87947.4	95.8	%	0.51				0.53%
Y 371.029	1234965.8	92.623	%	0.1967				0.21%
Ag 328.068†	-1884.8	-1.3159	µg/L	0.04894	-1.3159	ppb	0.04894	3.72%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1064610.0	521240	µg/L	2413.7	521240	ppb	2413.7	0.46%
QC value within limits for Al 396.153Radial Recovery = 104.25%								
As 188.979†	27.2	-40.133	µg/L	4.9728	-40.133	ppb	4.9728	12.39%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	1214.9	-39.046	µg/L	1.2595	-39.046	ppb	1.2595	3.23%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	333.7	7.7694	µg/L	0.17884	7.7694	ppb	0.17884	2.30%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-577.2	-0.3704	µg/L	0.01907	-0.3704	ppb	0.01907	5.15%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1298985.3	488820	µg/L	2889.4	488820	ppb	2889.4	0.59%
QC value within limits for Ca 317.933Radial Recovery = 97.76%								
Cd 226.502†	995.4	4.3459	µg/L	0.32903	4.3459	ppb	0.32903	7.57%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	58.3	2.5766	µg/L	0.34118	2.5766	ppb	0.34118	13.24%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -60.2     -1.3877 µg/L       0.49847     -1.3877 ppb        0.49847  35.92%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -5481.1     -2.2914 µg/L       0.38628     -2.2914 ppb        0.38628  16.86%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     14998.9      186810 µg/L         511.5      186810 ppb          511.5   0.27%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.41%
K 766.490 Radial†       -175.7     -83.125 µg/L       28.0391     -83.125 ppb        28.0391  33.73%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        36609.6      495060 µg/L         965.7      495060 ppb          965.7   0.20%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.01%
Mn 257.610†             7029.3      0.4930 µg/L       0.02889      0.4930 ppb        0.02889   5.86%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -79.0     -1.1946 µg/L       0.23418     -1.1946 ppb        0.23418  19.60%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         6.7      3.3723 µg/L       6.65744      3.3723 ppb        6.65744 197.42%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -47.3     -0.3742 µg/L       0.67152     -0.3742 ppb        0.67152 179.47%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                27.0      49.369 µg/L        7.2954      49.369 ppb         7.2954  14.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -140.4      3.1389 µg/L       1.90368      3.1389 ppb        1.90368  60.65%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -49.5     -164.50 µg/L         9.476     -164.50 ppb          9.476   5.76%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                2.4     -5.1946 µg/L       2.42071     -5.1946 ppb        2.42071  46.60%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†             -185.5     -3.4953 µg/L       6.11925     -3.4953 ppb        6.11925 175.07%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -169.2     -32.055 µg/L        2.4913     -32.055 ppb         2.4913   7.77%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               54.0      3.8451 µg/L       0.46474      3.8451 ppb        0.46474  12.09%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -99.3      8.3719 µg/L       1.24611      8.3719 ppb        1.24611  14.88%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              614.2      3.7196 µg/L       0.12350      3.7196 ppb        0.12350   3.32%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            12440.3     -0.8625 µg/L       0.06714     -0.8625 ppb        0.06714   7.78%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               36.5     -30.095 µg/L        6.9497     -30.095 ppb         6.9497  23.09%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               -63.3     -61.686 µg/L        5.1055     -61.686 ppb         5.1055   8.28%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              2175.2      3.6172 µg/L       0.60318      3.6172 ppb        0.60318  16.68%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             1592.7      1.6404 µg/L       0.50483      1.6404 ppb        0.50483  30.77%
   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: 3/15/2010 11:59:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87640.7	87640.7	95.5	%			11:59:41
1	Al 396.153Radial†	1020621.1	1068944.6	523350	µg/L	523350	ppb	11:59:36
1	Ca 317.933Radial†	1247859.8	1306402.9	491610	µg/L	491610	ppb	11:59:36
1	Fe 238.204 Radial†	14327.3	14990.3	186720	µg/L	186720	ppb	11:59:41
1	K 766.490 Radial†	10908.7	11018.3	5213.1	µg/L	5213.1	ppb	11:59:41
1	Mg 279.077 IEC†	35072.9	36718.9	496540	µg/L	496540	ppb	11:59:41
1	Na 589.592 Radial†	9903.0	10180.1	5148.9	µg/L	5148.9	ppb	11:59:41
1	Sr 421.552†	80346.2	84002.2	508.74	µg/L	508.74	ppb	11:59:36
1	Sc 361.383	1825807.7	1825807.7	93.625	%			12:00:18
1	Y 371.029	1237445.1	1237445.1	92.809	%			12:00:18
1	Ag 328.068†	26604.5	28939.4	261.51	µg/L	261.51	ppb	12:00:18
1	As 188.979†	335.3	361.6	480.92	µg/L	480.92	ppb	12:00:39
1	B 249.677†	11564.2	12074.2	484.12	µg/L	484.12	ppb	12:00:18
1	Ba 233.527†	20306.0	21715.7	503.41	µg/L	503.41	ppb	12:00:39
1	Be 313.107†	368049.6	394667.5	245.10	µg/L	245.10	ppb	12:00:18
1	Cd 226.502†	17795.8	19172.8	469.71	µg/L	469.71	ppb	12:00:39
1	Co 228.616†	9336.2	9937.4	450.55	µg/L	450.55	ppb	12:00:39
1	Cr 267.716†	19600.1	20842.3	486.66	µg/L	486.66	ppb	12:00:39
1	Cu 324.752†	75383.3	76291.9	555.84	µg/L	555.84	ppb	12:00:18
1	Mn 257.610†	147367.0	158140.1	490.82	µg/L	490.82	ppb	12:00:18
1	Mo 202.031†	4571.9	4870.9	518.34	µg/L	518.34	ppb	12:00:39
1	Ni 231.604†	7418.7	7566.3	449.54	µg/L	449.54	ppb	12:00:39
1	P 214.914†	1708.6	1537.0	2666.1	µg/L	2666.1	ppb	12:00:39
1	Pb 220.353†	1562.9	1629.8	496.12	µg/L	496.12	ppb	12:00:39
1	S 181.975 Axial†	759.1	787.9	2619.5	µg/L	2619.5	ppb	12:00:39
1	Sb 206.836†	556.0	566.0	534.08	µg/L	534.08	ppb	12:00:39
1	Se 196.026†	2177.5	2303.9	2493.0	µg/L	2493.0	ppb	12:00:39
1	SiO2†	57136.5	58285.0	11040	µg/L	11040	ppb	12:00:18
1	Si 251.611†	68591.0	72839.4	5188.7	µg/L	5188.7	ppb	12:00:18
1	Sn 189.927†	1073.6	1151.9	534.26	µg/L	534.26	ppb	12:00:39
1	Ti 334.940†	206417.3	221162.8	511.45	µg/L	511.45	ppb	12:00:18
1	Tl 190.801†	429.5	493.1	450.64	µg/L	450.64	ppb	12:00:39
1	U 409.014†	4846.7	5216.5	430.65	µg/L	430.65	ppb	12:00:18
1	V 292.402†	40624.6	43291.4	527.08	µg/L	527.08	ppb	12:00:18
1	Zn 213.857†	20663.7	21412.3	478.05	µg/L	478.05	ppb	12:00:39
2	Sc RADIAL	87764.5	87764.5	95.6	%			11:59:53
2	Al 396.153Radial†	1013773.3	1060276.3	519100	µg/L	519100	ppb	11:59:47
2	Ca 317.933Radial†	1239069.0	1295367.1	487460	µg/L	487460	ppb	11:59:47
2	Fe 238.204 Radial†	14409.0	15054.6	187520	µg/L	187520	ppb	11:59:53
2	K 766.490 Radial†	10995.6	11093.0	5248.5	µg/L	5248.5	ppb	11:59:53
2	Mg 279.077 IEC†	35140.4	36737.7	496800	µg/L	496800	ppb	11:59:53
2	Na 589.592 Radial†	9927.0	10190.6	5154.2	µg/L	5154.2	ppb	11:59:53
2	Sr 421.552†	79723.8	83232.7	504.08	µg/L	504.08	ppb	11:59:47
2	Sc 361.383	1817770.0	1817770.0	93.213	%			12:00:48
2	Y 371.029	1231522.8	1231522.8	92.365	%			12:00:48
2	Ag 328.068†	26591.2	29050.8	262.52	µg/L	262.52	ppb	12:00:48
2	As 188.979†	340.4	368.6	492.31	µg/L	492.31	ppb	12:01:09
2	B 249.677†	11622.5	12191.4	489.35	µg/L	489.35	ppb	12:00:48
2	Ba 233.527†	20327.2	21834.3	506.16	µg/L	506.16	ppb	12:01:09
2	Be 313.107†	366725.4	394985.1	245.29	µg/L	245.29	ppb	12:00:48
2	Cd 226.502†	17825.2	19288.3	472.57	µg/L	472.57	ppb	12:01:09
2	Co 228.616†	9351.3	9997.7	453.29	µg/L	453.29	ppb	12:01:09
2	Cr 267.716†	19621.0	20957.2	489.34	µg/L	489.34	ppb	12:01:09
2	Cu 324.752†	74888.9	76117.6	554.80	µg/L	554.80	ppb	12:00:48
2	Mn 257.610†	146794.8	158222.2	491.12	µg/L	491.12	ppb	12:00:48
2	Mo 202.031†	4554.9	4874.2	518.72	µg/L	518.72	ppb	12:01:09
2	Ni 231.604†	7403.9	7585.6	450.68	µg/L	450.68	ppb	12:01:09
2	P 214.914†	1708.4	1544.8	2678.2	µg/L	2678.2	ppb	12:01:09
2	Pb 220.353†	1557.1	1630.8	496.11	µg/L	496.11	ppb	12:01:09

2	S 181.975 Axial†	751.2	783.0	2603.4 µg/L	2603.4 ppb	12:01:09
2	Sb 206.836†	559.7	572.6	540.40 µg/L	540.40 ppb	12:01:09
2	Se 196.026†	2174.1	2310.6	2502.4 µg/L	2502.4 ppb	12:01:09
2	SiO2†	57029.4	58440.0	11070 µg/L	11070 ppb	12:00:48
2	Si 251.611†	68403.2	72961.8	5197.4 µg/L	5197.4 ppb	12:00:48
2	Sn 189.927†	1074.3	1157.8	536.31 µg/L	536.31 ppb	12:01:09
2	Ti 334.940†	205631.0	221294.2	511.69 µg/L	511.69 ppb	12:00:48
2	Tl 190.801†	428.3	493.9	452.34 µg/L	452.34 ppb	12:01:09
2	U 409.014†	4893.5	5289.7	437.61 µg/L	437.61 ppb	12:00:48
2	V 292.402†	40573.3	43428.2	528.72 µg/L	528.72 ppb	12:00:48
2	Zn 213.857†	20696.6	21545.2	481.21 µg/L	481.21 ppb	12:01:09
3	Sc RADIAL	87883.5	87883.5	95.8 %		12:00:05
3	Al 396.153Radial†	1022312.3	1067757.2	522770 µg/L	522770 ppb	11:59:59
3	Ca 317.933Radial†	1249549.6	1304556.3	490910 µg/L	490910 ppb	11:59:59
3	Fe 238.204 Radial†	14364.5	14987.7	186680 µg/L	186680 ppb	12:00:05
3	K 766.490 Radial†	11022.4	11105.5	5254.4 µg/L	5254.4 ppb	12:00:05
3	Mg 279.077 IEC†	35125.0	36671.7	495900 µg/L	495900 ppb	12:00:05
3	Na 589.592 Radial†	9903.0	10151.5	5134.4 µg/L	5134.4 ppb	12:00:05
3	Sr 421.552†	80559.4	83992.4	508.68 µg/L	508.68 ppb	11:59:59
3	Sc 361.383	1827608.5	1827608.5	93.718 %		12:01:18
3	Y 371.029	1240214.1	1240214.1	93.017 %		12:01:18
3	Ag 328.068†	26793.5	29113.0	262.97 µg/L	262.97 ppb	12:01:18
3	As 188.979†	343.4	369.8	493.86 µg/L	493.86 ppb	12:01:39
3	B 249.677†	11586.1	12085.4	484.68 µg/L	484.68 ppb	12:01:18
3	Ba 233.527†	20273.9	21660.0	502.12 µg/L	502.12 ppb	12:01:39
3	Be 313.107†	368647.0	394917.7	245.25 µg/L	245.25 ppb	12:01:18
3	Cd 226.502†	17744.0	19098.7	467.81 µg/L	467.81 ppb	12:01:39
3	Co 228.616†	9306.3	9895.7	448.65 µg/L	448.65 ppb	12:01:39
3	Cr 267.716†	19547.9	20766.0	484.88 µg/L	484.88 ppb	12:01:39
3	Cu 324.752†	75337.2	76163.4	554.96 µg/L	554.96 ppb	12:01:18
3	Mn 257.610†	147679.2	158318.2	491.44 µg/L	491.44 ppb	12:01:18
3	Mo 202.031†	4550.9	4843.6	515.48 µg/L	515.48 ppb	12:01:39
3	Ni 231.604†	7382.8	7520.2	446.81 µg/L	446.81 ppb	12:01:39
3	P 214.914†	1687.1	1512.2	2622.2 µg/L	2622.2 ppb	12:01:39
3	Pb 220.353†	1563.5	1628.8	495.79 µg/L	495.79 ppb	12:01:39
3	S 181.975 Axial†	739.4	766.1	2547.0 µg/L	2547.0 ppb	12:01:39
3	Sb 206.836†	543.9	552.5	521.26 µg/L	521.26 ppb	12:01:39
3	Se 196.026†	2146.9	2269.1	2458.4 µg/L	2458.4 ppb	12:01:39
3	SiO2†	57233.6	58328.5	11049 µg/L	11049 ppb	12:01:18
3	Si 251.611†	68743.4	72929.8	5195.2 µg/L	5195.2 ppb	12:01:18
3	Sn 189.927†	1049.8	1125.4	523.05 µg/L	523.05 ppb	12:01:39
3	Ti 334.940†	206743.7	221293.9	511.82 µg/L	511.82 ppb	12:01:18
3	Tl 190.801†	424.2	487.0	444.39 µg/L	444.39 ppb	12:01:39
3	U 409.014†	4898.0	5266.2	435.33 µg/L	435.33 ppb	12:01:18
3	V 292.402†	40713.5	43343.5	527.72 µg/L	527.72 ppb	12:01:18
3	Zn 213.857†	20619.6	21343.5	476.44 µg/L	476.44 ppb	12:01:39

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1823728.7	93.519	%	0.2686				0.29%
Sc RADIAL	87762.9	95.6	%	0.13				0.14%
Y 371.029	1236394.0	92.730	%	0.3330				0.36%
Ag 328.068†	29034.4	262.33	µg/L	0.749	262.33	ppb	0.749	0.29%
QC value within limits for Ag 328.068 Recovery = 104.93%								
Al 396.153Radial†	1065659.4	521740	µg/L	2300.9	521740	ppb	2300.9	0.44%
QC value within limits for Al 396.153Radial Recovery = 104.35%								
As 188.979†	366.6	489.03	µg/L	7.063	489.03	ppb	7.063	1.44%
QC value within limits for As 188.979 Recovery = 97.81%								
B 249.677†	12117.0	486.05	µg/L	2.869	486.05	ppb	2.869	0.59%
QC value within limits for B 249.677 Recovery = 97.21%								
Ba 233.527†	21736.6	503.90	µg/L	2.060	503.90	ppb	2.060	0.41%
QC value within limits for Ba 233.527 Recovery = 100.78%								
Be 313.107†	394856.8	245.22	µg/L	0.104	245.22	ppb	0.104	0.04%
QC value within limits for Be 313.107 Recovery = 98.09%								
Ca 317.933Radial†	1302108.7	489990	µg/L	2224.4	489990	ppb	2224.4	0.45%
QC value within limits for Ca 317.933Radial Recovery = 98.00%								
Cd 226.502†	19186.6	470.03	µg/L	2.396	470.03	ppb	2.396	0.51%
QC value within limits for Cd 226.502 Recovery = 94.01%								
Co 228.616†	9943.6	450.83	µg/L	2.330	450.83	ppb	2.330	0.52%

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   QC value within limits for Co 228.616  Recovery = 90.17%
Cr 267.716†            20855.2      486.96 µg/L        2.247      486.96 ppb          2.247   0.46%
   QC value within limits for Cr 267.716  Recovery = 97.39%
Cu 324.752†            76190.9      555.20 µg/L        0.561      555.20 ppb          0.561   0.10%
   QC value within limits for Cu 324.752  Recovery = 111.04%
Fe 238.204 Radial†     15010.9      186970 µg/L        471.9      186970 ppb          471.9   0.25%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.49%
K 766.490 Radial†      11072.3      5238.6 µg/L        22.32      5238.6 ppb          22.32   0.43%
   QC value within limits for K 766.490 Radial  Recovery = 104.77%
Mg 279.077 IEC†        36709.4      496410 µg/L        459.2      496410 ppb          459.2   0.09%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.28%
Mn 257.610†           158226.8      491.13 µg/L        0.310      491.13 ppb          0.310   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.23%
Mo 202.031†             4862.9      517.51 µg/L        1.772      517.51 ppb          1.772   0.34%
   QC value within limits for Mo 202.031  Recovery = 103.50%
Na 589.592 Radial†     10174.1      5145.9 µg/L        10.25      5145.9 ppb          10.25   0.20%
   QC value within limits for Na 589.592 Radial  Recovery = 102.92%
Ni 231.604†             7557.4      449.01 µg/L        1.989      449.01 ppb          1.989   0.44%
   QC value within limits for Ni 231.604  Recovery = 89.80%
P 214.914†              1531.3      2655.5 µg/L        29.46      2655.5 ppb          29.46   1.11%
   QC value within limits for P 214.914  Recovery = 106.22%
Pb 220.353†             1629.8      496.01 µg/L        0.190      496.01 ppb          0.190   0.04%
   QC value within limits for Pb 220.353  Recovery = 99.20%
S 181.975 Axial†         779.0      2590.0 µg/L        38.09      2590.0 ppb          38.09   1.47%
   QC value within limits for S 181.975 Axial  Recovery = 103.60%
Sb 206.836†              563.7      531.91 µg/L        9.751      531.91 ppb          9.751   1.83%
   QC value within limits for Sb 206.836  Recovery = 106.38%
Se 196.026†             2294.5      2484.6 µg/L        23.17      2484.6 ppb          23.17   0.93%
   QC value within limits for Se 196.026  Recovery = 99.38%
SiO2†                  58351.2       11053 µg/L         15.1       11053 ppb           15.1   0.14%
   QC value within limits for SiO2  Recovery = 103.35%
Si 251.611†            72910.3      5193.8 µg/L        4.52      5193.8 ppb          4.52   0.09%
   QC value within limits for Si 251.611  Recovery = 103.88%
Sn 189.927†             1145.1      531.21 µg/L        7.136      531.21 ppb          7.136   1.34%
   QC value within limits for Sn 189.927  Recovery = 106.24%
Sr 421.552†            83742.5      507.17 µg/L        2.674      507.17 ppb          2.674   0.53%
   QC value within limits for Sr 421.552  Recovery = 101.43%
Ti 334.940†           221250.3      511.65 µg/L        0.183      511.65 ppb          0.183   0.04%
   QC value within limits for Ti 334.940  Recovery = 102.33%
Tl 190.801†              491.3      449.12 µg/L        4.184      449.12 ppb          4.184   0.93%
   QC value within limits for Tl 190.801  Recovery = 89.82%
U 409.014†              5257.5      434.53 µg/L        3.551      434.53 ppb          3.551   0.82%
   QC value within limits for U 409.014  Recovery = 86.91%
V 292.402†             43354.4      527.84 µg/L        0.825      527.84 ppb          0.825   0.16%
   QC value within limits for V 292.402  Recovery = 105.57%
Zn 213.857†            21433.7      478.57 µg/L        2.427      478.57 ppb          2.427   0.51%
   QC value within limits for Zn 213.857  Recovery = 95.71%
All analyte(s) passed QC.
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Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 105
Date Collected: 3/15/2010 12:01:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87752.2	87752.2	95.6	%			12:02:26
1	Al 396.153Radial†	1024903.1	1072064.5	524890	µg/L	524890	ppb	12:02:21
1	Ca 317.933Radial†	1250023.2	1307004.7	491830	µg/L	491830	ppb	12:02:21
1	Fe 238.204 Radial†	34413.7	35978.8	448120	µg/L	448120	ppb	12:02:26
1	K 766.490 Radial†	149.6	-248.7	-117.66	µg/L	-117.66	ppb	12:02:26
1	Mg 279.077 IEC†	35111.3	36712.3	496160	µg/L	496160	ppb	12:02:26
1	Na 589.592 Radial†	928192.0	970566.0	490890	µg/L	490890	ppb	12:02:21
1	Sr 421.552†	2007.4	1964.2	11.896	µg/L	11.896	ppb	12:02:26
1	Sc 361.383	1804640.6	1804640.6	92.540	%			12:03:03
1	Y 371.029	1218054.6	1218054.6	91.355	%			12:03:03
1	Ag 328.068†	-4521.2	-4362.1	-1.9078	µg/L	-1.9078	ppb	12:03:03
1	As 188.979†	15.0	19.6	-84.583	µg/L	-84.583	ppb	12:03:24
1	B 249.677†	2799.8	2748.2	-101.63	µg/L	-101.63	ppb	12:03:03
1	Ba 233.527†	644.4	723.5	16.833	µg/L	16.833	ppb	12:03:24
1	Be 313.107†	-9306.5	-8497.9	-5.2962	µg/L	-5.2962	ppb	12:03:03
1	Cd 226.502†	2026.7	2355.4	9.5970	µg/L	9.5970	ppb	12:03:24
1	Co 228.616†	251.9	237.8	10.699	µg/L	10.699	ppb	12:03:24
1	Cr 267.716†	373.5	311.3	7.2969	µg/L	7.2969	ppb	12:03:24
1	Cu 324.752†	-7294.2	-12106.2	1.6137	µg/L	1.6137	ppb	12:03:24
1	Mn 257.610†	6838.6	8129.3	19.439	µg/L	19.439	ppb	12:03:03
1	Mo 202.031†	-161.9	-187.3	-2.6263	µg/L	-2.6263	ppb	12:03:24
1	Ni 231.604†	232.7	-106.0	-0.4577	µg/L	-0.4577	ppb	12:03:24
1	P 214.914†	469.8	219.7	183.59	µg/L	183.59	ppb	12:03:24
1	Pb 220.353†	-27.9	-69.7	11.661	µg/L	11.661	ppb	12:03:24
1	S 181.975 Axial†	-41.4	-67.7	-225.03	µg/L	-225.03	ppb	12:03:24
1	Sb 206.836†	21.7	-4.4	-11.975	µg/L	-11.975	ppb	12:03:24
1	Se 196.026†	-339.7	-388.9	622.00	µg/L	622.00	ppb	12:03:24
1	SiO2†	2491.9	-48.9	-9.2670	µg/L	-9.2670	ppb	12:03:24
1	Si 251.611†	-191.1	-628.2	-44.753	µg/L	-44.753	ppb	12:03:24
1	Sn 189.927†	-80.1	-81.3	15.011	µg/L	15.011	ppb	12:03:24
1	Ti 334.940†	13528.8	15310.8	6.1223	µg/L	6.1223	ppb	12:03:03
1	Tl 190.801†	-18.5	14.4	1.8435	µg/L	1.8435	ppb	12:03:24
1	U 409.014†	151252.7	163485.7	15157	µg/L	15157	ppb	12:03:03
1	V 292.402†	3918.2	4134.8	10.918	µg/L	10.918	ppb	12:03:24
1	Zn 213.857†	3505.6	3129.9	26.418	µg/L	26.418	ppb	12:03:24
2	Sc RADIAL	87657.3	87657.3	95.5	%			12:02:38
2	Al 396.153Radial†	1029896.8	1078454.0	528010	µg/L	528010	ppb	12:02:32
2	Ca 317.933Radial†	1255240.8	1313883.5	494420	µg/L	494420	ppb	12:02:32
2	Fe 238.204 Radial†	34482.8	36090.0	449500	µg/L	449500	ppb	12:02:38
2	K 766.490 Radial†	296.0	-95.3	-45.074	µg/L	-45.074	ppb	12:02:38
2	Mg 279.077 IEC†	35106.4	36746.9	496630	µg/L	496630	ppb	12:02:38
2	Na 589.592 Radial†	934302.9	978015.6	494660	µg/L	494660	ppb	12:02:32
2	Sr 421.552†	1976.1	1933.6	11.711	µg/L	11.711	ppb	12:02:38
2	Sc 361.383	1789952.3	1789952.3	91.787	%			12:03:32
2	Y 371.029	1208081.9	1208081.9	90.607	%			12:03:32
2	Ag 328.068†	-4331.7	-4195.8	-0.3928	µg/L	-0.3928	ppb	12:03:32
2	As 188.979†	11.6	16.0	-90.687	µg/L	-90.687	ppb	12:03:53
2	B 249.677†	2629.6	2587.5	-110.08	µg/L	-110.08	ppb	12:03:32
2	Ba 233.527†	657.0	742.9	17.283	µg/L	17.283	ppb	12:03:53
2	Be 313.107†	-9161.1	-8422.0	-5.2490	µg/L	-5.2490	ppb	12:03:32
2	Cd 226.502†	2025.9	2372.5	9.8786	µg/L	9.8786	ppb	12:03:53
2	Co 228.616†	250.3	238.3	10.725	µg/L	10.725	ppb	12:03:53
2	Cr 267.716†	370.7	311.6	7.3030	µg/L	7.3030	ppb	12:03:53
2	Cu 324.752†	-7289.5	-12165.7	1.4679	µg/L	1.4679	ppb	12:03:53
2	Mn 257.610†	6740.5	8083.0	19.339	µg/L	19.339	ppb	12:03:32
2	Mo 202.031†	-166.8	-194.0	-3.2850	µg/L	-3.2850	ppb	12:03:53
2	Ni 231.604†	235.2	-101.2	-0.1567	µg/L	-0.1567	ppb	12:03:53
2	P 214.914†	444.9	196.7	142.76	µg/L	142.76	ppb	12:03:53
2	Pb 220.353†	-17.6	-58.7	14.965	µg/L	14.965	ppb	12:03:53

2	S 181.975 Axial†	-35.9	-62.1	-206.34	µg/L	-206.34 ppb	12:03:53
2	Sb 206.836†	37.2	12.6	4.1824	µg/L	4.1824 ppb	12:03:53
2	Se 196.026†	-359.6	-413.6	600.96	µg/L	600.96 ppb	12:03:53
2	SiO2†	2502.8	-14.9	-2.8298	µg/L	-2.8298 ppb	12:03:53
2	Si 251.611†	-220.5	-662.0	-47.154	µg/L	-47.154 ppb	12:03:53
2	Sn 189.927†	-86.8	-89.3	11.888	µg/L	11.888 ppb	12:03:53
2	Ti 334.940†	13403.3	15294.0	6.0850	µg/L	6.0850 ppb	12:03:32
2	Tl 190.801†	-10.9	22.5	10.030	µg/L	10.030 ppb	12:03:53
2	U 409.014†	150056.9	163524.1	15161	µg/L	15161 ppb	12:03:32
2	V 292.402†	3980.1	4237.1	12.028	µg/L	12.028 ppb	12:03:53
2	Zn 213.857†	3469.4	3121.6	26.125	µg/L	26.125 ppb	12:03:53
3	Sc RADIAL	87969.9	87969.9	95.9	%		12:02:50
3	Al 396.153Radial†	1026918.2	1071514.5	524620	µg/L	524620 ppb	12:02:44
3	Ca 317.933Radial†	1251973.1	1305804.0	491380	µg/L	491380 ppb	12:02:44
3	Fe 238.204 Radial†	34500.4	35980.1	448140	µg/L	448140 ppb	12:02:50
3	K 766.490 Radial†	199.9	-196.6	-93.011	µg/L	-93.011 ppb	12:02:50
3	Mg 279.077 IEC†	35257.2	36773.7	496990	µg/L	496990 ppb	12:02:50
3	Na 589.592 Radial†	931066.3	971162.6	491200	µg/L	491200 ppb	12:02:44
3	Sr 421.552†	2018.9	1970.9	11.936	µg/L	11.936 ppb	12:02:50
3	Sc 361.383	1793897.9	1793897.9	91.989	%		12:04:01
3	Y 371.029	1211199.0	1211199.0	90.841	%		12:04:01
3	Ag 328.068†	-4424.1	-4285.8	-1.2622	µg/L	-1.2622 ppb	12:04:01
3	As 188.979†	17.2	22.1	-80.606	µg/L	-80.606 ppb	12:04:22
3	B 249.677†	2711.5	2670.3	-105.38	µg/L	-105.38 ppb	12:04:01
3	Ba 233.527†	653.3	737.3	17.153	µg/L	17.153 ppb	12:04:22
3	Be 313.107†	-9156.7	-8395.3	-5.2329	µg/L	-5.2329 ppb	12:04:01
3	Cd 226.502†	2028.4	2370.3	9.9780	µg/L	9.9780 ppb	12:04:22
3	Co 228.616†	260.4	248.6	11.189	µg/L	11.189 ppb	12:04:22
3	Cr 267.716†	385.1	326.3	7.6474	µg/L	7.6474 ppb	12:04:22
3	Cu 324.752†	-7228.4	-12081.8	1.7834	µg/L	1.7834 ppb	12:04:22
3	Mn 257.610†	6757.4	8085.3	19.241	µg/L	19.241 ppb	12:04:01
3	Mo 202.031†	-174.2	-201.7	-4.1388	µg/L	-4.1388 ppb	12:04:22
3	Ni 231.604†	250.8	-84.8	0.7928	µg/L	0.7928 ppb	12:04:22
3	P 214.914†	446.8	197.8	144.63	µg/L	144.63 ppb	12:04:22
3	Pb 220.353†	-25.2	-67.0	12.395	µg/L	12.395 ppb	12:04:22
3	S 181.975 Axial†	-47.5	-74.6	-248.09	µg/L	-248.09 ppb	12:04:22
3	Sb 206.836†	29.6	4.3	-3.7481	µg/L	-3.7481 ppb	12:04:22
3	Se 196.026†	-356.2	-409.0	601.34	µg/L	601.34 ppb	12:04:22
3	SiO2†	2483.2	-42.3	-8.0098	µg/L	-8.0098 ppb	12:04:22
3	Si 251.611†	-182.3	-619.8	-44.154	µg/L	-44.154 ppb	12:04:22
3	Sn 189.927†	-93.6	-96.5	8.5680	µg/L	8.5680 ppb	12:04:22
3	Ti 334.940†	13958.0	15864.9	7.4098	µg/L	7.4098 ppb	12:04:01
3	Tl 190.801†	-3.8	30.2	18.476	µg/L	18.476 ppb	12:04:22
3	U 409.014†	150384.9	163521.1	15161	µg/L	15161 ppb	12:04:01
3	V 292.402†	3917.4	4159.3	11.217	µg/L	11.217 ppb	12:04:22
3	Zn 213.857†	3483.2	3128.2	26.324	µg/L	26.324 ppb	12:04:22

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1796163.6	92.105	%	0.3898				0.42%
Sc RADIAL	87793.1	95.7	%	0.17				0.18%
Y 371.029	1212445.1	90.934	%	0.3826				0.42%
Ag 328.068†	-4281.3	-1.1876	µg/L	0.76028	-1.1876	ppb	0.76028	64.02%
Al 396.153Radial†	1074011.0	525840	µg/L	1888.7	525840	ppb	1888.7	0.36%
QC value within limits for Al 396.153Radial Recovery = 105.17%								
As 188.979†	19.2	-85.292	µg/L	5.0775	-85.292	ppb	5.0775	5.95%
B 249.677†	2668.7	-105.70	µg/L	4.234	-105.70	ppb	4.234	4.01%
Ba 233.527†	734.5	17.090	µg/L	0.2320	17.090	ppb	0.2320	1.36%
Be 313.107†	-8438.4	-5.2594	µg/L	0.03287	-5.2594	ppb	0.03287	0.62%
Ca 317.933Radial†	1308897.4	492550	µg/L	1640.6	492550	ppb	1640.6	0.33%
QC value within limits for Ca 317.933Radial Recovery = 98.51%								
Cd 226.502†	2366.1	9.8179	µg/L	0.19763	9.8179	ppb	0.19763	2.01%
Co 228.616†	241.6	10.871	µg/L	0.2755	10.871	ppb	0.2755	2.53%
Cr 267.716†	316.4	7.4158	µg/L	0.20062	7.4158	ppb	0.20062	2.71%
Cu 324.752†	-12117.9	1.6217	µg/L	0.15788	1.6217	ppb	0.15788	9.74%
Fe 238.204 Radial†	36016.3	448590	µg/L	795.3	448590	ppb	795.3	0.18%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 89.72%								
K 766.490 Radial†	-180.2	-85.247	µg/L	36.9092	-85.247	ppb	36.9092	43.30%
Mg 279.077 IEC†	36744.3	496600	µg/L	415.9	496600	ppb	415.9	0.08%

QC value within limits for Mg 279.077 IEC Recovery = 99.32%

Mn 257.610†	8099.2	19.340	µg/L	0.0988	19.340	ppb	0.0988	0.51%
Mo 202.031†	-194.3	-3.3501	µg/L	0.75834	-3.3501	ppb	0.75834	22.64%
Na 589.592 Radial†	973248.0	492250	µg/L	2093.7	492250	ppb	2093.7	0.43%

QC value within limits for Na 589.592 Radial Recovery = 98.45%

Ni 231.604†	-97.3	0.0595	µg/L	0.65266	0.0595	ppb	0.65266	>999.9%
P 214.914†	204.7	156.99	µg/L	23.056	156.99	ppb	23.056	14.69%
Pb 220.353†	-65.1	13.007	µg/L	1.7347	13.007	ppb	1.7347	13.34%
S 181.975 Axial†	-68.1	-226.49	µg/L	20.915	-226.49	ppb	20.915	9.23%
Sb 206.836†	4.2	-3.8468	µg/L	8.07907	-3.8468	ppb	8.07907	210.02%
Se 196.026†	-403.8	608.10	µg/L	12.042	608.10	ppb	12.042	1.98%
SiO2†	-35.4	-6.7022	µg/L	3.41203	-6.7022	ppb	3.41203	50.91%
Si 251.611†	-636.7	-45.354	µg/L	1.5877	-45.354	ppb	1.5877	3.50%
Sn 189.927†	-89.0	11.823	µg/L	3.2222	11.823	ppb	3.2222	27.25%
Sr 421.552†	1956.2	11.848	µg/L	0.1203	11.848	ppb	0.1203	1.02%
Ti 334.940†	15489.9	6.5390	µg/L	0.75432	6.5390	ppb	0.75432	11.54%
Tl 190.801†	22.4	10.117	µg/L	8.3167	10.117	ppb	8.3167	82.21%
U 409.014†	163510.3	15159	µg/L	1.9	15159	ppb	1.9	0.01%

QC value within limits for U 409.014 Recovery = 101.06%

V 292.402†	4177.1	11.387	µg/L	0.5745	11.387	ppb	0.5745	5.05%
Zn 213.857†	3126.6	26.289	µg/L	0.1498	26.289	ppb	0.1498	0.57%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 108
Date Collected: 3/15/2010 12:04:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	91284.3	91284.3	99.5	%			12:05:10
1	Al 396.153Radial†	775.0	941.6	246.06	µg/L	246.06	ppb	12:05:10
1	Ca 317.933Radial†	550.1	212.1	79.831	µg/L	79.831	ppb	12:05:31
1	Fe 238.204 Radial†	12.7	-0.3	205.02	µg/L	205.02	ppb	12:05:31
1	K 766.490 Radial†	640062.0	643106.4	304270	µg/L	304270	ppb	12:05:05
1	Mg 279.077 IEC†	4.7	-4.3	117.86	µg/L	117.86	ppb	12:05:31
1	Na 589.592 Radial†	1088.5	904.2	457.34	µg/L	457.34	ppb	12:05:10
1	Sr 421.552†	1628663.7	1637306.0	9916.0	µg/L	9916.0	ppb	12:05:05
1	Sc 361.383	1924615.0	1924615.0	98.692	%			12:06:59
1	Y 371.029	1300334.2	1300334.2	97.526	%			12:06:59
1	Ag 328.068†	-6516.5	-6079.3	16.949	µg/L	16.949	ppb	12:07:05
1	As 188.979†	6445.4	6534.2	10188	µg/L	10188	ppb	12:07:05
1	B 249.677†	104221.1	105324.9	5106.7	µg/L	5106.7	ppb	12:06:59
1	Ba 233.527†	629919.9	638294.8	14787	µg/L	14787	ppb	12:06:59
1	Be 313.107†	4649250.8	4712421.8	2925.2	µg/L	2925.2	ppb	12:06:59
1	Cd 226.502†	385161.6	390431.1	9995.6	µg/L	9995.6	ppb	12:06:59
1	Co 228.616†	213859.4	216659.0	9826.5	µg/L	9826.5	ppb	12:06:59
1	Cr 267.716†	1073418.3	1087551.0	25382	µg/L	25382	ppb	12:06:59
1	Cu 324.752†	3032948.1	3068917.0	20947	µg/L	20947	ppb	12:06:59
1	Mn 257.610†	2988470.5	3028813.3	9830.2	µg/L	9830.2	ppb	12:06:59
1	Mo 202.031†	98401.3	99693.0	10464	µg/L	10464	ppb	12:06:59
1	Ni 231.604†	168977.6	170859.5	10097	µg/L	10097	ppb	12:06:59
1	P 214.914†	11721.9	11589.2	18420	µg/L	18420	ppb	12:07:05
1	Pb 220.353†	91635.3	92810.1	25832	µg/L	25832	ppb	12:06:59
1	S 181.975 Axial†	16044.1	16233.8	53975	µg/L	53975	ppb	12:07:05
1	Sb 206.836†	11083.7	11202.8	10545	µg/L	10545	ppb	12:07:05
1	Se 196.026†	10120.3	10232.6	10269	µg/L	10269	ppb	12:07:05
1	SiO2†	524568.6	528778.5	100160	µg/L	100160	ppb	12:06:59
1	Si 251.611†	648052.7	656219.1	46746	µg/L	46746	ppb	12:06:59
1	Sn 189.927†	25491.3	25834.4	10852	µg/L	10852	ppb	12:07:05
1	Ti 334.940†	3977374.5	4030774.3	9895.1	µg/L	9895.1	ppb	12:06:59
1	Tl 190.801†	9577.3	9738.6	10241	µg/L	10241	ppb	12:07:05
1	U 409.014†	-2057.3	-2044.7	-190.73	µg/L	-190.73	ppb	12:06:59
1	V 292.402†	808954.2	819575.3	10458	µg/L	10458	ppb	12:06:59
1	Zn 213.857†	615298.9	622794.6	14985	µg/L	14985	ppb	12:06:59
2	Sc RADIAL	90334.9	90334.9	98.4	%			12:05:42
2	Al 396.153Radial†	787.3	962.3	259.18	µg/L	259.18	ppb	12:05:42
2	Ca 317.933Radial†	520.3	187.7	70.618	µg/L	70.618	ppb	12:06:03
2	Fe 238.204 Radial†	9.5	-3.4	162.65	µg/L	162.65	ppb	12:06:03
2	K 766.490 Radial†	638913.2	648702.0	306920	µg/L	306920	ppb	12:05:37
2	Mg 279.077 IEC†	4.5	-4.5	112.05	µg/L	112.05	ppb	12:06:03
2	Na 589.592 Radial†	903.2	727.4	367.92	µg/L	367.92	ppb	12:05:42
2	Sr 421.552†	1626288.9	1652101.4	10006	µg/L	10006	ppb	12:05:37
2	Sc 361.383	1933956.1	1933956.1	99.171	%			12:07:21
2	Y 371.029	1305816.5	1305816.5	97.937	%			12:07:21
2	Ag 328.068†	-6144.1	-5672.0	19.252	µg/L	19.252	ppb	12:07:27
2	As 188.979†	6226.5	6281.9	9794.1	µg/L	9794.1	ppb	12:07:27
2	B 249.677†	103474.2	104061.8	5045.1	µg/L	5045.1	ppb	12:07:21
2	Ba 233.527†	623501.2	628739.5	14565	µg/L	14565	ppb	12:07:21
2	Be 313.107†	4599318.0	4639318.1	2879.8	µg/L	2879.8	ppb	12:07:21
2	Cd 226.502†	381115.5	384466.2	9842.9	µg/L	9842.9	ppb	12:07:21
2	Co 228.616†	211479.3	213212.5	9670.2	µg/L	9670.2	ppb	12:07:21
2	Cr 267.716†	1056479.9	1065217.7	24861	µg/L	24861	ppb	12:07:21
2	Cu 324.752†	3003906.4	3024789.2	20646	µg/L	20646	ppb	12:07:21
2	Mn 257.610†	2956237.9	2981685.7	9677.2	µg/L	9677.2	ppb	12:07:21
2	Mo 202.031†	97502.5	98305.0	10318	µg/L	10318	ppb	12:07:21
2	Ni 231.604†	167349.0	168390.3	9950.9	µg/L	9950.9	ppb	12:07:21
2	P 214.914†	11257.9	11064.0	17515	µg/L	17515	ppb	12:07:27
2	Pb 220.353†	90975.5	91696.3	25522	µg/L	25522	ppb	12:07:21

2	S 181.975 Axial†	15558.7	15665.8	52086	µg/L	52086 ppb	12:07:27
2	Sb 206.836†	10625.4	10686.4	10057	µg/L	10057 ppb	12:07:27
2	Se 196.026†	9760.1	9819.8	9854.3	µg/L	9854.3 ppb	12:07:27
2	SiO2†	522457.3	524082.4	99273	µg/L	99273 ppb	12:07:21
2	Si 251.611†	645559.6	650533.5	46341	µg/L	46341 ppb	12:07:21
2	Sn 189.927†	24187.4	24394.8	10247	µg/L	10247 ppb	12:07:27
2	Ti 334.940†	3938099.1	3971705.3	9750.1	µg/L	9750.1 ppb	12:07:21
2	Tl 190.801†	9349.7	9462.3	9951.7	µg/L	9951.7 ppb	12:07:27
2	U 409.014†	-1973.2	-1949.9	-181.88	µg/L	-181.88 ppb	12:07:21
2	V 292.402†	799485.2	806068.1	10285	µg/L	10285 ppb	12:07:21
2	Zn 213.857†	609207.8	613641.3	14765	µg/L	14765 ppb	12:07:21
3	Sc RADIAL	90032.2	90032.2	98.1	%		12:06:14
3	Al 396.153Radial†	769.9	947.3	269.78	µg/L	269.78 ppb	12:06:14
3	Ca 317.933Radial†	518.3	187.4	70.501	µg/L	70.501 ppb	12:06:35
3	Fe 238.204 Radial†	9.9	-3.0	149.87	µg/L	149.87 ppb	12:06:35
3	K 766.490 Radial†	638118.6	650075.1	307570	µg/L	307570 ppb	12:06:09
3	Mg 279.077 IEC†	4.9	-4.0	104.05	µg/L	104.05 ppb	12:06:35
3	Na 589.592 Radial†	758.8	583.4	295.07	µg/L	295.07 ppb	12:06:14
3	Sr 421.552†	1625149.5	1656496.6	10032	µg/L	10032 ppb	12:06:09
3	Sc 361.383	1887547.7	1887547.7	96.791	%		12:07:43
3	Y 371.029	1276328.7	1276328.7	95.726	%		12:07:43
3	Ag 328.068†	-5381.0	-5035.9	18.870	µg/L	18.870 ppb	12:07:49
3	As 188.979†	5562.1	5749.8	8964.6	µg/L	8964.6 ppb	12:07:49
3	B 249.677†	95838.7	98738.4	4785.0	µg/L	4785.0 ppb	12:07:43
3	Ba 233.527†	562280.8	580947.6	13458	µg/L	13458 ppb	12:07:43
3	Be 313.107†	4114177.3	4252121.6	2639.5	µg/L	2639.5 ppb	12:07:43
3	Cd 226.502†	342175.8	353684.3	9054.8	µg/L	9054.8 ppb	12:07:43
3	Co 228.616†	188511.5	194726.2	8831.7	µg/L	8831.7 ppb	12:07:43
3	Cr 267.716†	925965.1	956568.7	22325	µg/L	22325 ppb	12:07:43
3	Cu 324.752†	2695841.6	2780985.1	18982	µg/L	18982 ppb	12:07:43
3	Mn 257.610†	2646486.4	2734957.1	8876.4	µg/L	8876.4 ppb	12:07:43
3	Mo 202.031†	87102.8	89977.9	9444.0	µg/L	9444.0 ppb	12:07:43
3	Ni 231.604†	148723.8	153296.6	9058.9	µg/L	9058.9 ppb	12:07:43
3	P 214.914†	9770.5	9806.4	15452	µg/L	15452 ppb	12:07:49
3	Pb 220.353†	82576.3	85274.2	23734	µg/L	23734 ppb	12:07:43
3	S 181.975 Axial†	13920.9	14359.4	47743	µg/L	47743 ppb	12:07:49
3	Sb 206.836†	9449.1	9734.4	9165.6	µg/L	9165.6 ppb	12:07:49
3	Se 196.026†	8757.8	9026.3	9058.0	µg/L	9058.0 ppb	12:07:49
3	SiO2†	479639.7	492798.2	93347	µg/L	93347 ppb	12:07:43
3	Si 251.611†	591978.1	611180.5	43537	µg/L	43537 ppb	12:07:43
3	Sn 189.927†	20893.7	21591.6	9069.7	µg/L	9069.7 ppb	12:07:49
3	Ti 334.940†	3526723.5	3644326.1	8946.4	µg/L	8946.4 ppb	12:07:43
3	Tl 190.801†	8639.9	8960.7	9421.6	µg/L	9421.6 ppb	12:07:49
3	U 409.014†	-1778.2	-1797.3	-167.65	µg/L	-167.65 ppb	12:07:43
3	V 292.402†	713500.8	737054.2	9403.9	µg/L	9403.9 ppb	12:07:43
3	Zn 213.857†	546770.6	564237.8	13577	µg/L	13577 ppb	12:07:43

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1915372.9	98.218	%	1.2587				1.28%
Sc RADIAL	90550.5	98.7	%	0.71				0.72%
Y 371.029	1294159.8	97.063	%	1.1763				1.21%
Ag 328.068†	-5595.7	18.357	µg/L	1.2341	18.357	ppb	1.2341	6.72%
Al 396.153Radial†	950.4	258.34	µg/L	11.879	258.34	ppb	11.879	4.60%
As 188.979†	6188.6	9648.9	µg/L	624.54	9648.9	ppb	624.54	6.47%
QC value within limits for As 188.979 Recovery = 96.49%								
B 249.677†	102708.4	4979.0	µg/L	170.75	4979.0	ppb	170.75	3.43%
QC value within limits for B 249.677 Recovery = 99.58%								
Ba 233.527†	615993.9	14270	µg/L	711.9	14270	ppb	711.9	4.99%
QC value within limits for Ba 233.527 Recovery = 95.13%								
Be 313.107†	4534620.5	2814.8	µg/L	153.56	2814.8	ppb	153.56	5.46%
QC value within limits for Be 313.107 Recovery = 93.83%								
Ca 317.933Radial†	195.7	73.650	µg/L	5.3528	73.650	ppb	5.3528	7.27%
Cd 226.502†	376193.8	9631.1	µg/L	504.93	9631.1	ppb	504.93	5.24%
QC value within limits for Cd 226.502 Recovery = 96.31%								
Co 228.616†	208199.2	9442.8	µg/L	534.98	9442.8	ppb	534.98	5.67%
QC value within limits for Co 228.616 Recovery = 94.43%								
Cr 267.716†	1036445.8	24190	µg/L	1635.3	24190	ppb	1635.3	6.76%
QC value within limits for Cr 267.716 Recovery = 96.76%								

```
Cu 324.752†          2958230.4       20192 µg/L        1058.5       20192 ppb        1058.5   5.24%
   QC value within limits for Cu 324.752  Recovery = 100.96%
Fe 238.204 Radial†        -2.3      172.51 µg/L        28.867      172.51 ppb        28.867  16.73%
K 766.490 Radial†     647294.5      306260 µg/L        1746.5      306260 ppb        1746.5   0.57%
   QC value within limits for K 766.490 Radial  Recovery = 102.09%
Mg 279.077 IEC†           -4.3      111.32 µg/L         6.938      111.32 ppb         6.938   6.23%
Mn 257.610†          2915152.0      9461.3 µg/L        512.22      9461.3 ppb        512.22   5.41%
   QC value within limits for Mn 257.610  Recovery = 94.61%
Mo 202.031†            95992.0       10075 µg/L         551.5       10075 ppb         551.5   5.47%
   QC value within limits for Mo 202.031  Recovery = 100.75%
Na 589.592 Radial†       738.3      373.44 µg/L        81.278      373.44 ppb        81.278  21.76%
Ni 231.604†           164182.1      9702.2 µg/L        561.86      9702.2 ppb        561.86   5.79%
   QC value within limits for Ni 231.604  Recovery = 97.02%
P 214.914†             10819.9       17129 µg/L        1521.2       17129 ppb        1521.2   8.88%
   QC value greater than the upper limit for P 214.914  Recovery = 114.19%
Pb 220.353†            89926.9       25029 µg/L        1132.2       25029 ppb        1132.2   4.52%
   QC value within limits for Pb 220.353  Recovery = 100.12%
S 181.975 Axial†       15419.7       51268 µg/L        3195.5       51268 ppb        3195.5   6.23%
   QC value within limits for S 181.975 Axial  Recovery = 102.54%
Sb 206.836†            10541.2      9922.6 µg/L        699.48      9922.6 ppb        699.48   7.05%
   QC value within limits for Sb 206.836  Recovery = 99.23%
Se 196.026†             9692.9      9727.0 µg/L        615.29      9727.0 ppb        615.29   6.33%
   QC value within limits for Se 196.026  Recovery = 97.27%
SiO2†                 515219.7       97594 µg/L        3704.9       97594 ppb        3704.9   3.80%
   QC value within limits for SiO2  Recovery = 91.21%
Si 251.611†           639311.0       45541 µg/L        1747.2       45541 ppb        1747.2   3.84%
   QC value within limits for Si 251.611  Recovery = 91.08%
Sn 189.927†            23940.3       10056 µg/L         906.3       10056 ppb         906.3   9.01%
   QC value within limits for Sn 189.927  Recovery = 100.56%
Sr 421.552†          1648634.7      9984.7 µg/L         60.89      9984.7 ppb         60.89   0.61%
   QC value within limits for Sr 421.552  Recovery = 99.85%
Ti 334.940†          3882268.6      9530.5 µg/L        511.03      9530.5 ppb        511.03   5.36%
   QC value within limits for Ti 334.940  Recovery = 95.31%
Tl 190.801†             9387.2      9871.4 µg/L        415.55      9871.4 ppb        415.55   4.21%
   QC value within limits for Tl 190.801  Recovery = 98.71%
U 409.014†             -1930.6     -180.08 µg/L        11.645     -180.08 ppb        11.645   6.47%
V 292.402†           787565.9       10049 µg/L         565.2       10049 ppb         565.2   5.62%
   QC value within limits for V 292.402  Recovery = 100.49%
Zn 213.857†          600224.6       14442 µg/L         757.7       14442 ppb         757.7   5.25%
   QC value within limits for Zn 213.857  Recovery = 96.28%
QC Failed.  Continue with analysis.
```

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 12:07:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90027.2	90027.2	98.1	%			12:08:31
1	Al 396.153Radial†	9775.7	10128.1	4947.5	µg/L	4947.5	ppb	12:08:31
1	Ca 317.933Radial†	13306.7	13224.2	4976.4	µg/L	4976.4	ppb	12:08:31
1	Fe 238.204 Radial†	391.6	386.1	4819.5	µg/L	4819.5	ppb	12:08:52
1	K 766.490 Radial†	11594.6	11414.7	5400.7	µg/L	5400.7	ppb	12:08:31
1	Mg 279.077 IEC†	363.4	361.4	4892.8	µg/L	4892.8	ppb	12:08:52
1	Na 589.592 Radial†	19144.4	19326.2	9774.8	µg/L	9774.8	ppb	12:08:31
1	Sr 421.552†	79108.1	80509.7	487.59	µg/L	487.59	ppb	12:08:31
1	Sc 361.383	1903679.0	1903679.0	97.619	%			12:09:55
1	Y 371.029	1299133.9	1299133.9	97.436	%			12:09:55
1	Ag 328.068†	57525.6	59452.5	504.06	µg/L	504.06	ppb	12:10:01
1	As 188.979†	325.8	337.1	524.46	µg/L	524.46	ppb	12:10:22
1	B 249.677†	10594.7	10575.8	507.01	µg/L	507.01	ppb	12:10:01
1	Ba 233.527†	21383.3	21932.1	508.35	µg/L	508.35	ppb	12:10:01
1	Be 313.107†	794468.1	815408.4	506.62	µg/L	506.62	ppb	12:09:55
1	Cd 226.502†	19232.6	19867.1	508.08	µg/L	508.08	ppb	12:10:01
1	Co 228.616†	11013.3	11247.6	510.14	µg/L	510.14	ppb	12:10:01
1	Cr 267.716†	21586.6	22020.9	514.13	µg/L	514.13	ppb	12:10:01
1	Cu 324.752†	77659.0	75329.6	515.08	µg/L	515.08	ppb	12:10:01
1	Mn 257.610†	153790.4	158281.6	513.67	µg/L	513.67	ppb	12:09:55
1	Mo 202.031†	5082.5	5194.1	545.35	µg/L	545.35	ppb	12:10:22
1	Ni 231.604†	8747.5	8603.5	508.46	µg/L	508.46	ppb	12:10:01
1	P 214.914†	1734.0	1488.4	2580.2	µg/L	2580.2	ppb	12:10:22
1	Pb 220.353†	1877.4	1883.6	524.99	µg/L	524.99	ppb	12:10:22
1	S 181.975 Axial†	326.7	311.7	1036.5	µg/L	1036.5	ppb	12:10:22
1	Sb 206.836†	582.9	569.2	544.71	µg/L	544.71	ppb	12:10:22
1	Se 196.026†	527.0	518.0	531.07	µg/L	531.07	ppb	12:10:22
1	SiO2†	30513.8	28516.5	5401.6	µg/L	5401.6	ppb	12:10:01
1	Si 251.611†	35055.4	35488.8	2528.0	µg/L	2528.0	ppb	12:10:01
1	Sn 189.927†	1251.4	1287.2	541.17	µg/L	541.17	ppb	12:10:22
1	Ti 334.940†	202230.5	207855.4	509.95	µg/L	509.95	ppb	12:09:55
1	Tl 190.801†	450.3	495.7	521.68	µg/L	521.68	ppb	12:10:22
1	U 409.014†	5261.2	5429.4	505.47	µg/L	505.47	ppb	12:10:01
1	V 292.402†	39369.0	40230.2	511.95	µg/L	511.95	ppb	12:10:01
1	Zn 213.857†	21356.8	21219.5	509.66	µg/L	509.66	ppb	12:10:01
2	Sc RADIAL	89558.4	89558.4	97.6	%			12:08:57
2	Al 396.153Radial†	9722.2	10125.4	4946.5	µg/L	4946.5	ppb	12:08:57
2	Ca 317.933Radial†	13136.8	13121.2	4937.6	µg/L	4937.6	ppb	12:08:57
2	Fe 238.204 Radial†	392.9	389.5	4862.7	µg/L	4862.7	ppb	12:09:18
2	K 766.490 Radial†	11272.5	11146.5	5273.8	µg/L	5273.8	ppb	12:08:57
2	Mg 279.077 IEC†	364.6	364.5	4934.9	µg/L	4934.9	ppb	12:09:18
2	Na 589.592 Radial†	19055.2	19336.9	9780.3	µg/L	9780.3	ppb	12:08:57
2	Sr 421.552†	78610.1	80421.4	487.06	µg/L	487.06	ppb	12:08:57
2	Sc 361.383	1898646.0	1898646.0	97.360	%			12:10:29
2	Y 371.029	1294420.5	1294420.5	97.082	%			12:10:29
2	Ag 328.068†	57358.7	59437.2	503.96	µg/L	503.96	ppb	12:10:34
2	As 188.979†	323.1	335.2	521.45	µg/L	521.45	ppb	12:10:55
2	B 249.677†	10535.7	10544.0	505.46	µg/L	505.46	ppb	12:10:34
2	Ba 233.527†	21393.7	22000.8	509.94	µg/L	509.94	ppb	12:10:34
2	Be 313.107†	791039.0	814043.6	505.77	µg/L	505.77	ppb	12:10:29
2	Cd 226.502†	19263.7	19951.3	510.23	µg/L	510.23	ppb	12:10:34
2	Co 228.616†	11060.5	11325.9	513.69	µg/L	513.69	ppb	12:10:34
2	Cr 267.716†	21599.2	22092.4	515.80	µg/L	515.80	ppb	12:10:34
2	Cu 324.752†	77404.6	75279.2	514.74	µg/L	514.74	ppb	12:10:34
2	Mn 257.610†	153632.2	158536.7	514.49	µg/L	514.49	ppb	12:10:29
2	Mo 202.031†	4959.0	5081.1	533.50	µg/L	533.50	ppb	12:10:55
2	Ni 231.604†	8838.3	8720.5	515.38	µg/L	515.38	ppb	12:10:34
2	P 214.914†	1694.6	1452.5	2516.6	µg/L	2516.6	ppb	12:10:55
2	Pb 220.353†	1847.4	1858.0	517.80	µg/L	517.80	ppb	12:10:55

2	S 181.975 Axial†	328.3	314.3	1045.0 µg/L	1045.0 ppb	12:10:55
2	Sb 206.836†	569.9	557.4	533.31 µg/L	533.31 ppb	12:10:55
2	Se 196.026†	513.0	505.1	518.16 µg/L	518.16 ppb	12:10:55
2	SiO2†	30486.9	28571.7	5412.1 µg/L	5412.1 ppb	12:10:34
2	Si 251.611†	35141.5	35672.5	2541.1 µg/L	2541.1 ppb	12:10:34
2	Sn 189.927†	1206.0	1244.0	523.03 µg/L	523.03 ppb	12:10:55
2	Ti 334.940†	201579.3	207735.7	509.66 µg/L	509.66 ppb	12:10:29
2	Tl 190.801†	445.6	492.1	517.92 µg/L	517.92 ppb	12:10:55
2	U 409.014†	5363.6	5548.9	516.62 µg/L	516.62 ppb	12:10:34
2	V 292.402†	39503.4	40475.2	514.95 µg/L	514.95 ppb	12:10:34
2	Zn 213.857†	21365.4	21286.4	511.24 µg/L	511.24 ppb	12:10:34
3	Sc RADIAL	89594.5	89594.5	97.6 %		12:09:23
3	Al 396.153Radial†	9740.8	10140.4	4955.9 µg/L	4955.9 ppb	12:09:23
3	Ca 317.933Radial†	13220.1	13201.1	4967.7 µg/L	4967.7 ppb	12:09:23
3	Fe 238.204 Radial†	389.0	385.4	4809.9 µg/L	4809.9 ppb	12:09:44
3	K 766.490 Radial†	11169.7	11036.5	5221.7 µg/L	5221.7 ppb	12:09:23
3	Mg 279.077 IEC†	357.9	357.5	4838.8 µg/L	4838.8 ppb	12:09:44
3	Na 589.592 Radial†	18982.2	19254.2	9738.5 µg/L	9738.5 ppb	12:09:23
3	Sr 421.552†	78821.5	80605.6	488.17 µg/L	488.17 ppb	12:09:23
3	Sc 361.383	1907748.7	1907748.7	97.827 %		12:11:02
3	Y 371.029	1300304.4	1300304.4	97.524 %		12:11:02
3	Ag 328.068†	53254.7	54961.0	465.85 µg/L	465.85 ppb	12:11:08
3	As 188.979†	265.3	274.5	426.87 µg/L	426.87 ppb	12:11:28
3	B 249.677†	9759.9	9699.4	464.74 µg/L	464.74 ppb	12:11:08
3	Ba 233.527†	19228.9	19683.0	456.20 µg/L	456.20 ppb	12:11:08
3	Be 313.107†	722225.7	739825.3	459.66 µg/L	459.66 ppb	12:11:02
3	Cd 226.502†	17143.9	17690.0	452.34 µg/L	452.34 ppb	12:11:08
3	Co 228.616†	9742.9	9924.9	450.08 µg/L	450.08 ppb	12:11:08
3	Cr 267.716†	18483.0	18801.2	438.97 µg/L	438.97 ppb	12:11:08
3	Cu 324.752†	69193.9	66506.8	454.86 µg/L	454.86 ppb	12:11:08
3	Mn 257.610†	140675.3	144539.1	469.07 µg/L	469.07 ppb	12:11:02
3	Mo 202.031†	4045.6	4123.2	432.95 µg/L	432.95 ppb	12:11:28
3	Ni 231.604†	7804.4	7620.3	450.37 µg/L	450.37 ppb	12:11:08
3	P 214.914†	1468.5	1213.1	2098.6 µg/L	2098.6 ppb	12:11:28
3	Pb 220.353†	1577.0	1572.5	438.22 µg/L	438.22 ppb	12:11:28
3	S 181.975 Axial†	282.1	265.4	882.38 µg/L	882.38 ppb	12:11:28
3	Sb 206.836†	481.9	464.8	444.35 µg/L	444.35 ppb	12:11:28
3	Se 196.026†	445.1	433.2	445.91 µg/L	445.91 ppb	12:11:28
3	SiO2†	27998.0	25878.1	4901.9 µg/L	4901.9 ppb	12:11:08
3	Si 251.611†	32042.6	32332.6	2303.2 µg/L	2303.2 ppb	12:11:08
3	Sn 189.927†	969.1	995.9	418.81 µg/L	418.81 ppb	12:11:28
3	Ti 334.940†	182603.8	187350.9	459.62 µg/L	459.62 ppb	12:11:02
3	Tl 190.801†	385.2	428.1	450.73 µg/L	450.73 ppb	12:11:28
3	U 409.014†	4536.7	4677.3	435.32 µg/L	435.32 ppb	12:11:08
3	V 292.402†	34640.1	35310.3	448.88 µg/L	448.88 ppb	12:11:08
3	Zn 213.857†	18925.2	18687.2	448.77 µg/L	448.77 ppb	12:11:08

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	1903357.9	97.602	%	0.2338				0.24%
Sc RADIAL	89726.7	97.8	%	0.28				0.29%
Y 371.029	1297952.9	97.347	%	0.2336				0.24%
Ag 328.068†	57950.2	491.29	µg/L	22.030	491.29	ppb	22.030	4.48%
QC value within limits for Ag 328.068 Recovery = 98.26%								
Al 396.153Radial†	10131.3	4950.0	µg/L	5.15	4950.0	ppb	5.15	0.10%
QC value within limits for Al 396.153Radial Recovery = 99.00%								
As 188.979†	315.6	490.93	µg/L	55.493	490.93	ppb	55.493	11.30%
QC value within limits for As 188.979 Recovery = 98.19%								
B 249.677†	10273.1	492.40	µg/L	23.971	492.40	ppb	23.971	4.87%
QC value within limits for B 249.677 Recovery = 98.48%								
Ba 233.527†	21205.3	491.50	µg/L	30.578	491.50	ppb	30.578	6.22%
QC value within limits for Ba 233.527 Recovery = 98.30%								
Be 313.107†	789759.1	490.68	µg/L	26.870	490.68	ppb	26.870	5.48%
QC value within limits for Be 313.107 Recovery = 98.14%								
Ca 317.933Radial†	13182.2	4960.5	µg/L	20.34	4960.5	ppb	20.34	0.41%
QC value within limits for Ca 317.933Radial Recovery = 99.21%								
Cd 226.502†	19169.4	490.22	µg/L	32.821	490.22	ppb	32.821	6.70%
QC value within limits for Cd 226.502 Recovery = 98.04%								
Co 228.616†	10832.8	491.30	µg/L	35.742	491.30	ppb	35.742	7.27%

```
   QC value within limits for Co 228.616  Recovery = 98.26%
Cr 267.716†            20971.5      489.63 µg/L        43.887      489.63 ppb         43.887   8.96%
   QC value within limits for Cr 267.716  Recovery = 97.93%
Cu 324.752†            72371.9      494.89 µg/L        34.673      494.89 ppb         34.673   7.01%
   QC value within limits for Cu 324.752  Recovery = 98.98%
Fe 238.204 Radial†       387.0      4830.7 µg/L         28.16      4830.7 ppb          28.16   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 96.61%
K 766.490 Radial†      11199.3      5298.7 µg/L         92.03      5298.7 ppb          92.03   1.74%
   QC value within limits for K 766.490 Radial  Recovery = 105.97%
Mg 279.077 IEC†          361.1      4888.9 µg/L         48.17      4888.9 ppb          48.17   0.99%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.78%
Mn 257.610†           153785.8      499.08 µg/L        25.991      499.08 ppb         25.991   5.21%
   QC value within limits for Mn 257.610  Recovery = 99.82%
Mo 202.031†             4799.5      503.93 µg/L        61.762      503.93 ppb         61.762  12.26%
   QC value within limits for Mo 202.031  Recovery = 100.79%
Na 589.592 Radial†     19305.8      9764.5 µg/L         22.74      9764.5 ppb          22.74   0.23%
   QC value within limits for Na 589.592 Radial  Recovery = 97.65%
Ni 231.604†             8314.8      491.40 µg/L        35.707      491.40 ppb         35.707   7.27%
   QC value within limits for Ni 231.604  Recovery = 98.28%
P 214.914†              1384.7      2398.5 µg/L        261.64      2398.5 ppb         261.64  10.91%
   QC value within limits for P 214.914  Recovery = 95.94%
Pb 220.353†             1771.3      493.67 µg/L        48.155      493.67 ppb         48.155   9.75%
   QC value within limits for Pb 220.353  Recovery = 98.73%
S 181.975 Axial†         297.1      987.94 µg/L        91.515      987.94 ppb         91.515   9.26%
   QC value within limits for S 181.975 Axial  Recovery = 98.79%
Sb 206.836†              530.5      507.46 µg/L        54.946      507.46 ppb         54.946  10.83%
   QC value within limits for Sb 206.836  Recovery = 101.49%
Se 196.026†              485.4      498.38 µg/L        45.897      498.38 ppb         45.897   9.21%
   QC value within limits for Se 196.026  Recovery = 99.68%
SiO2†                  27655.4      5238.5 µg/L        291.61      5238.5 ppb         291.61   5.57%
   QC value within limits for SiO2  Recovery = 97.96%
Si 251.611†            34498.0      2457.5 µg/L        133.75      2457.5 ppb         133.75   5.44%
   QC value within limits for Si 251.611  Recovery = 98.30%
Sn 189.927†             1175.7      494.34 µg/L        66.036      494.34 ppb         66.036  13.36%
   QC value within limits for Sn 189.927  Recovery = 98.87%
Sr 421.552†            80512.2      487.61 µg/L         0.558      487.61 ppb          0.558   0.11%
   QC value within limits for Sr 421.552  Recovery = 97.52%
Ti 334.940†           200980.6      493.08 µg/L        28.974      493.08 ppb         28.974   5.88%
   QC value within limits for Ti 334.940  Recovery = 98.62%
Tl 190.801†              472.0      496.78 µg/L        39.922      496.78 ppb         39.922   8.04%
   QC value within limits for Tl 190.801  Recovery = 99.36%
U 409.014†              5218.6      485.80 µg/L        44.073      485.80 ppb         44.073   9.07%
   QC value within limits for U 409.014  Recovery = 97.16%
V 292.402†             38671.9      491.93 µg/L        37.311      491.93 ppb         37.311   7.58%
   QC value within limits for V 292.402  Recovery = 98.39%
Zn 213.857†            20397.7      489.89 µg/L        35.622      489.89 ppb         35.622   7.27%
   QC value within limits for Zn 213.857  Recovery = 97.98%
All analyte(s) passed QC.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 12:11:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88644.7	88644.7	96.6	%			12:12:08
1	Al 396.153Radial†	-130.7	27.1	13.242	µg/L	13.242	ppb	12:12:08
1	Ca 317.933Radial†	353.1	24.6	9.2504	µg/L	9.2504	ppb	12:12:28
1	Fe 238.204 Radial†	14.4	1.8	22.035	µg/L	22.035	ppb	12:12:28
1	K 766.490 Radial†	614.2	230.7	109.16	µg/L	109.16	ppb	12:12:08
1	Mg 279.077 IEC†	11.8	3.2	43.287	µg/L	43.287	ppb	12:12:28
1	Na 589.592 Radial†	278.5	98.2	49.666	µg/L	49.666	ppb	12:12:08
1	Sr 421.552†	183.2	54.4	0.3292	µg/L	0.3292	ppb	12:12:08
1	Sc 361.383	1906748.1	1906748.1	97.776	%			12:13:30
1	Y 371.029	1302812.0	1302812.0	97.712	%			12:13:30
1	Ag 328.068†	-541.5	-30.3	-0.2519	µg/L	-0.2519	ppb	12:13:36
1	As 188.979†	1.5	4.9	7.6425	µg/L	7.6425	ppb	12:13:56
1	B 249.677†	372.6	103.8	4.9797	µg/L	4.9797	ppb	12:13:36
1	Ba 233.527†	-3.9	23.1	0.5343	µg/L	0.5343	ppb	12:13:56
1	Be 313.107†	-1367.5	160.3	0.0992	µg/L	0.0992	ppb	12:13:36
1	Cd 226.502†	-155.8	6.0	0.1501	µg/L	0.1501	ppb	12:13:56
1	Co 228.616†	35.3	1.7	0.0766	µg/L	0.0766	ppb	12:13:56
1	Cr 267.716†	106.0	16.1	0.3753	µg/L	0.3753	ppb	12:13:36
1	Cu 324.752†	4780.3	665.1	4.5439	µg/L	4.5439	ppb	12:13:36
1	Mn 257.610†	-627.5	97.6	0.3152	µg/L	0.3152	ppb	12:13:56
1	Mo 202.031†	27.1	15.3	1.6085	µg/L	1.6085	ppb	12:13:56
1	Ni 231.604†	349.5	0.0	0.0011	µg/L	0.0011	ppb	12:13:56
1	P 214.914†	289.1	7.7	13.201	µg/L	13.201	ppb	12:13:56
1	Pb 220.353†	48.5	10.0	2.7905	µg/L	2.7905	ppb	12:13:56
1	S 181.975 Axial†	21.0	-1.4	-4.6894	µg/L	-4.6894	ppb	12:13:56
1	Sb 206.836†	34.5	7.4	7.0491	µg/L	7.0491	ppb	12:13:56
1	Se 196.026†	20.6	-0.7	-0.6779	µg/L	-0.6779	ppb	12:13:56
1	SiO2†	2677.6	-3.2	-0.6059	µg/L	-0.6059	ppb	12:13:36
1	Si 251.611†	471.9	60.9	4.3401	µg/L	4.3401	ppb	12:13:56
1	Sn 189.927†	-1.2	4.0	1.7019	µg/L	1.7019	ppb	12:13:56
1	Ti 334.940†	-297.6	387.0	0.9467	µg/L	0.9467	ppb	12:13:36
1	Tl 190.801†	-31.0	2.6	2.7540	µg/L	2.7540	ppb	12:13:56
1	U 409.014†	-19.7	19.7	1.8355	µg/L	1.8355	ppb	12:13:36
1	V 292.402†	110.8	14.2	0.1907	µg/L	0.1907	ppb	12:13:36
1	Zn 213.857†	644.0	0.4	-0.0018	µg/L	-0.0018	ppb	12:13:56
2	Sc RADIAL	88226.7	88226.7	96.1	%			12:12:34
2	Al 396.153Radial†	-140.6	16.2	7.9028	µg/L	7.9028	ppb	12:12:34
2	Ca 317.933Radial†	361.6	35.2	13.240	µg/L	13.240	ppb	12:12:54
2	Fe 238.204 Radial†	14.5	2.0	25.429	µg/L	25.429	ppb	12:12:54
2	K 766.490 Radial†	674.8	296.8	140.42	µg/L	140.42	ppb	12:12:34
2	Mg 279.077 IEC†	12.1	3.5	47.993	µg/L	47.993	ppb	12:12:54
2	Na 589.592 Radial†	286.1	107.4	54.326	µg/L	54.326	ppb	12:12:34
2	Sr 421.552†	142.0	12.3	0.0747	µg/L	0.0747	ppb	12:12:34
2	Sc 361.383	1898146.8	1898146.8	97.335	%			12:14:02
2	Y 371.029	1297073.3	1297073.3	97.281	%			12:14:02
2	Ag 328.068†	-522.0	-12.8	-0.1057	µg/L	-0.1057	ppb	12:14:08
2	As 188.979†	4.2	7.7	12.027	µg/L	12.027	ppb	12:14:28
2	B 249.677†	331.3	63.0	3.0190	µg/L	3.0190	ppb	12:14:08
2	Ba 233.527†	-16.3	10.4	0.2395	µg/L	0.2395	ppb	12:14:28
2	Be 313.107†	-1383.1	137.9	0.0853	µg/L	0.0853	ppb	12:14:08
2	Cd 226.502†	-150.4	10.8	0.2741	µg/L	0.2741	ppb	12:14:28
2	Co 228.616†	40.9	7.6	0.3450	µg/L	0.3450	ppb	12:14:28
2	Cr 267.716†	117.7	28.6	0.6677	µg/L	0.6677	ppb	12:14:08
2	Cu 324.752†	4840.4	749.0	5.1173	µg/L	5.1173	ppb	12:14:08
2	Mn 257.610†	-636.1	85.9	0.2771	µg/L	0.2771	ppb	12:14:28
2	Mo 202.031†	29.4	17.9	1.8797	µg/L	1.8797	ppb	12:14:28
2	Ni 231.604†	361.8	14.3	0.8442	µg/L	0.8442	ppb	12:14:28
2	P 214.914†	291.7	11.7	20.182	µg/L	20.182	ppb	12:14:28
2	Pb 220.353†	41.0	2.6	0.7091	µg/L	0.7091	ppb	12:14:28

2	S 181.975 Axial†	19.5	-2.9	-9.4802 µg/L	-9.4802 ppb		12:14:28
2	Sb 206.836†	35.7	8.8	8.4016 µg/L	8.4016 ppb		12:14:28
2	Se 196.026†	23.5	2.4	2.4120 µg/L	2.4120 ppb		12:14:28
2	SiO2†	2686.8	18.7	3.5352 µg/L	3.5352 ppb		12:14:08
2	Si 251.611†	445.1	35.6	2.5376 µg/L	2.5376 ppb		12:14:28
2	Sn 189.927†	7.7	13.2	5.5273 µg/L	5.5273 ppb		12:14:28
2	Ti 334.940†	-313.1	369.7	0.9039 µg/L	0.9039 ppb		12:14:08
2	Tl 190.801†	-33.9	-0.5	-0.4645 µg/L	-0.4645 ppb		12:14:28
2	U 409.014†	-46.8	-8.2	-0.7715 µg/L	-0.7715 ppb		12:14:08
2	V 292.402†	96.6	0.1	0.0131 µg/L	0.0131 ppb		12:14:08
2	Zn 213.857†	648.5	7.9	0.1762 µg/L	0.1762 ppb		12:14:28
3	Sc RADIAL	87973.3	87973.3	95.9 %			12:13:00
3	Al 396.153Radial†	-161.7	-6.2	-3.1126 µg/L	-3.1126 ppb		12:13:00
3	Ca 317.933Radial†	350.8	25.0	9.4045 µg/L	9.4045 ppb		12:13:20
3	Fe 238.204 Radial†	13.9	1.4	17.519 µg/L	17.519 ppb		12:13:20
3	K 766.490 Radial†	526.2	143.8	68.030 µg/L	68.030 ppb		12:13:00
3	Mg 279.077 IEC†	8.9	0.2	2.6125 µg/L	2.6125 ppb		12:13:20
3	Na 589.592 Radial†	266.0	87.3	44.172 µg/L	44.172 ppb		12:13:00
3	Sr 421.552†	150.7	21.9	0.1325 µg/L	0.1325 ppb		12:13:00
3	Sc 361.383	1889513.2	1889513.2	96.892 %			12:14:35
3	Y 371.029	1290447.5	1290447.5	96.784 %			12:14:35
3	Ag 328.068†	-499.0	8.6	0.0753 µg/L	0.0753 ppb		12:14:40
3	As 188.979†	-0.2	3.2	5.0183 µg/L	5.0183 ppb		12:15:01
3	B 249.677†	349.9	83.8	4.0200 µg/L	4.0200 ppb		12:14:40
3	Ba 233.527†	-8.6	18.2	0.4222 µg/L	0.4222 ppb		12:15:01
3	Be 313.107†	-1373.3	141.4	0.0876 µg/L	0.0876 ppb		12:14:40
3	Cd 226.502†	-150.0	10.5	0.2688 µg/L	0.2688 ppb		12:15:01
3	Co 228.616†	29.0	-4.5	-0.2036 µg/L	-0.2036 ppb		12:15:01
3	Cr 267.716†	48.5	-42.2	-0.9854 µg/L	-0.9854 ppb		12:14:40
3	Cu 324.752†	4716.3	643.6	4.3964 µg/L	4.3964 ppb		12:14:40
3	Mn 257.610†	-638.7	80.2	0.2612 µg/L	0.2612 ppb		12:15:01
3	Mo 202.031†	37.5	26.3	2.7618 µg/L	2.7618 ppb		12:15:01
3	Ni 231.604†	363.0	17.2	1.0189 µg/L	1.0189 ppb		12:15:01
3	P 214.914†	291.7	13.1	22.718 µg/L	22.718 ppb		12:15:01
3	Pb 220.353†	43.9	5.8	1.5944 µg/L	1.5944 ppb		12:15:01
3	S 181.975 Axial†	24.1	2.0	6.6265 µg/L	6.6265 ppb		12:15:01
3	Sb 206.836†	34.0	7.2	6.9313 µg/L	6.9313 ppb		12:15:01
3	Se 196.026†	19.5	-1.7	-1.6111 µg/L	-1.6111 ppb		12:15:01
3	SiO2†	2690.5	35.0	6.6385 µg/L	6.6385 ppb		12:14:40
3	Si 251.611†	464.9	58.1	4.1404 µg/L	4.1404 ppb		12:15:01
3	Sn 189.927†	-0.5	4.7	1.9695 µg/L	1.9695 ppb		12:15:01
3	Ti 334.940†	-376.1	303.2	0.7443 µg/L	0.7443 ppb		12:14:40
3	Tl 190.801†	-33.6	-0.3	-0.3115 µg/L	-0.3115 ppb		12:15:01
3	U 409.014†	52.6	94.2	8.7836 µg/L	8.7836 ppb		12:14:40
3	V 292.402†	118.8	23.4	0.3211 µg/L	0.3211 ppb		12:14:40
3	Zn 213.857†	646.9	9.3	0.2126 µg/L	0.2126 ppb		12:15:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1898136.0	97.334	%	0.4419				0.45%
Sc RADIAL	88281.6	96.2	%	0.37				0.38%
Y 371.029	1296777.6	97.259	%	0.4641				0.48%
Ag 328.068†	-11.5	-0.0941	µg/L	0.16392	-0.0941	ppb	0.16392	174.23%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	12.4	6.0108	µg/L	8.33991	6.0108	ppb	8.33991	138.75%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.3	8.2294	µg/L	3.54119	8.2294	ppb	3.54119	43.03%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	83.5	4.0062	µg/L	0.98044	4.0062	ppb	0.98044	24.47%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	17.2	0.3987	µg/L	0.14880	0.3987	ppb	0.14880	37.32%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	146.5	0.0907	µg/L	0.00746	0.0907	ppb	0.00746	8.22%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	28.3	10.632	µg/L	2.2601	10.632	ppb	2.2601	21.26%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	9.1	0.2310	µg/L	0.07012	0.2310	ppb	0.07012	30.35%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	1.6	0.0726	µg/L	0.27432	0.0726	ppb	0.27432	377.65%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                0.8      0.0192 µg/L       0.88223      0.0192 ppb        0.88223 >999.9%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              685.9      4.6859 µg/L       0.38084      4.6859 ppb        0.38084   8.13%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.7      21.661 µg/L        3.9683      21.661 ppb         3.9683  18.32%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        223.8      105.87 µg/L        36.304      105.87 ppb         36.304  34.29%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            2.3      31.298 µg/L       24.9534      31.298 ppb        24.9534  79.73%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               87.9      0.2845 µg/L       0.02774      0.2845 ppb        0.02774   9.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               19.8      2.0833 µg/L       0.60301      2.0833 ppb        0.60301  28.94%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        97.6      49.388 µg/L        5.0825      49.388 ppb         5.0825  10.29%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               10.5      0.6214 µg/L       0.54428      0.6214 ppb        0.54428  87.59%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                10.8      18.700 µg/L        4.9284      18.700 ppb         4.9284  26.35%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                6.1      1.6980 µg/L       1.04457      1.6980 ppb        1.04457  61.52%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.8     -2.5143 µg/L       8.27072     -2.5143 ppb        8.27072 328.94%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                7.8      7.4607 µg/L       0.81701      7.4607 ppb        0.81701  10.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.0      0.0410 µg/L       2.10566      0.0410 ppb        2.10566 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     16.8      3.1893 µg/L       3.63459      3.1893 ppb        3.63459 113.96%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               51.6      3.6727 µg/L       0.98812      3.6727 ppb        0.98812  26.90%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                7.3      3.0662 µg/L       2.13553      3.0662 ppb        2.13553  69.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               29.5      0.1788 µg/L       0.13341      0.1788 ppb        0.13341  74.61%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              353.3      0.8650 µg/L       0.10669      0.8650 ppb        0.10669  12.33%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                0.6      0.6593 µg/L       1.81565      0.6593 ppb        1.81565 275.38%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                35.2      3.2825 µg/L       4.93916      3.2825 ppb        4.93916 150.47%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                12.6      0.1749 µg/L       0.15461      0.1749 ppb        0.15461  88.38%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                5.9      0.1290 µg/L       0.11474      0.1290 ppb        0.11474  88.96%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Analysis Begun

Start Time: 3/15/2010 12:22:32 **Plasma On Time: 3/12/2010 12:50:39**
Logged In Analyst: optima **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N1030502Autosampler Model: AS-93plus

Sample Information File: C:\pe\optima1\Sample Information\031510.sif
Batch ID:
Results Data Set: 031510A
Results Library: c:\pe\optima1\Results\Results.mdb

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Method Loaded
Method Name: Gen Eng fast_new Si **Method Last Saved: 3/15/2010 00:47:23**
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

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Sequence No.: 1 **Autosampler Location: 113**
Sample ID: LR1 **Date Collected: 3/15/2010 12:22:34**
Analyst: HSC **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88537.6	88537.6	96.5	%			12:23:06
1	Al 396.153Radial†	-163.9	-7.5	-3.3820	µg/L	-3.3820	ppb	12:23:06
1	Ca 317.933Radial†	458.0	133.8	50.363	µg/L	50.363	ppb	12:23:26
1	Fe 238.204 Radial†	27979.8	28990.3	361080	µg/L	361080	ppb	12:23:06

1	K 766.490 Radial†	208.5	-189.1	-89.453	µg/L	-89.453 ppb	12:23:06
1	Mg 279.077 IEC†	13.5	5.0	-320.30	µg/L	-320.30 ppb	12:23:26
1	Na 589.592 Radial†	244.3	63.1	31.920	µg/L	31.920 ppb	12:23:06
1	Sr 421.552†	206.5	78.8	0.4770	µg/L	0.4770 ppb	12:23:06
1	Sc 361.383	1836274.2	1836274.2	94.162	%		12:24:29
1	Y 371.029	1248207.9	1248207.9	93.616	%		12:24:29
1	Ag 328.068†	-3378.0	-3063.9	2.3801	µg/L	2.3801 ppb	12:24:35
1	As 188.979†	-18.4	-16.1	-69.789	µg/L	-69.789 ppb	12:24:55
1	B 249.677†	2384.9	2255.4	-79.933	µg/L	-79.933 ppb	12:24:35
1	Ba 233.527†	507.0	565.5	13.194	µg/L	13.194 ppb	12:24:55
1	Be 313.107†	-1563.5	-101.6	-0.0632	µg/L	-0.0632 ppb	12:24:35
1	Cd 226.502†	1724.0	1996.2	10.249	µg/L	10.249 ppb	12:24:35
1	Co 228.616†	449.8	443.2	20.112	µg/L	20.112 ppb	12:24:55
1	Cr 267.716†	-148.4	-249.9	-5.7937	µg/L	-5.7937 ppb	12:24:55
1	Cu 324.752†	-2712.6	-7104.7	19.388	µg/L	19.388 ppb	12:24:35
1	Mn 257.610†	214.1	966.8	24.509	µg/L	24.509 ppb	12:24:29
1	Mo 202.031†	-109.5	-128.6	0.2201	µg/L	0.2201 ppb	12:24:35
1	Ni 231.604†	285.9	-53.8	1.4849	µg/L	1.4849 ppb	12:24:55
1	P 214.914†	459.7	200.2	65.596	µg/L	65.596 ppb	12:24:55
1	Pb 220.353†	54.2	18.0	11.025	µg/L	11.025 ppb	12:24:55
1	S 181.975 Axial†	-11.7	-35.4	-117.60	µg/L	-117.60 ppb	12:24:55
1	Sb 206.836†	22.4	-4.1	-4.0392	µg/L	-4.0392 ppb	12:24:55
1	Se 196.026†	-253.6	-291.1	855.99	µg/L	855.99 ppb	12:24:55
1	SiO2†	2456.5	-132.9	-25.182	µg/L	-25.182 ppb	12:24:35
1	Si 251.611†	-282.6	-721.8	-51.419	µg/L	-51.419 ppb	12:24:35
1	Sn 189.927†	-2.4	2.7	-0.5902	µg/L	-0.5902 ppb	12:24:55
1	Ti 334.940†	-592.3	62.3	0.1485	µg/L	0.1485 ppb	12:24:35
1	Tl 190.801†	-40.0	-8.1	42.577	µg/L	42.577 ppb	12:24:55
1	U 409.014†	802.7	892.4	33.049	µg/L	33.049 ppb	12:24:35
1	V 292.402†	4619.4	4806.6	14.689	µg/L	14.689 ppb	12:24:35
1	Zn 213.857†	2449.1	1942.6	29.923	µg/L	29.923 ppb	12:24:55
2	Sc RADIAL	88728.7	88728.7	96.7	%		12:23:32
2	Al 396.153Radial†	-204.8	-49.4	-23.868	µg/L	-23.868 ppb	12:23:32
2	Ca 317.933Radial†	459.3	134.2	50.483	µg/L	50.483 ppb	12:23:52
2	Fe 238.204 Radial†	28203.4	29159.0	363180	µg/L	363180 ppb	12:23:32
2	K 766.490 Radial†	237.1	-159.9	-75.669	µg/L	-75.669 ppb	12:23:32
2	Mg 279.077 IEC†	13.2	4.6	-327.25	µg/L	-327.25 ppb	12:23:52
2	Na 589.592 Radial†	181.3	-2.6	-1.3133	µg/L	-1.3133 ppb	12:23:32
2	Sr 421.552†	198.0	69.5	0.4207	µg/L	0.4207 ppb	12:23:32
2	Sc 361.383	1842213.3	1842213.3	94.467	%		12:25:02
2	Y 371.029	1250573.1	1250573.1	93.794	%		12:25:02
2	Ag 328.068†	-3574.6	-3260.4	0.8784	µg/L	0.8784 ppb	12:25:07
2	As 188.979†	-17.4	-15.1	-68.384	µg/L	-68.384 ppb	12:25:28
2	B 249.677†	2390.5	2253.2	-81.135	µg/L	-81.135 ppb	12:25:07
2	Ba 233.527†	497.9	554.2	12.929	µg/L	12.929 ppb	12:25:28
2	Be 313.107†	-1607.5	-142.8	-0.0889	µg/L	-0.0889 ppb	12:25:07
2	Cd 226.502†	1695.2	1959.8	9.0801	µg/L	9.0801 ppb	12:25:07
2	Co 228.616†	450.7	442.6	20.084	µg/L	20.084 ppb	12:25:28
2	Cr 267.716†	-144.1	-244.8	-5.6754	µg/L	-5.6754 ppb	12:25:28
2	Cu 324.752†	-2870.7	-7262.7	18.704	µg/L	18.704 ppb	12:25:07
2	Mn 257.610†	160.7	909.5	24.448	µg/L	24.448 ppb	12:25:02
2	Mo 202.031†	-124.9	-144.6	-1.3743	µg/L	-1.3743 ppb	12:25:07
2	Ni 231.604†	290.8	-49.6	1.7604	µg/L	1.7604 ppb	12:25:28
2	P 214.914†	461.1	200.2	63.958	µg/L	63.958 ppb	12:25:28
2	Pb 220.353†	65.2	29.4	14.239	µg/L	14.239 ppb	12:25:28
2	S 181.975 Axial†	-17.3	-41.3	-137.23	µg/L	-137.23 ppb	12:25:28
2	Sb 206.836†	29.1	3.0	2.6542	µg/L	2.6542 ppb	12:25:28
2	Se 196.026†	-249.6	-286.1	867.78	µg/L	867.78 ppb	12:25:28
2	SiO2†	2449.1	-149.1	-28.245	µg/L	-28.245 ppb	12:25:07
2	Si 251.611†	-302.3	-741.7	-52.835	µg/L	-52.835 ppb	12:25:07
2	Sn 189.927†	5.6	11.2	2.9668	µg/L	2.9668 ppb	12:25:28
2	Ti 334.940†	-562.4	96.0	0.2316	µg/L	0.2316 ppb	12:25:07
2	Tl 190.801†	-38.9	-6.8	44.178	µg/L	44.178 ppb	12:25:28
2	U 409.014†	763.1	847.7	28.589	µg/L	28.589 ppb	12:25:07
2	V 292.402†	4523.6	4689.4	12.928	µg/L	12.928 ppb	12:25:07
2	Zn 213.857†	2405.9	1888.5	28.515	µg/L	28.515 ppb	12:25:28
3	Sc RADIAL	88743.2	88743.2	96.7	%		12:23:58
3	Al 396.153Radial†	-184.0	-27.8	-13.366	µg/L	-13.366 ppb	12:23:58
3	Ca 317.933Radial†	455.9	130.6	49.130	µg/L	49.130 ppb	12:24:18
3	Fe 238.204 Radial†	28213.0	29164.1	363240	µg/L	363240 ppb	12:23:58
3	K 766.490 Radial†	242.1	-154.8	-73.235	µg/L	-73.235 ppb	12:23:58

3	Mg 279.077 IEC†	7.7	-1.1	-405.31 µg/L	-405.31 ppb	12:24:18
3	Na 589.592 Radial†	170.1	-14.3	-7.2204 µg/L	-7.2204 ppb	12:23:58
3	Sr 421.552†	205.8	77.5	0.4694 µg/L	0.4694 ppb	12:23:58
3	Sc 361.383	1840186.3	1840186.3	94.363 %		12:25:34
3	Y 371.029	1251307.4	1251307.4	93.849 %		12:25:34
3	Ag 328.068†	-3086.1	-2747.0	5.1719 µg/L	5.1719 ppb	12:25:40
3	As 188.979†	-13.2	-10.6	-61.364 µg/L	-61.364 ppb	12:26:00
3	B 249.677†	2244.3	2101.1	-88.484 µg/L	-88.484 ppb	12:25:40
3	Ba 233.527†	393.2	443.8	10.366 µg/L	10.366 ppb	12:26:00
3	Be 313.107†	-1599.6	-136.4	-0.0849 µg/L	-0.0849 ppb	12:25:40
3	Cd 226.502†	1480.6	1734.3	3.3086 µg/L	3.3086 ppb	12:25:40
3	Co 228.616†	404.9	394.7	17.909 µg/L	17.909 ppb	12:26:00
3	Cr 267.716†	-91.8	-189.6	-4.3894 µg/L	-4.3894 ppb	12:26:00
3	Cu 324.752†	-1887.3	-6224.0	25.806 µg/L	25.806 ppb	12:25:40
3	Mn 257.610†	138.2	885.8	24.380 µg/L	24.380 ppb	12:25:34
3	Mo 202.031†	-100.1	-118.4	1.3713 µg/L	1.3713 ppb	12:25:40
3	Ni 231.604†	308.4	-30.7	2.8869 µg/L	2.8869 ppb	12:26:00
3	P 214.914†	423.0	160.3	-7.3517 µg/L	-7.3517 ppb	12:26:00
3	Pb 220.353†	62.2	26.4	13.403 µg/L	13.403 ppb	12:26:00
3	S 181.975 Axial†	-1.9	-24.9	-82.775 µg/L	-82.775 ppb	12:26:00
3	Sb 206.836†	34.9	9.1	8.5413 µg/L	8.5413 ppb	12:26:00
3	Se 196.026†	-199.4	-233.1	921.18 µg/L	921.18 ppb	12:26:00
3	SiO2†	2504.1	-88.0	-16.678 µg/L	-16.678 ppb	12:25:40
3	Si 251.611†	-213.0	-647.4	-46.120 µg/L	-46.120 ppb	12:25:40
3	Sn 189.927†	2.7	8.1	1.6677 µg/L	1.6677 ppb	12:26:00
3	Ti 334.940†	-516.4	144.2	0.3559 µg/L	0.3559 ppb	12:25:40
3	Tl 190.801†	-43.1	-11.3	39.562 µg/L	39.562 ppb	12:26:00
3	U 409.014†	668.6	748.5	19.322 µg/L	19.322 ppb	12:25:40
3	V 292.402†	4146.3	4294.8	7.9639 µg/L	7.9639 ppb	12:25:40
3	Zn 213.857†	2095.3	1562.2	20.609 µg/L	20.609 ppb	12:26:00

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1839557.9	94.330	%	0.1548				0.16%
Sc RADIAL	88669.8	96.6	%	0.13				0.13%
Y 371.029	1250029.5	93.753	%	0.1215				0.13%
Ag 328.068†	-3023.8	2.8101	µg/L	2.17881	2.8101	ppb	2.17881	77.53%
Al 396.153Radial†	-28.2	-13.539	µg/L	10.2443	-13.539	ppb	10.2443	75.67%
As 188.979†	-13.9	-66.512	µg/L	4.5135	-66.512	ppb	4.5135	6.79%
B 249.677†	2203.2	-83.184	µg/L	4.6290	-83.184	ppb	4.6290	5.56%
Ba 233.527†	521.2	12.163	µg/L	1.5619	12.163	ppb	1.5619	12.84%
Be 313.107†	-126.9	-0.0790	µg/L	0.01380	-0.0790	ppb	0.01380	17.47%
Ca 317.933Radial†	132.8	49.992	µg/L	0.7488	49.992	ppb	0.7488	1.50%
Cd 226.502†	1896.8	7.5460	µg/L	3.71601	7.5460	ppb	3.71601	49.24%
Co 228.616†	426.8	19.368	µg/L	1.2642	19.368	ppb	1.2642	6.53%
Cr 267.716†	-228.1	-5.2862	µg/L	0.77886	-5.2862	ppb	0.77886	14.73%
Cu 324.752†	-6863.8	21.300	µg/L	3.9179	21.300	ppb	3.9179	18.39%
Fe 238.204 Radial†	29104.5	362500	µg/L	1232.2	362500	ppb	1232.2	0.34%
K 766.490 Radial†	-167.9	-79.452	µg/L	8.7455	-79.452	ppb	8.7455	11.01%
Mg 279.077 IEC†	2.8	-350.95	µg/L	47.204	-350.95	ppb	47.204	13.45%
Mn 257.610†	920.7	24.446	µg/L	0.0645	24.446	ppb	0.0645	0.26%
Mo 202.031†	-130.6	0.0724	µg/L	1.37873	0.0724	ppb	1.37873	>999.9%
Na 589.592 Radial†	15.4	7.7956	µg/L	21.10043	7.7956	ppb	21.10043	270.67%
Ni 231.604†	-44.7	2.0441	µg/L	0.74276	2.0441	ppb	0.74276	36.34%
P 214.914†	186.9	40.734	µg/L	41.6516	40.734	ppb	41.6516	102.25%
Pb 220.353†	24.6	12.889	µg/L	1.6675	12.889	ppb	1.6675	12.94%
S 181.975 Axial†	-33.8	-112.53	µg/L	27.579	-112.53	ppb	27.579	24.51%
Sb 206.836†	2.7	2.3854	µg/L	6.29456	2.3854	ppb	6.29456	263.88%
Se 196.026†	-270.1	881.65	µg/L	34.738	881.65	ppb	34.738	3.94%
SiO2†	-123.4	-23.368	µg/L	5.9933	-23.368	ppb	5.9933	25.65%
Si 251.611†	-703.7	-50.124	µg/L	3.5394	-50.124	ppb	3.5394	7.06%
Sn 189.927†	7.3	1.3481	µg/L	1.79990	1.3481	ppb	1.79990	133.51%
Sr 421.552†	75.2	0.4557	µg/L	0.03055	0.4557	ppb	0.03055	6.70%
Ti 334.940†	100.8	0.2453	µg/L	0.10438	0.2453	ppb	0.10438	42.55%
Tl 190.801†	-8.7	42.105	µg/L	2.3438	42.105	ppb	2.3438	5.57%
U 409.014†	829.5	26.987	µg/L	7.0024	26.987	ppb	7.0024	25.95%
V 292.402†	4596.9	11.860	µg/L	3.4873	11.860	ppb	3.4873	29.40%
Zn 213.857†	1797.8	26.349	µg/L	5.0209	26.349	ppb	5.0209	19.06%

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 12:26:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87249.5	87249.5	95.1	%			12:26:42
1	Al 396.153Radial†	9705.4	10371.3	5066.8	µg/L	5066.8	ppb	12:26:42
1	Ca 317.933Radial†	13078.1	13415.7	5048.4	µg/L	5048.4	ppb	12:26:42
1	Fe 238.204 Radial†	395.6	403.0	5030.3	µg/L	5030.3	ppb	12:27:03
1	K 766.490 Radial†	10496.7	10636.1	5032.3	µg/L	5032.3	ppb	12:26:42
1	Mg 279.077 IEC†	361.5	371.1	5024.5	µg/L	5024.5	ppb	12:27:03
1	Na 589.592 Radial†	18632.9	19409.5	9817.0	µg/L	9817.0	ppb	12:26:42
1	Sr 421.552†	78548.8	82488.8	499.58	µg/L	499.58	ppb	12:26:42
1	Sc 361.383	1877524.4	1877524.4	96.277	%			12:28:06
1	Y 371.029	1278095.9	1278095.9	95.858	%			12:28:06
1	Ag 328.068†	57261.2	59998.7	508.72	µg/L	508.72	ppb	12:28:12
1	As 188.979†	326.8	342.8	533.23	µg/L	533.23	ppb	12:28:33
1	B 249.677†	10306.0	10427.1	499.76	µg/L	499.76	ppb	12:28:12
1	Ba 233.527†	21282.5	22132.5	513.00	µg/L	513.00	ppb	12:28:12
1	Be 313.107†	790412.2	822532.8	511.05	µg/L	511.05	ppb	12:28:06
1	Cd 226.502†	19123.9	20028.7	512.20	µg/L	512.20	ppb	12:28:12
1	Co 228.616†	10977.3	11367.3	515.56	µg/L	515.56	ppb	12:28:12
1	Cr 267.716†	21536.8	22277.2	520.12	µg/L	520.12	ppb	12:28:12
1	Cu 324.752†	76799.5	75545.1	516.59	µg/L	516.59	ppb	12:28:12
1	Mn 257.610†	153187.3	159849.8	518.76	µg/L	518.76	ppb	12:28:06
1	Mo 202.031†	4953.1	5132.2	538.86	µg/L	538.86	ppb	12:28:33
1	Ni 231.604†	8785.0	8767.3	518.15	µg/L	518.15	ppb	12:28:12
1	P 214.914†	1729.5	1508.4	2615.3	µg/L	2615.3	ppb	12:28:33
1	Pb 220.353†	1870.7	1903.5	530.50	µg/L	530.50	ppb	12:28:33
1	S 181.975 Axial†	315.5	304.8	1013.3	µg/L	1013.3	ppb	12:28:33
1	Sb 206.836†	556.4	550.0	526.29	µg/L	526.29	ppb	12:28:33
1	Se 196.026†	532.7	531.4	545.09	µg/L	545.09	ppb	12:28:33
1	SiO2†	30214.3	28640.9	5425.2	µg/L	5425.2	ppb	12:28:12
1	Si 251.611†	34764.7	35687.2	2542.2	µg/L	2542.2	ppb	12:28:12
1	Sn 189.927†	1235.5	1288.5	541.76	µg/L	541.76	ppb	12:28:33
1	Ti 334.940†	200665.4	209115.6	513.04	µg/L	513.04	ppb	12:28:06
1	Tl 190.801†	435.5	486.7	512.32	µg/L	512.32	ppb	12:28:33
1	U 409.014†	5295.8	5540.5	515.80	µg/L	515.80	ppb	12:28:12
1	V 292.402†	39296.9	40717.1	518.03	µg/L	518.03	ppb	12:28:12
1	Zn 213.857†	21217.9	21380.0	513.48	µg/L	513.48	ppb	12:28:12
2	Sc RADIAL	87992.5	87992.5	95.9	%			12:27:08
2	Al 396.153Radial†	9788.4	10371.8	5067.3	µg/L	5067.3	ppb	12:27:08
2	Ca 317.933Radial†	13166.0	13391.1	5039.2	µg/L	5039.2	ppb	12:27:08
2	Fe 238.204 Radial†	396.3	400.2	4995.8	µg/L	4995.8	ppb	12:27:29
2	K 766.490 Radial†	10531.8	10579.6	5005.5	µg/L	5005.5	ppb	12:27:08
2	Mg 279.077 IEC†	367.9	374.7	5072.3	µg/L	5072.3	ppb	12:27:29
2	Na 589.592 Radial†	18780.7	19398.2	9811.2	µg/L	9811.2	ppb	12:27:08
2	Sr 421.552†	78909.6	82167.5	497.63	µg/L	497.63	ppb	12:27:08
2	Sc 361.383	1885927.5	1885927.5	96.708	%			12:28:40
2	Y 371.029	1286298.0	1286298.0	96.473	%			12:28:40
2	Ag 328.068†	57270.4	59743.3	506.58	µg/L	506.58	ppb	12:28:45
2	As 188.979†	319.4	333.7	519.05	µg/L	519.05	ppb	12:29:06
2	B 249.677†	10411.8	10488.9	502.75	µg/L	502.75	ppb	12:28:45
2	Ba 233.527†	21420.2	22176.3	514.01	µg/L	514.01	ppb	12:28:45
2	Be 313.107†	793835.3	822414.5	510.97	µg/L	510.97	ppb	12:28:40
2	Cd 226.502†	19261.7	20082.7	513.58	µg/L	513.58	ppb	12:28:45
2	Co 228.616†	11052.4	11394.1	516.77	µg/L	516.77	ppb	12:28:45
2	Cr 267.716†	21643.3	22287.6	520.36	µg/L	520.36	ppb	12:28:45
2	Cu 324.752†	77097.6	75497.9	516.26	µg/L	516.26	ppb	12:28:45
2	Mn 257.610†	154045.4	160028.2	519.33	µg/L	519.33	ppb	12:28:40
2	Mo 202.031†	4812.5	4963.9	521.20	µg/L	521.20	ppb	12:29:06
2	Ni 231.604†	8810.4	8752.8	517.29	µg/L	517.29	ppb	12:28:45
2	P 214.914†	1691.7	1461.3	2531.9	µg/L	2531.9	ppb	12:29:06
2	Pb 220.353†	1845.5	1868.7	520.78	µg/L	520.78	ppb	12:29:06

2	S 181.975 Axial†	320.4	308.4	1025.2 µg/L	1025.2 ppb	12:29:06
2	Sb 206.836†	552.3	543.3	519.56 µg/L	519.56 ppb	12:29:06
2	Se 196.026†	519.1	515.0	528.44 µg/L	528.44 ppb	12:29:06
2	SiO2†	30376.4	28668.6	5430.5 µg/L	5430.5 ppb	12:28:45
2	Si 251.611†	34866.2	35631.3	2538.2 µg/L	2538.2 ppb	12:28:45
2	Sn 189.927†	1197.7	1243.7	522.92 µg/L	522.92 ppb	12:29:06
2	Ti 334.940†	201411.1	208958.1	512.65 µg/L	512.65 ppb	12:28:40
2	Tl 190.801†	436.1	485.3	510.89 µg/L	510.89 ppb	12:29:06
2	U 409.014†	5339.2	5560.9	517.70 µg/L	517.70 ppb	12:28:45
2	V 292.402†	39584.0	40832.2	519.35 µg/L	519.35 ppb	12:28:45
2	Zn 213.857†	21319.1	21386.4	513.64 µg/L	513.64 ppb	12:28:45
3	Sc RADIAL	88096.9	88096.9	96.0 %		12:27:34
3	Al 396.153Radial†	9786.2	10357.4	5062.2 µg/L	5062.2 ppb	12:27:34
3	Ca 317.933Radial†	13179.1	13388.6	5038.2 µg/L	5038.2 ppb	12:27:34
3	Fe 238.204 Radial†	398.0	401.5	5010.7 µg/L	5010.7 ppb	12:27:55
3	K 766.490 Radial†	10406.3	10435.7	4937.5 µg/L	4937.5 ppb	12:27:34
3	Mg 279.077 IEC†	361.4	367.4	4972.1 µg/L	4972.1 ppb	12:27:55
3	Na 589.592 Radial†	18778.9	19373.0	9798.5 µg/L	9798.5 ppb	12:27:34
3	Sr 421.552†	78836.2	81993.4	496.58 µg/L	496.58 ppb	12:27:34
3	Sc 361.383	1881193.2	1881193.2	96.466 %		12:29:13
3	Y 371.029	1281511.5	1281511.5	96.114 %		12:29:13
3	Ag 328.068†	53002.3	55467.8	470.17 µg/L	470.17 ppb	12:29:19
3	As 188.979†	258.6	271.5	422.05 µg/L	422.05 ppb	12:29:39
3	B 249.677†	9540.1	9612.3	460.45 µg/L	460.45 ppb	12:29:19
3	Ba 233.527†	19013.6	19737.4	457.47 µg/L	457.47 ppb	12:29:19
3	Be 313.107†	719652.3	747579.2	464.48 µg/L	464.48 ppb	12:29:13
3	Cd 226.502†	17043.3	17833.1	455.99 µg/L	455.99 ppb	12:29:19
3	Co 228.616†	9685.0	10005.5	453.73 µg/L	453.73 ppb	12:29:19
3	Cr 267.716†	18438.5	19021.7	444.12 µg/L	444.12 ppb	12:29:19
3	Cu 324.752†	68408.8	66691.4	456.15 µg/L	456.15 ppb	12:29:19
3	Mn 257.610†	140201.2	146077.6	474.06 µg/L	474.06 ppb	12:29:13
3	Mo 202.031†	3930.1	4061.8	426.51 µg/L	426.51 ppb	12:29:39
3	Ni 231.604†	7805.0	7733.5	457.06 µg/L	457.06 ppb	12:29:19
3	P 214.914†	1457.4	1222.8	2115.6 µg/L	2115.6 ppb	12:29:39
3	Pb 220.353†	1550.8	1568.1	436.97 µg/L	436.97 ppb	12:29:39
3	S 181.975 Axial†	285.8	273.4	908.95 µg/L	908.95 ppb	12:29:39
3	Sb 206.836†	472.0	461.5	441.03 µg/L	441.03 ppb	12:29:39
3	Se 196.026†	448.3	442.9	456.21 µg/L	456.21 ppb	12:29:39
3	SiO2†	27712.8	25986.5	4922.4 µg/L	4922.4 ppb	12:29:19
3	Si 251.611†	31599.2	32335.3	2303.4 µg/L	2303.4 ppb	12:29:19
3	Sn 189.927†	969.9	1010.7	425.03 µg/L	425.03 ppb	12:29:39
3	Ti 334.940†	181367.1	188703.7	462.93 µg/L	462.93 ppb	12:29:13
3	Tl 190.801†	383.3	431.7	454.55 µg/L	454.55 ppb	12:29:39
3	U 409.014†	4598.8	4807.2	447.40 µg/L	447.40 ppb	12:29:19
3	V 292.402†	34596.4	35764.8	454.55 µg/L	454.55 ppb	12:29:19
3	Zn 213.857†	18815.0	18846.1	452.56 µg/L	452.56 ppb	12:29:19

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1881548.4	96.484	%	0.2160				0.22%
Sc RADIAL	87779.6	95.6	%	0.50				0.53%
Y 371.029	1281968.5	96.149	%	0.3090				0.32%
Ag 328.068†	58403.3	495.16	µg/L	21.662	495.16	ppb	21.662	4.37%
QC value within limits for Ag 328.068 Recovery = 99.03%								
Al 396.153Radial†	10366.8	5065.5	µg/L	2.79	5065.5	ppb	2.79	0.06%
QC value within limits for Al 396.153Radial Recovery = 101.31%								
As 188.979†	316.0	491.45	µg/L	60.512	491.45	ppb	60.512	12.31%
QC value within limits for As 188.979 Recovery = 98.29%								
B 249.677†	10176.1	487.65	µg/L	23.604	487.65	ppb	23.604	4.84%
QC value within limits for B 249.677 Recovery = 97.53%								
Ba 233.527†	21348.8	494.83	µg/L	32.357	494.83	ppb	32.357	6.54%
QC value within limits for Ba 233.527 Recovery = 98.97%								
Be 313.107†	797508.8	495.50	µg/L	26.865	495.50	ppb	26.865	5.42%
QC value within limits for Be 313.107 Recovery = 99.10%								
Ca 317.933Radial†	13398.5	5041.9	µg/L	5.63	5041.9	ppb	5.63	0.11%
QC value within limits for Ca 317.933Radial Recovery = 100.84%								
Cd 226.502†	19314.8	493.92	µg/L	32.861	493.92	ppb	32.861	6.65%
QC value within limits for Cd 226.502 Recovery = 98.78%								
Co 228.616†	10922.3	495.35	µg/L	36.051	495.35	ppb	36.051	7.28%

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   QC value within limits for Co 228.616  Recovery = 99.07%
Cr 267.716†            21195.5      494.86 µg/L        43.948      494.86 ppb         43.948   8.88%
   QC value within limits for Cr 267.716  Recovery = 98.97%
Cu 324.752†            72578.1      496.33 µg/L        34.798      496.33 ppb         34.798   7.01%
   QC value within limits for Cu 324.752  Recovery = 99.27%
Fe 238.204 Radial†       401.6      5012.3 µg/L         17.32      5012.3 ppb          17.32   0.35%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.25%
K 766.490 Radial†      10550.5      4991.8 µg/L         48.88      4991.8 ppb          48.88   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 99.84%
Mg 279.077 IEC†          371.1      5023.0 µg/L         50.13      5023.0 ppb          50.13   1.00%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.46%
Mn 257.610†           155318.5      504.05 µg/L        25.972      504.05 ppb         25.972   5.15%
   QC value within limits for Mn 257.610  Recovery = 100.81%
Mo 202.031†             4719.3      495.53 µg/L        60.416      495.53 ppb         60.416  12.19%
   QC value within limits for Mo 202.031  Recovery = 99.11%
Na 589.592 Radial†     19393.6      9808.9 µg/L          9.44      9808.9 ppb          9.44   0.10%
   QC value within limits for Na 589.592 Radial  Recovery = 98.09%
Ni 231.604†             8417.9      497.50 µg/L        35.024      497.50 ppb         35.024   7.04%
   QC value within limits for Ni 231.604  Recovery = 99.50%
P 214.914†              1397.5      2420.9 µg/L        267.69      2420.9 ppb         267.69  11.06%
   QC value within limits for P 214.914  Recovery = 96.84%
Pb 220.353†             1780.1      496.08 µg/L        51.419      496.08 ppb         51.419  10.37%
   QC value within limits for Pb 220.353  Recovery = 99.22%
S 181.975 Axial†         295.5      982.49 µg/L        63.964      982.49 ppb         63.964   6.51%
   QC value within limits for S 181.975 Axial  Recovery = 98.25%
Sb 206.836†              518.2      495.62 µg/L        47.402      495.62 ppb         47.402   9.56%
   QC value within limits for Sb 206.836  Recovery = 99.12%
Se 196.026†              496.4      509.92 µg/L        47.248      509.92 ppb         47.248   9.27%
   QC value within limits for Se 196.026  Recovery = 101.98%
SiO2†                  27765.3      5259.4 µg/L        291.82      5259.4 ppb         291.82   5.55%
   QC value within limits for SiO2  Recovery = 98.35%
Si 251.611†            34551.3      2461.3 µg/L        136.72      2461.3 ppb         136.72   5.55%
   QC value within limits for Si 251.611  Recovery = 98.45%
Sn 189.927†             1181.0      496.57 µg/L        62.666      496.57 ppb         62.666  12.62%
   QC value within limits for Sn 189.927  Recovery = 99.31%
Sr 421.552†            82216.6      497.93 µg/L         1.522      497.93 ppb          1.522   0.31%
   QC value within limits for Sr 421.552  Recovery = 99.59%
Ti 334.940†           202259.2      496.21 µg/L        28.816      496.21 ppb         28.816   5.81%
   QC value within limits for Ti 334.940  Recovery = 99.24%
Tl 190.801†              467.9      492.59 µg/L        32.946      492.59 ppb         32.946   6.69%
   QC value within limits for Tl 190.801  Recovery = 98.52%
U 409.014†              5302.8      493.64 µg/L        40.050      493.64 ppb         40.050   8.11%
   QC value within limits for U 409.014  Recovery = 98.73%
V 292.402†             39104.7      497.31 µg/L        37.034      497.31 ppb         37.034   7.45%
   QC value within limits for V 292.402  Recovery = 99.46%
Zn 213.857†            20537.5      493.22 µg/L        35.216      493.22 ppb         35.216   7.14%
   QC value within limits for Zn 213.857  Recovery = 98.64%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 12:29:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88257.5	88257.5	96.2	%			12:30:19
1	Al 396.153Radial†	-149.4	7.1	3.4749	µg/L	3.4749	ppb	12:30:19
1	Ca 317.933Radial†	337.7	10.2	3.8333	µg/L	3.8333	ppb	12:30:39
1	Fe 238.204 Radial†	15.5	3.0	37.306	µg/L	37.306	ppb	12:30:39
1	K 766.490 Radial†	417.6	29.1	13.779	µg/L	13.779	ppb	12:30:19
1	Mg 279.077 IEC†	7.2	-1.6	-21.535	µg/L	-21.535	ppb	12:30:39
1	Na 589.592 Radial†	213.6	31.9	16.158	µg/L	16.158	ppb	12:30:19
1	Sr 421.552†	136.3	6.5	0.0391	µg/L	0.0391	ppb	12:30:19
1	Sc 361.383	1905450.8	1905450.8	97.709	%			12:31:41
1	Y 371.029	1301832.7	1301832.7	97.638	%			12:31:41
1	Ag 328.068†	-500.4	11.3	0.0997	µg/L	0.0997	ppb	12:31:47
1	As 188.979†	-5.3	-2.1	-3.2124	µg/L	-3.2124	ppb	12:32:08
1	B 249.677†	307.4	37.3	1.7746	µg/L	1.7746	ppb	12:31:47
1	Ba 233.527†	-20.0	6.6	0.1527	µg/L	0.1527	ppb	12:32:08
1	Be 313.107†	-1362.1	164.7	0.1024	µg/L	0.1024	ppb	12:31:47
1	Cd 226.502†	-167.4	-6.1	-0.1579	µg/L	-0.1579	ppb	12:32:08
1	Co 228.616†	20.6	-13.4	-0.6067	µg/L	-0.6067	ppb	12:32:08
1	Cr 267.716†	83.4	-7.0	-0.1624	µg/L	-0.1624	ppb	12:31:47
1	Cu 324.752†	4165.1	38.8	0.2717	µg/L	0.2717	ppb	12:31:47
1	Mn 257.610†	-684.5	38.8	0.1296	µg/L	0.1296	ppb	12:32:08
1	Mo 202.031†	16.6	4.7	0.4908	µg/L	0.4908	ppb	12:32:08
1	Ni 231.604†	371.0	22.3	1.3201	µg/L	1.3201	ppb	12:32:08
1	P 214.914†	285.5	4.2	7.3690	µg/L	7.3690	ppb	12:32:08
1	Pb 220.353†	58.5	20.3	5.6559	µg/L	5.6559	ppb	12:32:08
1	S 181.975 Axial†	19.4	-3.1	-10.237	µg/L	-10.237	ppb	12:32:08
1	Sb 206.836†	27.6	0.3	0.3328	µg/L	0.3328	ppb	12:32:08
1	Se 196.026†	20.2	-1.1	-0.9818	µg/L	-0.9818	ppb	12:32:08
1	SiO2†	2650.5	-29.1	-5.5061	µg/L	-5.5061	ppb	12:31:47
1	Si 251.611†	398.0	-14.4	-1.0237	µg/L	-1.0237	ppb	12:32:08
1	Sn 189.927†	-1.9	3.3	1.4029	µg/L	1.4029	ppb	12:32:08
1	Ti 334.940†	-635.6	40.9	0.1022	µg/L	0.1022	ppb	12:31:47
1	Tl 190.801†	-36.8	-3.3	-3.3954	µg/L	-3.3954	ppb	12:32:08
1	U 409.014†	-3.0	36.8	3.4286	µg/L	3.4286	ppb	12:31:47
1	V 292.402†	113.1	16.6	0.2110	µg/L	0.2110	ppb	12:31:47
1	Zn 213.857†	620.7	-23.0	-0.5641	µg/L	-0.5641	ppb	12:32:08
2	Sc RADIAL	87928.2	87928.2	95.8	%			12:30:45
2	Al 396.153Radial†	-133.2	23.5	11.455	µg/L	11.455	ppb	12:30:45
2	Ca 317.933Radial†	336.3	10.1	3.7905	µg/L	3.7905	ppb	12:31:05
2	Fe 238.204 Radial†	13.8	1.3	15.758	µg/L	15.758	ppb	12:31:05
2	K 766.490 Radial†	405.6	18.2	8.5974	µg/L	8.5974	ppb	12:30:45
2	Mg 279.077 IEC†	1.8	-7.2	-96.954	µg/L	-96.954	ppb	12:31:05
2	Na 589.592 Radial†	211.5	30.6	15.477	µg/L	15.477	ppb	12:30:45
2	Sr 421.552†	156.5	28.0	0.1698	µg/L	0.1698	ppb	12:30:45
2	Sc 361.383	1905199.5	1905199.5	97.697	%			12:32:14
2	Y 371.029	1302887.8	1302887.8	97.717	%			12:32:14
2	Ag 328.068†	-536.5	-25.6	-0.2138	µg/L	-0.2138	ppb	12:32:19
2	As 188.979†	1.6	5.0	7.8720	µg/L	7.8720	ppb	12:32:40
2	B 249.677†	308.2	38.2	1.8284	µg/L	1.8284	ppb	12:32:19
2	Ba 233.527†	-16.0	10.7	0.2484	µg/L	0.2484	ppb	12:32:40
2	Be 313.107†	-1320.6	207.1	0.1285	µg/L	0.1285	ppb	12:32:19
2	Cd 226.502†	-157.0	4.6	0.1158	µg/L	0.1158	ppb	12:32:40
2	Co 228.616†	24.0	-9.9	-0.4477	µg/L	-0.4477	ppb	12:32:40
2	Cr 267.716†	105.9	16.0	0.3744	µg/L	0.3744	ppb	12:32:19
2	Cu 324.752†	4203.7	78.9	0.5416	µg/L	0.5416	ppb	12:32:19
2	Mn 257.610†	-676.8	46.7	0.1590	µg/L	0.1590	ppb	12:32:40
2	Mo 202.031†	26.4	14.7	1.5447	µg/L	1.5447	ppb	12:32:40
2	Ni 231.604†	343.6	-5.7	-0.3382	µg/L	-0.3382	ppb	12:32:40
2	P 214.914†	288.8	7.6	13.409	µg/L	13.409	ppb	12:32:40
2	Pb 220.353†	50.1	11.6	3.2458	µg/L	3.2458	ppb	12:32:40

2	S 181.975 Axial†	19.4	-3.1	-10.185	µg/L	-10.185 ppb	12:32:40
2	Sb 206.836†	30.1	3.0	2.8512	µg/L	2.8512 ppb	12:32:40
2	Se 196.026†	18.5	-2.9	-2.7775	µg/L	-2.7775 ppb	12:32:40
2	SiO2†	2616.7	-63.3	-11.999	µg/L	-11.999 ppb	12:32:19
2	Si 251.611†	400.0	-12.3	-0.8767	µg/L	-0.8767 ppb	12:32:40
2	Sn 189.927†	-5.3	-0.2	-0.0913	µg/L	-0.0913 ppb	12:32:40
2	Ti 334.940†	-496.6	183.0	0.4570	µg/L	0.4570 ppb	12:32:19
2	Tl 190.801†	-35.6	-2.1	-2.1857	µg/L	-2.1857 ppb	12:32:40
2	U 409.014†	-23.2	16.2	1.5044	µg/L	1.5044 ppb	12:32:19
2	V 292.402†	102.3	5.5	0.0811	µg/L	0.0811 ppb	12:32:19
2	Zn 213.857†	614.6	-29.2	-0.7004	µg/L	-0.7004 ppb	12:32:40
3	Sc RADIAL	88084.9	88084.9	96.0	%		12:31:11
3	Al 396.153Radial†	-163.8	-8.2	-4.0365	µg/L	-4.0365 ppb	12:31:11
3	Ca 317.933Radial†	342.1	15.5	5.8402	µg/L	5.8402 ppb	12:31:31
3	Fe 238.204 Radial†	15.0	2.6	31.895	µg/L	31.895 ppb	12:31:31
3	K 766.490 Radial†	344.1	-46.7	-22.078	µg/L	-22.078 ppb	12:31:11
3	Mg 279.077 IEC†	8.8	0.1	1.3211	µg/L	1.3211 ppb	12:31:31
3	Na 589.592 Radial†	227.3	46.7	23.608	µg/L	23.608 ppb	12:31:11
3	Sr 421.552†	123.3	-6.8	-0.0414	µg/L	-0.0414 ppb	12:31:11
3	Sc 361.383	1900302.2	1900302.2	97.445	%		12:32:46
3	Y 371.029	1299334.6	1299334.6	97.451	%		12:32:46
3	Ag 328.068†	-602.6	-94.8	-0.7974	µg/L	-0.7974 ppb	12:32:51
3	As 188.979†	-6.4	-3.2	-4.9868	µg/L	-4.9868 ppb	12:33:12
3	B 249.677†	289.6	19.9	0.9395	µg/L	0.9395 ppb	12:32:51
3	Ba 233.527†	-30.5	-4.2	-0.0986	µg/L	-0.0986 ppb	12:33:12
3	Be 313.107†	-1429.4	91.9	0.0570	µg/L	0.0570 ppb	12:32:51
3	Cd 226.502†	-163.2	-2.2	-0.0587	µg/L	-0.0587 ppb	12:33:12
3	Co 228.616†	22.8	-11.0	-0.4989	µg/L	-0.4989 ppb	12:33:12
3	Cr 267.716†	62.2	-28.5	-0.6659	µg/L	-0.6659 ppb	12:32:51
3	Cu 324.752†	4221.8	108.5	0.7469	µg/L	0.7469 ppb	12:32:51
3	Mn 257.610†	-691.4	29.8	0.0987	µg/L	0.0987 ppb	12:33:12
3	Mo 202.031†	18.0	6.1	0.6456	µg/L	0.6456 ppb	12:33:12
3	Ni 231.604†	358.5	10.5	0.6205	µg/L	0.6205 ppb	12:33:12
3	P 214.914†	288.2	7.7	13.599	µg/L	13.599 ppb	12:33:12
3	Pb 220.353†	53.9	15.7	4.3778	µg/L	4.3778 ppb	12:33:12
3	S 181.975 Axial†	19.1	-3.4	-11.157	µg/L	-11.157 ppb	12:33:12
3	Sb 206.836†	30.4	3.4	3.2102	µg/L	3.2102 ppb	12:33:12
3	Se 196.026†	24.3	3.1	3.2605	µg/L	3.2605 ppb	12:33:12
3	SiO2†	2622.3	-50.6	-9.5929	µg/L	-9.5929 ppb	12:32:51
3	Si 251.611†	411.2	0.2	0.0169	µg/L	0.0169 ppb	12:33:12
3	Sn 189.927†	1.6	6.8	2.8754	µg/L	2.8754 ppb	12:33:12
3	Ti 334.940†	-554.7	122.1	0.2998	µg/L	0.2998 ppb	12:32:51
3	Tl 190.801†	-31.0	2.6	2.6792	µg/L	2.6792 ppb	12:33:12
3	U 409.014†	8.6	48.7	4.5421	µg/L	4.5421 ppb	12:32:51
3	V 292.402†	77.7	-19.5	-0.2413	µg/L	-0.2413 ppb	12:32:51
3	Zn 213.857†	621.8	-20.2	-0.4932	µg/L	-0.4932 ppb	12:33:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1903650.8	97.617	%	0.1488				0.15%
Sc RADIAL	88090.2	96.0	%	0.18				0.19%
Y 371.029	1301351.7	97.602	%	0.1369				0.14%
Ag 328.068†	-36.4	-0.3038	µg/L	0.45530	-0.3038	ppb	0.45530	149.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.5	3.6313	µg/L	7.74710	3.6313	ppb	7.74710	213.34%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.1	-0.1091	µg/L	6.96852	-0.1091	ppb	6.96852	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	31.8	1.5142	µg/L	0.49839	1.5142	ppb	0.49839	32.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	4.4	0.1009	µg/L	0.17922	0.1009	ppb	0.17922	177.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.6	0.0960	µg/L	0.03618	0.0960	ppb	0.03618	37.69%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	11.9	4.4880	µg/L	1.17123	4.4880	ppb	1.17123	26.10%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-1.2	-0.0336	µg/L	0.13856	-0.0336	ppb	0.13856	412.49%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-11.4	-0.5178	µg/L	0.08114	-0.5178	ppb	0.08114	15.67%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -6.5     -0.1513 µg/L      0.52027     -0.1513 ppb       0.52027 343.89%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              75.4      0.5201 µg/L      0.23829      0.5201 ppb       0.23829  45.82%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        2.3      28.320 µg/L      11.2100      28.320 ppb       11.2100  39.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         0.2      0.0994 µg/L     19.38003      0.0994 ppb      19.38003 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -2.9     -39.056 µg/L      51.4269     -39.056 ppb       51.4269 131.68%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              38.5      0.1291 µg/L      0.03018      0.1291 ppb       0.03018  23.37%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               8.5      0.8937 µg/L      0.56908      0.8937 ppb       0.56908  63.68%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       36.4      18.414 µg/L       4.5107      18.414 ppb        4.5107  24.50%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               9.0      0.5342 µg/L      0.83253      0.5342 ppb       0.83253 155.86%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.5      11.459 µg/L       3.5435      11.459 ppb        3.5435  30.92%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              15.9      4.4265 µg/L      1.20577      4.4265 ppb       1.20577  27.24%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -3.2     -10.526 µg/L       0.5470     -10.526 ppb        0.5470   5.20%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               2.2      2.1314 µg/L      1.56795      2.1314 ppb       1.56795  73.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -0.3     -0.1663 µg/L      3.10053     -0.1663 ppb       3.10053 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -47.7     -9.0327 µg/L      3.28252     -9.0327 ppb       3.28252  36.34%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              -8.8     -0.6278 µg/L      0.56313     -0.6278 ppb       0.56313  89.69%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.3      1.3956 µg/L      1.48336      1.3956 ppb       1.48336 106.28%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               9.2      0.0558 µg/L      0.10657      0.0558 ppb       0.10657 190.83%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             115.4      0.2863 µg/L      0.17781      0.2863 ppb       0.17781  62.10%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -0.9     -0.9673 µg/L      3.21537     -0.9673 ppb       3.21537 332.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               33.9      3.1584 µg/L      1.53679      3.1584 ppb       1.53679  48.66%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                0.8      0.0170 µg/L      0.23289      0.0170 ppb       0.23289 >999.9%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             -24.1     -0.5859 µg/L      0.10529     -0.5859 ppb       0.10529  17.97%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 13:00:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90272.5	90272.5	98.4	%			13:01:29
1	Al 396.153Radial†	9782.4	10107.8	4938.4	µg/L	4938.4	ppb	13:01:29
1	Ca 317.933Radial†	12849.9	12723.0	4787.7	µg/L	4787.7	ppb	13:01:29
1	Fe 238.204 Radial†	387.1	380.5	4749.2	µg/L	4749.2	ppb	13:01:50
1	K 766.490 Radial†	10367.4	10135.0	4795.2	µg/L	4795.2	ppb	13:01:29
1	Mg 279.077 IEC†	355.0	351.9	4763.7	µg/L	4763.7	ppb	13:01:50
1	Na 589.592 Radial†	18582.4	18701.8	9459.0	µg/L	9459.0	ppb	13:01:29
1	Sr 421.552†	77376.0	78529.6	475.60	µg/L	475.60	ppb	13:01:29
1	Sc 361.383	1935622.6	1935622.6	99.257	%			13:02:53
1	Y 371.029	1320443.5	1320443.5	99.034	%			13:02:53
1	Ag 328.068†	56383.0	57328.8	486.06	µg/L	486.06	ppb	13:02:59
1	As 188.979†	315.7	321.5	500.10	µg/L	500.10	ppb	13:03:20
1	B 249.677†	10179.2	9978.2	478.26	µg/L	478.26	ppb	13:02:59
1	Ba 233.527†	20851.7	21034.9	487.56	µg/L	487.56	ppb	13:02:59
1	Be 313.107†	773207.8	780557.8	484.97	µg/L	484.97	ppb	13:02:53
1	Cd 226.502†	18691.4	18996.8	485.81	µg/L	485.81	ppb	13:02:59
1	Co 228.616†	10752.4	10798.5	489.77	µg/L	489.77	ppb	13:02:59
1	Cr 267.716†	21035.2	21100.5	492.64	µg/L	492.64	ppb	13:02:59
1	Cu 324.752†	75696.3	72039.4	492.61	µg/L	492.61	ppb	13:02:59
1	Mn 257.610†	150316.4	152181.6	493.87	µg/L	493.87	ppb	13:02:53
1	Mo 202.031†	4803.5	4827.1	506.83	µg/L	506.83	ppb	13:03:20
1	Ni 231.604†	8596.9	8303.9	490.76	µg/L	490.76	ppb	13:02:59
1	P 214.914†	1687.8	1412.5	2448.1	µg/L	2448.1	ppb	13:03:20
1	Pb 220.353†	1817.4	1791.5	499.28	µg/L	499.28	ppb	13:03:20
1	S 181.975 Axial†	321.6	301.1	1001.0	µg/L	1001.0	ppb	13:03:20
1	Sb 206.836†	546.3	522.5	499.90	µg/L	499.90	ppb	13:03:20
1	Se 196.026†	515.3	497.3	510.18	µg/L	510.18	ppb	13:03:20
1	SiO2†	29639.2	27119.5	5137.0	µg/L	5137.0	ppb	13:02:59
1	Si 251.611†	34018.2	33851.3	2411.4	µg/L	2411.4	ppb	13:02:59
1	Sn 189.927†	1197.6	1211.8	509.49	µg/L	509.49	ppb	13:03:20
1	Ti 334.940†	195943.1	198102.0	486.02	µg/L	486.02	ppb	13:02:53
1	Tl 190.801†	430.2	467.7	492.34	µg/L	492.34	ppb	13:03:20
1	U 409.014†	5180.3	5259.0	489.60	µg/L	489.60	ppb	13:02:59
1	V 292.402†	38573.7	38763.4	493.12	µg/L	493.12	ppb	13:02:59
1	Zn 213.857†	20777.5	20274.8	486.93	µg/L	486.93	ppb	13:02:59
2	Sc RADIAL	91550.9	91550.9	99.8	%			13:01:55
2	Al 396.153Radial†	9765.6	9952.1	4862.3	µg/L	4862.3	ppb	13:01:55
2	Ca 317.933Radial†	12819.7	12510.3	4707.7	µg/L	4707.7	ppb	13:01:55
2	Fe 238.204 Radial†	383.7	371.5	4638.1	µg/L	4638.1	ppb	13:02:16
2	K 766.490 Radial†	10486.1	10106.8	4781.9	µg/L	4781.9	ppb	13:01:55
2	Mg 279.077 IEC†	352.7	344.5	4663.5	µg/L	4663.5	ppb	13:02:16
2	Na 589.592 Radial†	18678.4	18534.3	9374.3	µg/L	9374.3	ppb	13:01:55
2	Sr 421.552†	77787.8	77844.0	471.45	µg/L	471.45	ppb	13:01:55
2	Sc 361.383	1927886.8	1927886.8	98.860	%			13:03:27
2	Y 371.029	1314103.9	1314103.9	98.559	%			13:03:27
2	Ag 328.068†	56246.9	57419.1	486.82	µg/L	486.82	ppb	13:03:32
2	As 188.979†	305.2	312.1	485.42	µg/L	485.42	ppb	13:03:53
2	B 249.677†	10130.5	9970.0	477.93	µg/L	477.93	ppb	13:03:32
2	Ba 233.527†	20784.4	21051.2	487.94	µg/L	487.94	ppb	13:03:32
2	Be 313.107†	768759.9	779184.4	484.11	µg/L	484.11	ppb	13:03:27
2	Cd 226.502†	18648.6	19029.0	486.65	µg/L	486.65	ppb	13:03:32
2	Co 228.616†	10716.0	10805.1	490.06	µg/L	490.06	ppb	13:03:32
2	Cr 267.716†	20978.7	21128.4	493.29	µg/L	493.29	ppb	13:03:32
2	Cu 324.752†	75461.1	72107.4	493.05	µg/L	493.05	ppb	13:03:32
2	Mn 257.610†	149880.4	152348.3	494.41	µg/L	494.41	ppb	13:03:27
2	Mo 202.031†	4704.8	4746.8	498.39	µg/L	498.39	ppb	13:03:53
2	Ni 231.604†	8575.6	8317.1	491.54	µg/L	491.54	ppb	13:03:32
2	P 214.914†	1657.6	1388.7	2405.9	µg/L	2405.9	ppb	13:03:53
2	Pb 220.353†	1773.2	1754.1	488.84	µg/L	488.84	ppb	13:03:53

2	S 181.975 Axial†	313.5	294.2	978.25 µg/L	978.25 ppb	13:03:53
2	Sb 206.836†	538.1	516.4	493.93 µg/L	493.93 ppb	13:03:53
2	Se 196.026†	499.0	483.0	495.53 µg/L	495.53 ppb	13:03:53
2	SiO2†	29660.9	27261.3	5163.9 µg/L	5163.9 ppb	13:03:32
2	Si 251.611†	34043.1	34014.0	2423.0 µg/L	2423.0 ppb	13:03:32
2	Sn 189.927†	1155.6	1174.1	493.68 µg/L	493.68 ppb	13:03:53
2	Ti 334.940†	195222.9	198165.7	486.18 µg/L	486.18 ppb	13:03:27
2	Tl 190.801†	435.9	475.3	500.19 µg/L	500.19 ppb	13:03:53
2	U 409.014†	5195.7	5295.5	493.03 µg/L	493.03 ppb	13:03:32
2	V 292.402†	38459.0	38803.4	493.58 µg/L	493.58 ppb	13:03:32
2	Zn 213.857†	20731.2	20312.0	487.84 µg/L	487.84 ppb	13:03:32
3	Sc RADIAL	91608.0	91608.0	99.8 %		13:02:21
3	Al 396.153Radial†	9740.0	9920.4	4848.7 µg/L	4848.7 ppb	13:02:21
3	Ca 317.933Radial†	12837.2	12519.8	4711.3 µg/L	4711.3 ppb	13:02:21
3	Fe 238.204 Radial†	389.2	376.8	4702.2 µg/L	4702.2 ppb	13:02:42
3	K 766.490 Radial†	10322.3	9936.1	4701.1 µg/L	4701.1 ppb	13:02:21
3	Mg 279.077 IEC†	358.8	350.4	4741.7 µg/L	4741.7 ppb	13:02:42
3	Na 589.592 Radial†	18740.6	18584.9	9399.9 µg/L	9399.9 ppb	13:02:21
3	Sr 421.552†	77849.6	77857.3	471.53 µg/L	471.53 ppb	13:02:21
3	Sc 361.383	1934758.7	1934758.7	99.212 %		13:04:00
3	Y 371.029	1320298.1	1320298.1	99.023 %		13:04:00
3	Ag 328.068†	52349.9	53289.0	451.67 µg/L	451.67 ppb	13:04:05
3	As 188.979†	262.4	267.9	416.56 µg/L	416.56 ppb	13:04:26
3	B 249.677†	9385.3	9182.5	439.90 µg/L	439.90 ppb	13:04:05
3	Ba 233.527†	18701.7	18877.2	437.53 µg/L	437.53 ppb	13:04:05
3	Be 313.107†	702997.1	710137.5	441.22 µg/L	441.22 ppb	13:04:00
3	Cd 226.502†	16661.2	16958.8	433.64 µg/L	433.64 ppb	13:04:05
3	Co 228.616†	9441.1	9481.7	429.98 µg/L	429.98 ppb	13:04:05
3	Cr 267.716†	18007.1	18057.7	421.61 µg/L	421.61 ppb	13:04:05
3	Cu 324.752†	67564.9	63877.5	436.89 µg/L	436.89 ppb	13:04:05
3	Mn 257.610†	137638.8	139471.0	452.62 µg/L	452.62 ppb	13:04:00
3	Mo 202.031†	3858.5	3876.8	407.08 µg/L	407.08 ppb	13:04:26
3	Ni 231.604†	7636.2	7339.4	433.77 µg/L	433.77 ppb	13:04:05
3	P 214.914†	1442.6	1166.1	2017.2 µg/L	2017.2 ppb	13:04:26
3	Pb 220.353†	1528.0	1500.6	418.17 µg/L	418.17 ppb	13:04:26
3	S 181.975 Axial†	277.7	257.0	854.34 µg/L	854.34 ppb	13:04:26
3	Sb 206.836†	451.9	427.6	408.72 µg/L	408.72 ppb	13:04:26
3	Se 196.026†	437.5	419.1	431.60 µg/L	431.60 ppb	13:04:26
3	SiO2†	27257.2	24732.0	4684.8 µg/L	4684.8 ppb	13:04:05
3	Si 251.611†	31063.3	30888.2	2200.3 µg/L	2200.3 ppb	13:04:05
3	Sn 189.927†	933.0	945.7	397.70 µg/L	397.70 ppb	13:04:26
3	Ti 334.940†	177160.7	179258.7	439.76 µg/L	439.76 ppb	13:04:00
3	Tl 190.801†	377.1	414.5	436.39 µg/L	436.39 ppb	13:04:26
3	U 409.014†	4495.9	4571.5	425.48 µg/L	425.48 ppb	13:04:05
3	V 292.402†	33846.0	34015.5	432.34 µg/L	432.34 ppb	13:04:05
3	Zn 213.857†	18504.0	17992.6	432.08 µg/L	432.08 ppb	13:04:05

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1932756.0	99.110	%	0.2174				0.22%
Sc RADIAL	91143.8	99.3	%	0.82				0.83%
Y 371.029	1318281.9	98.872	%	0.2714				0.27%
Ag 328.068†	56012.3	474.85	µg/L	20.080	474.85	ppb	20.080	4.23%
QC value within limits for Ag 328.068 Recovery = 94.97%								
Al 396.153Radial†	9993.4	4883.1	µg/L	48.34	4883.1	ppb	48.34	0.99%
QC value within limits for Al 396.153Radial Recovery = 97.66%								
As 188.979†	300.5	467.36	µg/L	44.603	467.36	ppb	44.603	9.54%
QC value within limits for As 188.979 Recovery = 93.47%								
B 249.677†	9710.2	465.37	µg/L	22.053	465.37	ppb	22.053	4.74%
QC value within limits for B 249.677 Recovery = 93.07%								
Ba 233.527†	20321.1	471.01	µg/L	28.994	471.01	ppb	28.994	6.16%
QC value within limits for Ba 233.527 Recovery = 94.20%								
Be 313.107†	756626.6	470.10	µg/L	25.017	470.10	ppb	25.017	5.32%
QC value within limits for Be 313.107 Recovery = 94.02%								
Ca 317.933Radial†	12584.4	4735.6	µg/L	45.21	4735.6	ppb	45.21	0.95%
QC value within limits for Ca 317.933Radial Recovery = 94.71%								
Cd 226.502†	18328.2	468.70	µg/L	30.367	468.70	ppb	30.367	6.48%
QC value within limits for Cd 226.502 Recovery = 93.74%								
Co 228.616†	10361.8	469.93	µg/L	34.603	469.93	ppb	34.603	7.36%

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   QC value within limits for Co 228.616  Recovery = 93.99%
Cr 267.716†            20095.5      469.18 µg/L        41.201      469.18 ppb         41.201   8.78%
   QC value within limits for Cr 267.716  Recovery = 93.84%
Cu 324.752†            69341.4      474.18 µg/L        32.298      474.18 ppb         32.298   6.81%
   QC value within limits for Cu 324.752  Recovery = 94.84%
Fe 238.204 Radial†       376.3      4696.5 µg/L         55.79      4696.5 ppb          55.79   1.19%
   QC value within limits for Fe 238.204 Radial  Recovery = 93.93%
K 766.490 Radial†      10059.3      4759.4 µg/L         50.92      4759.4 ppb          50.92   1.07%
   QC value within limits for K 766.490 Radial  Recovery = 95.19%
Mg 279.077 IEC†          348.9      4723.0 µg/L         52.70      4723.0 ppb          52.70   1.12%
   QC value within limits for Mg 279.077 IEC  Recovery = 94.46%
Mn 257.610†           148000.3      480.30 µg/L        23.976      480.30 ppb         23.976   4.99%
   QC value within limits for Mn 257.610  Recovery = 96.06%
Mo 202.031†             4483.5      470.77 µg/L        55.316      470.77 ppb         55.316  11.75%
   QC value within limits for Mo 202.031  Recovery = 94.15%
Na 589.592 Radial†     18607.0      9411.1 µg/L         43.46      9411.1 ppb          43.46   0.46%
   QC value within limits for Na 589.592 Radial  Recovery = 94.11%
Ni 231.604†             7986.8      472.02 µg/L        33.129      472.02 ppb         33.129   7.02%
   QC value within limits for Ni 231.604  Recovery = 94.40%
P 214.914†              1322.4      2290.4 µg/L        237.57      2290.4 ppb         237.57  10.37%
   QC value within limits for P 214.914  Recovery = 91.62%
Pb 220.353†             1682.0      468.76 µg/L        44.126      468.76 ppb         44.126   9.41%
   QC value within limits for Pb 220.353  Recovery = 93.75%
S 181.975 Axial†         284.1      944.54 µg/L        78.936      944.54 ppb         78.936   8.36%
   QC value within limits for S 181.975 Axial  Recovery = 94.45%
Sb 206.836†              488.8      467.52 µg/L        51.005      467.52 ppb         51.005  10.91%
   QC value within limits for Sb 206.836  Recovery = 93.50%
Se 196.026†              466.5      479.10 µg/L        41.786      479.10 ppb         41.786   8.72%
   QC value within limits for Se 196.026  Recovery = 95.82%
SiO2†                  26370.9      4995.2 µg/L        269.19      4995.2 ppb         269.19   5.39%
   QC value within limits for SiO2  Recovery = 93.41%
Si 251.611†            32917.8      2344.9 µg/L        125.34      2344.9 ppb         125.34   5.35%
   QC value within limits for Si 251.611  Recovery = 93.80%
Sn 189.927†             1110.5      466.95 µg/L        60.496      466.95 ppb         60.496  12.96%
   QC value within limits for Sn 189.927  Recovery = 93.39%
Sr 421.552†            78077.0      472.86 µg/L         2.374      472.86 ppb          2.374   0.50%
   QC value within limits for Sr 421.552  Recovery = 94.57%
Ti 334.940†           191842.1      470.65 µg/L        26.754      470.65 ppb         26.754   5.68%
   QC value within limits for Ti 334.940  Recovery = 94.13%
Tl 190.801†              452.5      476.31 µg/L        34.794      476.31 ppb         34.794   7.30%
   QC value within limits for Tl 190.801  Recovery = 95.26%
U 409.014†              5042.0      469.37 µg/L        38.046      469.37 ppb         38.046   8.11%
   QC value within limits for U 409.014  Recovery = 93.87%
V 292.402†             37194.1      473.01 µg/L        35.227      473.01 ppb         35.227   7.45%
   QC value within limits for V 292.402  Recovery = 94.60%
Zn 213.857†            19526.5      468.95 µg/L        31.935      468.95 ppb         31.935   6.81%
   QC value within limits for Zn 213.857  Recovery = 93.79%
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 13:04:36
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	91863.0	91863.0	100	%			13:05:06
1	Al 396.153Radial†	-81.8	80.7	39.541	µg/L	39.541	ppb	13:05:06
1	Ca 317.933Radial†	348.7	7.4	2.7890	µg/L	2.7890	ppb	13:05:26
1	Fe 238.204 Radial†	11.5	-1.6	-19.988	µg/L	-19.988	ppb	13:05:26
1	K 766.490 Radial†	466.4	60.8	28.753	µg/L	28.753	ppb	13:05:06
1	Mg 279.077 IEC†	6.9	-2.2	-29.223	µg/L	-29.223	ppb	13:05:26
1	Na 589.592 Radial†	225.8	35.5	17.934	µg/L	17.934	ppb	13:05:06
1	Sr 421.552†	118.0	-17.4	-0.1055	µg/L	-0.1055	ppb	13:05:06
1	Sc 361.383	1962312.0	1962312.0	100.63	%			13:06:28
1	Y 371.029	1340750.6	1340750.6	100.56	%			13:06:28
1	Ag 328.068†	-506.1	20.6	0.1692	µg/L	0.1692	ppb	13:06:34
1	As 188.979†	-1.9	1.5	2.3245	µg/L	2.3245	ppb	13:06:54
1	B 249.677†	273.5	-5.5	-0.2561	µg/L	-0.2561	ppb	13:06:54
1	Ba 233.527†	-23.1	4.2	0.0955	µg/L	0.0955	ppb	13:06:54
1	Be 313.107†	-1430.7	137.1	0.0851	µg/L	0.0851	ppb	13:06:34
1	Cd 226.502†	-166.7	-0.3	-0.0072	µg/L	-0.0072	ppb	13:06:54
1	Co 228.616†	24.6	-10.0	-0.4541	µg/L	-0.4541	ppb	13:06:54
1	Cr 267.716†	88.0	-4.8	-0.1128	µg/L	-0.1128	ppb	13:06:34
1	Cu 324.752†	4225.9	-24.3	-0.1698	µg/L	-0.1698	ppb	13:06:34
1	Mn 257.610†	-490.6	251.9	0.8182	µg/L	0.8182	ppb	13:06:54
1	Mo 202.031†	8.0	-4.5	-0.4679	µg/L	-0.4679	ppb	13:06:54
1	Ni 231.604†	342.8	-16.7	-0.9893	µg/L	-0.9893	ppb	13:06:54
1	P 214.914†	282.4	-7.3	-12.813	µg/L	-12.813	ppb	13:06:54
1	Pb 220.353†	37.8	-2.0	-0.5543	µg/L	-0.5543	ppb	13:06:54
1	S 181.975 Axial†	17.5	-5.5	-18.438	µg/L	-18.438	ppb	13:06:54
1	Sb 206.836†	32.4	4.3	4.0926	µg/L	4.0926	ppb	13:06:54
1	Se 196.026†	21.8	-0.2	-0.1989	µg/L	-0.1989	ppb	13:06:54
1	SiO2†	2610.6	-147.3	-27.907	µg/L	-27.907	ppb	13:06:34
1	Si 251.611†	368.0	-56.0	-3.9860	µg/L	-3.9860	ppb	13:06:54
1	Sn 189.927†	0.3	5.5	2.3312	µg/L	2.3312	ppb	13:06:54
1	Ti 334.940†	-646.4	49.0	0.1226	µg/L	0.1226	ppb	13:06:34
1	Tl 190.801†	-31.0	3.6	3.7230	µg/L	3.7230	ppb	13:06:54
1	U 409.014†	-22.8	17.2	1.6094	µg/L	1.6094	ppb	13:06:34
1	V 292.402†	67.6	-32.0	-0.4032	µg/L	-0.4032	ppb	13:06:34
1	Zn 213.857†	616.1	-46.0	-1.1048	µg/L	-1.1048	ppb	13:06:54
2	Sc RADIAL	91421.8	91421.8	99.6	%			13:05:32
2	Al 396.153Radial†	-85.5	76.6	37.513	µg/L	37.513	ppb	13:05:32
2	Ca 317.933Radial†	351.3	11.7	4.4063	µg/L	4.4063	ppb	13:05:52
2	Fe 238.204 Radial†	13.3	0.2	2.6797	µg/L	2.6797	ppb	13:05:52
2	K 766.490 Radial†	417.6	14.0	6.6427	µg/L	6.6427	ppb	13:05:32
2	Mg 279.077 IEC†	10.1	1.1	14.524	µg/L	14.524	ppb	13:05:52
2	Na 589.592 Radial†	140.4	-49.2	-24.882	µg/L	-24.882	ppb	13:05:32
2	Sr 421.552†	100.1	-34.9	-0.2112	µg/L	-0.2112	ppb	13:05:32
2	Sc 361.383	1956327.1	1956327.1	100.32	%			13:07:00
2	Y 371.029	1337864.6	1337864.6	100.34	%			13:07:00
2	Ag 328.068†	-543.1	-17.9	-0.1544	µg/L	-0.1544	ppb	13:07:06
2	As 188.979†	-3.1	0.3	0.4561	µg/L	0.4561	ppb	13:07:26
2	B 249.677†	275.7	-2.5	-0.1216	µg/L	-0.1216	ppb	13:07:26
2	Ba 233.527†	-21.4	5.7	0.1319	µg/L	0.1319	ppb	13:07:26
2	Be 313.107†	-1424.5	138.8	0.0862	µg/L	0.0862	ppb	13:07:06
2	Cd 226.502†	-161.6	4.2	0.1066	µg/L	0.1066	ppb	13:07:26
2	Co 228.616†	21.7	-12.8	-0.5822	µg/L	-0.5822	ppb	13:07:26
2	Cr 267.716†	82.3	-10.3	-0.2408	µg/L	-0.2408	ppb	13:07:06
2	Cu 324.752†	4247.6	10.2	0.0698	µg/L	0.0698	ppb	13:07:06
2	Mn 257.610†	-487.0	253.9	0.8233	µg/L	0.8233	ppb	13:07:26
2	Mo 202.031†	16.6	4.2	0.4359	µg/L	0.4359	ppb	13:07:26
2	Ni 231.604†	356.9	-1.6	-0.0966	µg/L	-0.0966	ppb	13:07:26
2	P 214.914†	294.0	5.1	8.9405	µg/L	8.9405	ppb	13:07:26
2	Pb 220.353†	47.7	8.0	2.2201	µg/L	2.2201	ppb	13:07:26

2	S 181.975 Axial†	19.7	-3.3	-10.985 µg/L	-10.985 ppb	13:07:26
2	Sb 206.836†	26.8	-1.1	-1.0537 µg/L	-1.0537 ppb	13:07:26
2	Se 196.026†	23.5	1.6	1.6511 µg/L	1.6511 ppb	13:07:26
2	SiO2†	2578.1	-171.8	-32.539 µg/L	-32.539 ppb	13:07:06
2	Si 251.611†	383.6	-39.4	-2.8039 µg/L	-2.8039 ppb	13:07:26
2	Sn 189.927†	-3.2	2.1	0.8781 µg/L	0.8781 ppb	13:07:26
2	Ti 334.940†	-607.9	85.4	0.2085 µg/L	0.2085 ppb	13:07:06
2	Tl 190.801†	-33.8	0.6	0.6805 µg/L	0.6805 ppb	13:07:26
2	U 409.014†	-5.9	34.0	3.1675 µg/L	3.1675 ppb	13:07:06
2	V 292.402†	50.4	-49.0	-0.6110 µg/L	-0.6110 ppb	13:07:06
2	Zn 213.857†	618.4	-41.9	-1.0136 µg/L	-1.0136 ppb	13:07:26
3	Sc RADIAL	92213.9	92213.9	100 %		13:05:58
3	Al 396.153Radial†	-70.0	92.8	45.410 µg/L	45.410 ppb	13:05:58
3	Ca 317.933Radial†	347.0	4.4	1.6391 µg/L	1.6391 ppb	13:06:18
3	Fe 238.204 Radial†	12.7	-0.5	-5.6166 µg/L	-5.6166 ppb	13:06:18
3	K 766.490 Radial†	460.6	53.3	25.219 µg/L	25.219 ppb	13:05:58
3	Mg 279.077 IEC†	8.0	-1.1	-14.425 µg/L	-14.425 ppb	13:06:18
3	Na 589.592 Radial†	112.6	-78.0	-39.474 µg/L	-39.474 ppb	13:05:58
3	Sr 421.552†	125.9	-10.0	-0.0607 µg/L	-0.0607 ppb	13:05:58
3	Sc 361.383	1948291.3	1948291.3	99.906 %		13:07:32
3	Y 371.029	1331475.6	1331475.6	99.862 %		13:07:32
3	Ag 328.068†	-503.0	20.0	0.1646 µg/L	0.1646 ppb	13:07:38
3	As 188.979†	-2.7	0.7	1.0526 µg/L	1.0526 ppb	13:07:59
3	B 249.677†	284.2	7.2	0.3469 µg/L	0.3469 ppb	13:07:59
3	Ba 233.527†	-31.9	-4.9	-0.1137 µg/L	-0.1137 ppb	13:07:59
3	Be 313.107†	-1428.0	129.5	0.0803 µg/L	0.0803 ppb	13:07:38
3	Cd 226.502†	-157.4	7.8	0.1997 µg/L	0.1997 ppb	13:07:59
3	Co 228.616†	30.6	-3.8	-0.1744 µg/L	-0.1744 ppb	13:07:59
3	Cr 267.716†	49.6	-42.7	-0.9958 µg/L	-0.9958 ppb	13:07:38
3	Cu 324.752†	4194.1	-25.9	-0.1781 µg/L	-0.1781 ppb	13:07:38
3	Mn 257.610†	-504.4	234.6	0.7620 µg/L	0.7620 ppb	13:07:59
3	Mo 202.031†	18.5	6.2	0.6469 µg/L	0.6469 ppb	13:07:59
3	Ni 231.604†	368.3	11.2	0.6620 µg/L	0.6620 ppb	13:07:59
3	P 214.914†	281.2	-6.5	-11.479 µg/L	-11.479 ppb	13:07:59
3	Pb 220.353†	36.5	-3.0	-0.8332 µg/L	-0.8332 ppb	13:07:59
3	S 181.975 Axial†	22.1	-0.8	-2.5846 µg/L	-2.5846 ppb	13:07:59
3	Sb 206.836†	29.3	1.5	1.4489 µg/L	1.4489 ppb	13:07:59
3	Se 196.026†	18.3	-3.4	-3.4691 µg/L	-3.4691 ppb	13:07:59
3	SiO2†	2579.1	-160.2	-30.351 µg/L	-30.351 ppb	13:07:38
3	Si 251.611†	376.4	-45.0	-3.2034 µg/L	-3.2034 ppb	13:07:59
3	Sn 189.927†	-9.6	-4.4	-1.8396 µg/L	-1.8396 ppb	13:07:59
3	Ti 334.940†	-556.0	134.9	0.3323 µg/L	0.3323 ppb	13:07:38
3	Tl 190.801†	-33.6	0.7	0.7557 µg/L	0.7557 ppb	13:07:59
3	U 409.014†	-55.5	-15.7	-1.4639 µg/L	-1.4639 ppb	13:07:38
3	V 292.402†	55.5	-43.7	-0.5482 µg/L	-0.5482 ppb	13:07:38
3	Zn 213.857†	612.9	-44.8	-1.0861 µg/L	-1.0861 ppb	13:07:59

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1955643.5	100.28	%	0.361				0.36%
Sc RADIAL	91832.9	100	%	0.4				0.43%
Y 371.029	1336696.9	100.25	%	0.356				0.36%
Ag 328.068†	7.6	0.0598	µg/L	0.18554	0.0598	ppb	0.18554	310.19%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	83.4	40.821	µg/L	4.1013	40.821	ppb	4.1013	10.05%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	1.2777	µg/L	0.95433	1.2777	ppb	0.95433	74.69%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.3	-0.0103	µg/L	0.31654	-0.0103	ppb	0.31654	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	1.7	0.0379	µg/L	0.13256	0.0379	ppb	0.13256	349.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	135.1	0.0839	µg/L	0.00313	0.0839	ppb	0.00313	3.73%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	7.8	2.9448	µg/L	1.39017	2.9448	ppb	1.39017	47.21%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	3.9	0.0997	µg/L	0.10363	0.0997	ppb	0.10363	103.96%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-8.9	-0.4035	µg/L	0.20856	-0.4035	ppb	0.20856	51.68%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -19.3     -0.4498 µg/L       0.47715     -0.4498 ppb        0.47715 106.08%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -13.4     -0.0927 µg/L       0.14078     -0.0927 ppb        0.14078 151.89%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.6     -7.6415 µg/L      11.46863     -7.6415 ppb       11.46863 150.08%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         42.7      20.205 µg/L       11.8775      20.205 ppb        11.8775  58.79%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.7     -9.7080 µg/L      22.25136     -9.7080 ppb       22.25136 229.21%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              246.8      0.8012 µg/L       0.03404      0.8012 ppb        0.03404   4.25%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                2.0      0.2050 µg/L       0.59219      0.2050 ppb        0.59219 288.93%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -30.6     -15.474 µg/L       29.8378     -15.474 ppb        29.8378 192.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -2.4     -0.1413 µg/L       0.82659     -0.1413 ppb        0.82659 585.00%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                -2.9     -5.1174 µg/L      12.19275     -5.1174 ppb       12.19275 238.26%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                1.0      0.2775 µg/L       1.68810      0.2775 ppb        1.68810 608.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -3.2     -10.669 µg/L        7.9314     -10.669 ppb         7.9314  74.34%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                1.6      1.4959 µg/L       2.57347      1.4959 ppb        2.57347 172.03%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.7     -0.6723 µg/L       2.59276     -0.6723 ppb        2.59276 385.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                   -159.8     -30.266 µg/L        2.3174     -30.266 ppb         2.3174   7.66%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              -46.8     -3.3311 µg/L       0.60131     -3.3311 ppb        0.60131  18.05%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.1      0.4565 µg/L       2.11712      0.4565 ppb        2.11712 463.73%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -20.8     -0.1258 µg/L       0.07724     -0.1258 ppb        0.07724  61.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               89.8      0.2212 µg/L       0.10542      0.2212 ppb        0.10542  47.67%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.6      1.7197 µg/L       1.73527      1.7197 ppb        1.73527 100.90%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                11.8      1.1044 µg/L       2.35664      1.1044 ppb        2.35664 213.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -41.6     -0.5208 µg/L       0.10658     -0.5208 ppb        0.10658  20.47%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              -44.2     -1.0682 µg/L       0.04817     -1.0682 ppb        0.04817   4.51%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 20
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 13:44:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89853.1	89853.1	97.9	%			13:45:01
1	Al 396.153Radial†	9465.7	9830.7	4802.6	µg/L	4802.6	ppb	13:45:01
1	Ca 317.933Radial†	12730.4	12661.9	4764.7	µg/L	4764.7	ppb	13:45:01
1	Fe 238.204 Radial†	402.9	398.4	4973.1	µg/L	4973.1	ppb	13:45:21
1	K 766.490 Radial†	10108.8	9920.0	4693.5	µg/L	4693.5	ppb	13:45:01
1	Mg 279.077 IEC†	360.6	359.2	4862.7	µg/L	4862.7	ppb	13:45:21
1	Na 589.592 Radial†	19486.5	19713.4	9970.7	µg/L	9970.7	ppb	13:45:01
1	Sr 421.552†	78610.6	80157.8	485.46	µg/L	485.46	ppb	13:45:01
1	Sc 361.383	1903740.2	1903740.2	97.622	%			13:46:25
1	Y 371.029	1299685.8	1299685.8	97.477	%			13:46:25
1	Ag 328.068†	56342.2	58238.4	493.78	µg/L	493.78	ppb	13:46:30
1	As 188.979†	313.1	324.1	504.16	µg/L	504.16	ppb	13:46:51
1	B 249.677†	10133.4	10103.0	484.16	µg/L	484.16	ppb	13:46:30
1	Ba 233.527†	20658.1	21188.5	491.12	µg/L	491.12	ppb	13:46:30
1	Be 313.107†	768189.2	788463.1	489.88	µg/L	489.88	ppb	13:46:25
1	Cd 226.502†	18593.7	19212.0	491.29	µg/L	491.29	ppb	13:46:30
1	Co 228.616†	10596.5	10820.2	490.74	µg/L	490.74	ppb	13:46:30
1	Cr 267.716†	21018.4	21438.1	500.53	µg/L	500.53	ppb	13:46:30
1	Cu 324.752†	74826.2	72425.2	495.28	µg/L	495.28	ppb	13:46:30
1	Mn 257.610†	149614.7	153999.1	499.78	µg/L	499.78	ppb	13:46:25
1	Mo 202.031†	4780.9	4885.0	512.91	µg/L	512.91	ppb	13:46:51
1	Ni 231.604†	8487.0	8336.4	492.68	µg/L	492.68	ppb	13:46:30
1	P 214.914†	1674.7	1427.5	2474.1	µg/L	2474.1	ppb	13:46:51
1	Pb 220.353†	1780.8	1784.6	497.36	µg/L	497.36	ppb	13:46:51
1	S 181.975 Axial†	312.1	296.8	986.68	µg/L	986.68	ppb	13:46:51
1	Sb 206.836†	538.6	523.8	501.14	µg/L	501.14	ppb	13:46:51
1	Se 196.026†	502.9	493.4	506.86	µg/L	506.86	ppb	13:46:51
1	SiO2†	29405.8	27380.5	5186.5	µg/L	5186.5	ppb	13:46:30
1	Si 251.611†	33720.5	34120.3	2430.6	µg/L	2430.6	ppb	13:46:30
1	Sn 189.927†	1175.0	1208.9	508.27	µg/L	508.27	ppb	13:46:51
1	Ti 334.940†	194886.4	200325.7	491.47	µg/L	491.47	ppb	13:46:25
1	Tl 190.801†	439.5	484.6	510.03	µg/L	510.03	ppb	13:46:51
1	U 409.014†	5167.3	5333.1	496.48	µg/L	496.48	ppb	13:46:30
1	V 292.402†	38496.2	39334.9	500.36	µg/L	500.36	ppb	13:46:30
1	Zn 213.857†	20592.2	20435.5	490.79	µg/L	490.79	ppb	13:46:30
2	Sc RADIAL	89680.9	89680.9	97.7	%			13:45:27
2	Al 396.153Radial†	9464.1	9847.7	4811.1	µg/L	4811.1	ppb	13:45:27
2	Ca 317.933Radial†	12743.7	12700.5	4779.3	µg/L	4779.3	ppb	13:45:27
2	Fe 238.204 Radial†	408.3	404.7	5051.0	µg/L	5051.0	ppb	13:45:47
2	K 766.490 Radial†	10077.3	9907.6	4687.6	µg/L	4687.6	ppb	13:45:27
2	Mg 279.077 IEC†	356.9	356.2	4821.6	µg/L	4821.6	ppb	13:45:47
2	Na 589.592 Radial†	19484.4	19749.5	9988.9	µg/L	9988.9	ppb	13:45:27
2	Sr 421.552†	78615.6	80317.1	486.43	µg/L	486.43	ppb	13:45:27
2	Sc 361.383	1894257.2	1894257.2	97.135	%			13:46:58
2	Y 371.029	1293435.3	1293435.3	97.009	%			13:46:58
2	Ag 328.068†	56205.8	58386.8	495.06	µg/L	495.06	ppb	13:47:04
2	As 188.979†	307.8	320.3	498.22	µg/L	498.22	ppb	13:47:24
2	B 249.677†	10075.8	10095.6	483.77	µg/L	483.77	ppb	13:47:04
2	Ba 233.527†	20612.6	21247.5	492.49	µg/L	492.49	ppb	13:47:04
2	Be 313.107†	766614.3	790781.1	491.32	µg/L	491.32	ppb	13:46:58
2	Cd 226.502†	18577.6	19290.8	493.30	µg/L	493.30	ppb	13:47:04
2	Co 228.616†	10600.2	10878.4	493.38	µg/L	493.38	ppb	13:47:04
2	Cr 267.716†	20998.2	21525.2	502.56	µg/L	502.56	ppb	13:47:04
2	Cu 324.752†	74603.2	72579.4	496.35	µg/L	496.35	ppb	13:47:04
2	Mn 257.610†	149358.1	154502.2	501.42	µg/L	501.42	ppb	13:46:58
2	Mo 202.031†	4674.4	4799.9	503.99	µg/L	503.99	ppb	13:47:24
2	Ni 231.604†	8467.7	8360.0	494.08	µg/L	494.08	ppb	13:47:04
2	P 214.914†	1651.4	1412.1	2446.7	µg/L	2446.7	ppb	13:47:24
2	Pb 220.353†	1773.5	1786.3	497.81	µg/L	497.81	ppb	13:47:24

2	S 181.975 Axial†	309.6	295.8	983.56 µg/L	983.56 ppb	13:47:24
2	Sb 206.836†	536.5	524.4	501.55 µg/L	501.55 ppb	13:47:24
2	Se 196.026†	503.6	496.6	510.41 µg/L	510.41 ppb	13:47:24
2	SiO2†	29339.0	27462.5	5202.0 µg/L	5202.0 ppb	13:47:04
2	Si 251.611†	33694.6	34266.6	2441.0 µg/L	2441.0 ppb	13:47:04
2	Sn 189.927†	1155.4	1194.8	502.34 µg/L	502.34 ppb	13:47:24
2	Ti 334.940†	194253.2	200673.3	492.32 µg/L	492.32 ppb	13:46:58
2	Tl 190.801†	430.3	477.4	502.51 µg/L	502.51 ppb	13:47:24
2	U 409.014†	5084.9	5274.8	491.03 µg/L	491.03 ppb	13:47:04
2	V 292.402†	38499.8	39536.0	502.82 µg/L	502.82 ppb	13:47:04
2	Zn 213.857†	20558.2	20506.1	492.49 µg/L	492.49 ppb	13:47:04
3	Sc RADIAL	90094.6	90094.6	98.2 %		13:45:53
3	Al 396.153Radial†	9448.0	9786.8	4783.1 µg/L	4783.1 ppb	13:45:53
3	Ca 317.933Radial†	12785.3	12683.0	4772.7 µg/L	4772.7 ppb	13:45:53
3	Fe 238.204 Radial†	404.0	398.4	4971.9 µg/L	4971.9 ppb	13:46:13
3	K 766.490 Radial†	10119.0	9902.7	4685.3 µg/L	4685.3 ppb	13:45:53
3	Mg 279.077 IEC†	359.7	357.4	4836.3 µg/L	4836.3 ppb	13:46:13
3	Na 589.592 Radial†	19488.3	19661.9	9944.6 µg/L	9944.6 ppb	13:45:53
3	Sr 421.552†	78695.0	80028.6	484.68 µg/L	484.68 ppb	13:45:53
3	Sc 361.383	1887548.9	1887548.9	96.791 %		13:47:31
3	Y 371.029	1288117.3	1288117.3	96.610 %		13:47:31
3	Ag 328.068†	51993.1	54240.2	459.75 µg/L	459.75 ppb	13:47:37
3	As 188.979†	256.6	268.5	417.51 µg/L	417.51 ppb	13:47:58
3	B 249.677†	9267.4	9297.3	445.30 µg/L	445.30 ppb	13:47:37
3	Ba 233.527†	18359.6	18995.3	440.28 µg/L	440.28 ppb	13:47:37
3	Be 313.107†	696997.7	721661.6	448.38 µg/L	448.38 ppb	13:47:31
3	Cd 226.502†	16471.7	17183.0	439.34 µg/L	439.34 ppb	13:47:37
3	Co 228.616†	9319.2	9593.7	435.06 µg/L	435.06 ppb	13:47:37
3	Cr 267.716†	17910.0	18411.4	429.87 µg/L	429.87 ppb	13:47:37
3	Cu 324.752†	66133.3	64101.6	438.47 µg/L	438.47 ppb	13:47:37
3	Mn 257.610†	136453.9	141716.7	459.92 µg/L	459.92 ppb	13:47:31
3	Mo 202.031†	3837.7	3952.6	415.05 µg/L	415.05 ppb	13:47:58
3	Ni 231.604†	7472.3	7362.5	435.13 µg/L	435.13 ppb	13:47:37
3	P 214.914†	1423.3	1182.5	2046.0 µg/L	2046.0 ppb	13:47:58
3	Pb 220.353†	1505.3	1515.6	422.38 µg/L	422.38 ppb	13:47:58
3	S 181.975 Axial†	269.2	255.2	848.51 µg/L	848.51 ppb	13:47:58
3	Sb 206.836†	457.7	445.0	425.36 µg/L	425.36 ppb	13:47:58
3	Se 196.026†	435.1	427.7	440.96 µg/L	440.96 ppb	13:47:58
3	SiO2†	26816.6	24963.8	4728.7 µg/L	4728.7 ppb	13:47:37
3	Si 251.611†	30443.3	31030.8	2210.5 µg/L	2210.5 ppb	13:47:37
3	Sn 189.927†	932.6	968.7	407.39 µg/L	407.39 ppb	13:47:58
3	Ti 334.940†	175345.1	181849.1	446.11 µg/L	446.11 ppb	13:47:31
3	Tl 190.801†	377.4	424.3	446.70 µg/L	446.70 ppb	13:47:58
3	U 409.014†	4431.3	4618.1	429.79 µg/L	429.79 ppb	13:47:37
3	V 292.402†	33665.7	34682.5	440.79 µg/L	440.79 ppb	13:47:37
3	Zn 213.857†	18199.4	18144.4	435.72 µg/L	435.72 ppb	13:47:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1895182.1	97.183	%	0.4172				0.43%
Sc RADIAL	89876.2	97.9	%	0.23				0.23%
Y 371.029	1293746.1	97.032	%	0.4343				0.45%
Ag 328.068†	56955.1	482.86	µg/L	20.028	482.86	ppb	20.028	4.15%
QC value within limits for Ag 328.068 Recovery = 96.57%								
Al 396.153Radial†	9821.7	4798.9	µg/L	14.35	4798.9	ppb	14.35	0.30%
QC value within limits for Al 396.153Radial Recovery = 95.98%								
As 188.979†	304.3	473.30	µg/L	48.403	473.30	ppb	48.403	10.23%
QC value within limits for As 188.979 Recovery = 94.66%								
B 249.677†	9832.0	471.08	µg/L	22.328	471.08	ppb	22.328	4.74%
QC value within limits for B 249.677 Recovery = 94.22%								
Ba 233.527†	20477.1	474.63	µg/L	29.761	474.63	ppb	29.761	6.27%
QC value within limits for Ba 233.527 Recovery = 94.93%								
Be 313.107†	766968.6	476.53	µg/L	24.388	476.53	ppb	24.388	5.12%
QC value within limits for Be 313.107 Recovery = 95.31%								
Ca 317.933Radial†	12681.8	4772.2	µg/L	7.27	4772.2	ppb	7.27	0.15%
QC value within limits for Ca 317.933Radial Recovery = 95.44%								
Cd 226.502†	18561.9	474.64	µg/L	30.590	474.64	ppb	30.590	6.44%
QC value within limits for Cd 226.502 Recovery = 94.93%								
Co 228.616†	10430.8	473.06	µg/L	32.937	473.06	ppb	32.937	6.96%

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   QC value within limits for Co 228.616  Recovery = 94.61%
Cr 267.716†            20458.2      477.65 µg/L        41.395      477.65 ppb         41.395   8.67%
   QC value within limits for Cr 267.716  Recovery = 95.53%
Cu 324.752†            69702.1      476.70 µg/L        33.114      476.70 ppb         33.114   6.95%
   QC value within limits for Cu 324.752  Recovery = 95.34%
Fe 238.204 Radial†       400.5      4998.7 µg/L         45.36      4998.7 ppb          45.36   0.91%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.97%
K 766.490 Radial†       9910.1      4688.8 µg/L          4.23      4688.8 ppb           4.23   0.09%
   QC value within limits for K 766.490 Radial  Recovery = 93.78%
Mg 279.077 IEC†          357.6      4840.2 µg/L         20.83      4840.2 ppb          20.83   0.43%
   QC value within limits for Mg 279.077 IEC  Recovery = 96.80%
Mn 257.610†           150072.7      487.04 µg/L        23.502      487.04 ppb         23.502   4.83%
   QC value within limits for Mn 257.610  Recovery = 97.41%
Mo 202.031†             4545.8      477.32 µg/L        54.109      477.32 ppb         54.109  11.34%
   QC value within limits for Mo 202.031  Recovery = 95.46%
Na 589.592 Radial†     19708.3      9968.1 µg/L         22.27      9968.1 ppb          22.27   0.22%
   QC value within limits for Na 589.592 Radial  Recovery = 99.68%
Ni 231.604†             8019.6      473.97 µg/L        33.636      473.97 ppb         33.636   7.10%
   QC value within limits for Ni 231.604  Recovery = 94.79%
P 214.914†              1340.7      2322.3 µg/L        239.69      2322.3 ppb         239.69  10.32%
   QC value within limits for P 214.914  Recovery = 92.89%
Pb 220.353†             1695.5      472.52 µg/L        43.422      472.52 ppb         43.422   9.19%
   QC value within limits for Pb 220.353  Recovery = 94.50%
S 181.975 Axial†         282.6      939.58 µg/L        78.888      939.58 ppb         78.888   8.40%
   QC value within limits for S 181.975 Axial  Recovery = 93.96%
Sb 206.836†              497.7      476.02 µg/L        43.872      476.02 ppb         43.872   9.22%
   QC value within limits for Sb 206.836  Recovery = 95.20%
Se 196.026†              472.6      486.08 µg/L        39.114      486.08 ppb         39.114   8.05%
   QC value within limits for Se 196.026  Recovery = 97.22%
SiO2†                  26602.3      5039.0 µg/L        268.89      5039.0 ppb         268.89   5.34%
   QC value within limits for SiO2  Recovery = 94.23%
Si 251.611†            33139.2      2360.7 µg/L        130.18      2360.7 ppb         130.18   5.51%
   QC value within limits for Si 251.611  Recovery = 94.43%
Sn 189.927†             1124.1      472.67 µg/L        56.605      472.67 ppb         56.605  11.98%
   QC value within limits for Sn 189.927  Recovery = 94.53%
Sr 421.552†            80167.8      485.52 µg/L         0.875      485.52 ppb          0.875   0.18%
   QC value within limits for Sr 421.552  Recovery = 97.10%
Ti 334.940†           194282.7      476.63 µg/L        26.437      476.63 ppb         26.437   5.55%
   QC value within limits for Ti 334.940  Recovery = 95.33%
Tl 190.801†              462.1      486.41 µg/L        34.597      486.41 ppb         34.597   7.11%
   QC value within limits for Tl 190.801  Recovery = 97.28%
U 409.014†              5075.3      472.43 µg/L        37.032      472.43 ppb         37.032   7.84%
   QC value within limits for U 409.014  Recovery = 94.49%
V 292.402†             37851.1      481.32 µg/L        35.125      481.32 ppb         35.125   7.30%
   QC value within limits for V 292.402  Recovery = 96.26%
Zn 213.857†            19695.4      473.00 µg/L        32.295      473.00 ppb         32.295   6.83%
   QC value within limits for Zn 213.857  Recovery = 94.60%
All analyte(s) passed QC.
```

Sequence No.: 21
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 13:48:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88969.0	88969.0	96.9	%			13:48:38
1	Al 396.153Radial†	-134.7	23.5	11.480	µg/L	11.480	ppb	13:48:38
1	Ca 317.933Radial†	349.3	19.4	7.2993	µg/L	7.2993	ppb	13:48:58
1	Fe 238.204 Radial†	14.8	2.2	27.413	µg/L	27.413	ppb	13:48:58
1	K 766.490 Radial†	426.5	34.8	16.485	µg/L	16.485	ppb	13:48:38
1	Mg 279.077 IEC†	9.4	0.7	8.9358	µg/L	8.9358	ppb	13:48:58
1	Na 589.592 Radial†	189.0	4.8	2.4340	µg/L	2.4340	ppb	13:48:38
1	Sr 421.552†	133.9	2.8	0.0167	µg/L	0.0167	ppb	13:48:38
1	Sc 361.383	1876963.6	1876963.6	96.249	%			13:50:00
1	Y 371.029	1283961.5	1283961.5	96.298	%			13:50:00
1	Ag 328.068†	-538.7	-36.2	-0.3042	µg/L	-0.3042	ppb	13:50:06
1	As 188.979†	-2.7	0.6	0.9570	µg/L	0.9570	ppb	13:50:27
1	B 249.677†	291.7	25.7	1.2224	µg/L	1.2224	ppb	13:50:06
1	Ba 233.527†	-12.2	14.5	0.3340	µg/L	0.3340	ppb	13:50:27
1	Be 313.107†	-1243.6	266.7	0.1657	µg/L	0.1657	ppb	13:50:06
1	Cd 226.502†	-162.0	-3.0	-0.0797	µg/L	-0.0797	ppb	13:50:27
1	Co 228.616†	26.6	-6.8	-0.3084	µg/L	-0.3084	ppb	13:50:27
1	Cr 267.716†	74.3	-15.1	-0.3524	µg/L	-0.3524	ppb	13:50:06
1	Cu 324.752†	4076.4	11.3	0.0825	µg/L	0.0825	ppb	13:50:06
1	Mn 257.610†	-635.5	79.1	0.2579	µg/L	0.2579	ppb	13:50:27
1	Mo 202.031†	14.2	2.4	0.2566	µg/L	0.2566	ppb	13:50:27
1	Ni 231.604†	353.3	9.7	0.5735	µg/L	0.5735	ppb	13:50:27
1	P 214.914†	296.2	19.8	34.883	µg/L	34.883	ppb	13:50:27
1	Pb 220.353†	31.3	-7.0	-1.9538	µg/L	-1.9538	ppb	13:50:27
1	S 181.975 Axial†	18.0	-4.2	-13.899	µg/L	-13.899	ppb	13:50:27
1	Sb 206.836†	32.3	5.7	5.4124	µg/L	5.4124	ppb	13:50:27
1	Se 196.026†	22.7	1.8	1.8639	µg/L	1.8639	ppb	13:50:27
1	SiO2†	2524.4	-118.9	-22.525	µg/L	-22.525	ppb	13:50:06
1	Si 251.611†	362.4	-45.2	-3.2206	µg/L	-3.2206	ppb	13:50:27
1	Sn 189.927†	-1.2	4.0	1.6718	µg/L	1.6718	ppb	13:50:27
1	Ti 334.940†	-606.9	60.8	0.1487	µg/L	0.1487	ppb	13:50:06
1	Tl 190.801†	-35.8	-2.8	-2.9370	µg/L	-2.9370	ppb	13:50:27
1	U 409.014†	-1.0	38.8	3.6147	µg/L	3.6147	ppb	13:50:06
1	V 292.402†	76.7	-19.5	-0.2442	µg/L	-0.2442	ppb	13:50:06
1	Zn 213.857†	618.2	-16.0	-0.3925	µg/L	-0.3925	ppb	13:50:27
2	Sc RADIAL	88454.2	88454.2	96.4	%			13:49:04
2	Al 396.153Radial†	-123.6	34.2	16.709	µg/L	16.709	ppb	13:49:04
2	Ca 317.933Radial†	351.7	23.9	9.0102	µg/L	9.0102	ppb	13:49:24
2	Fe 238.204 Radial†	15.1	2.6	31.780	µg/L	31.780	ppb	13:49:24
2	K 766.490 Radial†	414.7	25.2	11.904	µg/L	11.904	ppb	13:49:04
2	Mg 279.077 IEC†	8.6	-0.1	-1.5380	µg/L	-1.5380	ppb	13:49:24
2	Na 589.592 Radial†	235.3	53.9	27.281	µg/L	27.281	ppb	13:49:04
2	Sr 421.552†	140.1	10.0	0.0606	µg/L	0.0606	ppb	13:49:04
2	Sc 361.383	1874339.3	1874339.3	96.114	%			13:50:33
2	Y 371.029	1283541.8	1283541.8	96.267	%			13:50:33
2	Ag 328.068†	-560.0	-59.2	-0.4973	µg/L	-0.4973	ppb	13:50:38
2	As 188.979†	-3.3	-0.1	-0.1025	µg/L	-0.1025	ppb	13:50:59
2	B 249.677†	269.6	3.2	0.1374	µg/L	0.1374	ppb	13:50:38
2	Ba 233.527†	-17.8	8.5	0.1970	µg/L	0.1970	ppb	13:50:59
2	Be 313.107†	-1301.0	205.2	0.1275	µg/L	0.1275	ppb	13:50:38
2	Cd 226.502†	-160.1	-1.3	-0.0349	µg/L	-0.0349	ppb	13:50:59
2	Co 228.616†	28.9	-4.4	-0.1992	µg/L	-0.1992	ppb	13:50:59
2	Cr 267.716†	76.0	-13.2	-0.3083	µg/L	-0.3083	ppb	13:50:38
2	Cu 324.752†	4145.4	89.1	0.6143	µg/L	0.6143	ppb	13:50:38
2	Mn 257.610†	-622.6	91.6	0.2994	µg/L	0.2994	ppb	13:50:59
2	Mo 202.031†	17.7	6.0	0.6329	µg/L	0.6329	ppb	13:50:59
2	Ni 231.604†	360.8	18.0	1.0656	µg/L	1.0656	ppb	13:50:59
2	P 214.914†	276.8	-0.0	-0.0580	µg/L	-0.0580	ppb	13:50:59
2	Pb 220.353†	45.9	8.2	2.2747	µg/L	2.2747	ppb	13:50:59

2	S 181.975 Axial†	21.9	-0.1	-0.4043 µg/L	-0.4043 ppb	13:50:59
2	Sb 206.836†	33.7	7.2	6.8273 µg/L	6.8273 ppb	13:50:59
2	Se 196.026†	22.2	1.3	1.4107 µg/L	1.4107 ppb	13:50:59
2	SiO2†	2618.2	-17.7	-3.3518 µg/L	-3.3518 ppb	13:50:38
2	Si 251.611†	362.1	-44.9	-3.2015 µg/L	-3.2015 ppb	13:50:59
2	Sn 189.927†	-0.3	4.9	2.0698 µg/L	2.0698 ppb	13:50:59
2	Ti 334.940†	-573.1	95.1	0.2337 µg/L	0.2337 ppb	13:50:38
2	Tl 190.801†	-30.0	3.2	3.3346 µg/L	3.3346 ppb	13:50:59
2	U 409.014†	-5.7	34.0	3.1656 µg/L	3.1656 ppb	13:50:38
2	V 292.402†	74.3	-21.9	-0.2720 µg/L	-0.2720 ppb	13:50:38
2	Zn 213.857†	621.9	-11.3	-0.2799 µg/L	-0.2799 ppb	13:50:59
3	Sc RADIAL	88947.4	88947.4	96.9 %		13:49:30
3	Al 396.153Radial†	-123.7	34.8	17.038 µg/L	17.038 ppb	13:49:30
3	Ca 317.933Radial†	341.3	11.2	4.2040 µg/L	4.2040 ppb	13:49:50
3	Fe 238.204 Radial†	15.9	3.3	41.050 µg/L	41.050 ppb	13:49:50
3	K 766.490 Radial†	339.3	-55.0	-26.037 µg/L	-26.037 ppb	13:49:30
3	Mg 279.077 IEC†	7.7	-1.1	-14.555 µg/L	-14.555 ppb	13:49:50
3	Na 589.592 Radial†	169.5	-15.3	-7.7313 µg/L	-7.7313 ppb	13:49:30
3	Sr 421.552†	127.5	-3.8	-0.0230 µg/L	-0.0230 ppb	13:49:30
3	Sc 361.383	1870280.8	1870280.8	95.906 %		13:51:05
3	Y 371.029	1278129.8	1278129.8	95.861 %		13:51:05
3	Ag 328.068†	-539.4	-38.9	-0.3277 µg/L	-0.3277 ppb	13:51:10
3	As 188.979†	-5.5	-2.3	-3.6293 µg/L	-3.6293 ppb	13:51:31
3	B 249.677†	273.1	7.5	0.3357 µg/L	0.3357 ppb	13:51:10
3	Ba 233.527†	-17.5	8.8	0.2029 µg/L	0.2029 ppb	13:51:31
3	Be 313.107†	-1267.5	237.2	0.1474 µg/L	0.1474 ppb	13:51:10
3	Cd 226.502†	-160.3	-1.9	-0.0505 µg/L	-0.0505 ppb	13:51:31
3	Co 228.616†	29.1	-4.0	-0.1831 µg/L	-0.1831 ppb	13:51:31
3	Cr 267.716†	54.7	-35.3	-0.8230 µg/L	-0.8230 ppb	13:51:10
3	Cu 324.752†	4115.5	67.2	0.4665 µg/L	0.4665 ppb	13:51:10
3	Mn 257.610†	-627.1	85.5	0.2811 µg/L	0.2811 ppb	13:51:31
3	Mo 202.031†	16.9	5.3	0.5583 µg/L	0.5583 ppb	13:51:31
3	Ni 231.604†	370.6	29.0	1.7159 µg/L	1.7159 ppb	13:51:31
3	P 214.914†	275.1	-1.1	-2.0189 µg/L	-2.0189 ppb	13:51:31
3	Pb 220.353†	34.9	-3.2	-0.9054 µg/L	-0.9054 ppb	13:51:31
3	S 181.975 Axial†	23.7	1.7	5.7738 µg/L	5.7738 ppb	13:51:31
3	Sb 206.836†	27.5	0.8	0.7428 µg/L	0.7428 ppb	13:51:31
3	Se 196.026†	17.1	-4.0	-3.8461 µg/L	-3.8461 ppb	13:51:31
3	SiO2†	2529.1	-104.7	-19.824 µg/L	-19.824 ppb	13:51:10
3	Si 251.611†	363.6	-42.6	-3.0333 µg/L	-3.0333 ppb	13:51:31
3	Sn 189.927†	-3.9	1.2	0.4995 µg/L	0.4995 ppb	13:51:31
3	Ti 334.940†	-658.4	4.8	0.0130 µg/L	0.0130 ppb	13:51:10
3	Tl 190.801†	-37.7	-4.9	-5.0804 µg/L	-5.0804 ppb	13:51:31
3	U 409.014†	64.4	107.0	9.9749 µg/L	9.9749 ppb	13:51:10
3	V 292.402†	56.6	-40.1	-0.4979 µg/L	-0.4979 ppb	13:51:10
3	Zn 213.857†	636.3	5.1	0.1146 µg/L	0.1146 ppb	13:51:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1873861.3	96.090	%	0.1727				0.18%
Sc RADIAL	88790.2	96.7	%	0.32				0.33%
Y 371.029	1281877.7	96.142	%	0.2439				0.25%
Ag 328.068†	-44.8	-0.3764	µg/L	0.10534	-0.3764	ppb	0.10534	27.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	30.8	15.076	µg/L	3.1181	15.076	ppb	3.1181	20.68%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-0.9250	µg/L	2.40121	-0.9250	ppb	2.40121	259.60%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	12.1	0.5651	µg/L	0.57778	0.5651	ppb	0.57778	102.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.6	0.2446	µg/L	0.07748	0.2446	ppb	0.07748	31.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	236.4	0.1469	µg/L	0.01913	0.1469	ppb	0.01913	13.02%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	18.2	6.8378	µg/L	2.43612	6.8378	ppb	2.43612	35.63%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-2.0	-0.0551	µg/L	0.02274	-0.0551	ppb	0.02274	41.29%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-5.1	-0.2302	µg/L	0.06818	-0.2302	ppb	0.06818	29.62%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -21.2     -0.4945 µg/L       0.28527     -0.4945 ppb        0.28527  57.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               55.9      0.3878 µg/L       0.27452      0.3878 ppb        0.27452  70.80%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.7      33.415 µg/L        6.9638      33.415 ppb         6.9638  20.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          1.7      0.7840 µg/L      23.34029      0.7840 ppb       23.34029 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.2     -2.3857 µg/L      11.76840     -2.3857 ppb       11.76840 493.28%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               85.4      0.2794 µg/L       0.02078      0.2794 ppb        0.02078   7.44%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                4.6      0.4826 µg/L       0.19923      0.4826 ppb        0.19923  41.28%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        14.5      7.3279 µg/L      18.01191      7.3279 ppb       18.01191 245.80%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               18.9      1.1183 µg/L       0.57303      1.1183 ppb        0.57303  51.24%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 6.2      10.935 µg/L       20.7625      10.935 ppb        20.7625 189.86%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -0.7     -0.1948 µg/L       2.20199     -0.1948 ppb        2.20199 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -0.9     -2.8432 µg/L      10.06064     -2.8432 ppb       10.06064 353.85%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                4.5      4.3275 µg/L       3.18400      4.3275 ppb        3.18400  73.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.3     -0.1905 µg/L       3.17394     -0.1905 ppb        3.17394 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -80.4     -15.233 µg/L       10.3781     -15.233 ppb        10.3781  68.13%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              -44.2     -3.1518 µg/L       0.10306     -3.1518 ppb        0.10306   3.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                3.4      1.4137 µg/L       0.81635      1.4137 ppb        0.81635  57.75%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                3.0      0.0181 µg/L       0.04180      0.0181 ppb        0.04180 230.83%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               53.6      0.1318 µg/L       0.11132      0.1318 ppb        0.11132  84.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -1.5     -1.5609 µg/L       4.37300     -1.5609 ppb        4.37300 280.15%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                59.9      5.5851 µg/L       3.80831      5.5851 ppb        3.80831  68.19%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -27.2     -0.3380 µg/L       0.13912     -0.3380 ppb        0.13912  41.16%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               -7.4     -0.1859 µg/L       0.26628     -0.1859 ppb        0.26628 143.21%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 13:58:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90651.5	90651.5	98.8	%			13:58:34
1	Al 396.153Radial†	9583.1	9864.5	4818.7	µg/L	4818.7	ppb	13:58:34
1	Ca 317.933Radial†	13161.3	12983.6	4885.8	µg/L	4885.8	ppb	13:58:34
1	Fe 238.204 Radial†	430.4	422.6	5274.6	µg/L	5274.6	ppb	13:58:55
1	K 766.490 Radial†	10164.8	9885.8	4677.3	µg/L	4677.3	ppb	13:58:34
1	Mg 279.077 IEC†	376.8	372.4	5041.2	µg/L	5041.2	ppb	13:58:55
1	Na 589.592 Radial†	21262.3	21336.0	10791	µg/L	10791	ppb	13:58:34
1	Sr 421.552†	82244.7	83129.8	503.46	µg/L	503.46	ppb	13:58:34
1	Sc 361.383	1870086.0	1870086.0	95.896	%			13:59:58
1	Y 371.029	1276013.5	1276013.5	95.702	%			13:59:58
1	Ag 328.068†	57278.0	60252.8	510.90	µg/L	510.90	ppb	14:00:04
1	As 188.979†	322.4	339.6	528.29	µg/L	528.29	ppb	14:00:24
1	B 249.677†	10337.5	10502.6	503.26	µg/L	503.26	ppb	14:00:04
1	Ba 233.527†	21054.1	21982.3	509.53	µg/L	509.53	ppb	14:00:04
1	Be 313.107†	785138.4	820298.9	509.66	µg/L	509.66	ppb	13:59:58
1	Cd 226.502†	19009.7	19988.6	511.14	µg/L	511.14	ppb	14:00:04
1	Co 228.616†	10819.2	11247.8	510.14	µg/L	510.14	ppb	14:00:04
1	Cr 267.716†	21509.4	22337.6	521.53	µg/L	521.53	ppb	14:00:04
1	Cu 324.752†	75903.4	74927.9	512.42	µg/L	512.42	ppb	14:00:04
1	Mn 257.610†	153083.8	160374.8	520.48	µg/L	520.48	ppb	13:59:58
1	Mo 202.031†	4908.9	5106.7	536.19	µg/L	536.19	ppb	14:00:24
1	Ni 231.604†	8639.7	8652.0	511.34	µg/L	511.34	ppb	14:00:04
1	P 214.914†	1711.6	1496.8	2594.9	µg/L	2594.9	ppb	14:00:24
1	Pb 220.353†	1847.6	1887.1	525.92	µg/L	525.92	ppb	14:00:24
1	S 181.975 Axial†	320.2	310.9	1033.8	µg/L	1033.8	ppb	14:00:24
1	Sb 206.836†	556.1	552.1	528.16	µg/L	528.16	ppb	14:00:24
1	Se 196.026†	523.9	524.5	538.88	µg/L	538.88	ppb	14:00:24
1	SiO2†	29825.1	28359.9	5372.0	µg/L	5372.0	ppb	14:00:04
1	Si 251.611†	34194.8	35236.6	2510.1	µg/L	2510.1	ppb	14:00:04
1	Sn 189.927†	1207.7	1264.6	531.70	µg/L	531.70	ppb	14:00:24
1	Ti 334.940†	198646.2	207839.0	509.90	µg/L	509.90	ppb	13:59:58
1	Tl 190.801†	446.0	499.5	525.73	µg/L	525.73	ppb	14:00:24
1	U 409.014†	5244.4	5508.7	512.81	µg/L	512.81	ppb	14:00:04
1	V 292.402†	39430.0	41018.3	521.77	µg/L	521.77	ppb	14:00:04
1	Zn 213.857†	20974.8	21214.2	509.49	µg/L	509.49	ppb	14:00:04
2	Sc RADIAL	91415.9	91415.9	99.6	%			13:59:00
2	Al 396.153Radial†	9610.1	9810.4	4792.5	µg/L	4792.5	ppb	13:59:00
2	Ca 317.933Radial†	13282.9	12994.3	4889.8	µg/L	4889.8	ppb	13:59:00
2	Fe 238.204 Radial†	428.7	417.3	5208.4	µg/L	5208.4	ppb	13:59:20
2	K 766.490 Radial†	10311.0	9946.4	4706.0	µg/L	4706.0	ppb	13:59:00
2	Mg 279.077 IEC†	376.7	369.1	4996.8	µg/L	4996.8	ppb	13:59:20
2	Na 589.592 Radial†	21336.1	21230.0	10738	µg/L	10738	ppb	13:59:00
2	Sr 421.552†	83000.1	83191.9	503.84	µg/L	503.84	ppb	13:59:00
2	Sc 361.383	1868751.4	1868751.4	95.827	%			14:00:31
2	Y 371.029	1276965.6	1276965.6	95.773	%			14:00:31
2	Ag 328.068†	57319.7	60339.0	511.62	µg/L	511.62	ppb	14:00:37
2	As 188.979†	308.5	325.3	505.93	µg/L	505.93	ppb	14:00:57
2	B 249.677†	10324.5	10496.7	503.01	µg/L	503.01	ppb	14:00:37
2	Ba 233.527†	21083.3	22028.4	510.60	µg/L	510.60	ppb	14:00:37
2	Be 313.107†	785714.1	821484.3	510.40	µg/L	510.40	ppb	14:00:31
2	Cd 226.502†	19084.0	20080.2	513.49	µg/L	513.49	ppb	14:00:37
2	Co 228.616†	10854.1	11292.2	512.14	µg/L	512.14	ppb	14:00:37
2	Cr 267.716†	21503.0	22347.0	521.75	µg/L	521.75	ppb	14:00:37
2	Cu 324.752†	76278.9	75376.3	515.47	µg/L	515.47	ppb	14:00:37
2	Mn 257.610†	153262.3	160675.0	521.45	µg/L	521.45	ppb	14:00:31
2	Mo 202.031†	4759.5	4954.3	520.20	µg/L	520.20	ppb	14:00:57
2	Ni 231.604†	8673.2	8693.5	513.79	µg/L	513.79	ppb	14:00:37
2	P 214.914†	1660.1	1444.4	2501.9	µg/L	2501.9	ppb	14:00:57
2	Pb 220.353†	1789.0	1827.3	509.23	µg/L	509.23	ppb	14:00:57

2	S 181.975 Axial†	314.9	305.7	1016.3 µg/L	1016.3 ppb	14:00:57
2	Sb 206.836†	545.2	541.1	517.44 µg/L	517.44 ppb	14:00:57
2	Se 196.026†	505.5	505.7	519.91 µg/L	519.91 ppb	14:00:57
2	SiO2†	29964.2	28527.2	5403.7 µg/L	5403.7 ppb	14:00:37
2	Si 251.611†	34463.9	35542.8	2531.9 µg/L	2531.9 ppb	14:00:37
2	Sn 189.927†	1180.5	1237.1	520.14 µg/L	520.14 ppb	14:00:57
2	Ti 334.940†	199024.9	208382.2	511.24 µg/L	511.24 ppb	14:00:31
2	Tl 190.801†	438.9	492.3	518.30 µg/L	518.30 ppb	14:00:57
2	U 409.014†	5344.9	5617.5	522.97 µg/L	522.97 ppb	14:00:37
2	V 292.402†	39402.5	41019.0	521.67 µg/L	521.67 ppb	14:00:37
2	Zn 213.857†	21058.3	21316.9	511.97 µg/L	511.97 ppb	14:00:37
3	Sc RADIAL	90930.9	90930.9	99.1 %		13:59:26
3	Al 396.153Radial†	9536.4	9787.5	4783.1 µg/L	4783.1 ppb	13:59:26
3	Ca 317.933Radial†	13212.2	12994.1	4889.8 µg/L	4889.8 ppb	13:59:26
3	Fe 238.204 Radial†	429.9	420.8	5251.1 µg/L	5251.1 ppb	13:59:46
3	K 766.490 Radial†	10217.0	9906.9	4687.2 µg/L	4687.2 ppb	13:59:26
3	Mg 279.077 IEC†	380.7	375.1	5076.4 µg/L	5076.4 ppb	13:59:46
3	Na 589.592 Radial†	21145.6	21152.0	10698 µg/L	10698 ppb	13:59:26
3	Sr 421.552†	82515.2	83147.0	503.56 µg/L	503.56 ppb	13:59:26
3	Sc 361.383	1858492.0	1858492.0	95.301 %		14:01:05
3	Y 371.029	1268160.0	1268160.0	95.113 %		14:01:05
3	Ag 328.068†	53470.4	56630.1	480.03 µg/L	480.03 ppb	14:01:10
3	As 188.979†	262.4	278.7	433.31 µg/L	433.31 ppb	14:01:31
3	B 249.677†	9607.5	9803.8	469.55 µg/L	469.55 ppb	14:01:10
3	Ba 233.527†	18935.1	19895.8	461.15 µg/L	461.15 ppb	14:01:10
3	Be 313.107†	712062.0	748727.2	465.19 µg/L	465.19 ppb	14:01:05
3	Cd 226.502†	17093.6	18101.6	462.83 µg/L	462.83 ppb	14:01:10
3	Co 228.616†	9639.6	10080.4	457.14 µg/L	457.14 ppb	14:01:10
3	Cr 267.716†	18553.0	19375.4	452.37 µg/L	452.37 ppb	14:01:10
3	Cu 324.752†	68317.2	67461.4	461.45 µg/L	461.45 ppb	14:01:10
3	Mn 257.610†	139287.7	146894.4	476.72 µg/L	476.72 ppb	14:01:05
3	Mo 202.031†	3931.6	4113.1	431.90 µg/L	431.90 ppb	14:01:31
3	Ni 231.604†	7771.5	7797.2	460.83 µg/L	460.83 ppb	14:01:10
3	P 214.914†	1442.9	1226.1	2120.4 µg/L	2120.4 ppb	14:01:31
3	Pb 220.353†	1535.3	1571.4	437.88 µg/L	437.88 ppb	14:01:31
3	S 181.975 Axial†	271.5	262.0	871.00 µg/L	871.00 ppb	14:01:31
3	Sb 206.836†	465.9	461.1	440.63 µg/L	440.63 ppb	14:01:31
3	Se 196.026†	436.8	436.5	450.54 µg/L	450.54 ppb	14:01:31
3	SiO2†	27534.7	26150.5	4953.5 µg/L	4953.5 ppb	14:01:10
3	Si 251.611†	31434.1	32562.2	2319.6 µg/L	2319.6 ppb	14:01:10
3	Sn 189.927†	951.8	1004.0	422.21 µg/L	422.21 ppb	14:01:31
3	Ti 334.940†	179147.5	188671.3	462.84 µg/L	462.84 ppb	14:01:05
3	Tl 190.801†	391.7	445.4	468.85 µg/L	468.85 ppb	14:01:31
3	U 409.014†	4650.2	4919.3	457.84 µg/L	457.84 ppb	14:01:10
3	V 292.402†	34847.0	36465.9	463.42 µg/L	463.42 ppb	14:01:10
3	Zn 213.857†	18815.3	19084.7	458.29 µg/L	458.29 ppb	14:01:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1865776.5	95.675	%	0.3253				0.34%
Sc RADIAL	90999.4	99.2	%	0.42				0.43%
Y 371.029	1273713.0	95.529	%	0.3624				0.38%
Ag 328.068†	59074.0	500.85	µg/L	18.034	500.85	ppb	18.034	3.60%
QC value within limits for Ag 328.068 Recovery = 100.17%								
Al 396.153Radial†	9820.8	4798.1	µg/L	18.41	4798.1	ppb	18.41	0.38%
QC value within limits for Al 396.153Radial Recovery = 95.96%								
As 188.979†	314.5	489.18	µg/L	49.657	489.18	ppb	49.657	10.15%
QC value within limits for As 188.979 Recovery = 97.84%								
B 249.677†	10267.7	491.94	µg/L	19.391	491.94	ppb	19.391	3.94%
QC value within limits for B 249.677 Recovery = 98.39%								
Ba 233.527†	21302.2	493.76	µg/L	28.244	493.76	ppb	28.244	5.72%
QC value within limits for Ba 233.527 Recovery = 98.75%								
Be 313.107†	796836.8	495.08	µg/L	25.888	495.08	ppb	25.888	5.23%
QC value within limits for Be 313.107 Recovery = 99.02%								
Ca 317.933Radial†	12990.7	4888.5	µg/L	2.30	4888.5	ppb	2.30	0.05%
QC value within limits for Ca 317.933Radial Recovery = 97.77%								
Cd 226.502†	19390.2	495.82	µg/L	28.595	495.82	ppb	28.595	5.77%
QC value within limits for Cd 226.502 Recovery = 99.16%								
Co 228.616†	10873.5	493.14	µg/L	31.195	493.14	ppb	31.195	6.33%

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   QC value within limits for Co 228.616  Recovery = 98.63%
Cr 267.716†            21353.3      498.55 µg/L        39.989      498.55 ppb         39.989   8.02%
   QC value within limits for Cr 267.716  Recovery = 99.71%
Cu 324.752†            72588.5      496.45 µg/L        30.345      496.45 ppb         30.345   6.11%
   QC value within limits for Cu 324.752  Recovery = 99.29%
Fe 238.204 Radial†       420.2      5244.7 µg/L         33.56      5244.7 ppb          33.56   0.64%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.89%
K 766.490 Radial†       9913.0      4690.2 µg/L         14.57      4690.2 ppb          14.57   0.31%
   QC value within limits for K 766.490 Radial  Recovery = 93.80%
Mg 279.077 IEC†          372.2      5038.1 µg/L         39.90      5038.1 ppb          39.90   0.79%
   QC value within limits for Mg 279.077 IEC  Recovery = 100.76%
Mn 257.610†           155981.4      506.22 µg/L        25.548      506.22 ppb         25.548   5.05%
   QC value within limits for Mn 257.610  Recovery = 101.24%
Mo 202.031†             4724.7      496.10 µg/L        56.167      496.10 ppb         56.167  11.32%
   QC value within limits for Mo 202.031  Recovery = 99.22%
Na 589.592 Radial†     21239.3       10742 µg/L          46.7       10742 ppb           46.7   0.43%
   QC value within limits for Na 589.592 Radial  Recovery = 107.42%
Ni 231.604†             8380.9      495.32 µg/L        29.895      495.32 ppb         29.895   6.04%
   QC value within limits for Ni 231.604  Recovery = 99.06%
P 214.914†              1389.1      2405.7 µg/L        251.45      2405.7 ppb         251.45  10.45%
   QC value within limits for P 214.914  Recovery = 96.23%
Pb 220.353†             1761.9      491.01 µg/L        46.762      491.01 ppb         46.762   9.52%
   QC value within limits for Pb 220.353  Recovery = 98.20%
S 181.975 Axial†         292.9      973.72 µg/L        89.385      973.72 ppb         89.385   9.18%
   QC value within limits for S 181.975 Axial  Recovery = 97.37%
Sb 206.836†              518.1      495.41 µg/L        47.744      495.41 ppb         47.744   9.64%
   QC value within limits for Sb 206.836  Recovery = 99.08%
Se 196.026†              488.9      503.11 µg/L        46.501      503.11 ppb         46.501   9.24%
   QC value within limits for Se 196.026  Recovery = 100.62%
SiO2†                   27679.2      5243.0 µg/L        251.27      5243.0 ppb         251.27   4.79%
   QC value within limits for SiO2  Recovery = 98.05%
Si 251.611†             34447.2      2453.8 µg/L        116.80      2453.8 ppb         116.80   4.76%
   QC value within limits for Si 251.611  Recovery = 98.15%
Sn 189.927†             1168.6      491.35 µg/L        60.159      491.35 ppb         60.159  12.24%
   QC value within limits for Sn 189.927  Recovery = 98.27%
Sr 421.552†            83156.3      503.62 µg/L         0.194      503.62 ppb          0.194   0.04%
   QC value within limits for Sr 421.552  Recovery = 100.72%
Ti 334.940†           201630.8      494.66 µg/L        27.563      494.66 ppb         27.563   5.57%
   QC value within limits for Ti 334.940  Recovery = 98.93%
Tl 190.801†              479.1      504.30 µg/L        30.918      504.30 ppb         30.918   6.13%
   QC value within limits for Tl 190.801  Recovery = 100.86%
U 409.014†              5348.5      497.87 µg/L        35.041      497.87 ppb         35.041   7.04%
   QC value within limits for U 409.014  Recovery = 99.57%
V 292.402†             39501.0      502.29 µg/L        33.659      502.29 ppb         33.659   6.70%
   QC value within limits for V 292.402  Recovery = 100.46%
Zn 213.857†            20538.6      493.25 µg/L        30.301      493.25 ppb         30.301   6.14%
   QC value within limits for Zn 213.857  Recovery = 98.65%
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 101
Date Collected: 3/15/2010 14:01:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87345.5	87345.5	95.2	%			14:02:12
1	Al 396.153Radial†	264.9	440.8	215.59	µg/L	215.59	ppb	14:02:12
1	Ca 317.933Radial†	825.7	526.6	198.18	µg/L	198.18	ppb	14:02:32
1	Fe 238.204 Radial†	20.6	8.6	106.72	µg/L	106.72	ppb	14:02:32
1	K 766.490 Radial†	613.5	239.4	113.28	µg/L	113.28	ppb	14:02:12
1	Mg 279.077 IEC†	32.0	24.5	332.13	µg/L	332.13	ppb	14:02:32
1	Na 589.592 Radial†	886.8	741.7	375.11	µg/L	375.11	ppb	14:02:12
1	Sr 421.552†	949.9	862.8	5.2253	µg/L	5.2253	ppb	14:02:12
1	Sc 361.383	1844520.2	1844520.2	94.585	%			14:03:34
1	Y 371.029	1262706.7	1262706.7	94.704	%			14:03:34
1	Ag 328.068†	93.4	622.2	5.2797	µg/L	5.2797	ppb	14:03:40
1	As 188.979†	15.7	19.9	31.106	µg/L	31.106	ppb	14:04:00
1	B 249.677†	1282.7	1078.8	51.844	µg/L	51.844	ppb	14:03:40
1	Ba 233.527†	188.9	226.9	5.2581	µg/L	5.2581	ppb	14:04:00
1	Be 313.107†	6479.6	8409.4	5.2247	µg/L	5.2247	ppb	14:03:40
1	Cd 226.502†	28.5	195.4	4.9931	µg/L	4.9931	ppb	14:04:00
1	Co 228.616†	136.7	110.2	5.0013	µg/L	5.0013	ppb	14:04:00
1	Cr 267.716†	283.4	207.3	4.8405	µg/L	4.8405	ppb	14:03:40
1	Cu 324.752†	5532.3	1625.1	11.112	µg/L	11.112	ppb	14:03:40
1	Mn 257.610†	2469.2	3349.9	10.856	µg/L	10.856	ppb	14:03:40
1	Mo 202.031†	120.2	114.7	12.048	µg/L	12.048	ppb	14:04:00
1	Ni 231.604†	441.8	109.6	6.4811	µg/L	6.4811	ppb	14:04:00
1	P 214.914†	363.0	95.8	168.24	µg/L	168.24	ppb	14:04:00
1	Pb 220.353†	83.0	48.2	13.395	µg/L	13.395	ppb	14:04:00
1	S 181.975 Axial†	50.8	30.7	102.17	µg/L	102.17	ppb	14:04:00
1	Sb 206.836†	40.8	15.2	14.637	µg/L	14.637	ppb	14:04:00
1	Se 196.026†	49.7	30.7	30.917	µg/L	30.917	ppb	14:04:00
1	SiO2†	3694.5	1164.3	220.54	µg/L	220.54	ppb	14:03:40
1	Si 251.611†	1731.9	1409.3	100.39	µg/L	100.39	ppb	14:03:40
1	Sn 189.927†	18.5	24.8	10.443	µg/L	10.443	ppb	14:04:00
1	Ti 334.940†	1436.2	2209.8	5.4016	µg/L	5.4016	ppb	14:03:40
1	Tl 190.801†	-14.2	19.4	20.287	µg/L	20.287	ppb	14:04:00
1	U 409.014†	553.3	624.9	58.259	µg/L	58.259	ppb	14:03:40
1	V 292.402†	491.1	420.0	5.4401	µg/L	5.4401	ppb	14:03:40
1	Zn 213.857†	1038.7	439.9	10.569	µg/L	10.569	ppb	14:04:00
2	Sc RADIAL	88258.1	88258.1	96.2	%			14:02:38
2	Al 396.153Radial†	259.3	432.0	211.29	µg/L	211.29	ppb	14:02:38
2	Ca 317.933Radial†	815.7	507.2	190.87	µg/L	190.87	ppb	14:02:58
2	Fe 238.204 Radial†	22.0	9.8	122.23	µg/L	122.23	ppb	14:02:58
2	K 766.490 Radial†	649.9	270.7	128.06	µg/L	128.06	ppb	14:02:38
2	Mg 279.077 IEC†	29.2	21.3	287.65	µg/L	287.65	ppb	14:02:58
2	Na 589.592 Radial†	869.5	714.0	361.11	µg/L	361.11	ppb	14:02:38
2	Sr 421.552†	939.2	841.3	5.0950	µg/L	5.0950	ppb	14:02:38
2	Sc 361.383	1851123.9	1851123.9	94.924	%			14:04:06
2	Y 371.029	1267057.6	1267057.6	95.030	%			14:04:06
2	Ag 328.068†	124.3	654.4	5.5531	µg/L	5.5531	ppb	14:04:12
2	As 188.979†	17.0	21.3	33.245	µg/L	33.245	ppb	14:04:32
2	B 249.677†	1317.9	1111.1	53.386	µg/L	53.386	ppb	14:04:12
2	Ba 233.527†	186.1	223.2	5.1735	µg/L	5.1735	ppb	14:04:32
2	Be 313.107†	6695.3	8612.2	5.3508	µg/L	5.3508	ppb	14:04:12
2	Cd 226.502†	21.9	188.4	4.8096	µg/L	4.8096	ppb	14:04:32
2	Co 228.616†	143.9	117.2	5.3193	µg/L	5.3193	ppb	14:04:32
2	Cr 267.716†	297.2	220.7	5.1537	µg/L	5.1537	ppb	14:04:12
2	Cu 324.752†	5634.9	1712.3	11.711	µg/L	11.711	ppb	14:04:12
2	Mn 257.610†	2480.2	3352.2	10.868	µg/L	10.868	ppb	14:04:12
2	Mo 202.031†	113.5	107.2	11.255	µg/L	11.255	ppb	14:04:32
2	Ni 231.604†	435.0	100.8	5.9575	µg/L	5.9575	ppb	14:04:32
2	P 214.914†	359.1	90.4	158.51	µg/L	158.51	ppb	14:04:32
2	Pb 220.353†	71.7	35.9	9.9739	µg/L	9.9739	ppb	14:04:32

2	S 181.975 Axial†	46.2	25.7	85.499 µg/L	85.499 ppb	14:04:32
2	Sb 206.836†	39.5	13.8	13.245 µg/L	13.245 ppb	14:04:32
2	Se 196.026†	51.6	32.6	32.831 µg/L	32.831 ppb	14:04:32
2	SiO2†	3682.6	1137.8	215.53 µg/L	215.53 ppb	14:04:12
2	Si 251.611†	1763.8	1436.4	102.32 µg/L	102.32 ppb	14:04:12
2	Sn 189.927†	19.6	25.9	10.897 µg/L	10.897 ppb	14:04:32
2	Ti 334.940†	1442.1	2210.6	5.4071 µg/L	5.4071 ppb	14:04:12
2	Tl 190.801†	-14.1	19.5	20.408 µg/L	20.408 ppb	14:04:32
2	U 409.014†	558.6	628.3	58.581 µg/L	58.581 ppb	14:04:12
2	V 292.402†	503.9	431.6	5.5796 µg/L	5.5796 ppb	14:04:12
2	Zn 213.857†	1028.6	425.3	10.219 µg/L	10.219 ppb	14:04:32
3	Sc RADIAL	87632.7	87632.7	95.5 %		14:03:04
3	Al 396.153Radial†	224.3	397.3	194.33 µg/L	194.33 ppb	14:03:04
3	Ca 317.933Radial†	817.5	515.2	193.88 µg/L	193.88 ppb	14:03:24
3	Fe 238.204 Radial†	20.6	8.4	105.14 µg/L	105.14 ppb	14:03:24
3	K 766.490 Radial†	713.5	342.0	161.83 µg/L	161.83 ppb	14:03:04
3	Mg 279.077 IEC†	28.3	20.6	278.88 µg/L	278.88 ppb	14:03:24
3	Na 589.592 Radial†	848.2	698.2	353.12 µg/L	353.12 ppb	14:03:04
3	Sr 421.552†	949.4	859.0	5.2024 µg/L	5.2024 ppb	14:03:04
3	Sc 361.383	1853842.4	1853842.4	95.063 %		14:04:39
3	Y 371.029	1269742.4	1269742.4	95.232 %		14:04:39
3	Ag 328.068†	60.2	586.8	4.9791 µg/L	4.9791 ppb	14:04:44
3	As 188.979†	17.3	21.6	33.685 µg/L	33.685 ppb	14:05:05
3	B 249.677†	1223.8	1010.1	48.536 µg/L	48.536 ppb	14:04:44
3	Ba 233.527†	157.0	192.3	4.4578 µg/L	4.4578 ppb	14:05:05
3	Be 313.107†	5890.7	7755.4	4.8185 µg/L	4.8185 ppb	14:04:44
3	Cd 226.502†	4.3	169.9	4.3382 µg/L	4.3382 ppb	14:05:05
3	Co 228.616†	115.1	86.7	3.9353 µg/L	3.9353 ppb	14:05:05
3	Cr 267.716†	263.8	185.1	4.3229 µg/L	4.3229 ppb	14:04:44
3	Cu 324.752†	5541.6	1605.5	10.978 µg/L	10.978 ppb	14:04:44
3	Mn 257.610†	2169.9	3021.9	9.7953 µg/L	9.7953 ppb	14:04:44
3	Mo 202.031†	101.4	94.3	9.9048 µg/L	9.9048 ppb	14:05:05
3	Ni 231.604†	434.0	99.1	5.8575 µg/L	5.8575 ppb	14:05:05
3	P 214.914†	349.9	80.1	140.35 µg/L	140.35 ppb	14:05:05
3	Pb 220.353†	70.4	34.4	9.5553 µg/L	9.5553 ppb	14:05:05
3	S 181.975 Axial†	49.2	28.8	95.730 µg/L	95.730 ppb	14:05:05
3	Sb 206.836†	36.2	10.2	9.8478 µg/L	9.8478 ppb	14:05:05
3	Se 196.026†	51.2	32.1	32.283 µg/L	32.283 ppb	14:05:05
3	SiO2†	3578.6	1022.7	193.72 µg/L	193.72 ppb	14:04:44
3	Si 251.611†	1690.5	1356.6	96.636 µg/L	96.636 ppb	14:04:44
3	Sn 189.927†	13.1	19.0	8.0090 µg/L	8.0090 ppb	14:05:05
3	Ti 334.940†	1227.6	1982.7	4.8483 µg/L	4.8483 ppb	14:04:44
3	Tl 190.801†	-16.1	17.4	18.269 µg/L	18.269 ppb	14:05:05
3	U 409.014†	526.1	593.3	55.319 µg/L	55.319 ppb	14:04:44
3	V 292.402†	465.2	390.2	5.0445 µg/L	5.0445 ppb	14:04:44
3	Zn 213.857†	994.5	387.9	9.3172 µg/L	9.3172 ppb	14:05:05

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1849828.8	94.857	%	0.2458				0.26%
Sc RADIAL	87745.4	95.6	%	0.51				0.53%
Y 371.029	1266502.3	94.989	%	0.2663				0.28%
Ag 328.068†	621.2	5.2706	µg/L	0.28707	5.2706	ppb	0.28707	5.45%
QC value within limits for Ag 328.068 Recovery = 105.41%								
Al 396.153Radial†	423.4	207.07	µg/L	11.242	207.07	ppb	11.242	5.43%
QC value within limits for Al 396.153Radial Recovery = 103.53%								
As 188.979†	21.0	32.679	µg/L	1.3795	32.679	ppb	1.3795	4.22%
QC value within limits for As 188.979 Recovery = 108.93%								
B 249.677†	1066.7	51.255	µg/L	2.4782	51.255	ppb	2.4782	4.83%
QC value within limits for B 249.677 Recovery = 102.51%								
Ba 233.527†	214.1	4.9631	µg/L	0.43964	4.9631	ppb	0.43964	8.86%
QC value within limits for Ba 233.527 Recovery = 99.26%								
Be 313.107†	8259.0	5.1313	µg/L	0.27816	5.1313	ppb	0.27816	5.42%
QC value within limits for Be 313.107 Recovery = 102.63%								
Ca 317.933Radial†	516.4	194.31	µg/L	3.676	194.31	ppb	3.676	1.89%
QC value within limits for Ca 317.933Radial Recovery = 97.15%								
Cd 226.502†	184.6	4.7137	µg/L	0.33782	4.7137	ppb	0.33782	7.17%
QC value within limits for Cd 226.502 Recovery = 94.27%								
Co 228.616†	104.7	4.7520	µg/L	0.72495	4.7520	ppb	0.72495	15.26%

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   QC value within limits for Co 228.616  Recovery = 95.04%
Cr 267.716†              204.4      4.7724 µg/L       0.41956      4.7724 ppb        0.41956   8.79%
   QC value within limits for Cr 267.716  Recovery = 95.45%
Cu 324.752†             1647.6      11.267 µg/L        0.3900      11.267 ppb         0.3900   3.46%
   QC value within limits for Cu 324.752  Recovery = 112.67%
Fe 238.204 Radial†        8.9      111.36 µg/L         9.443      111.36 ppb          9.443   8.48%
   QC value within limits for Fe 238.204 Radial  Recovery = 111.36%
K 766.490 Radial†        284.0      134.39 µg/L        24.884      134.39 ppb         24.884  18.52%
   QC value within limits for K 766.490 Radial  Recovery = 89.59%
Mg 279.077 IEC†           22.1      299.55 µg/L        28.551      299.55 ppb         28.551   9.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.85%
Mn 257.610†             3241.4      10.506 µg/L        0.6159      10.506 ppb         0.6159   5.86%
   QC value within limits for Mn 257.610  Recovery = 105.06%
Mo 202.031†              105.4      11.069 µg/L        1.0836      11.069 ppb         1.0836   9.79%
   QC value within limits for Mo 202.031  Recovery = 110.69%
Na 589.592 Radial†       717.9      363.12 µg/L        11.132      363.12 ppb         11.132   3.07%
   QC value within limits for Na 589.592 Radial  Recovery = 121.04%
Ni 231.604†              103.2      6.0987 µg/L       0.33495      6.0987 ppb        0.33495   5.49%
   QC value within limits for Ni 231.604  Recovery = 121.97%
P 214.914†                88.8      155.70 µg/L        14.155      155.70 ppb         14.155   9.09%
   QC value within limits for P 214.914  Recovery = 103.80%
Pb 220.353†               39.5      10.975 µg/L        2.1066      10.975 ppb         2.1066  19.19%
   QC value within limits for Pb 220.353  Recovery = 109.75%
S 181.975 Axial†          28.4      94.468 µg/L        8.4089      94.468 ppb         8.4089   8.90%
   QC value within limits for S 181.975 Axial  Recovery = 94.47%
Sb 206.836†               13.1      12.576 µg/L        2.4633      12.576 ppb         2.4633  19.59%
   QC value within limits for Sb 206.836  Recovery = 125.76%
Se 196.026†               31.8      32.011 µg/L        0.9856      32.011 ppb         0.9856   3.08%
   QC value within limits for Se 196.026  Recovery = 106.70%
SiO2†                   1108.3      209.93 µg/L        14.259      209.93 ppb         14.259   6.79%
   QC value within limits for SiO2  Recovery = 98.56%
Si 251.611†             1400.8      99.784 µg/L        2.8923      99.784 ppb         2.8923   2.90%
   QC value within limits for Si 251.611  Recovery = 99.78%
Sn 189.927†               23.2      9.7830 µg/L       1.55300      9.7830 ppb        1.55300  15.87%
   QC value within limits for Sn 189.927  Recovery = 97.83%
Sr 421.552†              854.4      5.1743 µg/L       0.06959      5.1743 ppb        0.06959   1.34%
   QC value within limits for Sr 421.552  Recovery = 103.49%
Ti 334.940†             2134.4      5.2190 µg/L       0.32105      5.2190 ppb        0.32105   6.15%
   QC value within limits for Ti 334.940  Recovery = 104.38%
Tl 190.801†               18.7      19.655 µg/L        1.2019      19.655 ppb         1.2019   6.12%
   QC value within limits for Tl 190.801  Recovery = 98.27%
U 409.014†               615.5      57.386 µg/L        1.7974      57.386 ppb         1.7974   3.13%
   QC value within limits for U 409.014  Recovery = 114.77%
V 292.402†               413.9      5.3547 µg/L       0.27756      5.3547 ppb        0.27756   5.18%
   QC value within limits for V 292.402  Recovery = 107.09%
Zn 213.857†              417.7      10.035 µg/L        0.6459      10.035 ppb         0.6459   6.44%
   QC value within limits for Zn 213.857  Recovery = 100.35%
All analyte(s) passed QC.
```

Sequence No.: 4
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 14:05:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87471.4	87471.4	95.3	%			14:05:46
1	Al 396.153Radial†	-126.3	30.0	14.693	µg/L	14.693	ppb	14:05:46
1	Ca 317.933Radial†	337.0	12.6	4.7457	µg/L	4.7457	ppb	14:06:06
1	Fe 238.204 Radial†	13.5	1.1	13.724	µg/L	13.724	ppb	14:06:06
1	K 766.490 Radial†	356.0	-31.7	-14.987	µg/L	-14.987	ppb	14:05:46
1	Mg 279.077 IEC†	7.3	-1.4	-18.638	µg/L	-18.638	ppb	14:06:06
1	Na 589.592 Radial†	232.6	53.9	27.249	µg/L	27.249	ppb	14:05:46
1	Sr 421.552†	162.9	35.6	0.2155	µg/L	0.2155	ppb	14:05:46
1	Sc 361.383	1850658.2	1850658.2	94.900	%			14:07:08
1	Y 371.029	1267838.2	1267838.2	95.089	%			14:07:08
1	Ag 328.068†	-497.7	-0.9	-0.0096	µg/L	-0.0096	ppb	14:07:14
1	As 188.979†	-4.2	-1.1	-1.7151	µg/L	-1.7151	ppb	14:07:34
1	B 249.677†	300.4	39.2	1.8785	µg/L	1.8785	ppb	14:07:14
1	Ba 233.527†	-10.9	15.6	0.3594	µg/L	0.3594	ppb	14:07:34
1	Be 313.107†	-1184.8	310.3	0.1929	µg/L	0.1929	ppb	14:07:14
1	Cd 226.502†	-164.6	-8.1	-0.2089	µg/L	-0.2089	ppb	14:07:34
1	Co 228.616†	20.1	-13.2	-0.6023	µg/L	-0.6023	ppb	14:07:34
1	Cr 267.716†	85.6	-2.1	-0.0496	µg/L	-0.0496	ppb	14:07:14
1	Cu 324.752†	4079.8	75.2	0.5157	µg/L	0.5157	ppb	14:07:14
1	Mn 257.610†	-658.7	45.3	0.1492	µg/L	0.1492	ppb	14:07:34
1	Mo 202.031†	4.8	-7.3	-0.7681	µg/L	-0.7681	ppb	14:07:34
1	Ni 231.604†	347.9	9.1	0.5401	µg/L	0.5401	ppb	14:07:34
1	P 214.914†	279.0	6.0	10.548	µg/L	10.548	ppb	14:07:34
1	Pb 220.353†	39.0	1.5	0.4123	µg/L	0.4123	ppb	14:07:34
1	S 181.975 Axial†	26.3	4.8	15.798	µg/L	15.798	ppb	14:07:34
1	Sb 206.836†	25.0	-1.5	-1.4858	µg/L	-1.4858	ppb	14:07:34
1	Se 196.026†	15.7	-5.3	-5.2368	µg/L	-5.2368	ppb	14:07:34
1	SiO2†	2564.5	-39.4	-7.4538	µg/L	-7.4538	ppb	14:07:14
1	Si 251.611†	360.5	-41.8	-2.9790	µg/L	-2.9790	ppb	14:07:34
1	Sn 189.927†	-3.9	1.1	0.4746	µg/L	0.4746	ppb	14:07:34
1	Ti 334.940†	-656.4	-0.3	0.0008	µg/L	0.0008	ppb	14:07:14
1	Tl 190.801†	-31.3	1.4	1.4439	µg/L	1.4439	ppb	14:07:34
1	U 409.014†	11.3	51.8	4.8257	µg/L	4.8257	ppb	14:07:14
1	V 292.402†	63.3	-32.5	-0.4125	µg/L	-0.4125	ppb	14:07:14
1	Zn 213.857†	624.7	-0.0	-0.0033	µg/L	-0.0033	ppb	14:07:34
2	Sc RADIAL	87392.0	87392.0	95.2	%			14:06:12
2	Al 396.153Radial†	-129.7	26.3	12.882	µg/L	12.882	ppb	14:06:12
2	Ca 317.933Radial†	337.1	13.1	4.9298	µg/L	4.9298	ppb	14:06:32
2	Fe 238.204 Radial†	12.8	0.3	3.8316	µg/L	3.8316	ppb	14:06:32
2	K 766.490 Radial†	273.0	-118.5	-56.046	µg/L	-56.046	ppb	14:06:12
2	Mg 279.077 IEC†	8.3	-0.4	-4.8466	µg/L	-4.8466	ppb	14:06:32
2	Na 589.592 Radial†	214.7	35.3	17.870	µg/L	17.870	ppb	14:06:12
2	Sr 421.552†	139.0	10.7	0.0647	µg/L	0.0647	ppb	14:06:12
2	Sc 361.383	1859559.5	1859559.5	95.356	%			14:07:40
2	Y 371.029	1273313.2	1273313.2	95.499	%			14:07:40
2	Ag 328.068†	-522.7	-24.6	-0.2088	µg/L	-0.2088	ppb	14:07:46
2	As 188.979†	-0.8	2.6	4.0284	µg/L	4.0284	ppb	14:08:06
2	B 249.677†	289.7	26.5	1.2715	µg/L	1.2715	ppb	14:07:46
2	Ba 233.527†	-16.6	9.7	0.2231	µg/L	0.2231	ppb	14:08:06
2	Be 313.107†	-1230.6	268.3	0.1668	µg/L	0.1668	ppb	14:07:46
2	Cd 226.502†	-161.2	-3.7	-0.0932	µg/L	-0.0932	ppb	14:08:06
2	Co 228.616†	27.3	-5.7	-0.2613	µg/L	-0.2613	ppb	14:08:06
2	Cr 267.716†	70.1	-18.8	-0.4391	µg/L	-0.4391	ppb	14:07:46
2	Cu 324.752†	4145.5	123.5	0.8435	µg/L	0.8435	ppb	14:07:46
2	Mn 257.610†	-670.7	36.1	0.1177	µg/L	0.1177	ppb	14:08:06
2	Mo 202.031†	6.5	-5.5	-0.5799	µg/L	-0.5799	ppb	14:08:06
2	Ni 231.604†	369.8	30.4	1.8001	µg/L	1.8001	ppb	14:08:06
2	P 214.914†	271.2	-3.6	-6.3418	µg/L	-6.3418	ppb	14:08:06
2	Pb 220.353†	40.2	2.6	0.7086	µg/L	0.7086	ppb	14:08:06

2	S 181.975 Axial†	19.5	-2.5	-8.4141 µg/L	-8.4141 ppb	14:08:06
2	Sb 206.836†	21.0	-5.9	-5.6021 µg/L	-5.6021 ppb	14:08:06
2	Se 196.026†	31.1	10.8	10.840 µg/L	10.840 ppb	14:08:06
2	SiO2†	2556.4	-60.8	-11.524 µg/L	-11.524 ppb	14:07:46
2	Si 251.611†	373.6	-29.9	-2.1275 µg/L	-2.1275 ppb	14:08:06
2	Sn 189.927†	-1.8	3.3	1.3908 µg/L	1.3908 ppb	14:08:06
2	Ti 334.940†	-663.0	-3.9	-0.0092 µg/L	-0.0092 ppb	14:07:46
2	Tl 190.801†	-33.2	-0.4	-0.4284 µg/L	-0.4284 ppb	14:08:06
2	U 409.014†	14.8	55.4	5.1678 µg/L	5.1678 ppb	14:07:46
2	V 292.402†	71.6	-24.2	-0.3049 µg/L	-0.3049 ppb	14:07:46
2	Zn 213.857†	622.7	-5.3	-0.1377 µg/L	-0.1377 ppb	14:08:06
3	Sc RADIAL	87686.7	87686.7	95.5 %		14:06:38
3	Al 396.153Radial†	-137.8	18.2	8.9416 µg/L	8.9416 ppb	14:06:38
3	Ca 317.933Radial†	349.8	25.2	9.4847 µg/L	9.4847 ppb	14:06:58
3	Fe 238.204 Radial†	15.2	2.8	35.055 µg/L	35.055 ppb	14:06:58
3	K 766.490 Radial†	424.1	38.7	18.298 µg/L	18.298 ppb	14:06:38
3	Mg 279.077 IEC†	8.2	-0.5	-7.2415 µg/L	-7.2415 ppb	14:06:58
3	Na 589.592 Radial†	272.0	94.6	47.825 µg/L	47.825 ppb	14:06:38
3	Sr 421.552†	121.4	-8.3	-0.0502 µg/L	-0.0502 ppb	14:06:38
3	Sc 361.383	1854331.3	1854331.3	95.088 %		14:08:12
3	Y 371.029	1268743.4	1268743.4	95.157 %		14:08:12
3	Ag 328.068†	-482.3	16.3	0.1375 µg/L	0.1375 ppb	14:08:18
3	As 188.979†	-5.5	-2.4	-3.7018 µg/L	-3.7018 ppb	14:08:39
3	B 249.677†	295.3	33.3	1.5825 µg/L	1.5825 ppb	14:08:18
3	Ba 233.527†	-16.5	9.8	0.2255 µg/L	0.2255 ppb	14:08:39
3	Be 313.107†	-1175.1	323.0	0.2007 µg/L	0.2007 ppb	14:08:18
3	Cd 226.502†	-175.2	-18.9	-0.4881 µg/L	-0.4881 ppb	14:08:39
3	Co 228.616†	30.3	-2.6	-0.1164 µg/L	-0.1164 ppb	14:08:39
3	Cr 267.716†	78.4	-9.9	-0.2306 µg/L	-0.2306 ppb	14:08:18
3	Cu 324.752†	4094.1	81.7	0.5642 µg/L	0.5642 ppb	14:08:18
3	Mn 257.610†	-667.7	37.3	0.1235 µg/L	0.1235 ppb	14:08:39
3	Mo 202.031†	7.7	-4.2	-0.4420 µg/L	-0.4420 ppb	14:08:39
3	Ni 231.604†	342.9	3.2	0.1888 µg/L	0.1888 ppb	14:08:39
3	P 214.914†	282.5	9.1	16.044 µg/L	16.044 ppb	14:08:39
3	Pb 220.353†	34.2	-3.6	-1.0136 µg/L	-1.0136 ppb	14:08:39
3	S 181.975 Axial†	24.1	2.4	8.0695 µg/L	8.0695 ppb	14:08:39
3	Sb 206.836†	29.9	3.5	3.3562 µg/L	3.3562 ppb	14:08:39
3	Se 196.026†	27.2	6.8	6.9448 µg/L	6.9448 ppb	14:08:39
3	SiO2†	2538.4	-72.2	-13.682 µg/L	-13.682 ppb	14:08:18
3	Si 251.611†	364.1	-38.8	-2.7659 µg/L	-2.7659 ppb	14:08:39
3	Sn 189.927†	-4.0	1.0	0.4400 µg/L	0.4400 ppb	14:08:39
3	Ti 334.940†	-625.0	34.1	0.0845 µg/L	0.0845 ppb	14:08:18
3	Tl 190.801†	-29.0	3.8	3.9849 µg/L	3.9849 ppb	14:08:39
3	U 409.014†	-44.8	-7.2	-0.6778 µg/L	-0.6778 ppb	14:08:18
3	V 292.402†	67.3	-28.5	-0.3676 µg/L	-0.3676 ppb	14:08:18
3	Zn 213.857†	632.6	7.0	0.1659 µg/L	0.1659 ppb	14:08:39

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1854849.7	95.115	%	0.2294				0.24%
Sc RADIAL	87516.7	95.4	%	0.17				0.17%
Y 371.029	1269964.9	95.248	%	0.2201				0.23%
Ag 328.068†	-3.1	-0.0270	µg/L	0.17383	-0.0270	ppb	0.17383	644.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	24.8	12.172	µg/L	2.9408	12.172	ppb	2.9408	24.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.4628	µg/L	4.01435	-0.4628	ppb	4.01435	867.37%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	33.0	1.5775	µg/L	0.30352	1.5775	ppb	0.30352	19.24%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	11.7	0.2693	µg/L	0.07802	0.2693	ppb	0.07802	28.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	300.5	0.1868	µg/L	0.01779	0.1868	ppb	0.01779	9.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	17.0	6.3867	µg/L	2.68449	6.3867	ppb	2.68449	42.03%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-10.3	-0.2634	µg/L	0.20301	-0.2634	ppb	0.20301	77.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-7.2	-0.3267	µg/L	0.24946	-0.3267	ppb	0.24946	76.36%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -10.3     -0.2398 µg/L       0.19489     -0.2398 ppb        0.19489  81.29%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               93.4      0.6411 µg/L       0.17693      0.6411 ppb        0.17693  27.60%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.4     17.537 µg/L       15.9573     17.537 ppb        15.9573  90.99%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -37.2    -17.578 µg/L       37.2396    -17.578 ppb        37.2396 211.85%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -0.8    -10.242 µg/L        7.3693    -10.242 ppb         7.3693  71.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               39.6      0.1301 µg/L       0.01678      0.1301 ppb        0.01678  12.89%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -5.7     -0.5966 µg/L       0.16370     -0.5966 ppb        0.16370  27.44%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        61.3     30.981 µg/L       15.3224     30.981 ppb        15.3224  49.46%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               14.2      0.8430 µg/L       0.84729      0.8430 ppb        0.84729 100.51%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 3.9      6.7501 µg/L      11.66625      6.7501 ppb       11.66625 172.83%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                0.1      0.0358 µg/L       0.92078      0.0358 ppb        0.92078 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           1.5      5.1510 µg/L      12.36697      5.1510 ppb       12.36697 240.09%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -1.3     -1.2439 µg/L       4.48406     -1.2439 ppb        4.48406 360.49%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                4.1      4.1826 µg/L       8.38661      4.1826 ppb        8.38661 200.51%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                    -57.5    -10.887 µg/L        3.1626    -10.887 ppb         3.1626  29.05%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              -36.8     -2.6241 µg/L       0.44307     -2.6241 ppb        0.44307  16.88%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.8      0.7684 µg/L       0.53922      0.7684 ppb        0.53922  70.17%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               12.7      0.0767 µg/L       0.13325      0.0767 ppb        0.13325 173.84%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               10.0      0.0253 µg/L       0.05143      0.0253 ppb        0.05143 202.91%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                1.6      1.6668 µg/L       2.21510      1.6668 ppb        2.21510 132.90%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                33.3      3.1052 µg/L       3.28063      3.1052 ppb        3.28063 105.65%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -28.4     -0.3617 µg/L       0.05404     -0.3617 ppb        0.05404  14.94%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                0.5      0.0083 µg/L       0.15213      0.0083 ppb        0.15213 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 14
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 14:41:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	86746.2	86746.2	94.5	%			14:41:34
1	Al 396.153Radial†	9870.2	10604.9	5181.1	µg/L	5181.1	ppb	14:41:34
1	Ca 317.933Radial†	13400.3	13836.4	5206.7	µg/L	5206.7	ppb	14:41:34
1	Fe 238.204 Radial†	408.5	419.1	5231.0	µg/L	5231.0	ppb	14:41:54
1	K 766.490 Radial†	10420.0	10619.1	5024.2	µg/L	5024.2	ppb	14:41:34
1	Mg 279.077 IEC†	370.6	383.0	5184.6	µg/L	5184.6	ppb	14:41:54
1	Na 589.592 Radial†	19956.2	20923.2	10583	µg/L	10583	ppb	14:41:34
1	Sr 421.552†	81425.9	86012.2	520.92	µg/L	520.92	ppb	14:41:34
1	Sc 361.383	1875518.8	1875518.8	96.175	%			14:42:58
1	Y 371.029	1278117.6	1278117.6	95.860	%			14:42:58
1	Ag 328.068†	57627.1	60442.8	512.51	µg/L	512.51	ppb	14:43:04
1	As 188.979†	325.9	342.3	532.40	µg/L	532.40	ppb	14:43:24
1	B 249.677†	10412.0	10548.8	505.51	µg/L	505.51	ppb	14:43:04
1	Ba 233.527†	21330.6	22206.1	514.71	µg/L	514.71	ppb	14:43:04
1	Be 313.107†	795727.2	828937.2	515.03	µg/L	515.03	ppb	14:42:58
1	Cd 226.502†	19232.8	20163.1	515.61	µg/L	515.61	ppb	14:43:04
1	Co 228.616†	10969.1	11371.0	515.73	µg/L	515.73	ppb	14:43:04
1	Cr 267.716†	21695.4	22466.0	524.52	µg/L	524.52	ppb	14:43:04
1	Cu 324.752†	76596.7	75419.5	515.77	µg/L	515.77	ppb	14:43:04
1	Mn 257.610†	154268.6	161144.3	522.96	µg/L	522.96	ppb	14:42:58
1	Mo 202.031†	4952.8	5137.4	539.42	µg/L	539.42	ppb	14:43:24
1	Ni 231.604†	8805.7	8798.5	520.00	µg/L	520.00	ppb	14:43:04
1	P 214.914†	1730.2	1511.0	2619.9	µg/L	2619.9	ppb	14:43:24
1	Pb 220.353†	1868.4	1903.1	530.41	µg/L	530.41	ppb	14:43:24
1	S 181.975 Axial†	322.8	312.7	1039.7	µg/L	1039.7	ppb	14:43:24
1	Sb 206.836†	561.7	556.2	532.14	µg/L	532.14	ppb	14:43:24
1	Se 196.026†	531.5	530.8	544.94	µg/L	544.94	ppb	14:43:24
1	SiO2†	30201.7	28661.3	5429.1	µg/L	5429.1	ppb	14:43:04
1	Si 251.611†	34706.3	35665.1	2540.6	µg/L	2540.6	ppb	14:43:04
1	Sn 189.927†	1237.0	1291.4	542.97	µg/L	542.97	ppb	14:43:24
1	Ti 334.940†	201369.8	210070.9	515.37	µg/L	515.37	ppb	14:42:58
1	Tl 190.801†	444.3	496.4	522.46	µg/L	522.46	ppb	14:43:24
1	U 409.014†	5331.7	5583.6	519.79	µg/L	519.79	ppb	14:43:04
1	V 292.402†	39671.5	41150.3	523.48	µg/L	523.48	ppb	14:43:04
1	Zn 213.857†	21252.6	21439.7	514.90	µg/L	514.90	ppb	14:43:04
2	Sc RADIAL	89251.6	89251.6	97.2	%			14:42:00
2	Al 396.153Radial†	9688.1	10124.6	4946.2	µg/L	4946.2	ppb	14:42:00
2	Ca 317.933Radial†	13174.7	13206.4	4969.7	µg/L	4969.7	ppb	14:42:00
2	Fe 238.204 Radial†	415.0	413.7	5163.4	µg/L	5163.4	ppb	14:42:21
2	K 766.490 Radial†	10150.6	10032.6	4746.7	µg/L	4746.7	ppb	14:42:00
2	Mg 279.077 IEC†	375.3	376.8	5101.3	µg/L	5101.3	ppb	14:42:21
2	Na 589.592 Radial†	19691.2	20058.0	10145	µg/L	10145	ppb	14:42:00
2	Sr 421.552†	80072.1	82201.8	497.84	µg/L	497.84	ppb	14:42:00
2	Sc 361.383	1862037.9	1862037.9	95.483	%			14:43:31
2	Y 371.029	1269155.4	1269155.4	95.188	%			14:43:31
2	Ag 328.068†	58040.6	61309.6	519.84	µg/L	519.84	ppb	14:43:37
2	As 188.979†	312.8	330.9	514.74	µg/L	514.74	ppb	14:43:58
2	B 249.677†	10474.7	10692.9	512.49	µg/L	512.49	ppb	14:43:37
2	Ba 233.527†	21472.2	22515.0	521.87	µg/L	521.87	ppb	14:43:37
2	Be 313.107†	790663.5	829624.1	515.45	µg/L	515.45	ppb	14:43:31
2	Cd 226.502†	19346.0	20426.5	522.36	µg/L	522.36	ppb	14:43:37
2	Co 228.616†	11029.8	11517.1	522.35	µg/L	522.35	ppb	14:43:37
2	Cr 267.716†	21821.7	22761.6	531.43	µg/L	531.43	ppb	14:43:37
2	Cu 324.752†	76973.4	76390.7	522.39	µg/L	522.39	ppb	14:43:37
2	Mn 257.610†	153291.1	161281.9	523.41	µg/L	523.41	ppb	14:43:31
2	Mo 202.031†	4822.5	5038.3	529.01	µg/L	529.01	ppb	14:43:58
2	Ni 231.604†	8840.2	8901.0	526.05	µg/L	526.05	ppb	14:43:37
2	P 214.914†	1705.3	1498.0	2595.9	µg/L	2595.9	ppb	14:43:58
2	Pb 220.353†	1828.2	1875.1	522.55	µg/L	522.55	ppb	14:43:58

2	S 181.975 Axial†	322.1	314.4	1045.2 µg/L	1045.2 ppb	14:43:58
2	Sb 206.836†	550.8	549.0	525.03 µg/L	525.03 ppb	14:43:58
2	Se 196.026†	515.8	518.4	532.37 µg/L	532.37 ppb	14:43:58
2	SiO2†	30326.6	29019.4	5496.9 µg/L	5496.9 ppb	14:43:37
2	Si 251.611†	34940.9	36172.1	2576.7 µg/L	2576.7 ppb	14:43:37
2	Sn 189.927†	1189.5	1251.0	525.97 µg/L	525.97 ppb	14:43:58
2	Ti 334.940†	200257.8	210422.2	516.24 µg/L	516.24 ppb	14:43:31
2	Tl 190.801†	444.7	500.1	526.37 µg/L	526.37 ppb	14:43:58
2	U 409.014†	5334.1	5626.3	523.79 µg/L	523.79 ppb	14:43:37
2	V 292.402†	39864.4	41650.9	529.73 µg/L	529.73 ppb	14:43:37
2	Zn 213.857†	21377.5	21730.4	521.90 µg/L	521.90 ppb	14:43:37
3	Sc RADIAL	88447.1	88447.1	96.4 %		14:42:26
3	Al 396.153Radial†	9639.1	10164.4	4967.6 µg/L	4967.6 ppb	14:42:26
3	Ca 317.933Radial†	13063.8	13214.6	4972.7 µg/L	4972.7 ppb	14:42:26
3	Fe 238.204 Radial†	409.3	411.6	5136.3 µg/L	5136.3 ppb	14:42:47
3	K 766.490 Radial†	10273.7	10255.3	4852.1 µg/L	4852.1 ppb	14:42:26
3	Mg 279.077 IEC†	367.3	372.0	5034.6 µg/L	5034.6 ppb	14:42:47
3	Na 589.592 Radial†	19589.3	20136.5	10185 µg/L	10185 ppb	14:42:26
3	Sr 421.552†	79718.2	82583.4	500.15 µg/L	500.15 ppb	14:42:26
3	Sc 361.383	1873064.5	1873064.5	96.049 %		14:44:05
3	Y 371.029	1278412.6	1278412.6	95.882 %		14:44:05
3	Ag 328.068†	53641.0	56371.2	477.82 µg/L	477.82 ppb	14:44:10
3	As 188.979†	267.5	281.9	438.32 µg/L	438.32 ppb	14:44:31
3	B 249.677†	9588.0	9705.1	464.86 µg/L	464.86 ppb	14:44:10
3	Ba 233.527†	19145.5	19960.2	462.63 µg/L	462.63 ppb	14:44:10
3	Be 313.107†	727595.5	759086.8	471.63 µg/L	471.63 ppb	14:44:05
3	Cd 226.502†	17159.0	18030.2	461.02 µg/L	461.02 ppb	14:44:10
3	Co 228.616†	9703.8	10068.5	456.59 µg/L	456.59 ppb	14:44:10
3	Cr 267.716†	18667.6	19343.3	451.62 µg/L	451.62 ppb	14:44:10
3	Cu 324.752†	68642.2	67242.2	459.94 µg/L	459.94 ppb	14:44:10
3	Mn 257.610†	141427.0	147984.5	480.26 µg/L	480.26 ppb	14:44:05
3	Mo 202.031†	4003.8	4156.2	436.43 µg/L	436.43 ppb	14:44:31
3	Ni 231.604†	7852.1	7817.7	462.04 µg/L	462.04 ppb	14:44:10
3	P 214.914†	1464.7	1237.0	2140.2 µg/L	2140.2 ppb	14:44:31
3	Pb 220.353†	1572.3	1597.4	445.14 µg/L	445.14 ppb	14:44:31
3	S 181.975 Axial†	279.4	268.0	891.09 µg/L	891.09 ppb	14:44:31
3	Sb 206.836†	467.0	458.4	438.16 µg/L	438.16 ppb	14:44:31
3	Se 196.026†	453.5	450.4	464.06 µg/L	464.06 ppb	14:44:31
3	SiO2†	27772.0	26172.8	4957.7 µg/L	4957.7 ppb	14:44:10
3	Si 251.611†	31718.8	32602.0	2322.4 µg/L	2322.4 ppb	14:44:10
3	Sn 189.927†	970.8	1016.0	427.28 µg/L	427.28 ppb	14:44:31
3	Ti 334.940†	182939.7	191156.9	468.95 µg/L	468.95 ppb	14:44:05
3	Tl 190.801†	387.9	438.3	461.50 µg/L	461.50 ppb	14:44:31
3	U 409.014†	4674.5	4906.7	456.67 µg/L	456.67 ppb	14:44:10
3	V 292.402†	34828.8	36162.4	459.65 µg/L	459.65 ppb	14:44:10
3	Zn 213.857†	18940.6	19061.5	457.73 µg/L	457.73 ppb	14:44:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1870207.0	95.902	%	0.3682				0.38%
Sc RADIAL	88148.3	96.0	%	1.39				1.45%
Y 371.029	1275228.5	95.643	%	0.3946				0.41%
Ag 328.068†	59374.5	503.39	µg/L	22.445	503.39	ppb	22.445	4.46%
QC value within limits for Ag 328.068 Recovery = 100.68%								
Al 396.153Radial†	10298.0	5031.6	µg/L	129.93	5031.6	ppb	129.93	2.58%
QC value within limits for Al 396.153Radial Recovery = 100.63%								
As 188.979†	318.4	495.15	µg/L	50.005	495.15	ppb	50.005	10.10%
QC value within limits for As 188.979 Recovery = 99.03%								
B 249.677†	10315.6	494.29	µg/L	25.720	494.29	ppb	25.720	5.20%
QC value within limits for B 249.677 Recovery = 98.86%								
Ba 233.527†	21560.4	499.74	µg/L	32.331	499.74	ppb	32.331	6.47%
QC value within limits for Ba 233.527 Recovery = 99.95%								
Be 313.107†	805882.7	500.70	µg/L	25.180	500.70	ppb	25.180	5.03%
QC value within limits for Be 313.107 Recovery = 100.14%								
Ca 317.933Radial†	13419.1	5049.7	µg/L	135.99	5049.7	ppb	135.99	2.69%
QC value within limits for Ca 317.933Radial Recovery = 100.99%								
Cd 226.502†	19539.9	499.67	µg/L	33.640	499.67	ppb	33.640	6.73%
QC value within limits for Cd 226.502 Recovery = 99.93%								
Co 228.616†	10985.6	498.22	µg/L	36.206	498.22	ppb	36.206	7.27%

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   QC value within limits for Co 228.616  Recovery = 99.64%
Cr 267.716†            21523.6      502.52 µg/L        44.217      502.52 ppb         44.217   8.80%
   QC value within limits for Cr 267.716  Recovery = 100.50%
Cu 324.752†            73017.4      499.36 µg/L        34.305      499.36 ppb         34.305   6.87%
   QC value within limits for Cu 324.752  Recovery = 99.87%
Fe 238.204 Radial†       414.8      5176.9 µg/L         48.78      5176.9 ppb          48.78   0.94%
   QC value within limits for Fe 238.204 Radial  Recovery = 103.54%
K 766.490 Radial†      10302.3      4874.3 µg/L        140.09      4874.3 ppb         140.09   2.87%
   QC value within limits for K 766.490 Radial  Recovery = 97.49%
Mg 279.077 IEC†          377.3      5106.9 µg/L         75.16      5106.9 ppb          75.16   1.47%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.14%
Mn 257.610†           156803.6      508.88 µg/L        24.787      508.88 ppb         24.787   4.87%
   QC value within limits for Mn 257.610  Recovery = 101.78%
Mo 202.031†             4777.3      501.62 µg/L        56.697      501.62 ppb         56.697  11.30%
   QC value within limits for Mo 202.031  Recovery = 100.32%
Na 589.592 Radial†     20372.6       10304 µg/L         242.0       10304 ppb          242.0   2.35%
   QC value within limits for Na 589.592 Radial  Recovery = 103.04%
Ni 231.604†             8505.7      502.70 µg/L        35.341      502.70 ppb         35.341   7.03%
   QC value within limits for Ni 231.604  Recovery = 100.54%
P 214.914†              1415.3      2452.0 µg/L        270.34      2452.0 ppb         270.34  11.03%
   QC value within limits for P 214.914  Recovery = 98.08%
Pb 220.353†             1791.9      499.37 µg/L        47.127      499.37 ppb         47.127   9.44%
   QC value within limits for Pb 220.353  Recovery = 99.87%
S 181.975 Axial†         298.4      991.99 µg/L        87.423      991.99 ppb         87.423   8.81%
   QC value within limits for S 181.975 Axial  Recovery = 99.20%
Sb 206.836†              521.2      498.45 µg/L        52.330      498.45 ppb         52.330  10.50%
   QC value within limits for Sb 206.836  Recovery = 99.69%
Se 196.026†              499.8      513.79 µg/L        43.523      513.79 ppb         43.523   8.47%
   QC value within limits for Se 196.026  Recovery = 102.76%
SiO2†                  27951.2      5294.6 µg/L        293.70      5294.6 ppb         293.70   5.55%
   QC value within limits for SiO2  Recovery = 99.01%
Si 251.611†            34813.0      2479.9 µg/L        137.59      2479.9 ppb         137.59   5.55%
   QC value within limits for Si 251.611  Recovery = 99.20%
Sn 189.927†             1186.1      498.74 µg/L        62.471      498.74 ppb         62.471  12.53%
   QC value within limits for Sn 189.927  Recovery = 99.75%
Sr 421.552†            83599.1      506.30 µg/L        12.709      506.30 ppb         12.709   2.51%
   QC value within limits for Sr 421.552  Recovery = 101.26%
Ti 334.940†           203883.4      500.19 µg/L        27.056      500.19 ppb         27.056   5.41%
   QC value within limits for Ti 334.940  Recovery = 100.04%
Tl 190.801†              478.2      503.44 µg/L        36.380      503.44 ppb         36.380   7.23%
   QC value within limits for Tl 190.801  Recovery = 100.69%
U 409.014†              5372.2      500.08 µg/L        37.648      500.08 ppb         37.648   7.53%
   QC value within limits for U 409.014  Recovery = 100.02%
V 292.402†             39654.5      504.28 µg/L        38.784      504.28 ppb         38.784   7.69%
   QC value within limits for V 292.402  Recovery = 100.86%
Zn 213.857†            20743.9      498.18 µg/L        35.199      498.18 ppb         35.199   7.07%
   QC value within limits for Zn 213.857  Recovery = 99.64%
All analyte(s) passed QC.
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Sequence No.: 15
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 14:44:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87333.5	87333.5	95.2	%			14:45:11
1	Al 396.153Radial†	-138.9	16.5	8.0313	µg/L	8.0313	ppb	14:45:11
1	Ca 317.933Radial†	349.6	26.5	9.9566	µg/L	9.9566	ppb	14:45:31
1	Fe 238.204 Radial†	14.7	2.4	29.477	µg/L	29.477	ppb	14:45:31
1	K 766.490 Radial†	450.7	68.5	32.405	µg/L	32.405	ppb	14:45:11
1	Mg 279.077 IEC†	9.8	1.3	17.173	µg/L	17.173	ppb	14:45:31
1	Na 589.592 Radial†	177.8	-3.3	-1.6648	µg/L	-1.6648	ppb	14:45:11
1	Sr 421.552†	132.0	3.4	0.0208	µg/L	0.0208	ppb	14:45:11
1	Sc 361.383	1816741.8	1816741.8	93.161	%			14:46:33
1	Y 371.029	1242130.6	1242130.6	93.161	%			14:46:33
1	Ag 328.068†	-508.1	-21.9	-0.1834	µg/L	-0.1834	ppb	14:46:39
1	As 188.979†	-4.8	-1.8	-2.8322	µg/L	-2.8322	ppb	14:46:59
1	B 249.677†	288.3	32.1	1.5296	µg/L	1.5296	ppb	14:46:39
1	Ba 233.527†	-17.4	8.4	0.1944	µg/L	0.1944	ppb	14:46:59
1	Be 313.107†	-1267.7	198.0	0.1230	µg/L	0.1230	ppb	14:46:39
1	Cd 226.502†	-161.5	-8.1	-0.2079	µg/L	-0.2079	ppb	14:46:59
1	Co 228.616†	19.8	-13.1	-0.5952	µg/L	-0.5952	ppb	14:46:59
1	Cr 267.716†	52.8	-35.6	-0.8314	µg/L	-0.8314	ppb	14:46:39
1	Cu 324.752†	4032.4	104.5	0.7189	µg/L	0.7189	ppb	14:46:39
1	Mn 257.610†	-651.5	40.1	0.1307	µg/L	0.1307	ppb	14:46:59
1	Mo 202.031†	21.3	10.6	1.1087	µg/L	1.1087	ppb	14:46:59
1	Ni 231.604†	367.4	36.9	2.1841	µg/L	2.1841	ppb	14:46:59
1	P 214.914†	292.0	25.4	44.859	µg/L	44.859	ppb	14:46:59
1	Pb 220.353†	45.9	9.7	2.6845	µg/L	2.6845	ppb	14:46:59
1	S 181.975 Axial†	24.2	3.0	10.054	µg/L	10.054	ppb	14:46:59
1	Sb 206.836†	24.5	-1.5	-1.4233	µg/L	-1.4233	ppb	14:46:59
1	Se 196.026†	20.8	0.5	0.5948	µg/L	0.5948	ppb	14:46:59
1	SiO2†	2527.2	-29.0	-5.4940	µg/L	-5.4940	ppb	14:46:39
1	Si 251.611†	369.6	-25.0	-1.7804	µg/L	-1.7804	ppb	14:46:59
1	Sn 189.927†	0.9	6.2	2.6023	µg/L	2.6023	ppb	14:46:59
1	Ti 334.940†	-537.3	114.6	0.2802	µg/L	0.2802	ppb	14:46:39
1	Tl 190.801†	-34.3	-2.4	-2.5093	µg/L	-2.5093	ppb	14:46:59
1	U 409.014†	76.0	121.5	11.327	µg/L	11.327	ppb	14:46:39
1	V 292.402†	76.9	-16.6	-0.1945	µg/L	-0.1945	ppb	14:46:39
1	Zn 213.857†	626.3	14.0	0.3253	µg/L	0.3253	ppb	14:46:59
2	Sc RADIAL	86339.9	86339.9	94.1	%			14:45:37
2	Al 396.153Radial†	-140.3	13.4	6.5247	µg/L	6.5247	ppb	14:45:37
2	Ca 317.933Radial†	339.5	19.9	7.4900	µg/L	7.4900	ppb	14:45:57
2	Fe 238.204 Radial†	14.7	2.5	31.726	µg/L	31.726	ppb	14:45:57
2	K 766.490 Radial†	239.6	-150.4	-71.176	µg/L	-71.176	ppb	14:45:37
2	Mg 279.077 IEC†	9.5	1.1	14.463	µg/L	14.463	ppb	14:45:57
2	Na 589.592 Radial†	198.3	20.6	10.437	µg/L	10.437	ppb	14:45:37
2	Sr 421.552†	89.4	-40.3	-0.2438	µg/L	-0.2438	ppb	14:45:37
2	Sc 361.383	1821170.7	1821170.7	93.388	%			14:47:05
2	Y 371.029	1244049.4	1244049.4	93.305	%			14:47:05
2	Ag 328.068†	-581.2	-98.8	-0.8292	µg/L	-0.8292	ppb	14:47:11
2	As 188.979†	-1.3	2.0	3.1269	µg/L	3.1269	ppb	14:47:32
2	B 249.677†	248.7	-11.0	-0.5469	µg/L	-0.5469	ppb	14:47:11
2	Ba 233.527†	-21.9	3.7	0.0851	µg/L	0.0851	ppb	14:47:32
2	Be 313.107†	-1258.3	211.4	0.1313	µg/L	0.1313	ppb	14:47:11
2	Cd 226.502†	-170.1	-16.9	-0.4338	µg/L	-0.4338	ppb	14:47:32
2	Co 228.616†	23.1	-9.6	-0.4375	µg/L	-0.4375	ppb	14:47:32
2	Cr 267.716†	101.6	16.5	0.3849	µg/L	0.3849	ppb	14:47:11
2	Cu 324.752†	4031.3	92.8	0.6393	µg/L	0.6393	ppb	14:47:11
2	Mn 257.610†	-664.8	27.6	0.0904	µg/L	0.0904	ppb	14:47:32
2	Mo 202.031†	17.6	6.5	0.6828	µg/L	0.6828	ppb	14:47:32
2	Ni 231.604†	354.2	21.8	1.2928	µg/L	1.2928	ppb	14:47:32
2	P 214.914†	285.4	17.7	31.124	µg/L	31.124	ppb	14:47:32
2	Pb 220.353†	43.9	7.5	2.0719	µg/L	2.0719	ppb	14:47:32

2	S 181.975 Axial†	27.5	6.5	21.758 µg/L	21.758 ppb		14:47:32
2	Sb 206.836†	27.6	1.6	1.5606 µg/L	1.5606 ppb		14:47:32
2	Se 196.026†	19.4	-1.0	-0.9500 µg/L	-0.9500 ppb		14:47:32
2	SiO2†	2579.5	20.4	3.8727 µg/L	3.8727 ppb		14:47:11
2	Si 251.611†	368.4	-27.2	-1.9390 µg/L	-1.9390 ppb		14:47:32
2	Sn 189.927†	-4.4	0.5	0.2020 µg/L	0.2020 ppb		14:47:32
2	Ti 334.940†	-539.4	113.8	0.2783 µg/L	0.2783 ppb		14:47:11
2	Tl 190.801†	-37.8	-6.1	-6.3828 µg/L	-6.3828 ppb		14:47:32
2	U 409.014†	13.7	54.6	5.0842 µg/L	5.0842 ppb		14:47:11
2	V 292.402†	92.5	-0.1	0.0058 µg/L	0.0058 ppb		14:47:11
2	Zn 213.857†	622.2	8.0	0.1833 µg/L	0.1833 ppb		14:47:32
3	Sc RADIAL	86396.4	86396.4	94.1 %			14:46:03
3	Al 396.153Radial†	-159.0	-6.5	-3.1699 µg/L	-3.1699 ppb		14:46:03
3	Ca 317.933Radial†	350.0	30.9	11.621 µg/L	11.621 ppb		14:46:23
3	Fe 238.204 Radial†	14.1	1.8	23.012 µg/L	23.012 ppb		14:46:23
3	K 766.490 Radial†	495.6	121.3	57.409 µg/L	57.409 ppb		14:46:03
3	Mg 279.077 IEC†	9.8	1.3	17.916 µg/L	17.916 ppb		14:46:23
3	Na 589.592 Radial†	193.0	14.8	7.4975 µg/L	7.4975 ppb		14:46:03
3	Sr 421.552†	139.9	13.3	0.0806 µg/L	0.0806 ppb		14:46:03
3	Sc 361.383	1814726.1	1814726.1	93.057 %			14:47:38
3	Y 371.029	1243075.1	1243075.1	93.231 %			14:47:38
3	Ag 328.068†	-515.1	-30.0	-0.2463 µg/L	-0.2463 ppb		14:47:43
3	As 188.979†	-0.6	2.7	4.1982 µg/L	4.1982 ppb		14:48:04
3	B 249.677†	238.2	-21.3	-1.0376 µg/L	-1.0376 ppb		14:47:43
3	Ba 233.527†	-17.6	8.2	0.1899 µg/L	0.1899 ppb		14:48:04
3	Be 313.107†	-1353.3	104.6	0.0650 µg/L	0.0650 ppb		14:47:43
3	Cd 226.502†	-164.8	-11.8	-0.3021 µg/L	-0.3021 ppb		14:48:04
3	Co 228.616†	24.3	-8.3	-0.3765 µg/L	-0.3765 ppb		14:48:04
3	Cr 267.716†	74.6	-12.1	-0.2828 µg/L	-0.2828 ppb		14:47:43
3	Cu 324.752†	4021.5	97.6	0.6704 µg/L	0.6704 ppb		14:47:43
3	Mn 257.610†	-673.4	15.8	0.0514 µg/L	0.0514 ppb		14:48:04
3	Mo 202.031†	11.8	0.4	0.0399 µg/L	0.0399 ppb		14:48:04
3	Ni 231.604†	353.4	22.3	1.3215 µg/L	1.3215 ppb		14:48:04
3	P 214.914†	290.6	24.3	42.835 µg/L	42.835 ppb		14:48:04
3	Pb 220.353†	45.1	8.9	2.4783 µg/L	2.4783 ppb		14:48:04
3	S 181.975 Axial†	20.1	-1.3	-4.2580 µg/L	-4.2580 ppb		14:48:04
3	Sb 206.836†	24.9	-1.2	-1.0921 µg/L	-1.0921 ppb		14:48:04
3	Se 196.026†	19.3	-1.1	-1.0647 µg/L	-1.0647 ppb		14:48:04
3	SiO2†	2612.0	65.2	12.350 µg/L	12.350 ppb		14:47:43
3	Si 251.611†	356.1	-39.0	-2.7801 µg/L	-2.7801 ppb		14:48:04
3	Sn 189.927†	0.7	6.0	2.5135 µg/L	2.5135 ppb		14:48:04
3	Ti 334.940†	-594.3	52.7	0.1283 µg/L	0.1283 ppb		14:47:43
3	Tl 190.801†	-36.0	-4.3	-4.4768 µg/L	-4.4768 ppb		14:48:04
3	U 409.014†	-15.6	23.1	2.1504 µg/L	2.1504 ppb		14:47:43
3	V 292.402†	139.2	50.4	0.6342 µg/L	0.6342 ppb		14:47:43
3	Zn 213.857†	633.3	22.3	0.5296 µg/L	0.5296 ppb		14:48:04

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1817546.2	93.202	%	0.1691				0.18%
Sc RADIAL	86689.9	94.5	%	0.61				0.64%
Y 371.029	1243085.0	93.232	%	0.0720				0.08%
Ag 328.068†	-50.2	-0.4196	µg/L	0.35612	-0.4196	ppb	0.35612	84.86%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	7.8	3.7954	µg/L	6.07894	3.7954	ppb	6.07894	160.17%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.0	1.4976	µg/L	3.78781	1.4976	ppb	3.78781	252.93%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-0.1	-0.0183	µg/L	1.36282	-0.0183	ppb	1.36282	>999.9%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	6.8	0.1565	µg/L	0.06184	0.1565	ppb	0.06184	39.52%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	171.3	0.1064	µg/L	0.03613	0.1064	ppb	0.03613	33.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	25.7	9.6893	µg/L	2.07856	9.6893	ppb	2.07856	21.45%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-12.2	-0.3146	µg/L	0.11347	-0.3146	ppb	0.11347	36.07%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-10.3	-0.4697	µg/L	0.11287	-0.4697	ppb	0.11287	24.03%

```
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -10.4     -0.2431 µg/L       0.60913     -0.2431 ppb        0.60913 250.55%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               98.3      0.6762 µg/L       0.04008      0.6762 ppb        0.04008   5.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         2.3     28.072 µg/L        4.5240     28.072 ppb         4.5240  16.12%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         13.1      6.2126 µg/L      68.17643      6.2126 ppb       68.17643 >999.9%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            1.2     16.517 µg/L        1.8176     16.517 ppb         1.8176  11.00%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               27.8      0.0908 µg/L       0.03963      0.0908 ppb        0.03963  43.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                5.8      0.6105 µg/L       0.53803      0.6105 ppb        0.53803  88.13%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        10.7      5.4231 µg/L       6.31173      5.4231 ppb        6.31173 116.39%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               27.0      1.5994 µg/L       0.50654      1.5994 ppb        0.50654  31.67%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                22.5     39.606 µg/L        7.4150     39.606 ppb         7.4150  18.72%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                8.7      2.4116 µg/L       0.31171      2.4116 ppb        0.31171  12.93%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           2.8      9.1846 µg/L      13.02960      9.1846 ppb       13.02960 141.86%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               -0.3     -0.3183 µg/L       1.63555     -0.3183 ppb        1.63555 513.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.5     -0.4733 µg/L       0.92678     -0.4733 ppb        0.92678 195.82%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     18.9      3.5764 µg/L       8.92586      3.5764 ppb        8.92586 249.58%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†              -30.4     -2.1665 µg/L       0.53729     -2.1665 ppb        0.53729  24.80%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                4.2      1.7726 µg/L       1.36092      1.7726 ppb        1.36092  76.77%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -7.8     -0.0475 µg/L       0.17263     -0.0475 ppb        0.17263 363.77%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               93.7      0.2289 µg/L       0.08719      0.2289 ppb        0.08719  38.09%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -4.3     -4.4563 µg/L       1.93687     -4.4563 ppb        1.93687  43.46%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                66.4      6.1872 µg/L       4.68675      6.1872 ppb        4.68675  75.75%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                11.2      0.1485 µg/L       0.43237      0.1485 ppb        0.43237 291.15%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               14.7      0.3460 µg/L       0.17407      0.3460 ppb        0.17407  50.30%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: 1202046575|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 310
Date Collected: 3/15/2010 14:48:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046575|954672|1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87447.5	87447.5	95.3	%			14:48:47
1	Al 396.153Radial†	-142.6	12.8	6.2330	µg/L	6.2330	ppb	14:48:47
1	Ca 317.933Radial†	404.2	83.3	31.330	µg/L	31.330	ppb	14:49:07
1	Fe 238.204 Radial†	17.9	5.7	71.378	µg/L	71.378	ppb	14:49:07
1	K 766.490 Radial†	335.5	-53.1	-25.100	µg/L	-25.100	ppb	14:48:47
1	Mg 279.077 IEC†	11.8	3.3	45.169	µg/L	45.169	ppb	14:49:07
1	Na 589.592 Radial†	198.1	17.8	8.9862	µg/L	8.9862	ppb	14:48:47
1	Sr 421.552†	138.3	9.8	0.0593	µg/L	0.0593	ppb	14:48:47
1	Sc 361.383	1813019.4	1813019.4	92.970	%			14:50:09
1	Y 371.029	1239143.1	1239143.1	92.937	%			14:50:09
1	Ag 328.068†	-523.2	-39.2	-0.3245	µg/L	-0.3245	ppb	14:50:15
1	As 188.979†	-3.8	-0.7	-1.0743	µg/L	-1.0743	ppb	14:50:35
1	B 249.677†	299.3	44.7	2.1121	µg/L	2.1121	ppb	14:50:15
1	Ba 233.527†	-14.1	11.9	0.2755	µg/L	0.2755	ppb	14:50:35
1	Be 313.107†	-1248.9	215.5	0.1338	µg/L	0.1338	ppb	14:50:15
1	Cd 226.502†	-164.3	-11.4	-0.2990	µg/L	-0.2990	ppb	14:50:35
1	Co 228.616†	20.4	-12.5	-0.5658	µg/L	-0.5658	ppb	14:50:35
1	Cr 267.716†	123.3	40.3	0.9412	µg/L	0.9412	ppb	14:50:15
1	Cu 324.752†	4042.1	123.8	0.8583	µg/L	0.8583	ppb	14:50:15
1	Mn 257.610†	-437.3	269.0	0.8744	µg/L	0.8744	ppb	14:50:35
1	Mo 202.031†	19.0	8.0	0.8457	µg/L	0.8457	ppb	14:50:35
1	Ni 231.604†	362.2	32.2	1.9060	µg/L	1.9060	ppb	14:50:35
1	P 214.914†	289.0	22.8	40.327	µg/L	40.327	ppb	14:50:35
1	Pb 220.353†	47.7	11.8	3.2727	µg/L	3.2727	ppb	14:50:35
1	S 181.975 Axial†	22.2	0.9	3.0217	µg/L	3.0217	ppb	14:50:35
1	Sb 206.836†	24.8	-1.2	-1.1077	µg/L	-1.1077	ppb	14:50:35
1	Se 196.026†	22.9	2.8	3.0458	µg/L	3.0458	ppb	14:50:35
1	SiO2†	2809.0	279.7	52.983	µg/L	52.983	ppb	14:50:15
1	Si 251.611†	701.3	332.7	23.697	µg/L	23.697	ppb	14:50:35
1	Sn 189.927†	17.5	24.0	10.104	µg/L	10.104	ppb	14:50:35
1	Ti 334.940†	-491.9	162.3	0.3953	µg/L	0.3953	ppb	14:50:15
1	Tl 190.801†	-38.2	-6.7	-7.0135	µg/L	-7.0135	ppb	14:50:35
1	U 409.014†	-9.6	29.5	2.7435	µg/L	2.7435	ppb	14:50:15
1	V 292.402†	96.4	4.5	0.0584	µg/L	0.0584	ppb	14:50:15
1	Zn 213.857†	1241.2	676.8	16.353	µg/L	16.353	ppb	14:50:35
2	Sc RADIAL	87006.3	87006.3	94.8	%			14:49:13
2	Al 396.153Radial†	-114.0	42.2	20.678	µg/L	20.678	ppb	14:49:13
2	Ca 317.933Radial†	382.6	62.6	23.550	µg/L	23.550	ppb	14:49:33
2	Fe 238.204 Radial†	17.1	4.9	61.190	µg/L	61.190	ppb	14:49:33
2	K 766.490 Radial†	399.9	16.7	7.8823	µg/L	7.8823	ppb	14:49:13
2	Mg 279.077 IEC†	7.2	-1.5	-20.240	µg/L	-20.240	ppb	14:49:33
2	Na 589.592 Radial†	268.2	92.8	46.939	µg/L	46.939	ppb	14:49:13
2	Sr 421.552†	124.0	-4.6	-0.0277	µg/L	-0.0277	ppb	14:49:13
2	Sc 361.383	1821837.2	1821837.2	93.422	%			14:50:41
2	Y 371.029	1243979.5	1243979.5	93.299	%			14:50:41
2	Ag 328.068†	-494.8	-6.1	-0.0447	µg/L	-0.0447	ppb	14:50:47
2	As 188.979†	-3.3	-0.1	-0.1680	µg/L	-0.1680	ppb	14:51:07
2	B 249.677†	301.2	45.1	2.1384	µg/L	2.1384	ppb	14:50:47
2	Ba 233.527†	-17.3	8.6	0.1985	µg/L	0.1985	ppb	14:51:07
2	Be 313.107†	-1330.3	134.9	0.0837	µg/L	0.0837	ppb	14:50:47
2	Cd 226.502†	-166.8	-13.3	-0.3446	µg/L	-0.3446	ppb	14:51:07
2	Co 228.616†	21.0	-11.9	-0.5416	µg/L	-0.5416	ppb	14:51:07
2	Cr 267.716†	88.6	2.5	0.0592	µg/L	0.0592	ppb	14:50:47
2	Cu 324.752†	4048.2	109.3	0.7576	µg/L	0.7576	ppb	14:50:47
2	Mn 257.610†	-434.5	274.4	0.8954	µg/L	0.8954	ppb	14:51:07
2	Mo 202.031†	10.8	-0.7	-0.0758	µg/L	-0.0758	ppb	14:51:07
2	Ni 231.604†	359.3	27.1	1.6066	µg/L	1.6066	ppb	14:51:07
2	P 214.914†	286.9	19.1	33.794	µg/L	33.794	ppb	14:51:07
2	Pb 220.353†	53.7	17.9	4.9836	µg/L	4.9836	ppb	14:51:07

2	S 181.975 Axial†	18.6	-3.0	-10.073 µg/L	-10.073 ppb	14:51:07
2	Sb 206.836†	25.0	-1.1	-1.0921 µg/L	-1.0921 ppb	14:51:07
2	Se 196.026†	22.4	2.1	2.3524 µg/L	2.3524 ppb	14:51:07
2	SiO2†	2800.0	255.5	48.389 µg/L	48.389 ppb	14:50:47
2	Si 251.611†	690.6	317.5	22.617 µg/L	22.617 ppb	14:51:07
2	Sn 189.927†	13.2	19.3	8.1297 µg/L	8.1297 ppb	14:51:07
2	Ti 334.940†	-476.2	181.6	0.4479 µg/L	0.4479 ppb	14:50:47
2	Tl 190.801†	-31.4	0.8	0.8218 µg/L	0.8218 ppb	14:51:07
2	U 409.014†	-11.4	27.7	2.5715 µg/L	2.5715 ppb	14:50:47
2	V 292.402†	115.0	23.9	0.2959 µg/L	0.2959 ppb	14:50:47
2	Zn 213.857†	1249.1	678.7	16.406 µg/L	16.406 ppb	14:51:07
3	Sc RADIAL	87066.8	87066.8	94.9 %		14:49:38
3	Al 396.153Radial†	-161.7	-8.0	-3.9003 µg/L	-3.9003 ppb	14:49:38
3	Ca 317.933Radial†	391.7	71.9	27.056 µg/L	27.056 ppb	14:49:59
3	Fe 238.204 Radial†	17.4	5.3	65.943 µg/L	65.943 ppb	14:49:59
3	K 766.490 Radial†	300.5	-88.4	-41.838 µg/L	-41.838 ppb	14:49:38
3	Mg 279.077 IEC†	9.4	0.9	11.641 µg/L	11.641 ppb	14:49:59
3	Na 589.592 Radial†	279.0	103.9	52.550 µg/L	52.550 ppb	14:49:38
3	Sr 421.552†	124.3	-4.3	-0.0258 µg/L	-0.0258 ppb	14:49:38
3	Sc 361.383	1809368.4	1809368.4	92.782 %		14:51:13
3	Y 371.029	1235393.0	1235393.0	92.655 %		14:51:13
3	Ag 328.068†	-476.8	9.6	0.0859 µg/L	0.0859 ppb	14:51:19
3	As 188.979†	-5.2	-2.3	-3.5485 µg/L	-3.5485 ppb	14:51:40
3	B 249.677†	293.4	38.9	1.8389 µg/L	1.8389 ppb	14:51:19
3	Ba 233.527†	-23.0	2.3	0.0525 µg/L	0.0525 ppb	14:51:40
3	Be 313.107†	-1235.6	227.1	0.1410 µg/L	0.1410 ppb	14:51:19
3	Cd 226.502†	-162.5	-9.8	-0.2565 µg/L	-0.2565 ppb	14:51:40
3	Co 228.616†	24.0	-8.5	-0.3874 µg/L	-0.3874 ppb	14:51:40
3	Cr 267.716†	96.6	11.8	0.2742 µg/L	0.2742 ppb	14:51:19
3	Cu 324.752†	3999.4	86.6	0.6032 µg/L	0.6032 ppb	14:51:19
3	Mn 257.610†	-472.6	230.0	0.7496 µg/L	0.7496 ppb	14:51:40
3	Mo 202.031†	9.7	-1.9	-0.1926 µg/L	-0.1926 ppb	14:51:40
3	Ni 231.604†	365.9	36.9	2.1866 µg/L	2.1866 ppb	14:51:40
3	P 214.914†	285.0	19.2	33.984 µg/L	33.984 ppb	14:51:40
3	Pb 220.353†	49.4	13.7	3.8087 µg/L	3.8087 ppb	14:51:40
3	S 181.975 Axial†	22.8	1.7	5.5395 µg/L	5.5395 ppb	14:51:40
3	Sb 206.836†	28.4	2.8	2.6321 µg/L	2.6321 ppb	14:51:40
3	Se 196.026†	15.6	-5.0	-4.7940 µg/L	-4.7940 ppb	14:51:40
3	SiO2†	2826.0	304.1	57.613 µg/L	57.613 ppb	14:51:19
3	Si 251.611†	682.5	313.9	22.361 µg/L	22.361 ppb	14:51:40
3	Sn 189.927†	10.3	16.4	6.8751 µg/L	6.8751 ppb	14:51:40
3	Ti 334.940†	-478.4	175.7	0.4308 µg/L	0.4308 ppb	14:51:19
3	Tl 190.801†	-32.8	-1.0	-1.0283 µg/L	-1.0283 ppb	14:51:40
3	U 409.014†	-69.0	-34.4	-3.2236 µg/L	-3.2236 ppb	14:51:19
3	V 292.402†	90.4	-1.7	-0.0345 µg/L	-0.0345 ppb	14:51:19
3	Zn 213.857†	1227.0	664.1	16.049 µg/L	16.049 ppb	14:51:40

Mean Data: 1202046575|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1814741.6	93.058	%	0.3287				0.35%
Sc RADIAL	87173.5	95.0	%	0.26				0.27%
Y 371.029	1239505.2	92.964	%	0.3229				0.35%
Ag 328.068†	-11.9	-0.0944	µg/L	0.20966	-0.0944	ppb	0.20966	222.07%
Al 396.153Radial†	15.7	7.6703	µg/L	12.35212	7.6703	ppb	12.35212	161.04%
As 188.979†	-1.0	-1.5970	µg/L	1.74980	-1.5970	ppb	1.74980	109.57%
B 249.677†	42.9	2.0298	µg/L	0.16586	2.0298	ppb	0.16586	8.17%
Ba 233.527†	7.6	0.1755	µg/L	0.11329	0.1755	ppb	0.11329	64.55%
Be 313.107†	192.5	0.1195	µg/L	0.03121	0.1195	ppb	0.03121	26.12%
Ca 317.933Radial†	72.6	27.312	µg/L	3.8964	27.312	ppb	3.8964	14.27%
Cd 226.502†	-11.5	-0.3000	µg/L	0.04405	-0.3000	ppb	0.04405	14.68%
Co 228.616†	-11.0	-0.4983	µg/L	0.09678	-0.4983	ppb	0.09678	19.42%
Cr 267.716†	18.2	0.4249	µg/L	0.45987	0.4249	ppb	0.45987	108.24%
Cu 324.752†	106.5	0.7397	µg/L	0.12848	0.7397	ppb	0.12848	17.37%
Fe 238.204 Radial†	5.3	66.170	µg/L	5.0976	66.170	ppb	5.0976	7.70%
K 766.490 Radial†	-41.6	-19.685	µg/L	25.2986	-19.685	ppb	25.2986	128.52%
Mg 279.077 IEC†	0.9	12.190	µg/L	32.7079	12.190	ppb	32.7079	268.32%
Mn 257.610†	257.8	0.8398	µg/L	0.07884	0.8398	ppb	0.07884	9.39%
Mo 202.031†	1.8	0.1924	µg/L	0.56873	0.1924	ppb	0.56873	295.55%
Na 589.592 Radial†	71.5	36.159	µg/L	23.6986	36.159	ppb	23.6986	65.54%

Ni 231.604†	32.1	1.8998	µg/L	0.29006	1.8998	ppb	0.29006 15.27%
P 214.914†	20.4	36.035	µg/L	3.7179	36.035	ppb	3.7179 10.32%
Pb 220.353†	14.4	4.0217	µg/L	0.87511	4.0217	ppb	0.87511 21.76%
S 181.975 Axial†	-0.2	-0.5039	µg/L	8.38205	-0.5039	ppb	8.38205 >999.9%
Sb 206.836†	0.2	0.1441	µg/L	2.15467	0.1441	ppb	2.15467 >999.9%
Se 196.026†	0.0	0.2014	µg/L	4.34002	0.2014	ppb	4.34002 >999.9%
SiO2†	279.8	52.995	µg/L	4.6118	52.995	ppb	4.6118 8.70%
Si 251.611†	321.4	22.892	µg/L	0.7090	22.892	ppb	0.7090 3.10%
Sn 189.927†	19.9	8.3696	µg/L	1.62777	8.3696	ppb	1.62777 19.45%
Sr 421.552†	0.3	0.0019	µg/L	0.04969	0.0019	ppb	0.04969 >999.9%
Ti 334.940†	173.2	0.4247	µg/L	0.02683	0.4247	ppb	0.02683 6.32%
Tl 190.801†	-2.3	-2.4067	µg/L	4.09550	-2.4067	ppb	4.09550 170.17%
U 409.014†	7.6	0.6971	µg/L	3.39653	0.6971	ppb	3.39653 487.21%
V 292.402†	8.9	0.1066	µg/L	0.17040	0.1066	ppb	0.17040 159.81%
Zn 213.857†	673.2	16.270	µg/L	0.1927	16.270	ppb	0.1927 1.18%

Sequence No.: 17
Sample ID: 1202046580|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 311
Date Collected: 3/15/2010 14:51:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046580|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Units	Sample Conc.	Units	Analysis Time
1	Sc RADIAL	89382.9	89382.9	97.4	%			14:52:21
1	Al 396.153Radial†	203126.5	208728.0	102180	µg/L	102180	ppb	14:52:21
1	Ca 317.933Radial†	273991.6	280987.3	105740	µg/L	105740	ppb	14:52:21
1	Fe 238.204 Radial†	16104.8	16523.0	205820	µg/L	205820	ppb	14:52:41
1	K 766.490 Radial†	89292.6	91278.4	43187	µg/L	43187	ppb	14:52:21
1	Mg 279.077 IEC†	3114.0	3188.3	42921	µg/L	42921	ppb	14:52:41
1	Na 589.592 Radial†	22338.7	22746.7	11505	µg/L	11505	ppb	14:52:21
1	Sr 421.552†	401430.9	412044.6	2495.5	µg/L	2495.5	ppb	14:52:21
1	Sc 361.383	1796732.1	1796732.1	92.134	%			14:53:50
1	Y 371.029	1249699.0	1249699.0	93.728	%			14:53:50
1	Ag 328.068†	35468.5	39020.0	353.88	µg/L	353.88	ppb	14:53:50
1	As 188.979†	750.1	817.6	1237.8	µg/L	1237.8	ppb	14:54:11
1	B 249.677†	34813.7	37508.4	1701.3	µg/L	1701.3	ppb	14:53:50
1	Ba 233.527†	91012.8	98809.7	2288.8	µg/L	2288.8	ppb	14:53:50
1	Be 313.107†	1364775.4	1482845.8	919.10	µg/L	919.10	ppb	14:53:50
1	Cd 226.502†	25572.2	27920.6	692.41	µg/L	692.41	ppb	14:54:11
1	Co 228.616†	22178.6	24037.6	1078.0	µg/L	1078.0	ppb	14:54:11
1	Cr 267.716†	111939.5	121403.5	2833.6	µg/L	2833.6	ppb	14:53:50
1	Cu 324.752†	297157.2	318301.8	2211.3	µg/L	2211.3	ppb	14:53:50
1	Mn 257.610†	1839577.1	1997362.3	6491.8	µg/L	6491.8	ppb	14:53:50
1	Mo 202.031†	5362.6	5808.0	617.42	µg/L	617.42	ppb	14:54:11
1	Ni 231.604†	24983.0	26758.4	1584.5	µg/L	1584.5	ppb	14:54:11
1	P 214.914†	5198.5	5354.3	9108.8	µg/L	9108.8	ppb	14:54:11
1	Pb 220.353†	3243.0	3480.3	978.17	µg/L	978.17	ppb	14:54:11
1	S 181.975 Axial†	1236.4	1319.0	4385.4	µg/L	4385.4	ppb	14:54:11
1	Sb 206.836†	1388.7	1479.4	1384.2	µg/L	1384.2	ppb	14:54:11
1	Se 196.026†	3130.0	3375.5	3999.4	µg/L	3999.4	ppb	14:54:11
1	SiO2†	511662.0	552601.1	104670	µg/L	104670	ppb	14:53:50
1	Si 251.611†	628352.3	681573.3	48552	µg/L	48552	ppb	14:53:50
1	Sn 189.927†	2711.0	2947.6	1247.7	µg/L	1247.7	ppb	14:54:11
1	Ti 334.940†	2515129.6	2730539.1	6701.4	µg/L	6701.4	ppb	14:53:50
1	Tl 190.801†	1201.5	1338.4	1484.0	µg/L	1484.0	ppb	14:54:11
1	U 409.014†	-1207.5	-1270.7	-153.58	µg/L	-153.58	ppb	14:53:50
1	V 292.402†	107182.2	116233.3	1448.5	µg/L	1448.5	ppb	14:53:50
1	Zn 213.857†	263557.3	285399.1	6880.3	µg/L	6880.3	ppb	14:53:50
2	Sc RADIAL	88679.4	88679.4	96.6	%			14:52:47
2	Al 396.153Radial†	204721.8	212033.6	103800	µg/L	103800	ppb	14:52:47
2	Ca 317.933Radial†	276126.4	285428.5	107410	µg/L	107410	ppb	14:52:47
2	Fe 238.204 Radial†	16170.6	16722.2	208300	µg/L	208300	ppb	14:53:08
2	K 766.490 Radial†	89988.7	92726.2	43872	µg/L	43872	ppb	14:52:47
2	Mg 279.077 IEC†	3129.3	3229.5	43476	µg/L	43476	ppb	14:53:08
2	Na 589.592 Radial†	22526.2	23122.8	11695	µg/L	11695	ppb	14:52:47
2	Sr 421.552†	404731.2	418730.1	2536.0	µg/L	2536.0	ppb	14:52:47
2	Sc 361.383	1793853.7	1793853.7	91.987	%			14:54:21
2	Y 371.029	1250168.3	1250168.3	93.763	%			14:54:21
2	Ag 328.068†	35905.0	39556.3	358.68	µg/L	358.68	ppb	14:54:21
2	As 188.979†	759.9	829.5	1255.9	µg/L	1255.9	ppb	14:54:42
2	B 249.677†	35051.1	37827.1	1715.4	µg/L	1715.4	ppb	14:54:21
2	Ba 233.527†	91696.1	99711.0	2309.6	µg/L	2309.6	ppb	14:54:21
2	Be 313.107†	1377851.4	1499437.8	929.39	µg/L	929.39	ppb	14:54:21
2	Cd 226.502†	25558.5	27950.3	692.89	µg/L	692.89	ppb	14:54:42
2	Co 228.616†	22176.9	24074.4	1079.6	µg/L	1079.6	ppb	14:54:42
2	Cr 267.716†	113012.3	122764.7	2865.4	µg/L	2865.4	ppb	14:54:21
2	Cu 324.752†	299972.3	321879.6	2236.2	µg/L	2236.2	ppb	14:54:21
2	Mn 257.610†	1853958.8	2016200.5	6553.1	µg/L	6553.1	ppb	14:54:21
2	Mo 202.031†	5361.8	5816.6	618.42	µg/L	618.42	ppb	14:54:42
2	Ni 231.604†	24921.3	26734.8	1583.1	µg/L	1583.1	ppb	14:54:42
2	P 214.914†	5189.5	5353.6	9103.5	µg/L	9103.5	ppb	14:54:42
2	Pb 220.353†	3242.5	3485.4	979.72	µg/L	979.72	ppb	14:54:42

2	S 181.975 Axial†	1235.1	1319.8	4388.0	µg/L	4388.0 ppb	14:54:42
2	Sb 206.836†	1386.1	1478.9	1383.4	µg/L	1383.4 ppb	14:54:42
2	Se 196.026†	3120.2	3370.3	4001.5	µg/L	4001.5 ppb	14:54:42
2	SiO2†	515099.0	557228.7	105550	µg/L	105550 ppb	14:54:21
2	Si 251.611†	632762.7	687462.3	48971	µg/L	48971 ppb	14:54:21
2	Sn 189.927†	2703.6	2944.3	1246.5	µg/L	1246.5 ppb	14:54:42
2	Ti 334.940†	2536185.7	2757809.6	6768.3	µg/L	6768.3 ppb	14:54:21
2	Tl 190.801†	1204.4	1343.7	1490.3	µg/L	1490.3 ppb	14:54:42
2	U 409.014†	-1171.1	-1233.2	-150.54	µg/L	-150.54 ppb	14:54:21
2	V 292.402†	108097.0	117414.3	1463.2	µg/L	1463.2 ppb	14:54:21
2	Zn 213.857†	265980.6	288492.5	6954.9	µg/L	6954.9 ppb	14:54:21
3	Sc RADIAL	89177.4	89177.4	97.2	%		14:53:14
3	Al 396.153Radial†	208458.5	214696.1	105100	µg/L	105100 ppb	14:53:14
3	Ca 317.933Radial†	281426.2	289286.9	108860	µg/L	108860 ppb	14:53:14
3	Fe 238.204 Radial†	16264.0	16724.9	208330	µg/L	208330 ppb	14:53:34
3	K 766.490 Radial†	91389.6	93647.8	44308	µg/L	44308 ppb	14:53:14
3	Mg 279.077 IEC†	3132.4	3214.6	43274	µg/L	43274 ppb	14:53:34
3	Na 589.592 Radial†	22934.5	23412.7	11842	µg/L	11842 ppb	14:53:14
3	Sr 421.552†	412471.5	424356.9	2570.0	µg/L	2570.0 ppb	14:53:14
3	Sc 361.383	1798328.2	1798328.2	92.216	%		14:54:52
3	Y 371.029	1249088.2	1249088.2	93.682	%		14:54:52
3	Ag 328.068†	35575.3	39101.7	354.55	µg/L	354.55 ppb	14:54:52
3	As 188.979†	722.8	787.2	1189.7	µg/L	1189.7 ppb	14:55:12
3	B 249.677†	34576.7	37217.9	1685.9	µg/L	1685.9 ppb	14:54:52
3	Ba 233.527†	89704.2	97302.9	2253.8	µg/L	2253.8 ppb	14:54:52
3	Be 313.107†	1339533.9	1454159.1	901.33	µg/L	901.33 ppb	14:54:52
3	Cd 226.502†	24307.3	26524.3	656.32	µg/L	656.32 ppb	14:55:12
3	Co 228.616†	20810.2	22532.4	1009.9	µg/L	1009.9 ppb	14:55:12
3	Cr 267.716†	109365.5	118504.4	2766.0	µg/L	2766.0 ppb	14:54:52
3	Cu 324.752†	292092.8	312523.6	2172.3	µg/L	2172.3 ppb	14:54:52
3	Mn 257.610†	1810129.7	1963657.2	6382.5	µg/L	6382.5 ppb	14:54:52
3	Mo 202.031†	5036.1	5448.8	579.82	µg/L	579.82 ppb	14:55:12
3	Ni 231.604†	23461.9	25084.8	1485.6	µg/L	1485.6 ppb	14:55:12
3	P 214.914†	4940.4	5069.4	8607.4	µg/L	8607.4 ppb	14:55:12
3	Pb 220.353†	3099.8	3321.9	934.28	µg/L	934.28 ppb	14:55:12
3	S 181.975 Axial†	1182.7	1259.6	4188.1	µg/L	4188.1 ppb	14:55:12
3	Sb 206.836†	1294.3	1375.7	1285.6	µg/L	1285.6 ppb	14:55:12
3	Se 196.026†	3005.0	3236.8	3867.7	µg/L	3867.7 ppb	14:55:12
3	SiO2†	504802.1	544669.4	103170	µg/L	103170 ppb	14:54:52
3	Si 251.611†	619990.8	671900.8	47863	µg/L	47863 ppb	14:54:52
3	Sn 189.927†	2536.0	2755.3	1167.2	µg/L	1167.2 ppb	14:55:12
3	Ti 334.940†	2462510.5	2671055.7	6555.4	µg/L	6555.4 ppb	14:54:52
3	Tl 190.801†	1161.3	1293.7	1435.6	µg/L	1435.6 ppb	14:55:12
3	U 409.014†	-1141.7	-1198.1	-147.36	µg/L	-147.36 ppb	14:54:52
3	V 292.402†	104929.3	113686.9	1415.7	µg/L	1415.7 ppb	14:54:52
3	Zn 213.857†	260321.6	281636.3	6789.6	µg/L	6789.6 ppb	14:54:52

Mean Data: 1202046580|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1796304.7	92.113	%	0.1163				0.13%
Sc RADIAL	89079.9	97.1	%	0.39				0.41%
Y 371.029	1249651.8	93.725	%	0.0406				0.04%
Ag 328.068†	39226.0	355.70	µg/L	2.601	355.70	ppb	2.601	0.73%
Al 396.153Radial†	211819.3	103700	µg/L	1464.2	103700	ppb	1464.2	1.41%
As 188.979†	811.4	1227.8	µg/L	34.21	1227.8	ppb	34.21	2.79%
B 249.677†	37517.8	1700.9	µg/L	14.74	1700.9	ppb	14.74	0.87%
Ba 233.527†	98607.9	2284.1	µg/L	28.19	2284.1	ppb	28.19	1.23%
Be 313.107†	1478814.3	916.61	µg/L	14.196	916.61	ppb	14.196	1.55%
Ca 317.933Radial†	285234.2	107340	µg/L	1562.9	107340	ppb	1562.9	1.46%
Cd 226.502†	27465.1	680.54	µg/L	20.978	680.54	ppb	20.978	3.08%
Co 228.616†	23548.1	1055.8	µg/L	39.75	1055.8	ppb	39.75	3.77%
Cr 267.716†	120890.9	2821.7	µg/L	50.79	2821.7	ppb	50.79	1.80%
Cu 324.752†	317568.3	2206.6	µg/L	32.18	2206.6	ppb	32.18	1.46%
Fe 238.204 Radial†	16656.7	207480	µg/L	1442.1	207480	ppb	1442.1	0.70%
K 766.490 Radial†	92550.8	43789	µg/L	565.1	43789	ppb	565.1	1.29%
Mg 279.077 IEC†	3210.8	43223	µg/L	280.8	43223	ppb	280.8	0.65%
Mn 257.610†	1992406.7	6475.8	µg/L	86.38	6475.8	ppb	86.38	1.33%
Mo 202.031†	5691.1	605.22	µg/L	22.005	605.22	ppb	22.005	3.64%
Na 589.592 Radial†	23094.1	11681	µg/L	168.9	11681	ppb	168.9	1.45%

Ni 231.604†	26192.6	1551.1 µg/L	56.71	1551.1 ppb	56.71	3.66%
P 214.914†	5259.1	8939.9 µg/L	287.99	8939.9 ppb	287.99	3.22%
Pb 220.353†	3429.2	964.06 µg/L	25.797	964.06 ppb	25.797	2.68%
S 181.975 Axial†	1299.5	4320.5 µg/L	114.66	4320.5 ppb	114.66	2.65%
Sb 206.836†	1444.7	1351.1 µg/L	56.70	1351.1 ppb	56.70	4.20%
Se 196.026†	3327.5	3956.2 µg/L	76.65	3956.2 ppb	76.65	1.94%
SiO2†	551499.7	104470 µg/L	1203.1	104470 ppb	1203.1	1.15%
Si 251.611†	680312.2	48462 µg/L	559.7	48462 ppb	559.7	1.15%
Sn 189.927†	2882.4	1220.5 µg/L	46.14	1220.5 ppb	46.14	3.78%
Sr 421.552†	418377.2	2533.8 µg/L	37.33	2533.8 ppb	37.33	1.47%
Ti 334.940†	2719801.4	6675.1 µg/L	108.89	6675.1 ppb	108.89	1.63%
Tl 190.801†	1325.3	1470.0 µg/L	29.91	1470.0 ppb	29.91	2.03%
U 409.014†	-1234.0	-150.49 µg/L	3.113	-150.49 ppb	3.113	2.07%
V 292.402†	115778.2	1442.5 µg/L	24.30	1442.5 ppb	24.30	1.68%
Zn 213.857†	285175.9	6874.9 µg/L	82.77	6874.9 ppb	82.77	1.20%

Sequence No.: 18
Sample ID: 247178001|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 312
Date Collected: 3/15/2010 14:55:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178001|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	91108.3	91108.3	99.3	%			14:55:52
1	Al 396.153Radial†	137046.0	138213.2	67669	µg/L	67669	ppb	14:55:52
1	Ca 317.933Radial†	34351.3	34262.2	12893	µg/L	12893	ppb	14:55:52
1	Fe 238.204 Radial†	10414.4	10477.6	130500	µg/L	130500	ppb	14:56:12
1	K 766.490 Radial†	15799.1	15509.8	7338.2	µg/L	7338.2	ppb	14:55:52
1	Mg 279.077 IEC†	797.3	794.0	10602	µg/L	10602	ppb	14:56:12
1	Na 589.592 Radial†	1751.1	1573.8	795.99	µg/L	795.99	ppb	14:55:52
1	Sr 421.552†	19040.9	19045.2	115.34	µg/L	115.34	ppb	14:55:52
1	Sc 361.383	1866176.4	1866176.4	95.695	%			14:57:18
1	Y 371.029	1386310.0	1386310.0	103.97	%			14:57:18
1	Ag 328.068†	-1697.1	-1249.9	0.4484	µg/L	0.4484	ppb	14:57:23
1	As 188.979†	21.6	26.0	22.872	µg/L	22.872	ppb	14:57:44
1	B 249.677†	1312.4	1094.1	-15.060	µg/L	-15.060	ppb	14:57:23
1	Ba 233.527†	33165.8	34684.7	802.74	µg/L	802.74	ppb	14:57:23
1	Be 313.107†	19525.7	21962.8	12.535	µg/L	12.535	ppb	14:57:23
1	Cd 226.502†	491.5	678.9	2.7569	µg/L	2.7569	ppb	14:57:23
1	Co 228.616†	431.6	416.6	12.810	µg/L	12.810	ppb	14:57:44
1	Cr 267.716†	10537.5	10919.2	254.87	µg/L	254.87	ppb	14:57:23
1	Cu 324.752†	11871.6	8181.7	80.379	µg/L	80.379	ppb	14:57:23
1	Mn 257.610†	683797.9	715295.7	2328.5	µg/L	2328.5	ppb	14:57:18
1	Mo 202.031†	62.6	53.1	10.530	µg/L	10.530	ppb	14:57:44
1	Ni 231.604†	2603.5	2363.1	141.48	µg/L	141.48	ppb	14:57:44
1	P 214.914†	645.8	386.8	590.80	µg/L	590.80	ppb	14:57:44
1	Pb 220.353†	263.2	235.5	72.889	µg/L	72.889	ppb	14:57:44
1	S 181.975 Axial†	94.9	76.3	253.64	µg/L	253.64	ppb	14:57:44
1	Sb 206.836†	23.3	-3.5	-6.3159	µg/L	-6.3159	ppb	14:57:44
1	Se 196.026†	-82.6	-108.1	297.38	µg/L	297.38	ppb	14:57:44
1	SiO2†	506895.1	526954.4	99817	µg/L	99817	ppb	14:57:18
1	Si 251.611†	621641.6	649182.3	46244	µg/L	46244	ppb	14:57:18
1	Sn 189.927†	-25.3	-21.2	-8.1799	µg/L	-8.1799	ppb	14:57:44
1	Ti 334.940†	1140806.9	1192813.7	2927.6	µg/L	2927.6	ppb	14:57:18
1	Tl 190.801†	-69.4	-38.1	12.785	µg/L	12.785	ppb	14:57:44
1	U 409.014†	-1535.4	-1564.6	-164.86	µg/L	-164.86	ppb	14:57:18
1	V 292.402†	10825.4	11213.1	125.11	µg/L	125.11	ppb	14:57:23
1	Zn 213.857†	22453.1	22804.7	544.07	µg/L	544.07	ppb	14:57:23
2	Sc RADIAL	90355.3	90355.3	98.5	%			14:56:18
2	Al 396.153Radial†	136142.9	138446.5	67784	µg/L	67784	ppb	14:56:18
2	Ca 317.933Radial†	34142.2	34338.2	12922	µg/L	12922	ppb	14:56:18
2	Fe 238.204 Radial†	10362.2	10512.1	130930	µg/L	130930	ppb	14:56:38
2	K 766.490 Radial†	15555.0	15394.5	7283.6	µg/L	7283.6	ppb	14:56:18
2	Mg 279.077 IEC†	793.3	796.7	10637	µg/L	10637	ppb	14:56:38
2	Na 589.592 Radial†	1722.3	1559.2	788.62	µg/L	788.62	ppb	14:56:18
2	Sr 421.552†	18854.5	19015.6	115.16	µg/L	115.16	ppb	14:56:18
2	Sc 361.383	1876970.1	1876970.1	96.249	%			14:57:51
2	Y 371.029	1389218.4	1389218.4	104.19	%			14:57:51
2	Ag 328.068†	-1753.1	-1297.9	0.0747	µg/L	0.0747	ppb	14:57:57
2	As 188.979†	19.1	23.2	18.551	µg/L	18.551	ppb	14:58:17
2	B 249.677†	1363.5	1139.3	-13.113	µg/L	-13.113	ppb	14:57:57
2	Ba 233.527†	33324.4	34650.2	801.94	µg/L	801.94	ppb	14:57:57
2	Be 313.107†	19569.1	21890.6	12.500	µg/L	12.500	ppb	14:57:57
2	Cd 226.502†	469.1	652.7	2.0360	µg/L	2.0360	ppb	14:57:57
2	Co 228.616†	429.6	411.9	12.650	µg/L	12.650	ppb	14:58:17
2	Cr 267.716†	10484.4	10800.7	252.10	µg/L	252.10	ppb	14:57:57
2	Cu 324.752†	11856.2	8094.3	79.864	µg/L	79.864	ppb	14:57:57
2	Mn 257.610†	681234.9	708523.7	2306.6	µg/L	2306.6	ppb	14:57:51
2	Mo 202.031†	69.2	59.6	11.228	µg/L	11.228	ppb	14:58:17
2	Ni 231.604†	2585.3	2328.6	139.44	µg/L	139.44	ppb	14:58:17
2	P 214.914†	633.8	370.5	561.84	µg/L	561.84	ppb	14:58:17
2	Pb 220.353†	260.4	231.0	71.660	µg/L	71.660	ppb	14:58:17

2	S 181.975 Axial†	98.5	79.4	263.96	µg/L	263.96 ppb	14:58:17
2	Sb 206.836†	24.0	-3.0	-5.7756	µg/L	-5.7756 ppb	14:58:17
2	Se 196.026†	-71.0	-95.6	311.28	µg/L	311.28 ppb	14:58:17
2	SiO2†	505641.9	522606.3	98993	µg/L	98993 ppb	14:57:51
2	Si 251.611†	620302.4	644055.4	45879	µg/L	45879 ppb	14:57:51
2	Sn 189.927†	-12.6	-7.8	-2.5792	µg/L	-2.5792 ppb	14:58:17
2	Ti 334.940†	1137794.2	1182828.1	2903.1	µg/L	2903.1 ppb	14:57:51
2	Tl 190.801†	-67.9	-36.2	14.574	µg/L	14.574 ppb	14:58:17
2	U 409.014†	-1609.3	-1632.2	-171.23	µg/L	-171.23 ppb	14:57:51
2	V 292.402†	10862.4	11186.6	124.71	µg/L	124.71 ppb	14:57:57
2	Zn 213.857†	22474.7	22692.3	541.33	µg/L	541.33 ppb	14:57:57
3	Sc RADIAL	89839.3	89839.3	97.9	%		14:56:43
3	Al 396.153Radial†	135478.7	138562.2	67840	µg/L	67840 ppb	14:56:43
3	Ca 317.933Radial†	33952.4	34343.5	12924	µg/L	12924 ppb	14:56:43
3	Fe 238.204 Radial†	10335.8	10545.5	131350	µg/L	131350 ppb	14:57:04
3	K 766.490 Radial†	15544.4	15474.4	7321.4	µg/L	7321.4 ppb	14:56:43
3	Mg 279.077 IEC†	785.6	793.5	10594	µg/L	10594 ppb	14:57:04
3	Na 589.592 Radial†	1694.2	1540.6	779.22	µg/L	779.22 ppb	14:56:43
3	Sr 421.552†	18754.1	19023.1	115.21	µg/L	115.21 ppb	14:56:43
3	Sc 361.383	1863761.1	1863761.1	95.572	%		14:58:25
3	Y 371.029	1374996.2	1374996.2	103.13	%		14:58:25
3	Ag 328.068†	-1707.3	-1262.9	0.3541	µg/L	0.3541 ppb	14:58:31
3	As 188.979†	14.1	18.1	10.528	µg/L	10.528 ppb	14:58:52
3	B 249.677†	1167.8	944.6	-22.714	µg/L	-22.714 ppb	14:58:31
3	Ba 233.527†	31831.3	33333.3	771.46	µg/L	771.46 ppb	14:58:31
3	Be 313.107†	18547.5	20965.8	11.971	µg/L	11.971 ppb	14:58:31
3	Cd 226.502†	453.6	639.9	1.6493	µg/L	1.6493 ppb	14:58:31
3	Co 228.616†	393.0	376.8	11.307	µg/L	11.307 ppb	14:58:52
3	Cr 267.716†	9967.2	10336.7	241.27	µg/L	241.27 ppb	14:58:31
3	Cu 324.752†	11498.3	7807.2	77.982	µg/L	77.982 ppb	14:58:31
3	Mn 257.610†	653490.8	684510.3	2228.7	µg/L	2228.7 ppb	14:58:25
3	Mo 202.031†	64.5	55.1	10.779	µg/L	10.779 ppb	14:58:52
3	Ni 231.604†	2369.4	2121.8	127.22	µg/L	127.22 ppb	14:58:52
3	P 214.914†	610.2	350.5	526.33	µg/L	526.33 ppb	14:58:52
3	Pb 220.353†	236.5	207.8	65.220	µg/L	65.220 ppb	14:58:52
3	S 181.975 Axial†	90.6	71.8	238.82	µg/L	238.82 ppb	14:58:52
3	Sb 206.836†	22.7	-4.1	-6.7672	µg/L	-6.7672 ppb	14:58:52
3	Se 196.026†	-67.5	-92.5	315.72	µg/L	315.72 ppb	14:58:52
3	SiO2†	487770.2	507629.8	96156	µg/L	96156 ppb	14:58:25
3	Si 251.611†	598508.0	625818.7	44580	µg/L	44580 ppb	14:58:25
3	Sn 189.927†	-13.7	-9.1	-3.1014	µg/L	-3.1014 ppb	14:58:52
3	Ti 334.940†	1082424.5	1133271.0	2781.4	µg/L	2781.4 ppb	14:58:25
3	Tl 190.801†	-59.0	-27.3	22.487	µg/L	22.487 ppb	14:58:52
3	U 409.014†	-1497.7	-1527.2	-161.50	µg/L	-161.50 ppb	14:58:25
3	V 292.402†	10236.5	10611.6	117.40	µg/L	117.40 ppb	14:58:31
3	Zn 213.857†	21557.1	21897.6	522.15	µg/L	522.15 ppb	14:58:31

Mean Data: 247178001|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1868969.2	95.839	%	0.3607				0.38%
Sc RADIAL	90434.3	98.5	%	0.70				0.71%
Y 371.029	1383508.2	103.76	%	0.564				0.54%
Ag 328.068†	-1270.2	0.2924	µg/L	0.19435	0.2924	ppb	0.19435	66.47%
Al 396.153Radial†	138407.3	67764	µg/L	87.0	67764	ppb	87.0	0.13%
As 188.979†	22.4	17.317	µg/L	6.2637	17.317	ppb	6.2637	36.17%
B 249.677†	1059.4	-16.962	µg/L	5.0750	-16.962	ppb	5.0750	29.92%
Ba 233.527†	34222.8	792.05	µg/L	17.834	792.05	ppb	17.834	2.25%
Be 313.107†	21606.4	12.335	µg/L	0.3159	12.335	ppb	0.3159	2.56%
Ca 317.933Radial†	34314.6	12913	µg/L	17.1	12913	ppb	17.1	0.13%
Cd 226.502†	657.2	2.1474	µg/L	0.56213	2.1474	ppb	0.56213	26.18%
Co 228.616†	401.8	12.255	µg/L	0.8255	12.255	ppb	0.8255	6.74%
Cr 267.716†	10685.5	249.41	µg/L	7.186	249.41	ppb	7.186	2.88%
Cu 324.752†	8027.7	79.408	µg/L	1.2619	79.408	ppb	1.2619	1.59%
Fe 238.204 Radial†	10511.7	130930	µg/L	422.7	130930	ppb	422.7	0.32%
K 766.490 Radial†	15459.6	7314.4	µg/L	27.94	7314.4	ppb	27.94	0.38%
Mg 279.077 IEC†	794.7	10611	µg/L	22.9	10611	ppb	22.9	0.22%
Mn 257.610†	702776.5	2287.9	µg/L	52.48	2287.9	ppb	52.48	2.29%
Mo 202.031†	55.9	10.845	µg/L	0.3536	10.845	ppb	0.3536	3.26%
Na 589.592 Radial†	1557.9	787.94	µg/L	8.408	787.94	ppb	8.408	1.07%

Ni 231.604†	2271.2	136.05	µg/L	7.715	136.05	ppb	7.715	5.67%
P 214.914†	369.3	559.66	µg/L	32.287	559.66	ppb	32.287	5.77%
Pb 220.353†	224.8	69.923	µg/L	4.1188	69.923	ppb	4.1188	5.89%
S 181.975 Axial†	75.8	252.14	µg/L	12.635	252.14	ppb	12.635	5.01%
Sb 206.836†	-3.5	-6.2862	µg/L	0.49648	-6.2862	ppb	0.49648	7.90%
Se 196.026†	-98.7	308.12	µg/L	9.567	308.12	ppb	9.567	3.11%
SiO2†	519063.5	98322	µg/L	1920.3	98322	ppb	1920.3	1.95%
Si 251.611†	639685.5	45568	µg/L	874.7	45568	ppb	874.7	1.92%
Sn 189.927†	-12.7	-4.6202	µg/L	3.09386	-4.6202	ppb	3.09386	66.96%
Sr 421.552†	19028.0	115.24	µg/L	0.093	115.24	ppb	0.093	0.08%
Ti 334.940†	1169637.6	2870.7	µg/L	78.28	2870.7	ppb	78.28	2.73%
Tl 190.801†	-33.9	16.616	µg/L	5.1633	16.616	ppb	5.1633	31.08%
U 409.014†	-1574.6	-165.87	µg/L	4.943	-165.87	ppb	4.943	2.98%
V 292.402†	11003.8	122.41	µg/L	4.340	122.41	ppb	4.340	3.55%
Zn 213.857†	22464.9	535.85	µg/L	11.941	535.85	ppb	11.941	2.23%

Sequence No.: 19
Sample ID: 1202046576|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 313
Date Collected: 3/15/2010 14:59:01
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046576|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90209.3	90209.3	98.3	%			14:59:32
1	Al 396.153Radial†	126995.4	129363.8	63337	µg/L	63337	ppb	14:59:32
1	Ca 317.933Radial†	32845.7	33075.2	12446	µg/L	12446	ppb	14:59:32
1	Fe 238.204 Radial†	9343.0	9492.2	118230	µg/L	118230	ppb	14:59:53
1	K 766.490 Radial†	14585.5	14433.7	6829.0	µg/L	6829.0	ppb	14:59:32
1	Mg 279.077 IEC†	742.3	746.2	9967.5	µg/L	9967.5	ppb	14:59:53
1	Na 589.592 Radial†	1554.2	1391.1	703.57	µg/L	703.57	ppb	14:59:32
1	Sr 421.552†	18171.3	18351.6	111.14	µg/L	111.14	ppb	14:59:32
1	Sc 361.383	1866860.8	1866860.8	95.731	%			15:00:58
1	Y 371.029	1387044.7	1387044.7	104.03	%			15:00:58
1	Ag 328.068†	-1613.4	-1161.9	0.1777	µg/L	0.1777	ppb	15:01:04
1	As 188.979†	20.5	24.8	22.602	µg/L	22.602	ppb	15:01:24
1	B 249.677†	1202.9	979.2	-14.240	µg/L	-14.240	ppb	15:01:04
1	Ba 233.527†	32314.7	33783.0	781.86	µg/L	781.86	ppb	15:01:04
1	Be 313.107†	18226.5	20598.2	11.780	µg/L	11.780	ppb	15:01:04
1	Cd 226.502†	421.4	605.5	2.2489	µg/L	2.2489	ppb	15:01:24
1	Co 228.616†	391.9	374.9	11.424	µg/L	11.424	ppb	15:01:24
1	Cr 267.716†	9088.1	9401.1	219.44	µg/L	219.44	ppb	15:01:04
1	Cu 324.752†	11744.3	8044.2	77.133	µg/L	77.133	ppb	15:01:04
1	Mn 257.610†	670225.9	700856.5	2281.0	µg/L	2281.0	ppb	15:00:58
1	Mo 202.031†	57.6	47.8	9.5122	µg/L	9.5122	ppb	15:01:24
1	Ni 231.604†	2325.4	2071.7	124.08	µg/L	124.08	ppb	15:01:24
1	P 214.914†	623.5	363.3	558.03	µg/L	558.03	ppb	15:01:24
1	Pb 220.353†	266.1	238.4	73.207	µg/L	73.207	ppb	15:01:24
1	S 181.975 Axial†	99.6	81.1	269.67	µg/L	269.67	ppb	15:01:24
1	Sb 206.836†	17.1	-10.0	-12.145	µg/L	-12.145	ppb	15:01:24
1	Se 196.026†	-76.5	-101.7	265.24	µg/L	265.24	ppb	15:01:24
1	SiO2†	501997.0	521643.7	98811	µg/L	98811	ppb	15:00:58
1	Si 251.611†	615653.2	642688.8	45782	µg/L	45782	ppb	15:00:58
1	Sn 189.927†	-23.4	-19.2	-7.3333	µg/L	-7.3333	ppb	15:01:24
1	Ti 334.940†	1046558.6	1093925.0	2684.9	µg/L	2684.9	ppb	15:00:58
1	Tl 190.801†	-60.0	-28.3	18.924	µg/L	18.924	ppb	15:01:24
1	U 409.014†	-1950.7	-1997.8	-203.55	µg/L	-203.55	ppb	15:00:58
1	V 292.402†	10050.3	10399.3	116.29	µg/L	116.29	ppb	15:01:04
1	Zn 213.857†	20583.4	20843.0	497.32	µg/L	497.32	ppb	15:01:04
2	Sc RADIAL	90618.7	90618.7	98.7	%			14:59:58
2	Al 396.153Radial†	128258.8	130059.6	63677	µg/L	63677	ppb	14:59:58
2	Ca 317.933Radial†	33203.3	33286.4	12526	µg/L	12526	ppb	14:59:58
2	Fe 238.204 Radial†	9387.7	9494.5	118260	µg/L	118260	ppb	15:00:19
2	K 766.490 Radial†	14637.1	14418.9	6822.0	µg/L	6822.0	ppb	14:59:58
2	Mg 279.077 IEC†	744.2	744.6	9946.6	µg/L	9946.6	ppb	15:00:19
2	Na 589.592 Radial†	1651.1	1482.0	749.59	µg/L	749.59	ppb	14:59:58
2	Sr 421.552†	18409.2	18509.1	112.10	µg/L	112.10	ppb	14:59:58
2	Sc 361.383	1862349.9	1862349.9	95.499	%			15:01:32
2	Y 371.029	1384358.0	1384358.0	103.83	%			15:01:32
2	Ag 328.068†	-1578.2	-1129.0	0.4592	µg/L	0.4592	ppb	15:01:38
2	As 188.979†	18.8	23.1	19.953	µg/L	19.953	ppb	15:01:58
2	B 249.677†	1169.3	947.1	-15.797	µg/L	-15.797	ppb	15:01:38
2	Ba 233.527†	32299.9	33849.2	783.39	µg/L	783.39	ppb	15:01:38
2	Be 313.107†	18361.2	20785.3	11.894	µg/L	11.894	ppb	15:01:38
2	Cd 226.502†	411.6	596.3	2.0097	µg/L	2.0097	ppb	15:01:58
2	Co 228.616†	392.3	376.4	11.482	µg/L	11.482	ppb	15:01:58
2	Cr 267.716†	9154.7	9493.8	221.60	µg/L	221.60	ppb	15:01:38
2	Cu 324.752†	11736.1	8065.3	77.283	µg/L	77.283	ppb	15:01:38
2	Mn 257.610†	668958.8	701225.4	2282.2	µg/L	2282.2	ppb	15:01:32
2	Mo 202.031†	55.8	46.1	9.3342	µg/L	9.3342	ppb	15:01:58
2	Ni 231.604†	2307.1	2058.4	123.30	µg/L	123.30	ppb	15:01:58
2	P 214.914†	625.9	367.4	565.33	µg/L	565.33	ppb	15:01:58
2	Pb 220.353†	256.2	228.7	70.543	µg/L	70.543	ppb	15:01:58

2	S 181.975 Axial†	98.0	79.7	264.96	µg/L	264.96 ppb	15:01:58
2	Sb 206.836†	26.7	0.1	-2.5030	µg/L	-2.5030 ppb	15:01:58
2	Se 196.026†	-74.5	-99.9	267.21	µg/L	267.21 ppb	15:01:58
2	SiO2†	500857.7	521720.8	98825	µg/L	98825 ppb	15:01:32
2	Si 251.611†	614224.5	642750.4	45786	µg/L	45786 ppb	15:01:32
2	Sn 189.927†	-20.5	-16.2	-6.1002	µg/L	-6.1002 ppb	15:01:58
2	Ti 334.940†	1045553.9	1095520.9	2688.8	µg/L	2688.8 ppb	15:01:32
2	Tl 190.801†	-61.8	-30.4	16.774	µg/L	16.774 ppb	15:01:58
2	U 409.014†	-1896.1	-1945.5	-198.68	µg/L	-198.68 ppb	15:01:32
2	V 292.402†	10061.8	10436.8	116.77	µg/L	116.77 ppb	15:01:38
2	Zn 213.857†	20645.7	20960.4	500.16	µg/L	500.16 ppb	15:01:38
3	Sc RADIAL	90670.6	90670.6	98.8	%		15:00:24
3	Al 396.153Radial†	128168.6	129893.9	63596	µg/L	63596 ppb	15:00:24
3	Ca 317.933Radial†	33124.4	33187.4	12489	µg/L	12489 ppb	15:00:24
3	Fe 238.204 Radial†	9378.5	9479.7	118070	µg/L	118070 ppb	15:00:44
3	K 766.490 Radial†	14593.8	14366.6	6797.3	µg/L	6797.3 ppb	15:00:24
3	Mg 279.077 IEC†	742.4	742.3	9915.9	µg/L	9915.9 ppb	15:00:44
3	Na 589.592 Radial†	1665.9	1496.1	756.68	µg/L	756.68 ppb	15:00:24
3	Sr 421.552†	18304.2	18392.1	111.39	µg/L	111.39 ppb	15:00:24
3	Sc 361.383	1858508.9	1858508.9	95.302	%		15:02:06
3	Y 371.029	1376244.0	1376244.0	103.22	%		15:02:06
3	Ag 328.068†	-1529.9	-1081.8	0.7856	µg/L	0.7856 ppb	15:02:12
3	As 188.979†	15.9	20.1	15.298	µg/L	15.298 ppb	15:02:32
3	B 249.677†	1077.7	853.5	-20.226	µg/L	-20.226 ppb	15:02:12
3	Ba 233.527†	30532.6	32064.7	742.09	µg/L	742.09 ppb	15:02:12
3	Be 313.107†	16902.4	19294.4	11.017	µg/L	11.017 ppb	15:02:12
3	Cd 226.502†	360.0	543.1	0.6565	µg/L	0.6565 ppb	15:02:32
3	Co 228.616†	353.5	336.5	9.9415	µg/L	9.9415 ppb	15:02:32
3	Cr 267.716†	8495.8	8822.3	205.93	µg/L	205.93 ppb	15:02:12
3	Cu 324.752†	11311.6	7645.2	74.381	µg/L	74.381 ppb	15:02:12
3	Mn 257.610†	639233.9	671483.0	2185.6	µg/L	2185.6 ppb	15:02:06
3	Mo 202.031†	52.8	43.0	9.0006	µg/L	9.0006 ppb	15:02:32
3	Ni 231.604†	2093.3	1839.0	110.32	µg/L	110.32 ppb	15:02:32
3	P 214.914†	598.4	339.9	517.22	µg/L	517.22 ppb	15:02:32
3	Pb 220.353†	240.6	212.9	66.130	µg/L	66.130 ppb	15:02:32
3	S 181.975 Axial†	98.4	80.3	267.07	µg/L	267.07 ppb	15:02:32
3	Sb 206.836†	19.4	-7.5	-9.5723	µg/L	-9.5723 ppb	15:02:32
3	Se 196.026†	-62.5	-87.4	279.18	µg/L	279.18 ppb	15:02:32
3	SiO2†	483280.8	504361.4	95537	µg/L	95537 ppb	15:02:06
3	Si 251.611†	592677.0	621470.0	44270	µg/L	44270 ppb	15:02:06
3	Sn 189.927†	-15.6	-11.2	-3.9770	µg/L	-3.9770 ppb	15:02:32
3	Ti 334.940†	993087.5	1042731.1	2559.2	µg/L	2559.2 ppb	15:02:06
3	Tl 190.801†	-59.2	-27.7	18.012	µg/L	18.012 ppb	15:02:32
3	U 409.014†	-1875.3	-1927.8	-197.00	µg/L	-197.00 ppb	15:02:06
3	V 292.402†	9387.8	9751.3	108.13	µg/L	108.13 ppb	15:02:12
3	Zn 213.857†	19567.8	19874.1	473.95	µg/L	473.95 ppb	15:02:12

Mean Data: 1202046576|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1862573.2	95.511	%	0.2144				0.22%
Sc RADIAL	90499.6	98.6	%	0.28				0.28%
Y 371.029	1382548.9	103.69	%	0.422				0.41%
Ag 328.068†	-1124.2	0.4742	µg/L	0.30424	0.4742	ppb	0.30424	64.16%
Al 396.153Radial†	129772.4	63537	µg/L	178.0	63537	ppb	178.0	0.28%
As 188.979†	22.7	19.284	µg/L	3.6978	19.284	ppb	3.6978	19.17%
B 249.677†	926.6	-16.754	µg/L	3.1053	-16.754	ppb	3.1053	18.53%
Ba 233.527†	33232.3	769.11	µg/L	23.416	769.11	ppb	23.416	3.04%
Be 313.107†	20226.0	11.564	µg/L	0.4769	11.564	ppb	0.4769	4.12%
Ca 317.933Radial†	33183.0	12487	µg/L	39.8	12487	ppb	39.8	0.32%
Cd 226.502†	581.6	1.6384	µg/L	0.85871	1.6384	ppb	0.85871	52.41%
Co 228.616†	362.6	10.949	µg/L	0.8729	10.949	ppb	0.8729	7.97%
Cr 267.716†	9239.0	215.66	µg/L	8.494	215.66	ppb	8.494	3.94%
Cu 324.752†	7918.2	76.266	µg/L	1.6339	76.266	ppb	1.6339	2.14%
Fe 238.204 Radial†	9488.8	118180	µg/L	98.9	118180	ppb	98.9	0.08%
K 766.490 Radial†	14406.4	6816.1	µg/L	16.67	6816.1	ppb	16.67	0.24%
Mg 279.077 IEC†	744.4	9943.3	µg/L	25.96	9943.3	ppb	25.96	0.26%
Mn 257.610†	691188.3	2249.6	µg/L	55.39	2249.6	ppb	55.39	2.46%
Mo 202.031†	45.6	9.2823	µg/L	0.25968	9.2823	ppb	0.25968	2.80%
Na 589.592 Radial†	1456.4	736.62	µg/L	28.835	736.62	ppb	28.835	3.91%

Ni 231.604†	1989.7	119.23	µg/L	7.732	119.23	ppb	7.732	6.48%
P 214.914†	356.9	546.86	µg/L	25.923	546.86	ppb	25.923	4.74%
Pb 220.353†	226.7	69.960	µg/L	3.5743	69.960	ppb	3.5743	5.11%
S 181.975 Axial†	80.4	267.23	µg/L	2.358	267.23	ppb	2.358	0.88%
Sb 206.836†	-5.8	-8.0735	µg/L	4.99279	-8.0735	ppb	4.99279	61.84%
Se 196.026†	-96.3	270.55	µg/L	7.546	270.55	ppb	7.546	2.79%
SiO2†	515908.6	97724	µg/L	1894.3	97724	ppb	1894.3	1.94%
Si 251.611†	635636.4	45280	µg/L	873.9	45280	ppb	873.9	1.93%
Sn 189.927†	-15.5	-5.8035	µg/L	1.69775	-5.8035	ppb	1.69775	29.25%
Sr 421.552†	18417.6	111.54	µg/L	0.495	111.54	ppb	0.495	0.44%
Ti 334.940†	1077392.3	2644.3	µg/L	73.71	2644.3	ppb	73.71	2.79%
Tl 190.801†	-28.8	17.903	µg/L	1.0794	17.903	ppb	1.0794	6.03%
U 409.014†	-1957.1	-199.74	µg/L	3.402	-199.74	ppb	3.402	1.70%
V 292.402†	10195.8	113.73	µg/L	4.859	113.73	ppb	4.859	4.27%
Zn 213.857†	20559.2	490.48	µg/L	14.379	490.48	ppb	14.379	2.93%

Sequence No.: 20
Sample ID: 1202046578|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 314
Date Collected: 3/15/2010 15:02:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046578|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	91207.2	91207.2	99.4	%			15:03:12
1	Al 396.153Radial†	192725.2	194090.2	95016	µg/L	95016	ppb	15:03:12
1	Ca 317.933Radial†	36481.6	36368.2	13686	µg/L	13686	ppb	15:03:32
1	Fe 238.204 Radial†	9657.1	9704.3	120880	µg/L	120880	ppb	15:03:32
1	K 766.490 Radial†	28913.9	28689.1	13574	µg/L	13574	ppb	15:03:12
1	Mg 279.077 IEC†	1206.5	1205.0	16180	µg/L	16180	ppb	15:03:32
1	Na 589.592 Radial†	11672.9	11555.6	5844.6	µg/L	5844.6	ppb	15:03:12
1	Sr 421.552†	97562.8	98036.3	593.74	µg/L	593.74	ppb	15:03:12
1	Sc 361.383	1875635.5	1875635.5	96.181	%			15:04:38
1	Y 371.029	1377942.9	1377942.9	103.35	%			15:04:38
1	Ag 328.068†	57979.3	60805.2	525.32	µg/L	525.32	ppb	15:04:44
1	As 188.979†	339.9	356.8	539.84	µg/L	539.84	ppb	15:05:05
1	B 249.677†	11662.2	11848.0	507.98	µg/L	507.98	ppb	15:04:44
1	Ba 233.527†	43426.9	45178.5	1046.5	µg/L	1046.5	ppb	15:04:44
1	Be 313.107†	843830.8	878899.6	544.83	µg/L	544.83	ppb	15:04:38
1	Cd 226.502†	20053.9	21015.6	524.45	µg/L	524.45	ppb	15:04:44
1	Co 228.616†	11159.1	11567.9	517.78	µg/L	517.78	ppb	15:05:05
1	Cr 267.716†	29974.1	31072.0	725.41	µg/L	725.41	ppb	15:04:44
1	Cu 324.752†	88830.8	88134.4	624.30	µg/L	624.30	ppb	15:04:44
1	Mn 257.610†	851985.3	886558.5	2883.4	µg/L	2883.4	ppb	15:04:38
1	Mo 202.031†	4782.2	4959.8	525.17	µg/L	525.17	ppb	15:05:05
1	Ni 231.604†	10497.7	10557.2	625.54	µg/L	625.54	ppb	15:05:05
1	P 214.914†	941.2	690.7	1093.4	µg/L	1093.4	ppb	15:05:05
1	Pb 220.353†	2088.6	2132.0	602.74	µg/L	602.74	ppb	15:05:05
1	S 181.975 Axial†	1609.5	1650.5	5487.6	µg/L	5487.6	ppb	15:05:05
1	Sb 206.836†	463.1	453.6	431.77	µg/L	431.77	ppb	15:05:05
1	Se 196.026†	448.2	444.2	816.78	µg/L	816.78	ppb	15:05:05
1	SiO2†	457990.7	473436.6	89679	µg/L	89679	ppb	15:04:38
1	Si 251.611†	561758.8	583645.5	41576	µg/L	41576	ppb	15:04:38
1	Sn 189.927†	1197.4	1250.2	526.02	µg/L	526.02	ppb	15:05:05
1	Ti 334.940†	1491414.5	1551332.5	3807.3	µg/L	3807.3	ppb	15:04:38
1	Tl 190.801†	410.9	461.6	541.76	µg/L	541.76	ppb	15:05:05
1	U 409.014†	3879.4	4073.3	362.31	µg/L	362.31	ppb	15:04:44
1	V 292.402†	49751.9	51628.4	640.92	µg/L	640.92	ppb	15:04:44
1	Zn 213.857†	40629.0	41584.2	995.41	µg/L	995.41	ppb	15:04:44
2	Sc RADIAL	90878.1	90878.1	99.0	%			15:03:38
2	Al 396.153Radial†	192366.0	194429.7	95183	µg/L	95183	ppb	15:03:38
2	Ca 317.933Radial†	36804.2	36827.0	13858	µg/L	13858	ppb	15:03:58
2	Fe 238.204 Radial†	9742.4	9825.6	122390	µg/L	122390	ppb	15:03:58
2	K 766.490 Radial†	28909.8	28790.4	13622	µg/L	13622	ppb	15:03:38
2	Mg 279.077 IEC†	1219.0	1222.0	16409	µg/L	16409	ppb	15:03:58
2	Na 589.592 Radial†	11677.7	11603.0	5868.6	µg/L	5868.6	ppb	15:03:38
2	Sr 421.552†	97585.6	98414.8	596.03	µg/L	596.03	ppb	15:03:38
2	Sc 361.383	1874936.5	1874936.5	96.145	%			15:05:12
2	Y 371.029	1375153.6	1375153.6	103.14	%			15:05:12
2	Ag 328.068†	58245.3	61104.4	527.97	µg/L	527.97	ppb	15:05:18
2	As 188.979†	343.1	360.2	544.97	µg/L	544.97	ppb	15:05:38
2	B 249.677†	11703.0	11895.0	509.45	µg/L	509.45	ppb	15:05:18
2	Ba 233.527†	43517.1	45289.2	1049.0	µg/L	1049.0	ppb	15:05:18
2	Be 313.107†	843829.0	879224.8	545.03	µg/L	545.03	ppb	15:05:12
2	Cd 226.502†	20131.6	21104.2	526.54	µg/L	526.54	ppb	15:05:18
2	Co 228.616†	11086.4	11496.5	514.52	µg/L	514.52	ppb	15:05:38
2	Cr 267.716†	30069.0	31182.4	727.99	µg/L	727.99	ppb	15:05:18
2	Cu 324.752†	89025.9	88371.9	626.20	µg/L	626.20	ppb	15:05:18
2	Mn 257.610†	852421.8	887342.8	2886.0	µg/L	2886.0	ppb	15:05:12
2	Mo 202.031†	4750.7	4928.8	521.97	µg/L	521.97	ppb	15:05:38
2	Ni 231.604†	10398.9	10458.5	619.72	µg/L	619.72	ppb	15:05:38
2	P 214.914†	939.2	688.9	1088.9	µg/L	1088.9	ppb	15:05:38
2	Pb 220.353†	2091.8	2136.1	603.92	µg/L	603.92	ppb	15:05:38

2	S 181.975 Axial†	1611.8	1653.5	5497.6 µg/L	5497.6 ppb	15:05:38
2	Sb 206.836†	468.6	459.5	437.32 µg/L	437.32 ppb	15:05:38
2	Se 196.026†	450.2	446.4	823.67 µg/L	823.67 ppb	15:05:38
2	SiO2†	458050.6	473676.4	89725 µg/L	89725 ppb	15:05:12
2	Si 251.611†	562163.5	584284.2	41621 µg/L	41621 ppb	15:05:12
2	Sn 189.927†	1186.2	1239.0	521.34 µg/L	521.34 ppb	15:05:38
2	Ti 334.940†	1493344.6	1553918.1	3813.6 µg/L	3813.6 ppb	15:05:12
2	Tl 190.801†	406.8	457.5	537.79 µg/L	537.79 ppb	15:05:38
2	U 409.014†	3921.6	4118.7	366.33 µg/L	366.33 ppb	15:05:18
2	V 292.402†	49907.3	51809.4	642.99 µg/L	642.99 ppb	15:05:18
2	Zn 213.857†	40758.9	41735.1	999.00 µg/L	999.00 ppb	15:05:18
3	Sc RADIAL	91327.0	91327.0	99.5 %		15:04:04
3	Al 396.153Radial†	193571.8	194686.4	95309 µg/L	95309 ppb	15:04:04
3	Ca 317.933Radial†	36727.6	36567.3	13761 µg/L	13761 ppb	15:04:24
3	Fe 238.204 Radial†	9697.8	9732.4	121230 µg/L	121230 ppb	15:04:24
3	K 766.490 Radial†	29112.2	28850.2	13650 µg/L	13650 ppb	15:04:04
3	Mg 279.077 IEC†	1212.0	1208.9	16232 µg/L	16232 ppb	15:04:24
3	Na 589.592 Radial†	11734.5	11602.1	5868.1 µg/L	5868.1 ppb	15:04:04
3	Sr 421.552†	98166.6	98514.1	596.63 µg/L	596.63 ppb	15:04:04
3	Sc 361.383	1860909.9	1860909.9	95.425 %		15:05:46
3	Y 371.029	1362706.1	1362706.1	102.20 %		15:05:46
3	Ag 328.068†	56552.0	59786.5	516.55 µg/L	516.55 ppb	15:05:52
3	As 188.979†	316.2	334.7	505.39 µg/L	505.39 ppb	15:06:12
3	B 249.677†	11197.5	11456.9	488.92 µg/L	488.92 ppb	15:05:52
3	Ba 233.527†	41249.0	43253.5	1001.9 µg/L	1001.9 ppb	15:05:52
3	Be 313.107†	806554.3	846778.5	524.92 µg/L	524.92 ppb	15:05:46
3	Cd 226.502†	19228.6	20315.7	506.46 µg/L	506.46 ppb	15:05:52
3	Co 228.616†	10121.4	10572.1	472.83 µg/L	472.83 ppb	15:06:12
3	Cr 267.716†	28097.6	29352.3	685.26 µg/L	685.26 ppb	15:05:52
3	Cu 324.752†	84317.8	84135.9	597.07 µg/L	597.07 ppb	15:05:52
3	Mn 257.610†	815340.4	855166.4	2781.6 µg/L	2781.6 ppb	15:05:46
3	Mo 202.031†	4358.5	4555.1	482.70 µg/L	482.70 ppb	15:06:12
3	Ni 231.604†	9510.5	9609.0	569.50 µg/L	569.50 ppb	15:06:12
3	P 214.914†	882.3	636.6	999.96 µg/L	999.96 ppb	15:06:12
3	Pb 220.353†	1945.0	1998.7	565.60 µg/L	565.60 ppb	15:06:12
3	S 181.975 Axial†	1514.0	1563.6	5198.8 µg/L	5198.8 ppb	15:06:12
3	Sb 206.836†	429.8	422.6	402.00 µg/L	402.00 ppb	15:06:12
3	Se 196.026†	435.8	434.9	808.59 µg/L	808.59 ppb	15:06:12
3	SiO2†	439960.9	458310.5	86814 µg/L	86814 ppb	15:05:46
3	Si 251.611†	540276.7	565755.3	40302 µg/L	40302 ppb	15:05:46
3	Sn 189.927†	1084.2	1141.4	480.31 µg/L	480.31 ppb	15:06:12
3	Ti 334.940†	1423306.3	1492229.6	3662.2 µg/L	3662.2 ppb	15:05:46
3	Tl 190.801†	378.7	431.2	508.63 µg/L	508.63 ppb	15:06:12
3	U 409.014†	3655.9	3871.0	343.39 µg/L	343.39 ppb	15:05:52
3	V 292.402†	46796.1	48940.3	606.58 µg/L	606.58 ppb	15:05:52
3	Zn 213.857†	38728.6	39927.0	955.60 µg/L	955.60 ppb	15:05:52

Mean Data: 1202046578|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1870494.0	95.917	%	0.4260				0.44%
Sc RADIAL	91137.4	99.3	%	0.25				0.26%
Y 371.029	1371934.2	102.90	%	0.608				0.59%
Ag 328.068†	60565.4	523.28	µg/L	5.977	523.28	ppb	5.977	1.14%
Al 396.153Radial†	194402.1	95169	µg/L	146.9	95169	ppb	146.9	0.15%
As 188.979†	350.6	530.07	µg/L	21.525	530.07	ppb	21.525	4.06%
B 249.677†	11733.3	502.12	µg/L	11.452	502.12	ppb	11.452	2.28%
Ba 233.527†	44573.8	1032.4	µg/L	26.52	1032.4	ppb	26.52	2.57%
Be 313.107†	868301.0	538.26	µg/L	11.553	538.26	ppb	11.553	2.15%
Ca 317.933Radial†	36587.5	13768	µg/L	86.6	13768	ppb	86.6	0.63%
Cd 226.502†	20811.8	519.15	µg/L	11.042	519.15	ppb	11.042	2.13%
Co 228.616†	11212.2	501.71	µg/L	25.064	501.71	ppb	25.064	5.00%
Cr 267.716†	30535.6	712.89	µg/L	23.958	712.89	ppb	23.958	3.36%
Cu 324.752†	86880.8	615.86	µg/L	16.297	615.86	ppb	16.297	2.65%
Fe 238.204 Radial†	9754.1	121500	µg/L	791.3	121500	ppb	791.3	0.65%
K 766.490 Radial†	28776.6	13615	µg/L	38.5	13615	ppb	38.5	0.28%
Mg 279.077 IEC†	1212.0	16274	µg/L	119.9	16274	ppb	119.9	0.74%
Mn 257.610†	876355.9	2850.3	µg/L	59.58	2850.3	ppb	59.58	2.09%
Mo 202.031†	4814.6	509.95	µg/L	23.648	509.95	ppb	23.648	4.64%
Na 589.592 Radial†	11586.9	5860.4	µg/L	13.71	5860.4	ppb	13.71	0.23%

Ni 231.604†	10208.2	604.92 µg/L	30.811	604.92 ppb	30.811	5.09%
P 214.914†	672.1	1060.8 µg/L	52.70	1060.8 ppb	52.70	4.97%
Pb 220.353†	2088.9	590.75 µg/L	21.795	590.75 ppb	21.795	3.69%
S 181.975 Axial†	1622.5	5394.7 µg/L	169.74	5394.7 ppb	169.74	3.15%
Sb 206.836†	445.2	423.70 µg/L	18.994	423.70 ppb	18.994	4.48%
Se 196.026†	441.8	816.35 µg/L	7.551	816.35 ppb	7.551	0.92%
SiO2†	468474.5	88739 µg/L	1667.5	88739 ppb	1667.5	1.88%
Si 251.611†	577895.0	41166 µg/L	749.3	41166 ppb	749.3	1.82%
Sn 189.927†	1210.2	509.22 µg/L	25.147	509.22 ppb	25.147	4.94%
Sr 421.552†	98321.7	595.47 µg/L	1.527	595.47 ppb	1.527	0.26%
Ti 334.940†	1532493.4	3761.0 µg/L	85.66	3761.0 ppb	85.66	2.28%
Tl 190.801†	450.1	529.39 µg/L	18.088	529.39 ppb	18.088	3.42%
U 409.014†	4021.0	357.34 µg/L	12.250	357.34 ppb	12.250	3.43%
V 292.402†	50792.7	630.16 µg/L	20.449	630.16 ppb	20.449	3.25%
Zn 213.857†	41082.1	983.34 µg/L	24.088	983.34 ppb	24.088	2.45%

Sequence No.: 21
Sample ID: 1202046579|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 315
Date Collected: 3/15/2010 15:06:22
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046579|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90804.7	90804.7	98.9	%			15:06:53
1	Al 396.153Radial†	268332.5	271365.9	132850	µg/L	132850	ppb	15:06:53
1	Ca 317.933Radial†	49371.4	49558.7	18649	µg/L	18649	ppb	15:06:53
1	Fe 238.204 Radial†	12594.8	12716.5	158400	µg/L	158400	ppb	15:07:13
1	K 766.490 Radial†	35508.3	35483.1	16788	µg/L	16788	ppb	15:06:53
1	Mg 279.077 IEC†	1576.5	1584.3	21272	µg/L	21272	ppb	15:07:13
1	Na 589.592 Radial†	12038.6	11977.3	6057.9	µg/L	6057.9	ppb	15:06:53
1	Sr 421.552†	110738.9	111788.4	677.03	µg/L	677.03	ppb	15:06:53
1	Sc 361.383	1868984.2	1868984.2	95.839	%			15:08:19
1	Y 371.029	1409640.8	1409640.8	105.72	%			15:08:19
1	Ag 328.068†	58347.4	61403.9	533.69	µg/L	533.69	ppb	15:08:25
1	As 188.979†	359.3	378.3	568.17	µg/L	568.17	ppb	15:08:46
1	B 249.677†	12017.4	12261.7	508.51	µg/L	508.51	ppb	15:08:25
1	Ba 233.527†	125056.8	130512.8	3020.9	µg/L	3020.9	ppb	15:08:25
1	Be 313.107†	859818.5	898703.6	556.90	µg/L	556.90	ppb	15:08:19
1	Cd 226.502†	20396.9	21447.7	531.34	µg/L	531.34	ppb	15:08:25
1	Co 228.616†	11482.9	11946.9	533.72	µg/L	533.72	ppb	15:08:46
1	Cr 267.716†	35199.5	36635.2	855.26	µg/L	855.26	ppb	15:08:25
1	Cu 324.752†	93826.2	93675.4	669.17	µg/L	669.17	ppb	15:08:25
1	Mn 257.610†	1093465.8	1141674.5	3713.3	µg/L	3713.3	ppb	15:08:19
1	Mo 202.031†	4862.6	5061.3	537.25	µg/L	537.25	ppb	15:08:46
1	Ni 231.604†	11616.3	11763.1	697.35	µg/L	697.35	ppb	15:08:46
1	P 214.914†	1048.9	806.5	1274.6	µg/L	1274.6	ppb	15:08:46
1	Pb 220.353†	2265.7	2324.5	659.95	µg/L	659.95	ppb	15:08:46
1	S 181.975 Axial†	1814.6	1870.4	6218.8	µg/L	6218.8	ppb	15:08:46
1	Sb 206.836†	414.3	404.4	383.62	µg/L	383.62	ppb	15:08:46
1	Se 196.026†	420.2	416.7	904.23	µg/L	904.23	ppb	15:08:46
1	SiO2†	506026.3	525252.1	99494	µg/L	99494	ppb	15:08:19
1	Si 251.611†	621197.2	647742.8	46142	µg/L	46142	ppb	15:08:19
1	Sn 189.927†	1214.8	1272.7	535.83	µg/L	535.83	ppb	15:08:46
1	Ti 334.940†	1725667.3	1801273.0	4420.5	µg/L	4420.5	ppb	15:08:19
1	Tl 190.801†	418.1	470.7	565.14	µg/L	565.14	ppb	15:08:46
1	U 409.014†	2071.0	2200.8	182.13	µg/L	182.13	ppb	15:08:25
1	V 292.402†	54731.6	57008.4	704.10	µg/L	704.10	ppb	15:08:25
1	Zn 213.857†	47008.0	48390.4	1157.6	µg/L	1157.6	ppb	15:08:25
2	Sc RADIAL	90961.7	90961.7	99.1	%			15:07:19
2	Al 396.153Radial†	270515.2	273100.1	133700	µg/L	133700	ppb	15:07:19
2	Ca 317.933Radial†	49804.8	49909.9	18781	µg/L	18781	ppb	15:07:19
2	Fe 238.204 Radial†	12600.8	12700.6	158200	µg/L	158200	ppb	15:07:39
2	K 766.490 Radial†	35752.0	35667.0	16875	µg/L	16875	ppb	15:07:19
2	Mg 279.077 IEC†	1577.0	1582.1	21242	µg/L	21242	ppb	15:07:39
2	Na 589.592 Radial†	12191.6	12110.6	6125.3	µg/L	6125.3	ppb	15:07:19
2	Sr 421.552†	111741.2	112606.5	681.98	µg/L	681.98	ppb	15:07:19
2	Sc 361.383	1880487.7	1880487.7	96.429	%			15:08:53
2	Y 371.029	1417313.9	1417313.9	106.30	%			15:08:53
2	Ag 328.068†	58113.5	60788.9	528.46	µg/L	528.46	ppb	15:08:59
2	As 188.979†	354.7	371.2	557.07	µg/L	557.07	ppb	15:09:20
2	B 249.677†	12011.3	12178.8	504.61	µg/L	504.61	ppb	15:08:59
2	Ba 233.527†	125144.4	129805.4	3004.5	µg/L	3004.5	ppb	15:08:59
2	Be 313.107†	863292.5	896818.1	555.73	µg/L	555.73	ppb	15:08:53
2	Cd 226.502†	20329.3	21247.4	526.23	µg/L	526.23	ppb	15:08:59
2	Co 228.616†	11361.2	11747.4	524.66	µg/L	524.66	ppb	15:09:20
2	Cr 267.716†	34948.5	36150.2	843.94	µg/L	843.94	ppb	15:08:59
2	Cu 324.752†	93824.0	93074.3	665.03	µg/L	665.03	ppb	15:08:59
2	Mn 257.610†	1100524.1	1142014.8	3714.4	µg/L	3714.4	ppb	15:08:53
2	Mo 202.031†	4812.0	4977.9	528.49	µg/L	528.49	ppb	15:09:20
2	Ni 231.604†	11512.9	11581.8	686.63	µg/L	686.63	ppb	15:09:20
2	P 214.914†	1051.9	802.9	1269.1	µg/L	1269.1	ppb	15:09:20
2	Pb 220.353†	2222.0	2264.7	643.34	µg/L	643.34	ppb	15:09:20

2	S 181.975 Axial†	1798.5	1842.2	6124.9 µg/L	6124.9 ppb	15:09:20
2	Sb 206.836†	409.3	396.6	376.17 µg/L	376.17 ppb	15:09:20
2	Se 196.026†	435.9	430.2	917.21 µg/L	917.21 ppb	15:09:20
2	SiO2†	507352.3	523397.3	99143 µg/L	99143 ppb	15:08:53
2	Si 251.611†	622713.1	645349.8	45971 µg/L	45971 ppb	15:08:53
2	Sn 189.927†	1222.5	1273.0	535.94 µg/L	535.94 ppb	15:09:20
2	Ti 334.940†	1733917.4	1798813.9	4414.5 µg/L	4414.5 ppb	15:08:53
2	Tl 190.801†	398.2	447.3	540.72 µg/L	540.72 ppb	15:09:20
2	U 409.014†	2072.5	2189.1	181.06 µg/L	181.06 ppb	15:08:59
2	V 292.402†	54567.6	56488.9	697.49 µg/L	697.49 ppb	15:08:59
2	Zn 213.857†	46970.4	48051.4	1149.4 µg/L	1149.4 ppb	15:08:59
3	Sc RADIAL	90954.9	90954.9	99.1 %		15:07:45
3	Al 396.153Radial†	271341.2	273953.9	134120 µg/L	134120 ppb	15:07:45
3	Ca 317.933Radial†	49786.6	49895.2	18776 µg/L	18776 ppb	15:07:45
3	Fe 238.204 Radial†	12660.4	12761.6	158960 µg/L	158960 ppb	15:08:06
3	K 766.490 Radial†	35815.1	35733.3	16907 µg/L	16907 ppb	15:07:45
3	Mg 279.077 IEC†	1567.6	1572.7	21113 µg/L	21113 ppb	15:08:06
3	Na 589.592 Radial†	12230.9	12151.2	6145.9 µg/L	6145.9 ppb	15:07:45
3	Sr 421.552†	112066.9	112943.6	684.02 µg/L	684.02 ppb	15:07:45
3	Sc 361.383	1869166.3	1869166.3	95.849 %		15:09:27
3	Y 371.029	1403285.4	1403285.4	105.25 %		15:09:27
3	Ag 328.068†	57105.3	60102.1	522.53 µg/L	522.53 ppb	15:09:33
3	As 188.979†	325.8	343.3	513.55 µg/L	513.55 ppb	15:09:54
3	B 249.677†	11630.3	11856.7	488.65 µg/L	488.65 ppb	15:09:33
3	Ba 233.527†	119726.3	124938.7	2891.9 µg/L	2891.9 ppb	15:09:33
3	Be 313.107†	825444.1	862753.0	534.63 µg/L	534.63 ppb	15:09:27
3	Cd 226.502†	19672.1	20689.4	511.81 µg/L	511.81 ppb	15:09:33
3	Co 228.616†	10366.8	10781.4	481.14 µg/L	481.14 ppb	15:09:54
3	Cr 267.716†	33099.4	34440.6	804.03 µg/L	804.03 ppb	15:09:33
3	Cu 324.752†	89457.2	89107.7	638.10 µg/L	638.10 ppb	15:09:33
3	Mn 257.610†	1054210.5	1100607.9	3580.1 µg/L	3580.1 ppb	15:09:27
3	Mo 202.031†	4409.3	4587.9	487.58 µg/L	487.58 ppb	15:09:54
3	Ni 231.604†	10530.1	10628.7	630.31 µg/L	630.31 ppb	15:09:54
3	P 214.914†	985.4	740.1	1159.9 µg/L	1159.9 ppb	15:09:54
3	Pb 220.353†	2083.0	2133.6	606.83 µg/L	606.83 ppb	15:09:54
3	S 181.975 Axial†	1689.6	1739.9	5784.8 µg/L	5784.8 ppb	15:09:54
3	Sb 206.836†	376.4	364.8	345.70 µg/L	345.70 ppb	15:09:54
3	Se 196.026†	408.4	404.3	893.75 µg/L	893.75 ppb	15:09:54
3	SiO2†	487021.1	505372.3	95728 µg/L	95728 ppb	15:09:27
3	Si 251.611†	597928.0	623402.6	44408 µg/L	44408 ppb	15:09:27
3	Sn 189.927†	1112.7	1166.1	491.05 µg/L	491.05 ppb	15:09:54
3	Ti 334.940†	1653296.4	1725592.2	4234.7 µg/L	4234.7 ppb	15:09:27
3	Tl 190.801†	377.2	427.9	518.71 µg/L	518.71 ppb	15:09:54
3	U 409.014†	1964.9	2089.9	171.71 µg/L	171.71 ppb	15:09:33
3	V 292.402†	51805.2	53949.7	665.00 µg/L	665.00 ppb	15:09:33
3	Zn 213.857†	45109.5	46404.9	1109.9 µg/L	1109.9 ppb	15:09:33

Mean Data: 1202046579|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1872879.4	96.039	%	0.3379				0.35%
Sc RADIAL	90907.1	99.1	%	0.10				0.10%
Y 371.029	1410080.0	105.76	%	0.527				0.50%
Ag 328.068†	60764.9	528.23	µg/L	5.587	528.23	ppb	5.587	1.06%
Al 396.153Radial†	272806.6	133560	µg/L	646.1	133560	ppb	646.1	0.48%
As 188.979†	364.3	546.26	µg/L	28.872	546.26	ppb	28.872	5.29%
B 249.677†	12099.1	500.59	µg/L	10.520	500.59	ppb	10.520	2.10%
Ba 233.527†	128419.0	2972.4	µg/L	70.25	2972.4	ppb	70.25	2.36%
Be 313.107†	886091.6	549.09	µg/L	12.536	549.09	ppb	12.536	2.28%
Ca 317.933Radial†	49787.9	18736	µg/L	74.8	18736	ppb	74.8	0.40%
Cd 226.502†	21128.2	523.12	µg/L	10.125	523.12	ppb	10.125	1.94%
Co 228.616†	11491.9	513.17	µg/L	28.111	513.17	ppb	28.111	5.48%
Cr 267.716†	35742.0	834.41	µg/L	26.912	834.41	ppb	26.912	3.23%
Cu 324.752†	91952.5	657.44	µg/L	16.872	657.44	ppb	16.872	2.57%
Fe 238.204 Radial†	12726.2	158520	µg/L	393.8	158520	ppb	393.8	0.25%
K 766.490 Radial†	35627.8	16857	µg/L	61.3	16857	ppb	61.3	0.36%
Mg 279.077 IEC†	1579.7	21209	µg/L	84.4	21209	ppb	84.4	0.40%
Mn 257.610†	1128099.1	3669.2	µg/L	77.24	3669.2	ppb	77.24	2.11%
Mo 202.031†	4875.7	517.77	µg/L	26.509	517.77	ppb	26.509	5.12%
Na 589.592 Radial†	12079.7	6109.7	µg/L	46.03	6109.7	ppb	46.03	0.75%

Ni 231.604†	11324.5	671.43 µg/L	36.015	671.43 ppb	36.015	5.36%
P 214.914†	783.2	1234.6 µg/L	64.70	1234.6 ppb	64.70	5.24%
Pb 220.353†	2240.9	636.71 µg/L	27.173	636.71 ppb	27.173	4.27%
S 181.975 Axial†	1817.5	6042.8 µg/L	228.34	6042.8 ppb	228.34	3.78%
Sb 206.836†	388.6	368.50 µg/L	20.088	368.50 ppb	20.088	5.45%
Se 196.026†	417.1	905.06 µg/L	11.751	905.06 ppb	11.751	1.30%
SiO2†	518007.2	98122 µg/L	2080.1	98122 ppb	2080.1	2.12%
Si 251.611†	638831.7	45507 µg/L	955.7	45507 ppb	955.7	2.10%
Sn 189.927†	1237.3	520.94 µg/L	25.884	520.94 ppb	25.884	4.97%
Sr 421.552†	112446.2	681.01 µg/L	3.598	681.01 ppb	3.598	0.53%
Ti 334.940†	1775226.4	4356.6 µg/L	105.56	4356.6 ppb	105.56	2.42%
Tl 190.801†	448.6	541.53 µg/L	23.225	541.53 ppb	23.225	4.29%
U 409.014†	2159.9	178.30 µg/L	5.735	178.30 ppb	5.735	3.22%
V 292.402†	55815.7	688.86 µg/L	20.929	688.86 ppb	20.929	3.04%
Zn 213.857†	47615.6	1139.0 µg/L	25.51	1139.0 ppb	25.51	2.24%

Sequence No.: 22
Sample ID: 1202046577|954672|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 316
Date Collected: 3/15/2010 15:10:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046577|954672|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89430.6	89430.6	97.4	%			15:10:34
1	Al 396.153Radial†	26248.8	27099.7	13268	µg/L	13268	ppb	15:10:34
1	Ca 317.933Radial†	6675.7	6509.8	2449.7	µg/L	2449.7	ppb	15:10:54
1	Fe 238.204 Radial†	2051.5	2092.2	26059	µg/L	26059	ppb	15:10:54
1	K 766.490 Radial†	3371.5	3054.8	1445.3	µg/L	1445.3	ppb	15:10:34
1	Mg 279.077 IEC†	160.1	155.3	2072.6	µg/L	2072.6	ppb	15:10:54
1	Na 589.592 Radial†	498.8	321.7	162.71	µg/L	162.71	ppb	15:10:34
1	Sr 421.552†	3770.6	3734.2	22.616	µg/L	22.616	ppb	15:10:34
1	Sc 361.383	1881575.7	1881575.7	96.485	%			15:11:57
1	Y 371.029	1304660.7	1304660.7	97.850	%			15:11:57
1	Ag 328.068†	-793.1	-298.4	-0.3258	µg/L	-0.3258	ppb	15:12:02
1	As 188.979†	0.2	3.6	2.0564	µg/L	2.0564	ppb	15:12:23
1	B 249.677†	517.7	259.3	-1.0496	µg/L	-1.0496	ppb	15:12:02
1	Ba 233.527†	6599.4	6866.9	158.93	µg/L	158.93	ppb	15:12:02
1	Be 313.107†	2813.7	4475.0	2.5637	µg/L	2.5637	ppb	15:12:02
1	Cd 226.502†	-38.6	125.3	0.2872	µg/L	0.2872	ppb	15:12:23
1	Co 228.616†	101.1	70.3	2.0024	µg/L	2.0024	ppb	15:12:23
1	Cr 267.716†	2108.8	2093.3	48.860	µg/L	48.860	ppb	15:12:23
1	Cu 324.752†	5531.3	1508.9	15.198	µg/L	15.198	ppb	15:12:02
1	Mn 257.610†	134086.2	139710.2	454.84	µg/L	454.84	ppb	15:12:02
1	Mo 202.031†	27.3	15.9	2.6643	µg/L	2.6643	ppb	15:12:23
1	Ni 231.604†	799.5	471.2	28.214	µg/L	28.214	ppb	15:12:23
1	P 214.914†	359.0	84.1	130.17	µg/L	130.17	ppb	15:12:23
1	Pb 220.353†	94.6	58.5	17.724	µg/L	17.724	ppb	15:12:23
1	S 181.975 Axial†	36.3	14.7	48.814	µg/L	48.814	ppb	15:12:23
1	Sb 206.836†	25.6	-1.3	-1.8250	µg/L	-1.8250	ppb	15:12:23
1	Se 196.026†	1.4	-20.3	60.692	µg/L	60.692	ppb	15:12:23
1	SiO2†	99995.5	100896.6	19112	µg/L	19112	ppb	15:12:02
1	Si 251.611†	121289.1	125285.9	8924.7	µg/L	8924.7	ppb	15:12:02
1	Sn 189.927†	-6.3	-1.3	-0.4021	µg/L	-0.4021	ppb	15:12:23
1	Ti 334.940†	223935.1	232784.3	571.33	µg/L	571.33	ppb	15:11:57
1	Tl 190.801†	-45.4	-12.7	-2.9123	µg/L	-2.9123	ppb	15:12:23
1	U 409.014†	-333.4	-305.7	-32.286	µg/L	-32.286	ppb	15:12:02
1	V 292.402†	2208.0	2189.2	24.355	µg/L	24.355	ppb	15:12:02
1	Zn 213.857†	4833.9	4351.7	103.76	µg/L	103.76	ppb	15:12:23
2	Sc RADIAL	88821.1	88821.1	96.8	%			15:10:59
2	Al 396.153Radial†	25980.8	27007.6	13223	µg/L	13223	ppb	15:10:59
2	Ca 317.933Radial†	6703.3	6585.3	2478.1	µg/L	2478.1	ppb	15:11:20
2	Fe 238.204 Radial†	2054.0	2109.2	26271	µg/L	26271	ppb	15:11:20
2	K 766.490 Radial†	3293.7	2998.2	1418.5	µg/L	1418.5	ppb	15:10:59
2	Mg 279.077 IEC†	158.1	154.3	2059.0	µg/L	2059.0	ppb	15:11:20
2	Na 589.592 Radial†	525.9	353.2	178.64	µg/L	178.64	ppb	15:10:59
2	Sr 421.552†	3725.6	3714.3	22.495	µg/L	22.495	ppb	15:10:59
2	Sc 361.383	1871677.5	1871677.5	95.978	%			15:12:29
2	Y 371.029	1298328.2	1298328.2	97.375	%			15:12:29
2	Ag 328.068†	-724.8	-231.7	0.2522	µg/L	0.2522	ppb	15:12:35
2	As 188.979†	3.1	6.6	6.7010	µg/L	6.7010	ppb	15:12:55
2	B 249.677†	461.7	203.8	-3.8295	µg/L	-3.8295	ppb	15:12:35
2	Ba 233.527†	6538.8	6839.9	158.30	µg/L	158.30	ppb	15:12:35
2	Be 313.107†	2776.0	4451.2	2.5488	µg/L	2.5488	ppb	15:12:35
2	Cd 226.502†	-41.3	122.3	0.1869	µg/L	0.1869	ppb	15:12:55
2	Co 228.616†	110.4	80.6	2.4700	µg/L	2.4700	ppb	15:12:55
2	Cr 267.716†	2078.6	2073.4	48.397	µg/L	48.397	ppb	15:12:55
2	Cu 324.752†	5495.9	1502.3	15.193	µg/L	15.193	ppb	15:12:35
2	Mn 257.610†	133363.9	139692.6	454.79	µg/L	454.79	ppb	15:12:35
2	Mo 202.031†	30.3	19.2	3.0182	µg/L	3.0182	ppb	15:12:55
2	Ni 231.604†	792.7	468.5	28.054	µg/L	28.054	ppb	15:12:55
2	P 214.914†	361.8	88.9	138.50	µg/L	138.50	ppb	15:12:55
2	Pb 220.353†	81.1	44.9	13.935	µg/L	13.935	ppb	15:12:55

2	S 181.975 Axial†	42.8	21.7	72.008	µg/L	72.008 ppb	15:12:55
2	Sb 206.836†	27.3	0.5	-0.0371	µg/L	-0.0371 ppb	15:12:55
2	Se 196.026†	2.1	-19.6	62.053	µg/L	62.053 ppb	15:12:55
2	SiO2†	99089.8	100501.0	19037	µg/L	19037 ppb	15:12:35
2	Si 251.611†	120276.8	124896.0	8897.0	µg/L	8897.0 ppb	15:12:35
2	Sn 189.927†	-6.5	-1.5	-0.5054	µg/L	-0.5054 ppb	15:12:55
2	Ti 334.940†	222850.7	232881.8	571.57	µg/L	571.57 ppb	15:12:29
2	Tl 190.801†	-37.4	-4.6	5.5596	µg/L	5.5596 ppb	15:12:55
2	U 409.014†	-244.7	-215.1	-23.864	µg/L	-23.864 ppb	15:12:35
2	V 292.402†	2194.2	2187.0	24.310	µg/L	24.310 ppb	15:12:35
2	Zn 213.857†	4772.4	4314.1	102.84	µg/L	102.84 ppb	15:12:55
3	Sc RADIAL	89354.8	89354.8	97.4	%		15:11:25
3	Al 396.153Radial†	26153.2	27024.3	13231	µg/L	13231 ppb	15:11:25
3	Ca 317.933Radial†	6697.9	6538.4	2460.4	µg/L	2460.4 ppb	15:11:46
3	Fe 238.204 Radial†	2056.0	2098.6	26139	µg/L	26139 ppb	15:11:46
3	K 766.490 Radial†	3370.7	3056.9	1446.3	µg/L	1446.3 ppb	15:11:25
3	Mg 279.077 IEC†	161.9	157.2	2098.2	µg/L	2098.2 ppb	15:11:46
3	Na 589.592 Radial†	535.1	359.4	181.78	µg/L	181.78 ppb	15:11:25
3	Sr 421.552†	3754.3	3720.7	22.534	µg/L	22.534 ppb	15:11:25
3	Sc 361.383	1867503.6	1867503.6	95.764	%		15:13:01
3	Y 371.029	1294931.3	1294931.3	97.121	%		15:13:01
3	Ag 328.068†	-791.3	-302.8	-0.3752	µg/L	-0.3752 ppb	15:13:07
3	As 188.979†	2.1	5.6	5.2450	µg/L	5.2450 ppb	15:13:28
3	B 249.677†	456.2	199.1	-3.9986	µg/L	-3.9986 ppb	15:13:07
3	Ba 233.527†	6040.6	6334.9	146.61	µg/L	146.61 ppb	15:13:07
3	Be 313.107†	2479.5	4148.0	2.3761	µg/L	2.3761 ppb	15:13:07
3	Cd 226.502†	-59.9	102.7	-0.3029	µg/L	-0.3029 ppb	15:13:28
3	Co 228.616†	91.1	60.8	1.6518	µg/L	1.6518 ppb	15:13:28
3	Cr 267.716†	1705.8	1688.9	39.423	µg/L	39.423 ppb	15:13:28
3	Cu 324.752†	5426.9	1443.0	14.764	µg/L	14.764 ppb	15:13:07
3	Mn 257.610†	120748.5	126829.7	413.04	µg/L	413.04 ppb	15:13:07
3	Mo 202.031†	13.5	1.7	1.1723	µg/L	1.1723 ppb	15:13:28
3	Ni 231.604†	720.2	394.7	23.686	µg/L	23.686 ppb	15:13:28
3	P 214.914†	349.3	76.7	117.07	µg/L	117.07 ppb	15:13:28
3	Pb 220.353†	76.9	40.7	12.776	µg/L	12.776 ppb	15:13:28
3	S 181.975 Axial†	37.0	15.7	52.221	µg/L	52.221 ppb	15:13:28
3	Sb 206.836†	18.8	-8.2	-8.2752	µg/L	-8.2752 ppb	15:13:28
3	Se 196.026†	5.6	-16.0	65.259	µg/L	65.259 ppb	15:13:28
3	SiO2†	92009.9	93338.6	17680	µg/L	17680 ppb	15:13:07
3	Si 251.611†	111318.5	115821.5	8250.5	µg/L	8250.5 ppb	15:13:07
3	Sn 189.927†	-6.6	-1.7	-0.5788	µg/L	-0.5788 ppb	15:13:28
3	Ti 334.940†	206255.9	216071.8	530.30	µg/L	530.30 ppb	15:13:01
3	Tl 190.801†	-41.5	-9.0	0.4900	µg/L	0.4900 ppb	15:13:28
3	U 409.014†	-272.5	-244.7	-26.605	µg/L	-26.605 ppb	15:13:07
3	V 292.402†	1972.8	1960.9	21.443	µg/L	21.443 ppb	15:13:07
3	Zn 213.857†	4090.3	3613.0	85.907	µg/L	85.907 ppb	15:13:28

Mean Data: 1202046577|954672|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1873585.6	96.075	%	0.3706				0.39%
Sc RADIAL	89202.2	97.2	%	0.36				0.37%
Y 371.029	1299306.7	97.449	%	0.3703				0.38%
Ag 328.068†	-277.6	-0.1496	µg/L	0.34886	-0.1496	ppb	0.34886	233.20%
Al 396.153Radial†	27043.9	13241	µg/L	24.0	13241	ppb	24.0	0.18%
As 188.979†	5.2	4.6675	µg/L	2.37552	4.6675	ppb	2.37552	50.90%
B 249.677†	220.7	-2.9592	µg/L	1.65594	-2.9592	ppb	1.65594	55.96%
Ba 233.527†	6680.6	154.61	µg/L	6.936	154.61	ppb	6.936	4.49%
Be 313.107†	4358.1	2.4962	µg/L	0.10430	2.4962	ppb	0.10430	4.18%
Ca 317.933Radial†	6544.5	2462.7	µg/L	14.34	2462.7	ppb	14.34	0.58%
Cd 226.502†	116.8	0.0571	µg/L	0.31573	0.0571	ppb	0.31573	553.13%
Co 228.616†	70.6	2.0414	µg/L	0.41046	2.0414	ppb	0.41046	20.11%
Cr 267.716†	1951.9	45.560	µg/L	5.3200	45.560	ppb	5.3200	11.68%
Cu 324.752†	1484.7	15.052	µg/L	0.2495	15.052	ppb	0.2495	1.66%
Fe 238.204 Radial†	2100.0	26156	µg/L	106.9	26156	ppb	106.9	0.41%
K 766.490 Radial†	3036.6	1436.7	µg/L	15.76	1436.7	ppb	15.76	1.10%
Mg 279.077 IEC†	155.6	2076.6	µg/L	19.93	2076.6	ppb	19.93	0.96%
Mn 257.610†	135410.9	440.89	µg/L	24.121	440.89	ppb	24.121	5.47%
Mo 202.031†	12.3	2.2849	µg/L	0.97969	2.2849	ppb	0.97969	42.88%
Na 589.592 Radial†	344.8	174.38	µg/L	10.227	174.38	ppb	10.227	5.87%

Ni 231.604†	444.8	26.651	µg/L	2.5690	26.651	ppb	2.5690	9.64%
P 214.914†	83.3	128.58	µg/L	10.802	128.58	ppb	10.802	8.40%
Pb 220.353†	48.0	14.812	µg/L	2.5878	14.812	ppb	2.5878	17.47%
S 181.975 Axial†	17.3	57.681	µg/L	12.5236	57.681	ppb	12.5236	21.71%
Sb 206.836†	-3.0	-3.3791	µg/L	4.33336	-3.3791	ppb	4.33336	128.24%
Se 196.026†	-18.7	62.668	µg/L	2.3448	62.668	ppb	2.3448	3.74%
SiO2†	98245.4	18610	µg/L	805.8	18610	ppb	805.8	4.33%
Si 251.611†	122001.1	8690.7	µg/L	381.48	8690.7	ppb	381.48	4.39%
Sn 189.927†	-1.5	-0.4954	µg/L	0.08878	-0.4954	ppb	0.08878	17.92%
Sr 421.552†	3723.0	22.548	µg/L	0.0617	22.548	ppb	0.0617	0.27%
Ti 334.940†	227246.0	557.73	µg/L	23.758	557.73	ppb	23.758	4.26%
Tl 190.801†	-8.8	1.0458	µg/L	4.26325	1.0458	ppb	4.26325	407.66%
U 409.014†	-255.1	-27.585	µg/L	4.2959	-27.585	ppb	4.2959	15.57%
V 292.402†	2112.4	23.369	µg/L	1.6681	23.369	ppb	1.6681	7.14%
Zn 213.857†	4093.0	97.503	µg/L	10.0525	97.503	ppb	10.0525	10.31%

Sequence No.: 23
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 15:13:38
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89550.7	89550.7	97.6	%			15:14:11
1	Al 396.153Radial†	9761.2	10166.2	4966.3	µg/L	4966.3	ppb	15:14:11
1	Ca 317.933Radial†	13307.7	13297.4	5003.9	µg/L	5003.9	ppb	15:14:11
1	Fe 238.204 Radial†	420.3	417.6	5212.7	µg/L	5212.7	ppb	15:14:31
1	K 766.490 Radial†	10387.1	10240.1	4844.9	µg/L	4844.9	ppb	15:14:11
1	Mg 279.077 IEC†	377.7	378.1	5117.9	µg/L	5117.9	ppb	15:14:31
1	Na 589.592 Radial†	20186.2	20497.8	10367	µg/L	10367	ppb	15:14:11
1	Sr 421.552†	81724.4	83620.2	506.43	µg/L	506.43	ppb	15:14:11
1	Sc 361.383	1871468.2	1871468.2	95.967	%			15:15:35
1	Y 371.029	1275221.0	1275221.0	95.642	%			15:15:35
1	Ag 328.068†	57601.1	60545.4	513.37	µg/L	513.37	ppb	15:15:41
1	As 188.979†	322.7	339.6	528.30	µg/L	528.30	ppb	15:16:01
1	B 249.677†	10396.4	10556.0	505.87	µg/L	505.87	ppb	15:15:41
1	Ba 233.527†	21467.5	22396.8	519.12	µg/L	519.12	ppb	15:15:41
1	Be 313.107†	794736.6	829695.7	515.50	µg/L	515.50	ppb	15:15:35
1	Cd 226.502†	19244.7	20218.8	517.04	µg/L	517.04	ppb	15:15:41
1	Co 228.616†	11000.6	11428.5	518.34	µg/L	518.34	ppb	15:15:41
1	Cr 267.716†	21715.8	22536.1	526.16	µg/L	526.16	ppb	15:15:41
1	Cu 324.752†	77041.5	76055.3	520.11	µg/L	520.11	ppb	15:15:41
1	Mn 257.610†	153779.5	160981.8	522.44	µg/L	522.44	ppb	15:15:35
1	Mo 202.031†	4963.9	5160.1	541.80	µg/L	541.80	ppb	15:16:01
1	Ni 231.604†	8813.8	8826.7	521.66	µg/L	521.66	ppb	15:15:41
1	P 214.914†	1725.5	1510.0	2617.6	µg/L	2617.6	ppb	15:16:01
1	Pb 220.353†	1876.2	1915.5	533.83	µg/L	533.83	ppb	15:16:01
1	S 181.975 Axial†	327.9	318.8	1059.8	µg/L	1059.8	ppb	15:16:01
1	Sb 206.836†	558.8	554.4	530.42	µg/L	530.42	ppb	15:16:01
1	Se 196.026†	527.8	528.2	542.37	µg/L	542.37	ppb	15:16:01
1	SiO2†	30755.5	29306.3	5551.3	µg/L	5551.3	ppb	15:15:41
1	Si 251.611†	35327.5	36390.5	2592.3	µg/L	2592.3	ppb	15:15:41
1	Sn 189.927†	1238.2	1295.5	544.66	µg/L	544.66	ppb	15:16:01
1	Ti 334.940†	201859.5	211034.3	517.74	µg/L	517.74	ppb	15:15:35
1	Tl 190.801†	447.0	500.2	526.51	µg/L	526.51	ppb	15:16:01
1	U 409.014†	5315.1	5578.3	519.30	µg/L	519.30	ppb	15:15:41
1	V 292.402†	39635.5	41202.1	524.15	µg/L	524.15	ppb	15:15:41
1	Zn 213.857†	21346.2	21585.0	518.40	µg/L	518.40	ppb	15:15:41
2	Sc RADIAL	90162.0	90162.0	98.2	%			15:14:37
2	Al 396.153Radial†	9835.7	10174.3	4970.5	µg/L	4970.5	ppb	15:14:37
2	Ca 317.933Radial†	13419.4	13318.7	5011.9	µg/L	5011.9	ppb	15:14:37
2	Fe 238.204 Radial†	420.4	414.8	5177.7	µg/L	5177.7	ppb	15:14:57
2	K 766.490 Radial†	10373.9	10154.5	4804.4	µg/L	4804.4	ppb	15:14:37
2	Mg 279.077 IEC†	374.1	371.7	5031.7	µg/L	5031.7	ppb	15:14:57
2	Na 589.592 Radial†	20459.4	20635.6	10437	µg/L	10437	ppb	15:14:37
2	Sr 421.552†	82354.6	83693.7	506.88	µg/L	506.88	ppb	15:14:37
2	Sc 361.383	1873632.5	1873632.5	96.078	%			15:16:08
2	Y 371.029	1278226.3	1278226.3	95.868	%			15:16:08
2	Ag 328.068†	57628.5	60504.5	513.03	µg/L	513.03	ppb	15:16:14
2	As 188.979†	319.7	336.1	522.89	µg/L	522.89	ppb	15:16:34
2	B 249.677†	10393.5	10540.5	505.14	µg/L	505.14	ppb	15:16:14
2	Ba 233.527†	21411.1	22312.2	517.17	µg/L	517.17	ppb	15:16:14
2	Be 313.107†	794832.8	828839.2	514.97	µg/L	514.97	ppb	15:16:08
2	Cd 226.502†	19204.4	20153.6	515.38	µg/L	515.38	ppb	15:16:14
2	Co 228.616†	11028.5	11444.3	519.05	µg/L	519.05	ppb	15:16:14
2	Cr 267.716†	21729.6	22524.4	525.89	µg/L	525.89	ppb	15:16:14
2	Cu 324.752†	76773.3	75683.6	517.56	µg/L	517.56	ppb	15:16:14
2	Mn 257.610†	153829.0	160848.2	522.01	µg/L	522.01	ppb	15:16:08
2	Mo 202.031†	4853.8	5039.6	529.15	µg/L	529.15	ppb	15:16:34
2	Ni 231.604†	8827.1	8830.0	521.86	µg/L	521.86	ppb	15:16:14
2	P 214.914†	1703.5	1485.1	2573.8	µg/L	2573.8	ppb	15:16:34
2	Pb 220.353†	1838.4	1873.9	522.21	µg/L	522.21	ppb	15:16:34

2	S 181.975 Axial†	324.8	315.1	1047.6 µg/L	1047.6 ppb	15:16:34
2	Sb 206.836†	548.8	543.3	519.67 µg/L	519.67 ppb	15:16:34
2	Se 196.026†	518.2	517.6	531.66 µg/L	531.66 ppb	15:16:34
2	SiO2†	30710.6	29222.6	5535.4 µg/L	5535.4 ppb	15:16:14
2	Si 251.611†	35298.9	36318.2	2587.1 µg/L	2587.1 ppb	15:16:14
2	Sn 189.927†	1207.2	1261.8	530.51 µg/L	530.51 ppb	15:16:34
2	Ti 334.940†	201539.1	210457.9	516.33 µg/L	516.33 ppb	15:16:08
2	Tl 190.801†	440.4	492.8	518.74 µg/L	518.74 ppb	15:16:34
2	U 409.014†	5378.9	5638.3	524.91 µg/L	524.91 ppb	15:16:14
2	V 292.402†	39704.6	41226.3	524.37 µg/L	524.37 ppb	15:16:14
2	Zn 213.857†	21238.3	21447.0	515.07 µg/L	515.07 ppb	15:16:14
3	Sc RADIAL	89882.6	89882.6	97.9 %		15:15:03
3	Al 396.153Radial†	9872.2	10242.6	5005.9 µg/L	5005.9 ppb	15:15:03
3	Ca 317.933Radial†	13344.3	13284.5	4999.0 µg/L	4999.0 ppb	15:15:03
3	Fe 238.204 Radial†	422.1	417.9	5214.3 µg/L	5214.3 ppb	15:15:23
3	K 766.490 Radial†	10243.9	10054.5	4757.1 µg/L	4757.1 ppb	15:15:03
3	Mg 279.077 IEC†	374.7	373.5	5054.4 µg/L	5054.4 ppb	15:15:23
3	Na 589.592 Radial†	20345.0	20583.5	10411 µg/L	10411 ppb	15:15:03
3	Sr 421.552†	82015.8	83608.4	506.36 µg/L	506.36 ppb	15:15:03
3	Sc 361.383	1881583.9	1881583.9	96.486 %		15:16:42
3	Y 371.029	1283430.2	1283430.2	96.258 %		15:16:42
3	Ag 328.068†	53272.2	55736.1	472.45 µg/L	472.45 ppb	15:16:47
3	As 188.979†	269.0	282.1	438.67 µg/L	438.67 ppb	15:17:08
3	B 249.677†	9548.5	9619.0	460.67 µg/L	460.67 ppb	15:16:47
3	Ba 233.527†	19073.4	19795.2	458.81 µg/L	458.81 ppb	15:16:47
3	Be 313.107†	728255.2	756340.5	469.92 µg/L	469.92 ppb	15:16:42
3	Cd 226.502†	17098.5	17886.7	457.33 µg/L	457.33 ppb	15:16:47
3	Co 228.616†	9682.2	10000.4	453.50 µg/L	453.50 ppb	15:16:47
3	Cr 267.716†	18547.4	19130.7	446.66 µg/L	446.66 ppb	15:16:47
3	Cu 324.752†	68224.9	66486.1	454.79 µg/L	454.79 ppb	15:16:47
3	Mn 257.610†	141533.3	147428.0	478.45 µg/L	478.45 ppb	15:16:42
3	Mo 202.031†	4012.2	4146.0	435.35 µg/L	435.35 ppb	15:17:08
3	Ni 231.604†	7816.4	7743.7	457.66 µg/L	457.66 ppb	15:16:47
3	P 214.914†	1484.7	1250.8	2165.0 µg/L	2165.0 ppb	15:17:08
3	Pb 220.353†	1564.5	1581.9	440.88 µg/L	440.88 ppb	15:17:08
3	S 181.975 Axial†	284.1	271.5	902.67 µg/L	902.67 ppb	15:17:08
3	Sb 206.836†	473.5	462.8	442.45 µg/L	442.45 ppb	15:17:08
3	Se 196.026†	453.2	447.9	461.79 µg/L	461.79 ppb	15:17:08
3	SiO2†	28049.0	26328.9	4987.3 µg/L	4987.3 ppb	15:16:47
3	Si 251.611†	32060.5	32806.6	2337.0 µg/L	2337.0 ppb	15:16:47
3	Sn 189.927†	978.4	1019.2	428.63 µg/L	428.63 ppb	15:17:08
3	Ti 334.940†	183223.9	190589.2	467.55 µg/L	467.55 ppb	15:16:42
3	Tl 190.801†	387.7	436.2	459.32 µg/L	459.32 ppb	15:17:08
3	U 409.014†	4537.0	4742.2	441.31 µg/L	441.31 ppb	15:16:47
3	V 292.402†	34610.1	35771.6	454.68 µg/L	454.68 ppb	15:16:47
3	Zn 213.857†	18872.4	18901.5	453.89 µg/L	453.89 ppb	15:16:47

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1875561.5	96.177	%	0.2731				0.28%
Sc RADIAL	89865.1	97.9	%	0.33				0.34%
Y 371.029	1278959.2	95.923	%	0.3115				0.32%
Ag 328.068†	58928.7	499.62	µg/L	23.530	499.62	ppb	23.530	4.71%
QC value within limits for Ag 328.068 Recovery = 99.92%								
Al 396.153Radial†	10194.4	4980.9	µg/L	21.73	4980.9	ppb	21.73	0.44%
QC value within limits for Al 396.153Radial Recovery = 99.62%								
As 188.979†	319.3	496.62	µg/L	50.257	496.62	ppb	50.257	10.12%
QC value within limits for As 188.979 Recovery = 99.32%								
B 249.677†	10238.5	490.56	µg/L	25.888	490.56	ppb	25.888	5.28%
QC value within limits for B 249.677 Recovery = 98.11%								
Ba 233.527†	21501.4	498.37	µg/L	34.272	498.37	ppb	34.272	6.88%
QC value within limits for Ba 233.527 Recovery = 99.67%								
Be 313.107†	804958.5	500.13	µg/L	26.160	500.13	ppb	26.160	5.23%
QC value within limits for Be 313.107 Recovery = 100.03%								
Ca 317.933Radial†	13300.2	5005.0	µg/L	6.50	5005.0	ppb	6.50	0.13%
QC value within limits for Ca 317.933Radial Recovery = 100.10%								
Cd 226.502†	19419.7	496.59	µg/L	34.004	496.59	ppb	34.004	6.85%
QC value within limits for Cd 226.502 Recovery = 99.32%								
Co 228.616†	10957.8	496.96	µg/L	37.640	496.96	ppb	37.640	7.57%

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   QC value within limits for Co 228.616  Recovery = 99.39%
Cr 267.716†            21397.0      499.57 µg/L        45.821      499.57 ppb         45.821   9.17%
   QC value within limits for Cr 267.716  Recovery = 99.91%
Cu 324.752†            72741.7      497.49 µg/L        36.998      497.49 ppb         36.998   7.44%
   QC value within limits for Cu 324.752  Recovery = 99.50%
Fe 238.204 Radial†       416.8      5201.6 µg/L         20.71      5201.6 ppb          20.71   0.40%
   QC value within limits for Fe 238.204 Radial  Recovery = 104.03%
K 766.490 Radial†      10149.7      4802.1 µg/L         43.94      4802.1 ppb          43.94   0.92%
   QC value within limits for K 766.490 Radial  Recovery = 96.04%
Mg 279.077 IEC†          374.4      5068.0 µg/L         44.68      5068.0 ppb          44.68   0.88%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.36%
Mn 257.610†           156419.3      507.63 µg/L        25.272      507.63 ppb         25.272   4.98%
   QC value within limits for Mn 257.610  Recovery = 101.53%
Mo 202.031†             4781.9      502.10 µg/L        58.150      502.10 ppb         58.150  11.58%
   QC value within limits for Mo 202.031  Recovery = 100.42%
Na 589.592 Radial†     20572.3       10405 µg/L          35.2       10405 ppb           35.2   0.34%
   QC value within limits for Na 589.592 Radial  Recovery = 104.05%
Ni 231.604†             8466.8      500.40 µg/L        37.006      500.40 ppb         37.006   7.40%
   QC value within limits for Ni 231.604  Recovery = 100.08%
P 214.914†              1415.3      2452.1 µg/L        249.63      2452.1 ppb         249.63  10.18%
   QC value within limits for P 214.914  Recovery = 98.09%
Pb 220.353†             1790.4      498.97 µg/L        50.648      498.97 ppb         50.648  10.15%
   QC value within limits for Pb 220.353  Recovery = 99.79%
S 181.975 Axial†         301.8      1003.4 µg/L         87.41      1003.4 ppb          87.41   8.71%
   QC value within limits for S 181.975 Axial  Recovery = 100.34%
Sb 206.836†              520.2      497.51 µg/L        47.987      497.51 ppb         47.987   9.65%
   QC value within limits for Sb 206.836  Recovery = 99.50%
Se 196.026†              497.9      511.94 µg/L        43.761      511.94 ppb         43.761   8.55%
   QC value within limits for Se 196.026  Recovery = 102.39%
SiO2†                  28285.9      5358.0 µg/L        321.13      5358.0 ppb         321.13   5.99%
   QC value within limits for SiO2  Recovery = 100.20%
Si 251.611†            35171.8      2505.5 µg/L        145.93      2505.5 ppb         145.93   5.82%
   QC value within limits for Si 251.611  Recovery = 100.22%
Sn 189.927†             1192.2      501.27 µg/L        63.305      501.27 ppb         63.305  12.63%
   QC value within limits for Sn 189.927  Recovery = 100.25%
Sr 421.552†            83640.8      506.56 µg/L         0.280      506.56 ppb          0.280   0.06%
   QC value within limits for Sr 421.552  Recovery = 101.31%
Ti 334.940†           204027.1      500.54 µg/L        28.577      500.54 ppb         28.577   5.71%
   QC value within limits for Ti 334.940  Recovery = 100.11%
Tl 190.801†              476.4      501.53 µg/L        36.755      501.53 ppb         36.755   7.33%
   QC value within limits for Tl 190.801  Recovery = 100.31%
U 409.014†              5319.6      495.18 µg/L        46.730      495.18 ppb         46.730   9.44%
   QC value within limits for U 409.014  Recovery = 99.04%
V 292.402†             39400.0      501.07 µg/L        40.173      501.07 ppb         40.173   8.02%
   QC value within limits for V 292.402  Recovery = 100.21%
Zn 213.857†            20644.5      495.79 µg/L        36.325      495.79 ppb         36.325   7.33%
   QC value within limits for Zn 213.857  Recovery = 99.16%
All analyte(s) passed QC.
```

Sequence No.: 24
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 15:17:17
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88008.5	88008.5	95.9	%			15:17:48
1	Al 396.153Radial†	-66.6	93.0	45.531	µg/L	45.531	ppb	15:17:48
1	Ca 317.933Radial†	345.4	19.2	7.2245	µg/L	7.2245	ppb	15:18:08
1	Fe 238.204 Radial†	15.8	3.3	41.693	µg/L	41.693	ppb	15:18:08
1	K 766.490 Radial†	372.4	-16.8	-7.9453	µg/L	-7.9453	ppb	15:17:48
1	Mg 279.077 IEC†	9.2	0.5	7.0107	µg/L	7.0107	ppb	15:18:08
1	Na 589.592 Radial†	210.8	29.7	15.013	µg/L	15.013	ppb	15:17:48
1	Sr 421.552†	171.1	43.1	0.2613	µg/L	0.2613	ppb	15:17:48
1	Sc 361.383	1873776.7	1873776.7	96.085	%			15:19:09
1	Y 371.029	1282036.8	1282036.8	96.154	%			15:19:09
1	Ag 328.068†	-590.9	-91.4	-0.7722	µg/L	-0.7722	ppb	15:19:15
1	As 188.979†	-3.1	0.2	0.2848	µg/L	0.2848	ppb	15:19:35
1	B 249.677†	315.3	50.8	2.4205	µg/L	2.4205	ppb	15:19:15
1	Ba 233.527†	-12.3	14.3	0.3286	µg/L	0.3286	ppb	15:19:35
1	Be 313.107†	-1329.9	174.8	0.1085	µg/L	0.1085	ppb	15:19:15
1	Cd 226.502†	-158.7	0.2	0.0010	µg/L	0.0010	ppb	15:19:35
1	Co 228.616†	34.6	1.6	0.0723	µg/L	0.0723	ppb	15:19:35
1	Cr 267.716†	67.3	-22.3	-0.5208	µg/L	-0.5208	ppb	15:19:15
1	Cu 324.752†	4050.5	-8.4	-0.0495	µg/L	-0.0495	ppb	15:19:15
1	Mn 257.610†	-633.7	79.9	0.2614	µg/L	0.2614	ppb	15:19:35
1	Mo 202.031†	16.5	4.8	0.5067	µg/L	0.5067	ppb	15:19:35
1	Ni 231.604†	359.9	17.1	1.0150	µg/L	1.0150	ppb	15:19:35
1	P 214.914†	300.3	24.6	43.476	µg/L	43.476	ppb	15:19:35
1	Pb 220.353†	39.8	1.8	0.5146	µg/L	0.5146	ppb	15:19:35
1	S 181.975 Axial†	20.1	-2.0	-6.6363	µg/L	-6.6363	ppb	15:19:35
1	Sb 206.836†	24.0	-2.9	-2.6996	µg/L	-2.6996	ppb	15:19:35
1	Se 196.026†	18.2	-2.9	-2.7767	µg/L	-2.7767	ppb	15:19:35
1	SiO2†	2673.4	40.6	7.6889	µg/L	7.6889	ppb	15:19:15
1	Si 251.611†	478.4	76.1	5.4239	µg/L	5.4239	ppb	15:19:35
1	Sn 189.927†	1.9	7.2	3.0411	µg/L	3.0411	ppb	15:19:35
1	Ti 334.940†	-561.4	107.1	0.2626	µg/L	0.2626	ppb	15:19:15
1	Tl 190.801†	-33.0	0.0	0.0182	µg/L	0.0182	ppb	15:19:35
1	U 409.014†	-10.4	29.0	2.7013	µg/L	2.7013	ppb	15:19:15
1	V 292.402†	25.8	-72.4	-0.9113	µg/L	-0.9113	ppb	15:19:15
1	Zn 213.857†	628.2	-4.5	-0.1168	µg/L	-0.1168	ppb	15:19:35
2	Sc RADIAL	88581.1	88581.1	96.5	%			15:18:14
2	Al 396.153Radial†	-135.1	22.5	10.994	µg/L	10.994	ppb	15:18:14
2	Ca 317.933Radial†	340.2	11.5	4.3382	µg/L	4.3382	ppb	15:18:34
2	Fe 238.204 Radial†	15.3	2.7	34.065	µg/L	34.065	ppb	15:18:34
2	K 766.490 Radial†	354.9	-37.4	-17.713	µg/L	-17.713	ppb	15:18:14
2	Mg 279.077 IEC†	9.1	0.3	4.5310	µg/L	4.5310	ppb	15:18:34
2	Na 589.592 Radial†	196.7	13.6	6.8810	µg/L	6.8810	ppb	15:18:14
2	Sr 421.552†	116.0	-15.1	-0.0917	µg/L	-0.0917	ppb	15:18:14
2	Sc 361.383	1866253.1	1866253.1	95.699	%			15:19:41
2	Y 371.029	1275236.7	1275236.7	95.644	%			15:19:41
2	Ag 328.068†	-562.3	-64.1	-0.5366	µg/L	-0.5366	ppb	15:19:47
2	As 188.979†	-2.1	1.2	1.9265	µg/L	1.9265	ppb	15:20:08
2	B 249.677†	304.6	41.0	1.9525	µg/L	1.9525	ppb	15:19:47
2	Ba 233.527†	-18.1	8.2	0.1903	µg/L	0.1903	ppb	15:20:08
2	Be 313.107†	-1229.1	274.5	0.1705	µg/L	0.1705	ppb	15:19:47
2	Cd 226.502†	-178.6	-21.3	-0.5474	µg/L	-0.5474	ppb	15:20:08
2	Co 228.616†	20.6	-12.8	-0.5834	µg/L	-0.5834	ppb	15:20:08
2	Cr 267.716†	99.6	11.8	0.2745	µg/L	0.2745	ppb	15:19:47
2	Cu 324.752†	4087.0	46.7	0.3255	µg/L	0.3255	ppb	15:19:47
2	Mn 257.610†	-646.8	63.5	0.2079	µg/L	0.2079	ppb	15:20:08
2	Mo 202.031†	19.1	7.6	0.7945	µg/L	0.7945	ppb	15:20:08
2	Ni 231.604†	348.7	6.9	0.4107	µg/L	0.4107	ppb	15:20:08
2	P 214.914†	296.0	21.3	37.514	µg/L	37.514	ppb	15:20:08
2	Pb 220.353†	35.9	-2.1	-0.5715	µg/L	-0.5715	ppb	15:20:08

2	S 181.975 Axial†	19.5	-2.5	-8.3585 µg/L	-8.3585 ppb	15:20:08
2	Sb 206.836†	29.4	2.8	2.6760 µg/L	2.6760 ppb	15:20:08
2	Se 196.026†	27.4	6.8	6.9243 µg/L	6.9243 ppb	15:20:08
2	SiO2†	2638.9	15.8	2.9921 µg/L	2.9921 ppb	15:19:47
2	Si 251.611†	483.0	83.0	5.9118 µg/L	5.9118 ppb	15:20:08
2	Sn 189.927†	-7.4	-2.5	-1.0624 µg/L	-1.0624 ppb	15:20:08
2	Ti 334.940†	-517.7	150.4	0.3690 µg/L	0.3690 ppb	15:19:47
2	Tl 190.801†	-34.1	-1.3	-1.3112 µg/L	-1.3112 ppb	15:20:08
2	U 409.014†	-44.9	-7.0	-0.6614 µg/L	-0.6614 ppb	15:19:47
2	V 292.402†	95.8	1.0	0.0137 µg/L	0.0137 ppb	15:19:47
2	Zn 213.857†	624.6	-5.6	-0.1404 µg/L	-0.1404 ppb	15:20:08
3	Sc RADIAL	88635.0	88635.0	96.6 %		15:18:39
3	Al 396.153Radial†	-152.6	4.5	2.1849 µg/L	2.1849 ppb	15:18:39
3	Ca 317.933Radial†	344.2	15.5	5.8179 µg/L	5.8179 ppb	15:19:00
3	Fe 238.204 Radial†	14.1	1.5	18.199 µg/L	18.199 ppb	15:19:00
3	K 766.490 Radial†	397.6	6.5	3.0796 µg/L	3.0796 ppb	15:18:39
3	Mg 279.077 IEC†	5.6	-3.2	-43.653 µg/L	-43.653 ppb	15:19:00
3	Na 589.592 Radial†	184.3	0.7	0.3612 µg/L	0.3612 ppb	15:18:39
3	Sr 421.552†	170.5	41.2	0.2497 µg/L	0.2497 ppb	15:18:39
3	Sc 361.383	1868577.1	1868577.1	95.819 %		15:20:14
3	Y 371.029	1278293.3	1278293.3	95.873 %		15:20:14
3	Ag 328.068†	-501.8	-0.2	-0.0026 µg/L	-0.0026 ppb	15:20:19
3	As 188.979†	-2.4	0.8	1.3163 µg/L	1.3163 ppb	15:20:40
3	B 249.677†	299.1	34.8	1.6655 µg/L	1.6655 ppb	15:20:19
3	Ba 233.527†	-16.5	9.9	0.2283 µg/L	0.2283 ppb	15:20:40
3	Be 313.107†	-1332.3	168.4	0.1045 µg/L	0.1045 ppb	15:20:19
3	Cd 226.502†	-164.6	-6.5	-0.1679 µg/L	-0.1679 ppb	15:20:40
3	Co 228.616†	29.6	-3.6	-0.1630 µg/L	-0.1630 ppb	15:20:40
3	Cr 267.716†	87.0	-1.5	-0.0349 µg/L	-0.0349 ppb	15:20:19
3	Cu 324.752†	4106.4	61.6	0.4242 µg/L	0.4242 ppb	15:20:19
3	Mn 257.610†	-679.6	30.2	0.1019 µg/L	0.1019 ppb	15:20:40
3	Mo 202.031†	16.3	4.6	0.4880 µg/L	0.4880 ppb	15:20:40
3	Ni 231.604†	354.5	12.5	0.7401 µg/L	0.7401 ppb	15:20:40
3	P 214.914†	286.5	11.0	19.470 µg/L	19.470 ppb	15:20:40
3	Pb 220.353†	49.5	12.0	3.3437 µg/L	3.3437 ppb	15:20:40
3	S 181.975 Axial†	23.6	1.7	5.7494 µg/L	5.7494 ppb	15:20:40
3	Sb 206.836†	31.6	5.1	4.8500 µg/L	4.8500 ppb	15:20:40
3	Se 196.026†	25.6	5.0	5.0618 µg/L	5.0618 ppb	15:20:40
3	SiO2†	2663.7	38.3	7.2460 µg/L	7.2460 ppb	15:20:19
3	Si 251.611†	502.7	103.0	7.3355 µg/L	7.3355 ppb	15:20:40
3	Sn 189.927†	2.5	7.8	3.2882 µg/L	3.2882 ppb	15:20:40
3	Ti 334.940†	-444.9	227.0	0.5609 µg/L	0.5609 ppb	15:20:19
3	Tl 190.801†	-38.3	-5.6	-5.8004 µg/L	-5.8004 ppb	15:20:40
3	U 409.014†	17.2	57.8	5.3875 µg/L	5.3875 ppb	15:20:19
3	V 292.402†	68.8	-27.4	-0.3386 µg/L	-0.3386 ppb	15:20:19
3	Zn 213.857†	635.2	4.6	0.1098 µg/L	0.1098 ppb	15:20:40

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1869535.6	95.868	%	0.1975				0.21%
Sc RADIAL	88408.2	96.3	%	0.38				0.39%
Y 371.029	1278522.2	95.890	%	0.2554				0.27%
Ag 328.068†	-51.9	-0.4371	µg/L	0.39435	-0.4371	ppb	0.39435	90.22%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	40.0	19.570	µg/L	22.9100	19.570	ppb	22.9100	117.07%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.8	1.1759	µg/L	0.82985	1.1759	ppb	0.82985	70.57%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	42.2	2.0128	µg/L	0.38109	2.0128	ppb	0.38109	18.93%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	10.8	0.2491	µg/L	0.07147	0.2491	ppb	0.07147	28.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	205.9	0.1278	µg/L	0.03700	0.1278	ppb	0.03700	28.95%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	15.4	5.7935	µg/L	1.44329	5.7935	ppb	1.44329	24.91%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-9.2	-0.2381	µg/L	0.28085	-0.2381	ppb	0.28085	117.94%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-4.9	-0.2247	µg/L	0.33216	-0.2247	ppb	0.33216	147.81%

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   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                -4.0     -0.0937 µg/L       0.40091     -0.0937 ppb        0.40091 427.85%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                33.3      0.2334 µg/L       0.24992      0.2334 ppb        0.24992 107.08%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          2.5      31.319 µg/L       11.9849      31.319 ppb        11.9849  38.27%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -15.9     -7.5261 µg/L      10.40238     -7.5261 ppb       10.40238 138.22%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.8     -10.704 µg/L       28.5620     -10.704 ppb        28.5620 266.84%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                57.9      0.1904 µg/L       0.08114      0.1904 ppb        0.08114  42.62%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 5.7      0.5964 µg/L       0.17179      0.5964 ppb        0.17179  28.80%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         14.7      7.4183 µg/L       7.34045      7.4183 ppb        7.34045  98.95%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                12.2      0.7219 µg/L       0.30257      0.7219 ppb        0.30257  41.91%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 19.0      33.487 µg/L       12.4993      33.487 ppb        12.4993  37.33%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 3.9      1.0956 µg/L       2.02124      1.0956 ppb        2.02124 184.49%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -0.9     -3.0818 µg/L       7.69637     -3.0818 ppb        7.69637 249.74%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 1.7      1.6088 µg/L       3.88626      1.6088 ppb        3.88626 241.56%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 3.0      3.0698 µg/L       5.14815      3.0698 ppb        5.14815 167.70%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                      31.5      5.9757 µg/L       2.59329      5.9757 ppb        2.59329  43.40%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†                87.4      6.2237 µg/L       0.99323      6.2237 ppb        0.99323  15.96%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.2      1.7556 µg/L       2.44358      1.7556 ppb        2.44358 139.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                23.1      0.1397 µg/L       0.20055      0.1397 ppb        0.20055 143.52%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               161.5      0.3975 µg/L       0.15119      0.3975 ppb        0.15119  38.03%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                -2.3     -2.3644 µg/L       3.04893     -2.3644 ppb        3.04893 128.95%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 26.6      2.4758 µg/L       3.03074      2.4758 ppb        3.03074 122.41%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -33.0     -0.4121 µg/L       0.46686     -0.4121 ppb        0.46686 113.29%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -1.8     -0.0491 µg/L       0.13814     -0.0491 ppb        0.13814 281.12%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: 247178002|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 317
Date Collected: 3/15/2010 15:20:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178002|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	92290.4	92290.4	101	%			15:21:23
1	Al 396.153Radial†	114258.9	113784.8	55709	µg/L	55709	ppb	15:21:23
1	Ca 317.933Radial†	35180.9	34644.0	13037	µg/L	13037	ppb	15:21:23
1	Fe 238.204 Radial†	11218.1	11142.5	138780	µg/L	138780	ppb	15:21:44
1	K 766.490 Radial†	17610.3	17107.1	8093.9	µg/L	8093.9	ppb	15:21:23
1	Mg 279.077 IEC†	706.4	693.4	9231.5	µg/L	9231.5	ppb	15:21:44
1	Na 589.592 Radial†	1970.4	1769.3	894.87	µg/L	894.87	ppb	15:21:23
1	Sr 421.552†	18569.1	18330.3	111.01	µg/L	111.01	ppb	15:21:23
1	Sc 361.383	1884849.1	1884849.1	96.653	%			15:22:49
1	Y 371.029	1390566.1	1390566.1	104.29	%			15:22:49
1	Ag 328.068†	-1864.9	-1405.9	0.0144	µg/L	0.0144	ppb	15:22:55
1	As 188.979†	21.3	25.5	21.038	µg/L	21.038	ppb	15:23:16
1	B 249.677†	1336.0	1104.9	-19.171	µg/L	-19.171	ppb	15:22:55
1	Ba 233.527†	27554.0	28535.3	660.53	µg/L	660.53	ppb	15:22:55
1	Be 313.107†	16760.1	18899.3	10.167	µg/L	10.167	ppb	15:22:55
1	Cd 226.502†	528.3	711.9	2.5820	µg/L	2.5820	ppb	15:22:55
1	Co 228.616†	756.1	747.8	25.309	µg/L	25.309	ppb	15:23:16
1	Cr 267.716†	2627.1	2625.7	61.378	µg/L	61.378	ppb	15:23:16
1	Cu 324.752†	10979.3	7135.6	74.796	µg/L	74.796	ppb	15:22:55
1	Mn 257.610†	1262923.3	1307396.9	4250.8	µg/L	4250.8	ppb	15:22:49
1	Mo 202.031†	75.2	65.4	12.140	µg/L	12.140	ppb	15:23:16
1	Ni 231.604†	1260.8	947.0	57.794	µg/L	57.794	ppb	15:23:16
1	P 214.914†	753.6	491.7	766.61	µg/L	766.61	ppb	15:23:16
1	Pb 220.353†	475.8	452.7	132.65	µg/L	132.65	ppb	15:23:16
1	S 181.975 Axial†	164.5	147.3	489.69	µg/L	489.69	ppb	15:23:16
1	Sb 206.836†	25.1	-1.9	-2.5452	µg/L	-2.5452	ppb	15:23:16
1	Se 196.026†	-77.6	-102.1	330.71	µg/L	330.71	ppb	15:23:16
1	SiO2†	445431.7	458115.0	86777	µg/L	86777	ppb	15:22:49
1	Si 251.611†	546640.8	565148.9	40258	µg/L	40258	ppb	15:22:49
1	Sn 189.927†	-33.1	-29.0	-11.523	µg/L	-11.523	ppb	15:23:16
1	Ti 334.940†	1631702.5	1688898.7	4145.5	µg/L	4145.5	ppb	15:22:49
1	Tl 190.801†	-88.7	-57.4	11.840	µg/L	11.840	ppb	15:23:16
1	U 409.014†	-1959.9	-1987.9	-205.51	µg/L	-205.51	ppb	15:22:49
1	V 292.402†	13754.1	14131.2	160.37	µg/L	160.37	ppb	15:22:55
1	Zn 213.857†	23949.2	24120.3	575.95	µg/L	575.95	ppb	15:22:55
2	Sc RADIAL	91876.5	91876.5	100	%			15:21:49
2	Al 396.153Radial†	114311.4	114349.2	55986	µg/L	55986	ppb	15:21:49
2	Ca 317.933Radial†	35144.8	34765.5	13082	µg/L	13082	ppb	15:21:49
2	Fe 238.204 Radial†	11262.9	11237.6	139970	µg/L	139970	ppb	15:22:10
2	K 766.490 Radial†	17639.8	17215.4	8145.2	µg/L	8145.2	ppb	15:21:49
2	Mg 279.077 IEC†	712.4	702.6	9354.4	µg/L	9354.4	ppb	15:22:10
2	Na 589.592 Radial†	2004.8	1812.5	916.72	µg/L	916.72	ppb	15:21:49
2	Sr 421.552†	18496.6	18341.1	111.08	µg/L	111.08	ppb	15:21:49
2	Sc 361.383	1890976.8	1890976.8	96.967	%			15:23:24
2	Y 371.029	1395237.8	1395237.8	104.64	%			15:23:24
2	Ag 328.068†	-1818.1	-1351.4	0.5602	µg/L	0.5602	ppb	15:23:29
2	As 188.979†	23.1	27.2	23.597	µg/L	23.597	ppb	15:23:50
2	B 249.677†	1339.9	1104.5	-19.809	µg/L	-19.809	ppb	15:23:29
2	Ba 233.527†	27431.4	28316.5	655.47	µg/L	655.47	ppb	15:23:29
2	Be 313.107†	16657.8	18737.6	10.066	µg/L	10.066	ppb	15:23:29
2	Cd 226.502†	580.3	763.7	3.7728	µg/L	3.7728	ppb	15:23:29
2	Co 228.616†	755.9	745.1	25.182	µg/L	25.182	ppb	15:23:50
2	Cr 267.716†	2626.7	2616.6	61.164	µg/L	61.164	ppb	15:23:50
2	Cu 324.752†	10903.0	7020.1	74.230	µg/L	74.230	ppb	15:23:29
2	Mn 257.610†	1268972.9	1309401.6	4257.4	µg/L	4257.4	ppb	15:23:24
2	Mo 202.031†	85.0	75.4	13.228	µg/L	13.228	ppb	15:23:50
2	Ni 231.604†	1266.2	948.3	57.886	µg/L	57.886	ppb	15:23:50
2	P 214.914†	757.0	492.7	767.51	µg/L	767.51	ppb	15:23:50
2	Pb 220.353†	465.7	440.7	129.36	µg/L	129.36	ppb	15:23:50

2	S 181.975 Axial†	168.9	151.2	502.80	µg/L	502.80 ppb	15:23:50
2	Sb 206.836†	19.6	-7.7	-8.0602	µg/L	-8.0602 ppb	15:23:50
2	Se 196.026†	-83.2	-107.6	328.80	µg/L	328.80 ppb	15:23:50
2	SiO2†	447516.6	458771.7	86901	µg/L	86901 ppb	15:23:24
2	Si 251.611†	549084.0	565835.8	40307	µg/L	40307 ppb	15:23:24
2	Sn 189.927†	-25.9	-21.5	-8.3693	µg/L	-8.3693 ppb	15:23:50
2	Ti 334.940†	1637942.5	1689863.2	4147.9	µg/L	4147.9 ppb	15:23:24
2	Tl 190.801†	-83.5	-51.8	17.922	µg/L	17.922 ppb	15:23:50
2	U 409.014†	-1956.8	-1978.1	-204.77	µg/L	-204.77 ppb	15:23:24
2	V 292.402†	13752.2	14083.1	159.63	µg/L	159.63 ppb	15:23:29
2	Zn 213.857†	23835.4	23922.6	571.11	µg/L	571.11 ppb	15:23:29
3	Sc RADIAL	91910.5	91910.5	100	%		15:22:15
3	Al 396.153Radial†	115084.9	115079.2	56343	µg/L	56343 ppb	15:22:15
3	Ca 317.933Radial†	35404.9	35012.3	13175	µg/L	13175 ppb	15:22:15
3	Fe 238.204 Radial†	11207.2	11177.7	139220	µg/L	139220 ppb	15:22:36
3	K 766.490 Radial†	17812.3	17381.1	8223.6	µg/L	8223.6 ppb	15:22:15
3	Mg 279.077 IEC†	708.5	698.4	9298.5	µg/L	9298.5 ppb	15:22:36
3	Na 589.592 Radial†	1990.8	1797.7	909.25	µg/L	909.25 ppb	15:22:15
3	Sr 421.552†	18628.5	18465.9	111.84	µg/L	111.84 ppb	15:22:15
3	Sc 361.383	1888078.5	1888078.5	96.819	%		15:23:58
3	Y 371.029	1389187.7	1389187.7	104.19	%		15:23:58
3	Ag 328.068†	-1670.6	-1202.0	1.6984	µg/L	1.6984 ppb	15:24:03
3	As 188.979†	23.2	27.3	23.881	µg/L	23.881 ppb	15:24:24
3	B 249.677†	1311.8	1077.6	-20.725	µg/L	-20.725 ppb	15:24:03
3	Ba 233.527†	26323.3	27215.3	629.97	µg/L	629.97 ppb	15:24:03
3	Be 313.107†	15820.5	17899.2	9.6088	µg/L	9.6088 ppb	15:24:03
3	Cd 226.502†	507.4	689.3	1.9497	µg/L	1.9497 ppb	15:24:03
3	Co 228.616†	691.3	679.6	22.557	µg/L	22.557 ppb	15:24:24
3	Cr 267.716†	2368.7	2354.2	55.036	µg/L	55.036 ppb	15:24:24
3	Cu 324.752†	10613.3	6738.1	72.165	µg/L	72.165 ppb	15:24:03
3	Mn 257.610†	1225186.8	1266185.5	4117.1	µg/L	4117.1 ppb	15:23:58
3	Mo 202.031†	62.4	52.1	10.760	µg/L	10.760 ppb	15:24:24
3	Ni 231.604†	1185.1	866.6	53.041	µg/L	53.041 ppb	15:24:24
3	P 214.914†	713.1	448.5	690.45	µg/L	690.45 ppb	15:24:24
3	Pb 220.353†	441.1	416.0	122.49	µg/L	122.49 ppb	15:24:24
3	S 181.975 Axial†	150.1	132.1	439.17	µg/L	439.17 ppb	15:24:24
3	Sb 206.836†	14.7	-12.7	-12.770	µg/L	-12.770 ppb	15:24:24
3	Se 196.026†	-78.1	-102.5	331.59	µg/L	331.59 ppb	15:24:24
3	SiO2†	433517.9	445021.5	84297	µg/L	84297 ppb	15:23:58
3	Si 251.611†	531948.2	549006.1	39108	µg/L	39108 ppb	15:23:58
3	Sn 189.927†	-32.2	-28.1	-11.104	µg/L	-11.104 ppb	15:24:24
3	Ti 334.940†	1569069.5	1621320.0	3979.6	µg/L	3979.6 ppb	15:23:58
3	Tl 190.801†	-82.9	-51.3	16.258	µg/L	16.258 ppb	15:24:24
3	U 409.014†	-1895.8	-1918.2	-199.08	µg/L	-199.08 ppb	15:23:58
3	V 292.402†	13005.0	13333.2	150.25	µg/L	150.25 ppb	15:24:03
3	Zn 213.857†	23008.1	23105.8	551.42	µg/L	551.42 ppb	15:24:03

Mean Data: 247178002|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1887968.1	96.813	%	0.1572				0.16%
Sc RADIAL	92025.8	100	%	0.3				0.25%
Y 371.029	1391663.9	104.38	%	0.238				0.23%
Ag 328.068†	-1319.8	0.7577	µg/L	0.85917	0.7577	ppb	0.85917	113.39%
Al 396.153Radial†	114404.4	56013	µg/L	317.8	56013	ppb	317.8	0.57%
As 188.979†	26.7	22.839	µg/L	1.5660	22.839	ppb	1.5660	6.86%
B 249.677†	1095.7	-19.902	µg/L	0.7812	-19.902	ppb	0.7812	3.93%
Ba 233.527†	28022.4	648.66	µg/L	16.377	648.66	ppb	16.377	2.52%
Be 313.107†	18512.1	9.9472	µg/L	0.29747	9.9472	ppb	0.29747	2.99%
Ca 317.933Radial†	34807.2	13098	µg/L	70.6	13098	ppb	70.6	0.54%
Cd 226.502†	721.7	2.7682	µg/L	0.92572	2.7682	ppb	0.92572	33.44%
Co 228.616†	724.2	24.349	µg/L	1.5535	24.349	ppb	1.5535	6.38%
Cr 267.716†	2532.2	59.193	µg/L	3.6018	59.193	ppb	3.6018	6.08%
Cu 324.752†	6964.6	73.731	µg/L	1.3847	73.731	ppb	1.3847	1.88%
Fe 238.204 Radial†	11185.9	139320	µg/L	598.8	139320	ppb	598.8	0.43%
K 766.490 Radial†	17234.5	8154.2	µg/L	65.30	8154.2	ppb	65.30	0.80%
Mg 279.077 IEC†	698.1	9294.8	µg/L	61.55	9294.8	ppb	61.55	0.66%
Mn 257.610†	1294328.0	4208.4	µg/L	79.17	4208.4	ppb	79.17	1.88%
Mo 202.031†	64.3	12.042	µg/L	1.2370	12.042	ppb	1.2370	10.27%
Na 589.592 Radial†	1793.2	906.95	µg/L	11.105	906.95	ppb	11.105	1.22%

Ni 231.604†	920.7	56.240	µg/L	2.7709	56.240	ppb	2.7709	4.93%
P 214.914†	477.7	741.52	µg/L	44.235	741.52	ppb	44.235	5.97%
Pb 220.353†	436.5	128.17	µg/L	5.188	128.17	ppb	5.188	4.05%
S 181.975 Axial†	143.5	477.22	µg/L	33.599	477.22	ppb	33.599	7.04%
Sb 206.836†	-7.4	-7.7919	µg/L	5.11774	-7.7919	ppb	5.11774	65.68%
Se 196.026†	-104.1	330.37	µg/L	1.430	330.37	ppb	1.430	0.43%
SiO2†	453969.4	85992	µg/L	1469.2	85992	ppb	1469.2	1.71%
Si 251.611†	559996.9	39891	µg/L	678.5	39891	ppb	678.5	1.70%
Sn 189.927†	-26.2	-10.332	µg/L	1.7128	-10.332	ppb	1.7128	16.58%
Sr 421.552†	18379.1	111.31	µg/L	0.457	111.31	ppb	0.457	0.41%
Ti 334.940†	1666694.0	4091.0	µg/L	96.47	4091.0	ppb	96.47	2.36%
Tl 190.801†	-53.5	15.340	µg/L	3.1431	15.340	ppb	3.1431	20.49%
U 409.014†	-1961.4	-203.12	µg/L	3.517	-203.12	ppb	3.517	1.73%
V 292.402†	13849.2	156.75	µg/L	5.642	156.75	ppb	5.642	3.60%
Zn 213.857†	23716.2	566.16	µg/L	12.995	566.16	ppb	12.995	2.30%

Sequence No.: 26
Sample ID: 247178003|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 318
Date Collected: 3/15/2010 15:24:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178003|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	91122.2	91122.2	99.3	%			15:25:04
1	Al 396.153Radial†	112326.7	113295.3	55470	µg/L	55470	ppb	15:25:04
1	Ca 317.933Radial†	40080.7	40027.5	15063	µg/L	15063	ppb	15:25:04
1	Fe 238.204 Radial†	8693.9	8743.2	108900	µg/L	108900	ppb	15:25:24
1	K 766.490 Radial†	20682.5	20425.8	9664.1	µg/L	9664.1	ppb	15:25:04
1	Mg 279.077 IEC†	911.9	909.4	12186	µg/L	12186	ppb	15:25:24
1	Na 589.592 Radial†	2364.0	2190.8	1108.1	µg/L	1108.1	ppb	15:25:04
1	Sr 421.552†	19747.9	19754.3	119.64	µg/L	119.64	ppb	15:25:04
1	Sc 361.383	1878886.2	1878886.2	96.347	%			15:26:30
1	Y 371.029	1373411.2	1373411.2	103.01	%			15:26:30
1	Ag 328.068†	-1537.8	-1072.6	0.1902	µg/L	0.1902	ppb	15:26:36
1	As 188.979†	21.2	25.4	24.398	µg/L	24.398	ppb	15:26:56
1	B 249.677†	1268.1	1038.9	-6.6039	µg/L	-6.6039	ppb	15:26:36
1	Ba 233.527†	20474.1	21277.4	492.52	µg/L	492.52	ppb	15:26:36
1	Be 313.107†	13532.4	15604.2	8.7472	µg/L	8.7472	ppb	15:26:36
1	Cd 226.502†	385.7	565.7	2.2574	µg/L	2.2574	ppb	15:26:56
1	Co 228.616†	539.5	525.5	18.651	µg/L	18.651	ppb	15:26:56
1	Cr 267.716†	6528.7	6683.9	156.03	µg/L	156.03	ppb	15:26:36
1	Cu 324.752†	10817.5	7003.7	68.277	µg/L	68.277	ppb	15:26:36
1	Mn 257.610†	714305.4	742126.2	2414.2	µg/L	2414.2	ppb	15:26:30
1	Mo 202.031†	33.6	22.6	6.5072	µg/L	6.5072	ppb	15:26:56
1	Ni 231.604†	1900.1	1614.7	96.917	µg/L	96.917	ppb	15:26:56
1	P 214.914†	559.1	292.3	438.82	µg/L	438.82	ppb	15:26:56
1	Pb 220.353†	293.5	265.0	79.869	µg/L	79.869	ppb	15:26:56
1	S 181.975 Axial†	81.9	62.1	206.49	µg/L	206.49	ppb	15:26:56
1	Sb 206.836†	15.4	-11.9	-13.246	µg/L	-13.246	ppb	15:26:56
1	Se 196.026†	-65.3	-89.6	245.90	µg/L	245.90	ppb	15:26:56
1	SiO2†	482697.8	498256.5	94381	µg/L	94381	ppb	15:26:30
1	Si 251.611†	592397.8	614435.6	43769	µg/L	43769	ppb	15:26:30
1	Sn 189.927†	-13.5	-8.8	-2.6673	µg/L	-2.6673	ppb	15:26:56
1	Ti 334.940†	979506.0	1017333.2	2496.7	µg/L	2496.7	ppb	15:26:30
1	Tl 190.801†	-65.0	-33.1	10.645	µg/L	10.645	ppb	15:26:56
1	U 409.014†	-1827.4	-1856.8	-189.26	µg/L	-189.26	ppb	15:26:30
1	V 292.402†	9867.1	10142.0	114.10	µg/L	114.10	ppb	15:26:36
1	Zn 213.857†	18133.2	18162.4	432.93	µg/L	432.93	ppb	15:26:36
2	Sc RADIAL	91231.8	91231.8	99.4	%			15:25:30
2	Al 396.153Radial†	112970.3	113807.0	55720	µg/L	55720	ppb	15:25:30
2	Ca 317.933Radial†	40391.6	40291.7	15162	µg/L	15162	ppb	15:25:30
2	Fe 238.204 Radial†	8697.2	8736.0	108810	µg/L	108810	ppb	15:25:50
2	K 766.490 Radial†	20705.9	20424.3	9663.4	µg/L	9663.4	ppb	15:25:30
2	Mg 279.077 IEC†	912.9	909.3	12184	µg/L	12184	ppb	15:25:50
2	Na 589.592 Radial†	2362.9	2186.9	1106.1	µg/L	1106.1	ppb	15:25:30
2	Sr 421.552†	19898.5	19881.9	120.41	µg/L	120.41	ppb	15:25:30
2	Sc 361.383	1873063.2	1873063.2	96.049	%			15:27:04
2	Y 371.029	1371666.2	1371666.2	102.88	%			15:27:04
2	Ag 328.068†	-1531.7	-1071.2	0.1970	µg/L	0.1970	ppb	15:27:09
2	As 188.979†	16.6	20.7	17.021	µg/L	17.021	ppb	15:27:30
2	B 249.677†	1232.2	1005.6	-8.1592	µg/L	-8.1592	ppb	15:27:09
2	Ba 233.527†	20539.8	21411.9	495.63	µg/L	495.63	ppb	15:27:09
2	Be 313.107†	13629.3	15748.8	8.8391	µg/L	8.8391	ppb	15:27:09
2	Cd 226.502†	381.0	562.0	2.1756	µg/L	2.1756	ppb	15:27:30
2	Co 228.616†	539.7	527.5	18.753	µg/L	18.753	ppb	15:27:30
2	Cr 267.716†	6486.0	6660.5	155.49	µg/L	155.49	ppb	15:27:09
2	Cu 324.752†	10758.9	6977.6	68.083	µg/L	68.083	ppb	15:27:09
2	Mn 257.610†	709833.7	739775.4	2406.6	µg/L	2406.6	ppb	15:27:04
2	Mo 202.031†	39.0	28.3	7.1031	µg/L	7.1031	ppb	15:27:30
2	Ni 231.604†	1926.0	1647.8	98.872	µg/L	98.872	ppb	15:27:30
2	P 214.914†	549.0	283.6	423.64	µg/L	423.64	ppb	15:27:30
2	Pb 220.353†	289.4	261.7	78.955	µg/L	78.955	ppb	15:27:30

2	S 181.975 Axial†	76.9	57.1	189.96	µg/L	189.96 ppb	15:27:30
2	Sb 206.836†	17.9	-9.3	-10.759	µg/L	-10.759 ppb	15:27:30
2	Se 196.026†	-66.2	-90.7	244.43	µg/L	244.43 ppb	15:27:30
2	SiO2†	480297.6	497315.1	94202	µg/L	94202 ppb	15:27:04
2	Si 251.611†	589444.6	613272.4	43686	µg/L	43686 ppb	15:27:04
2	Sn 189.927†	-13.2	-8.5	-2.5380	µg/L	-2.5380 ppb	15:27:30
2	Ti 334.940†	974428.1	1015207.1	2491.5	µg/L	2491.5 ppb	15:27:04
2	Tl 190.801†	-59.4	-27.5	16.381	µg/L	16.381 ppb	15:27:30
2	U 409.014†	-1816.2	-1851.1	-188.71	µg/L	-188.71 ppb	15:27:04
2	V 292.402†	9860.6	10167.1	114.43	µg/L	114.43 ppb	15:27:09
2	Zn 213.857†	18145.6	18233.8	434.65	µg/L	434.65 ppb	15:27:09
3	Sc RADIAL	90826.1	90826.1	99.0	%		15:25:56
3	Al 396.153Radial†	112343.4	113681.1	55659	µg/L	55659 ppb	15:25:56
3	Ca 317.933Radial†	40148.8	40227.9	15138	µg/L	15138 ppb	15:25:56
3	Fe 238.204 Radial†	8692.5	8770.4	109240	µg/L	109240 ppb	15:26:16
3	K 766.490 Radial†	20652.5	20463.4	9681.9	µg/L	9681.9 ppb	15:25:56
3	Mg 279.077 IEC†	912.4	912.9	12232	µg/L	12232 ppb	15:26:16
3	Na 589.592 Radial†	2388.8	2223.7	1124.7	µg/L	1124.7 ppb	15:25:56
3	Sr 421.552†	19816.4	19888.4	120.45	µg/L	120.45 ppb	15:25:56
3	Sc 361.383	1881971.8	1881971.8	96.505	%		15:27:38
3	Y 371.029	1372306.7	1372306.7	102.92	%		15:27:38
3	Ag 328.068†	-1496.1	-1026.7	0.5538	µg/L	0.5538 ppb	15:27:43
3	As 188.979†	14.2	18.1	12.927	µg/L	12.927 ppb	15:28:04
3	B 249.677†	1182.9	948.4	-11.143	µg/L	-11.143 ppb	15:27:43
3	Ba 233.527†	19666.1	20405.3	472.33	µg/L	472.33 ppb	15:27:43
3	Be 313.107†	12779.9	14801.6	8.2912	µg/L	8.2912 ppb	15:27:43
3	Cd 226.502†	320.7	497.6	0.4716	µg/L	0.4716 ppb	15:28:04
3	Co 228.616†	488.8	472.1	16.461	µg/L	16.461 ppb	15:28:04
3	Cr 267.716†	6203.2	6335.5	147.90	µg/L	147.90 ppb	15:27:43
3	Cu 324.752†	10436.4	6590.4	65.520	µg/L	65.520 ppb	15:27:43
3	Mn 257.610†	686286.8	711877.4	2316.1	µg/L	2316.1 ppb	15:27:38
3	Mo 202.031†	25.2	13.7	5.5936	µg/L	5.5936 ppb	15:28:04
3	Ni 231.604†	1776.0	1482.9	89.128	µg/L	89.128 ppb	15:28:04
3	P 214.914†	527.3	258.4	378.94	µg/L	378.94 ppb	15:28:04
3	Pb 220.353†	274.2	244.6	74.189	µg/L	74.189 ppb	15:28:04
3	S 181.975 Axial†	70.0	49.6	164.96	µg/L	164.96 ppb	15:28:04
3	Sb 206.836†	22.8	-4.2	-5.9108	µg/L	-5.9108 ppb	15:28:04
3	Se 196.026†	-60.1	-84.1	252.43	µg/L	252.43 ppb	15:28:04
3	SiO2†	467882.3	482083.1	91317	µg/L	91317 ppb	15:27:38
3	Si 251.611†	574024.1	594388.5	42341	µg/L	42341 ppb	15:27:38
3	Sn 189.927†	-18.0	-13.4	-4.5914	µg/L	-4.5914 ppb	15:28:04
3	Ti 334.940†	936868.4	971484.8	2384.1	µg/L	2384.1 ppb	15:27:38
3	Tl 190.801†	-58.0	-25.7	16.997	µg/L	16.997 ppb	15:28:04
3	U 409.014†	-1719.4	-1741.8	-178.58	µg/L	-178.58 ppb	15:27:38
3	V 292.402†	9323.1	9561.5	106.73	µg/L	106.73 ppb	15:27:43
3	Zn 213.857†	17466.1	17440.2	415.48	µg/L	415.48 ppb	15:27:43

Mean Data: 247178003|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1877973.7	96.300	%	0.2320				0.24%
Sc RADIAL	91060.0	99.2	%	0.23				0.23%
Y 371.029	1372461.4	102.94	%	0.066				0.06%
Ag 328.068†	-1056.8	0.3137	µg/L	0.20799	0.3137	ppb	0.20799	66.31%
Al 396.153Radial†	113594.5	55616	µg/L	130.5	55616	ppb	130.5	0.23%
As 188.979†	21.4	18.115	µg/L	5.8133	18.115	ppb	5.8133	32.09%
B 249.677†	997.6	-8.6354	µg/L	2.30684	-8.6354	ppb	2.30684	26.71%
Ba 233.527†	21031.5	486.82	µg/L	12.652	486.82	ppb	12.652	2.60%
Be 313.107†	15384.9	8.6259	µg/L	0.29342	8.6259	ppb	0.29342	3.40%
Ca 317.933Radial†	40182.4	15121	µg/L	51.9	15121	ppb	51.9	0.34%
Cd 226.502†	541.8	1.6349	µg/L	1.00829	1.6349	ppb	1.00829	61.67%
Co 228.616†	508.4	17.955	µg/L	1.2949	17.955	ppb	1.2949	7.21%
Cr 267.716†	6560.0	153.14	µg/L	4.546	153.14	ppb	4.546	2.97%
Cu 324.752†	6857.2	67.293	µg/L	1.5389	67.293	ppb	1.5389	2.29%
Fe 238.204 Radial†	8749.9	108980	µg/L	225.5	108980	ppb	225.5	0.21%
K 766.490 Radial†	20437.8	9669.8	µg/L	10.48	9669.8	ppb	10.48	0.11%
Mg 279.077 IEC†	910.5	12201	µg/L	27.3	12201	ppb	27.3	0.22%
Mn 257.610†	731259.6	2379.0	µg/L	54.60	2379.0	ppb	54.60	2.30%
Mo 202.031†	21.5	6.4013	µg/L	0.76032	6.4013	ppb	0.76032	11.88%
Na 589.592 Radial†	2200.5	1113.0	µg/L	10.22	1113.0	ppb	10.22	0.92%

Ni 231.604†	1581.8	94.972	µg/L	5.1549	94.972	ppb	5.1549	5.43%
P 214.914†	278.1	413.80	µg/L	31.128	413.80	ppb	31.128	7.52%
Pb 220.353†	257.1	77.671	µg/L	3.0499	77.671	ppb	3.0499	3.93%
S 181.975 Axial†	56.3	187.14	µg/L	20.909	187.14	ppb	20.909	11.17%
Sb 206.836†	-8.5	-9.9719	µg/L	3.73034	-9.9719	ppb	3.73034	37.41%
Se 196.026†	-88.1	247.59	µg/L	4.257	247.59	ppb	4.257	1.72%
SiO2†	492551.6	93300	µg/L	1719.6	93300	ppb	1719.6	1.84%
Si 251.611†	607365.5	43266	µg/L	801.6	43266	ppb	801.6	1.85%
Sn 189.927†	-10.2	-3.2656	µg/L	1.15002	-3.2656	ppb	1.15002	35.22%
Sr 421.552†	19841.5	120.17	µg/L	0.458	120.17	ppb	0.458	0.38%
Ti 334.940†	1001341.7	2457.4	µg/L	63.53	2457.4	ppb	63.53	2.59%
Tl 190.801†	-28.8	14.674	µg/L	3.5030	14.674	ppb	3.5030	23.87%
U 409.014†	-1816.6	-185.52	µg/L	6.015	-185.52	ppb	6.015	3.24%
V 292.402†	9956.8	111.75	µg/L	4.353	111.75	ppb	4.353	3.90%
Zn 213.857†	17945.5	427.69	µg/L	10.605	427.69	ppb	10.605	2.48%

Sequence No.: 27
Sample ID: 247178004|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 319
Date Collected: 3/15/2010 15:28:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178004|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89264.7	89264.7	97.3	%			15:28:44
1	Al 396.153Radial†	65260.0	67258.7	32930	µg/L	32930	ppb	15:28:44
1	Ca 317.933Radial†	22314.8	22601.7	8505.2	µg/L	8505.2	ppb	15:28:44
1	Fe 238.204 Radial†	5254.7	5389.5	67127	µg/L	67127	ppb	15:29:05
1	K 766.490 Radial†	11321.3	11234.7	5315.5	µg/L	5315.5	ppb	15:28:44
1	Mg 279.077 IEC†	448.8	452.3	6046.9	µg/L	6046.9	ppb	15:29:05
1	Na 589.592 Radial†	1031.1	869.9	440.00	µg/L	440.00	ppb	15:28:44
1	Sr 421.552†	10891.8	11063.0	67.001	µg/L	67.001	ppb	15:28:44
1	Sc 361.383	1861262.4	1861262.4	95.443	%			15:30:10
1	Y 371.029	1311665.5	1311665.5	98.376	%			15:30:10
1	Ag 328.068†	-1164.4	-696.4	-0.1666	µg/L	-0.1666	ppb	15:30:15
1	As 188.979†	9.4	13.2	11.348	µg/L	11.348	ppb	15:30:36
1	B 249.677†	812.8	574.2	-7.3431	µg/L	-7.3431	ppb	15:30:15
1	Ba 233.527†	13871.8	14561.1	337.04	µg/L	337.04	ppb	15:30:15
1	Be 313.107†	9017.8	11007.2	6.0811	µg/L	6.0811	ppb	15:30:15
1	Cd 226.502†	200.3	375.2	2.0437	µg/L	2.0437	ppb	15:30:36
1	Co 228.616†	413.8	399.2	13.961	µg/L	13.961	ppb	15:30:36
1	Cr 267.716†	1690.7	1679.1	39.229	µg/L	39.229	ppb	15:30:36
1	Cu 324.752†	22601.2	19456.3	145.42	µg/L	145.42	ppb	15:30:15
1	Mn 257.610†	552365.6	579475.3	1884.3	µg/L	1884.3	ppb	15:30:10
1	Mo 202.031†	25.6	14.5	4.0747	µg/L	4.0747	ppb	15:30:36
1	Ni 231.604†	875.3	559.7	33.963	µg/L	33.963	ppb	15:30:36
1	P 214.914†	525.5	262.6	404.69	µg/L	404.69	ppb	15:30:36
1	Pb 220.353†	337.9	314.4	90.837	µg/L	90.837	ppb	15:30:36
1	S 181.975 Axial†	79.8	60.7	201.80	µg/L	201.80	ppb	15:30:36
1	Sb 206.836†	24.4	-2.3	-2.6970	µg/L	-2.6970	ppb	15:30:36
1	Se 196.026†	-26.9	-50.0	157.98	µg/L	157.98	ppb	15:30:36
1	SiO2†	387783.4	403554.7	76442	µg/L	76442	ppb	15:30:10
1	Si 251.611†	475638.1	497923.6	35470	µg/L	35470	ppb	15:30:10
1	Sn 189.927†	-15.4	-10.9	-4.0151	µg/L	-4.0151	ppb	15:30:36
1	Ti 334.940†	775238.1	812939.8	1995.3	µg/L	1995.3	ppb	15:30:10
1	Tl 190.801†	-59.8	-28.3	4.2436	µg/L	4.2436	ppb	15:30:36
1	U 409.014†	647.3	718.1	57.129	µg/L	57.129	ppb	15:30:10
1	V 292.402†	6210.7	6408.0	72.360	µg/L	72.360	ppb	15:30:15
1	Zn 213.857†	12624.8	12569.2	300.12	µg/L	300.12	ppb	15:30:15
2	Sc RADIAL	89004.5	89004.5	97.0	%			15:29:10
2	Al 396.153Radial†	65306.2	67502.4	33049	µg/L	33049	ppb	15:29:10
2	Ca 317.933Radial†	22278.5	22631.3	8516.3	µg/L	8516.3	ppb	15:29:10
2	Fe 238.204 Radial†	5248.6	5399.0	67245	µg/L	67245	ppb	15:29:30
2	K 766.490 Radial†	11278.4	11224.5	5310.7	µg/L	5310.7	ppb	15:29:10
2	Mg 279.077 IEC†	448.7	453.6	6063.9	µg/L	6063.9	ppb	15:29:30
2	Na 589.592 Radial†	1070.7	913.9	462.23	µg/L	462.23	ppb	15:29:10
2	Sr 421.552†	10858.8	11061.7	66.993	µg/L	66.993	ppb	15:29:10
2	Sc 361.383	1867358.8	1867358.8	95.756	%			15:30:43
2	Y 371.029	1316904.1	1316904.1	98.769	%			15:30:43
2	Ag 328.068†	-1177.6	-706.3	-0.2333	µg/L	-0.2333	ppb	15:30:49
2	As 188.979†	12.8	16.8	16.864	µg/L	16.864	ppb	15:31:09
2	B 249.677†	875.4	636.8	-4.3936	µg/L	-4.3936	ppb	15:30:49
2	Ba 233.527†	13912.6	14556.3	336.93	µg/L	336.93	ppb	15:30:49
2	Be 313.107†	9043.8	11003.5	6.0791	µg/L	6.0791	ppb	15:30:49
2	Cd 226.502†	204.6	378.9	2.1253	µg/L	2.1253	ppb	15:31:09
2	Co 228.616†	420.8	405.0	14.226	µg/L	14.226	ppb	15:31:09
2	Cr 267.716†	1695.7	1678.5	39.216	µg/L	39.216	ppb	15:31:09
2	Cu 324.752†	22714.6	19497.3	145.72	µg/L	145.72	ppb	15:30:49
2	Mn 257.610†	553820.6	579105.3	1883.1	µg/L	1883.1	ppb	15:30:43
2	Mo 202.031†	20.5	9.1	3.5084	µg/L	3.5084	ppb	15:31:09
2	Ni 231.604†	863.7	544.6	33.070	µg/L	33.070	ppb	15:31:09
2	P 214.914†	519.9	254.9	391.09	µg/L	391.09	ppb	15:31:09
2	Pb 220.353†	337.6	312.9	90.441	µg/L	90.441	ppb	15:31:09

2	S 181.975 Axial†	79.4	60.0	199.62	µg/L	199.62 ppb	15:31:09
2	Sb 206.836†	21.0	-5.9	-6.1621	µg/L	-6.1621 ppb	15:31:09
2	Se 196.026†	-38.9	-62.4	145.86	µg/L	145.86 ppb	15:31:09
2	SiO2†	388626.3	403108.5	76357	µg/L	76357 ppb	15:30:43
2	Si 251.611†	476439.7	497133.9	35413	µg/L	35413 ppb	15:30:43
2	Sn 189.927†	-19.2	-14.8	-5.6885	µg/L	-5.6885 ppb	15:31:09
2	Ti 334.940†	777526.3	812677.6	1994.7	µg/L	1994.7 ppb	15:30:43
2	Tl 190.801†	-62.1	-30.5	1.9848	µg/L	1.9848 ppb	15:31:09
2	U 409.014†	570.5	635.6	49.423	µg/L	49.423 ppb	15:30:43
2	V 292.402†	6311.0	6491.5	73.384	µg/L	73.384 ppb	15:30:49
2	Zn 213.857†	12620.6	12521.6	298.96	µg/L	298.96 ppb	15:30:49
3	Sc RADIAL	88581.0	88581.0	96.5	%		15:29:36
3	Al 396.153Radial†	65242.6	67758.4	33175	µg/L	33175 ppb	15:29:36
3	Ca 317.933Radial†	22209.9	22670.1	8530.9	µg/L	8530.9 ppb	15:29:36
3	Fe 238.204 Radial†	5271.3	5448.3	67859	µg/L	67859 ppb	15:29:56
3	K 766.490 Radial†	11372.6	11377.7	5383.2	µg/L	5383.2 ppb	15:29:36
3	Mg 279.077 IEC†	446.2	453.2	6058.2	µg/L	6058.2 ppb	15:29:56
3	Na 589.592 Radial†	1090.4	939.6	475.23	µg/L	475.23 ppb	15:29:36
3	Sr 421.552†	10897.5	11155.3	67.560	µg/L	67.560 ppb	15:29:36
3	Sc 361.383	1864373.4	1864373.4	95.603	%		15:31:17
3	Y 371.029	1312030.9	1312030.9	98.403	%		15:31:17
3	Ag 328.068†	-1174.1	-704.6	-0.2047	µg/L	-0.2047 ppb	15:31:23
3	As 188.979†	9.3	13.2	11.125	µg/L	11.125 ppb	15:31:43
3	B 249.677†	840.3	601.6	-6.4134	µg/L	-6.4134 ppb	15:31:23
3	Ba 233.527†	13288.9	13927.1	322.37	µg/L	322.37 ppb	15:31:23
3	Be 313.107†	8557.2	10509.6	5.8046	µg/L	5.8046 ppb	15:31:23
3	Cd 226.502†	165.8	338.7	1.0249	µg/L	1.0249 ppb	15:31:43
3	Co 228.616†	379.5	362.5	12.477	µg/L	12.477 ppb	15:31:43
3	Cr 267.716†	1536.5	1514.8	35.394	µg/L	35.394 ppb	15:31:43
3	Cu 324.752†	21774.4	18551.9	139.39	µg/L	139.39 ppb	15:31:23
3	Mn 257.610†	532986.1	558238.8	1815.4	µg/L	1815.4 ppb	15:31:17
3	Mo 202.031†	22.7	11.4	3.7700	µg/L	3.7700 ppb	15:31:43
3	Ni 231.604†	823.8	504.3	30.699	µg/L	30.699 ppb	15:31:43
3	P 214.914†	506.8	242.2	368.77	µg/L	368.77 ppb	15:31:43
3	Pb 220.353†	317.6	292.6	84.826	µg/L	84.826 ppb	15:31:43
3	S 181.975 Axial†	79.7	60.5	201.01	µg/L	201.01 ppb	15:31:43
3	Sb 206.836†	22.8	-4.1	-4.3740	µg/L	-4.3740 ppb	15:31:43
3	Se 196.026†	-24.1	-47.0	163.26	µg/L	163.26 ppb	15:31:43
3	SiO2†	376681.3	391264.0	74114	µg/L	74114 ppb	15:31:17
3	Si 251.611†	461968.4	482793.6	34392	µg/L	34392 ppb	15:31:17
3	Sn 189.927†	-19.9	-15.5	-5.9778	µg/L	-5.9778 ppb	15:31:43
3	Ti 334.940†	743081.4	777948.7	1909.4	µg/L	1909.4 ppb	15:31:17
3	Tl 190.801†	-49.2	-17.1	14.974	µg/L	14.974 ppb	15:31:43
3	U 409.014†	429.7	489.4	35.695	µg/L	35.695 ppb	15:31:17
3	V 292.402†	5927.4	6100.8	68.364	µg/L	68.364 ppb	15:31:23
3	Zn 213.857†	12098.2	11996.3	286.25	µg/L	286.25 ppb	15:31:23

Mean Data: 247178004|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1864331.5	95.601	%	0.1563				0.16%
Sc RADIAL	88950.1	96.9	%	0.38				0.39%
Y 371.029	1313533.5	98.516	%	0.2194				0.22%
Ag 328.068†	-702.4	-0.2016	µg/L	0.03345	-0.2016	ppb	0.03345	16.60%
Al 396.153Radial†	67506.5	33051	µg/L	122.4	33051	ppb	122.4	0.37%
As 188.979†	14.4	13.113	µg/L	3.2510	13.113	ppb	3.2510	24.79%
B 249.677†	604.2	-6.0500	µg/L	1.50793	-6.0500	ppb	1.50793	24.92%
Ba 233.527†	14348.2	332.11	µg/L	8.441	332.11	ppb	8.441	2.54%
Be 313.107†	10840.1	5.9883	µg/L	0.15907	5.9883	ppb	0.15907	2.66%
Ca 317.933Radial†	22634.4	8517.5	µg/L	12.91	8517.5	ppb	12.91	0.15%
Cd 226.502†	364.3	1.7313	µg/L	0.61314	1.7313	ppb	0.61314	35.41%
Co 228.616†	388.9	13.555	µg/L	0.9428	13.555	ppb	0.9428	6.96%
Cr 267.716†	1624.1	37.946	µg/L	2.2105	37.946	ppb	2.2105	5.83%
Cu 324.752†	19168.5	143.51	µg/L	3.575	143.51	ppb	3.575	2.49%
Fe 238.204 Radial†	5412.3	67410	µg/L	393.3	67410	ppb	393.3	0.58%
K 766.490 Radial†	11279.0	5336.4	µg/L	40.52	5336.4	ppb	40.52	0.76%
Mg 279.077 IEC†	453.0	6056.3	µg/L	8.64	6056.3	ppb	8.64	0.14%
Mn 257.610†	572273.1	1860.9	µg/L	39.43	1860.9	ppb	39.43	2.12%
Mo 202.031†	11.6	3.7843	µg/L	0.28342	3.7843	ppb	0.28342	7.49%
Na 589.592 Radial†	907.8	459.15	µg/L	17.820	459.15	ppb	17.820	3.88%

Ni 231.604†	536.2	32.577	µg/L	1.6869	32.577	ppb	1.6869	5.18%
P 214.914†	253.2	388.18	µg/L	18.136	388.18	ppb	18.136	4.67%
Pb 220.353†	306.7	88.701	µg/L	3.3621	88.701	ppb	3.3621	3.79%
S 181.975 Axial†	60.4	200.81	µg/L	1.100	200.81	ppb	1.100	0.55%
Sb 206.836†	-4.1	-4.4110	µg/L	1.73287	-4.4110	ppb	1.73287	39.29%
Se 196.026†	-53.1	155.70	µg/L	8.920	155.70	ppb	8.920	5.73%
SiO2†	399309.1	75638	µg/L	1320.4	75638	ppb	1320.4	1.75%
Si 251.611†	492617.0	35092	µg/L	606.7	35092	ppb	606.7	1.73%
Sn 189.927†	-13.7	-5.2271	µg/L	1.05959	-5.2271	ppb	1.05959	20.27%
Sr 421.552†	11093.3	67.185	µg/L	0.3250	67.185	ppb	0.3250	0.48%
Ti 334.940†	801188.7	1966.5	µg/L	49.41	1966.5	ppb	49.41	2.51%
Tl 190.801†	-25.3	7.0676	µg/L	6.94006	7.0676	ppb	6.94006	98.20%
U 409.014†	614.4	47.416	µg/L	10.8568	47.416	ppb	10.8568	22.90%
V 292.402†	6333.4	71.369	µg/L	2.6524	71.369	ppb	2.6524	3.72%
Zn 213.857†	12362.4	295.11	µg/L	7.695	295.11	ppb	7.695	2.61%

Sequence No.: 28
Sample ID: 247178005|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 320
Date Collected: 3/15/2010 15:31:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178005|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90115.2	90115.2	98.2	%			15:32:23
1	Al 396.153Radial†	95981.0	97912.7	47938	µg/L	47938	ppb	15:32:23
1	Ca 317.933Radial†	34937.7	35240.7	13261	µg/L	13261	ppb	15:32:23
1	Fe 238.204 Radial†	8422.0	8564.2	106670	µg/L	106670	ppb	15:32:43
1	K 766.490 Radial†	17769.2	17691.6	8370.5	µg/L	8370.5	ppb	15:32:23
1	Mg 279.077 IEC†	807.4	813.2	10887	µg/L	10887	ppb	15:32:43
1	Na 589.592 Radial†	1463.8	1300.6	657.83	µg/L	657.83	ppb	15:32:23
1	Sr 421.552†	17627.9	17817.5	107.91	µg/L	107.91	ppb	15:32:23
1	Sc 361.383	1864163.4	1864163.4	95.592	%			15:33:49
1	Y 371.029	1339853.6	1339853.6	100.49	%			15:33:49
1	Ag 328.068†	-1503.7	-1049.5	0.2877	µg/L	0.2877	ppb	15:33:54
1	As 188.979†	18.8	23.1	21.250	µg/L	21.250	ppb	15:34:15
1	B 249.677†	1112.6	886.6	-12.869	µg/L	-12.869	ppb	15:33:54
1	Ba 233.527†	22686.3	23759.4	549.96	µg/L	549.96	ppb	15:33:54
1	Be 313.107†	12280.3	14405.3	7.7657	µg/L	7.7657	ppb	15:33:54
1	Cd 226.502†	395.2	578.7	2.8064	µg/L	2.8064	ppb	15:34:15
1	Co 228.616†	611.1	604.8	20.960	µg/L	20.960	ppb	15:34:15
1	Cr 267.716†	3768.0	3849.4	89.907	µg/L	89.907	ppb	15:33:54
1	Cu 324.752†	11181.7	7473.4	71.064	µg/L	71.064	ppb	15:33:54
1	Mn 257.610†	899386.9	941597.1	3061.6	µg/L	3061.6	ppb	15:33:49
1	Mo 202.031†	44.9	34.7	7.6910	µg/L	7.6910	ppb	15:34:15
1	Ni 231.604†	1299.6	1002.1	60.639	µg/L	60.639	ppb	15:34:15
1	P 214.914†	735.2	481.2	771.59	µg/L	771.59	ppb	15:34:15
1	Pb 220.353†	422.0	401.9	117.32	µg/L	117.32	ppb	15:34:15
1	S 181.975 Axial†	100.9	82.7	274.86	µg/L	274.86	ppb	15:34:15
1	Sb 206.836†	24.3	-2.4	-3.4864	µg/L	-3.4864	ppb	15:34:15
1	Se 196.026†	-59.3	-83.9	245.66	µg/L	245.66	ppb	15:34:15
1	SiO2†	444606.7	462365.8	87582	µg/L	87582	ppb	15:33:49
1	Si 251.611†	545788.9	570533.6	40642	µg/L	40642	ppb	15:33:49
1	Sn 189.927†	-27.5	-23.5	-9.0214	µg/L	-9.0214	ppb	15:34:15
1	Ti 334.940†	1213384.7	1270025.3	3117.1	µg/L	3117.1	ppb	15:33:49
1	Tl 190.801†	-65.9	-34.6	16.997	µg/L	16.997	ppb	15:34:15
1	U 409.014†	-1317.5	-1338.4	-140.48	µg/L	-140.48	ppb	15:33:49
1	V 292.402†	10649.5	11041.4	125.63	µg/L	125.63	ppb	15:33:54
1	Zn 213.857†	19912.1	20172.0	481.87	µg/L	481.87	ppb	15:33:54
2	Sc RADIAL	89614.6	89614.6	97.6	%			15:32:49
2	Al 396.153Radial†	96553.2	99044.7	48493	µg/L	48493	ppb	15:32:49
2	Ca 317.933Radial†	35146.2	35653.0	13416	µg/L	13416	ppb	15:32:49
2	Fe 238.204 Radial†	8463.7	8654.8	107800	µg/L	107800	ppb	15:33:09
2	K 766.490 Radial†	17803.9	17828.2	8435.1	µg/L	8435.1	ppb	15:32:49
2	Mg 279.077 IEC†	808.0	818.5	10956	µg/L	10956	ppb	15:33:09
2	Na 589.592 Radial†	1493.3	1339.2	677.34	µg/L	677.34	ppb	15:32:49
2	Sr 421.552†	17738.9	18031.4	109.20	µg/L	109.20	ppb	15:32:49
2	Sc 361.383	1881791.3	1881791.3	96.496	%			15:34:23
2	Y 371.029	1354764.5	1354764.5	101.61	%			15:34:23
2	Ag 328.068†	-1504.5	-1035.6	0.4941	µg/L	0.4941	ppb	15:34:28
2	As 188.979†	15.6	19.5	15.554	µg/L	15.554	ppb	15:34:49
2	B 249.677†	1195.6	961.7	-9.8507	µg/L	-9.8507	ppb	15:34:28
2	Ba 233.527†	22617.8	23466.2	543.18	µg/L	543.18	ppb	15:34:28
2	Be 313.107†	12254.9	14258.7	7.6779	µg/L	7.6779	ppb	15:34:28
2	Cd 226.502†	378.9	558.0	2.1492	µg/L	2.1492	ppb	15:34:49
2	Co 228.616†	601.6	589.0	20.260	µg/L	20.260	ppb	15:34:49
2	Cr 267.716†	3737.0	3780.4	88.296	µg/L	88.296	ppb	15:34:28
2	Cu 324.752†	11147.8	7328.7	70.289	µg/L	70.289	ppb	15:34:28
2	Mn 257.610†	905287.9	938898.8	3052.9	µg/L	3052.9	ppb	15:34:23
2	Mo 202.031†	39.2	28.3	7.0643	µg/L	7.0643	ppb	15:34:49
2	Ni 231.604†	1301.8	991.7	60.040	µg/L	60.040	ppb	15:34:49
2	P 214.914†	717.5	455.6	725.65	µg/L	725.65	ppb	15:34:49
2	Pb 220.353†	398.8	373.7	109.52	µg/L	109.52	ppb	15:34:49

2	S 181.975 Axial†	102.4	83.2	276.72 µg/L	276.72 ppb	15:34:49
2	Sb 206.836†	21.1	-6.0	-6.8534 µg/L	-6.8534 ppb	15:34:49
2	Se 196.026†	-54.3	-78.1	254.96 µg/L	254.96 ppb	15:34:49
2	SiO2†	447528.2	461036.4	87330 µg/L	87330 ppb	15:34:23
2	Si 251.611†	549181.3	568700.7	40511 µg/L	40511 ppb	15:34:23
2	Sn 189.927†	-34.1	-30.1	-11.777 µg/L	-11.777 ppb	15:34:49
2	Ti 334.940†	1221403.6	1266444.8	3108.3 µg/L	3108.3 ppb	15:34:23
2	Tl 190.801†	-64.5	-32.5	19.271 µg/L	19.271 ppb	15:34:49
2	U 409.014†	-1307.4	-1314.9	-138.46 µg/L	-138.46 ppb	15:34:23
2	V 292.402†	10780.5	11072.7	125.87 µg/L	125.87 ppb	15:34:28
2	Zn 213.857†	19911.0	19975.7	477.07 µg/L	477.07 ppb	15:34:28
3	Sc RADIAL	89974.1	89974.1	98.0 %		15:33:15
3	Al 396.153Radial†	96558.5	98654.9	48302 µg/L	48302 ppb	15:33:15
3	Ca 317.933Radial†	35164.6	35528.0	13369 µg/L	13369 ppb	15:33:15
3	Fe 238.204 Radial†	8435.4	8591.2	107010 µg/L	107010 ppb	15:33:35
3	K 766.490 Radial†	17859.8	17812.4	8427.6 µg/L	8427.6 ppb	15:33:15
3	Mg 279.077 IEC†	799.4	806.3	10793 µg/L	10793 ppb	15:33:35
3	Na 589.592 Radial†	1468.3	1307.6	661.34 µg/L	661.34 ppb	15:33:15
3	Sr 421.552†	17799.7	18020.9	109.14 µg/L	109.14 ppb	15:33:15
3	Sc 361.383	1869994.1	1869994.1	95.891 %		15:34:57
3	Y 371.029	1342511.4	1342511.4	100.69 %		15:34:57
3	Ag 328.068†	-1468.2	-1007.6	0.6083 µg/L	0.6083 ppb	15:35:02
3	As 188.979†	11.8	15.7	9.6677 µg/L	9.6677 ppb	15:35:23
3	B 249.677†	1080.3	849.3	-14.852 µg/L	-14.852 ppb	15:35:02
3	Ba 233.527†	21505.4	22453.9	519.74 µg/L	519.74 ppb	15:35:02
3	Be 313.107†	11419.2	13467.4	7.2414 µg/L	7.2414 ppb	15:35:02
3	Cd 226.502†	322.7	501.9	0.7961 µg/L	0.7961 ppb	15:35:23
3	Co 228.616†	547.5	536.6	18.180 µg/L	18.180 ppb	15:35:23
3	Cr 267.716†	3504.9	3562.7	83.211 µg/L	83.211 ppb	15:35:02
3	Cu 324.752†	10798.3	7037.1	68.149 µg/L	68.149 ppb	15:35:02
3	Mn 257.610†	861920.3	899591.5	2925.3 µg/L	2925.3 ppb	15:34:57
3	Mo 202.031†	37.0	26.3	6.8238 µg/L	6.8238 ppb	15:35:23
3	Ni 231.604†	1193.5	887.2	53.851 µg/L	53.851 ppb	15:35:23
3	P 214.914†	681.8	423.0	669.02 µg/L	669.02 ppb	15:35:23
3	Pb 220.353†	388.1	365.2	107.13 µg/L	107.13 ppb	15:35:23
3	S 181.975 Axial†	97.0	78.2	260.06 µg/L	260.06 ppb	15:35:23
3	Sb 206.836†	18.1	-9.0	-9.6780 µg/L	-9.6780 ppb	15:35:23
3	Se 196.026†	-51.8	-75.8	254.83 µg/L	254.83 ppb	15:35:23
3	SiO2†	430761.7	446477.4	84573 µg/L	84573 ppb	15:34:57
3	Si 251.611†	528679.1	550910.4	39244 µg/L	39244 ppb	15:34:57
3	Sn 189.927†	-30.3	-26.3	-10.191 µg/L	-10.191 ppb	15:35:23
3	Ti 334.940†	1156987.8	1207254.2	2963.0 µg/L	2963.0 ppb	15:34:57
3	Tl 190.801†	-68.0	-36.6	13.090 µg/L	13.090 ppb	15:35:23
3	U 409.014†	-1304.9	-1320.9	-138.90 µg/L	-138.90 ppb	15:34:57
3	V 292.402†	10009.9	10339.6	116.73 µg/L	116.73 ppb	15:35:02
3	Zn 213.857†	18926.5	19079.1	455.46 µg/L	455.46 ppb	15:35:02

Mean Data: 247178005|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1871982.9	95.993	%	0.4605				0.48%
Sc RADIAL	89901.3	98.0	%	0.28				0.29%
Y 371.029	1345709.8	100.93	%	0.597				0.59%
Ag 328.068†	-1030.9	0.4634	µg/L	0.16252	0.4634	ppb	0.16252	35.07%
Al 396.153Radial†	98537.4	48244	µg/L	281.6	48244	ppb	281.6	0.58%
As 188.979†	19.4	15.491	µg/L	5.7916	15.491	ppb	5.7916	37.39%
B 249.677†	899.2	-12.524	µg/L	2.5184	-12.524	ppb	2.5184	20.11%
Ba 233.527†	23226.5	537.63	µg/L	15.857	537.63	ppb	15.857	2.95%
Be 313.107†	14043.8	7.5617	µg/L	0.28080	7.5617	ppb	0.28080	3.71%
Ca 317.933Radial†	35473.9	13349	µg/L	79.6	13349	ppb	79.6	0.60%
Cd 226.502†	546.2	1.9173	µg/L	1.02502	1.9173	ppb	1.02502	53.46%
Co 228.616†	576.8	19.800	µg/L	1.4457	19.800	ppb	1.4457	7.30%
Cr 267.716†	3730.9	87.138	µg/L	3.4950	87.138	ppb	3.4950	4.01%
Cu 324.752†	7279.7	69.834	µg/L	1.5096	69.834	ppb	1.5096	2.16%
Fe 238.204 Radial†	8603.4	107160	µg/L	579.3	107160	ppb	579.3	0.54%
K 766.490 Radial†	17777.4	8411.0	µg/L	35.34	8411.0	ppb	35.34	0.42%
Mg 279.077 IEC†	812.7	10879	µg/L	81.7	10879	ppb	81.7	0.75%
Mn 257.610†	926695.8	3013.2	µg/L	76.31	3013.2	ppb	76.31	2.53%
Mo 202.031†	29.7	7.1930	µg/L	0.44772	7.1930	ppb	0.44772	6.22%
Na 589.592 Radial†	1315.8	665.50	µg/L	10.401	665.50	ppb	10.401	1.56%

Ni 231.604†	960.3	58.177	µg/L	3.7580	58.177	ppb	3.7580	6.46%
P 214.914†	453.3	722.09	µg/L	51.380	722.09	ppb	51.380	7.12%
Pb 220.353†	380.3	111.32	µg/L	5.330	111.32	ppb	5.330	4.79%
S 181.975 Axial†	81.4	270.55	µg/L	9.129	270.55	ppb	9.129	3.37%
Sb 206.836†	-5.8	-6.6726	µg/L	3.09971	-6.6726	ppb	3.09971	46.45%
Se 196.026†	-79.3	251.82	µg/L	5.334	251.82	ppb	5.334	2.12%
SiO2†	456626.6	86495	µg/L	1669.7	86495	ppb	1669.7	1.93%
Si 251.611†	563381.5	40132	µg/L	772.1	40132	ppb	772.1	1.92%
Sn 189.927†	-26.6	-10.330	µg/L	1.3831	-10.330	ppb	1.3831	13.39%
Sr 421.552†	17956.6	108.75	µg/L	0.731	108.75	ppb	0.731	0.67%
Ti 334.940†	1247908.1	3062.8	µg/L	86.54	3062.8	ppb	86.54	2.83%
Tl 190.801†	-34.6	16.452	µg/L	3.1265	16.452	ppb	3.1265	19.00%
U 409.014†	-1324.7	-139.28	µg/L	1.064	-139.28	ppb	1.064	0.76%
V 292.402†	10817.9	122.74	µg/L	5.212	122.74	ppb	5.212	4.25%
Zn 213.857†	19742.3	471.47	µg/L	14.068	471.47	ppb	14.068	2.98%

Sequence No.: 29
Sample ID: 247178006|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 321
Date Collected: 3/15/2010 15:35:33
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178006|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	91306.9	91306.9	99.5	%			15:36:03
1	Al 396.153Radial†	177824.0	178900.4	87590	µg/L	87590	ppb	15:36:03
1	Ca 317.933Radial†	49790.8	49705.7	18705	µg/L	18705	ppb	15:36:03
1	Fe 238.204 Radial†	10176.4	10215.6	127240	µg/L	127240	ppb	15:36:23
1	K 766.490 Radial†	28782.3	28525.1	13496	µg/L	13496	ppb	15:36:03
1	Mg 279.077 IEC†	1329.1	1326.8	17813	µg/L	17813	ppb	15:36:23
1	Na 589.592 Radial†	2602.4	2425.7	1226.9	µg/L	1226.9	ppb	15:36:23
1	Sr 421.552†	30470.2	30491.5	184.67	µg/L	184.67	ppb	15:36:03
1	Sc 361.383	1884715.4	1884715.4	96.646	%			15:37:29
1	Y 371.029	1333809.8	1333809.8	100.04	%			15:37:29
1	Ag 328.068†	-1681.7	-1216.5	0.8431	µg/L	0.8431	ppb	15:37:34
1	As 188.979†	18.0	22.0	16.429	µg/L	16.429	ppb	15:37:55
1	B 249.677†	1379.7	1150.3	-10.895	µg/L	-10.895	ppb	15:37:34
1	Ba 233.527†	34818.0	36053.4	834.51	µg/L	834.51	ppb	15:37:34
1	Be 313.107†	15577.0	17676.4	10.064	µg/L	10.064	ppb	15:37:34
1	Cd 226.502†	454.8	635.9	1.9787	µg/L	1.9787	ppb	15:37:34
1	Co 228.616†	901.3	898.1	35.727	µg/L	35.727	ppb	15:37:55
1	Cr 267.716†	4446.8	4508.8	105.33	µg/L	105.33	ppb	15:37:34
1	Cu 324.752†	11264.9	7431.9	74.648	µg/L	74.648	ppb	15:37:34
1	Mn 257.610†	783215.9	811135.0	2638.9	µg/L	2638.9	ppb	15:37:29
1	Mo 202.031†	4.5	-7.7	4.0251	µg/L	4.0251	ppb	15:37:55
1	Ni 231.604†	1852.1	1559.0	93.838	µg/L	93.838	ppb	15:37:55
1	P 214.914†	666.2	401.3	625.27	µg/L	625.27	ppb	15:37:55
1	Pb 220.353†	337.2	309.3	94.878	µg/L	94.878	ppb	15:37:55
1	S 181.975 Axial†	154.3	136.7	454.55	µg/L	454.55	ppb	15:37:55
1	Sb 206.836†	23.5	-3.6	-4.8839	µg/L	-4.8839	ppb	15:37:55
1	Se 196.026†	-76.0	-100.5	288.75	µg/L	288.75	ppb	15:37:55
1	SiO2†	527098.0	542648.0	102790	µg/L	102790	ppb	15:37:29
1	Si 251.611†	647273.2	669313.7	47679	µg/L	47679	ppb	15:37:29
1	Sn 189.927†	-27.1	-22.8	-8.2340	µg/L	-8.2340	ppb	15:37:55
1	Ti 334.940†	952596.7	986345.8	2420.2	µg/L	2420.2	ppb	15:37:29
1	Tl 190.801†	-65.0	-32.9	13.928	µg/L	13.928	ppb	15:37:55
1	U 409.014†	-1696.9	-1715.9	-178.88	µg/L	-178.88	ppb	15:37:29
1	V 292.402†	15177.9	15605.4	180.47	µg/L	180.47	ppb	15:37:34
1	Zn 213.857†	16119.3	16020.4	379.94	µg/L	379.94	ppb	15:37:34
2	Sc RADIAL	90928.2	90928.2	99.1	%			15:36:29
2	Al 396.153Radial†	178651.8	180480.4	88364	µg/L	88364	ppb	15:36:29
2	Ca 317.933Radial†	49947.4	50072.3	18843	µg/L	18843	ppb	15:36:29
2	Fe 238.204 Radial†	10224.5	10306.8	128370	µg/L	128370	ppb	15:36:49
2	K 766.490 Radial†	28815.3	28678.9	13569	µg/L	13569	ppb	15:36:29
2	Mg 279.077 IEC†	1327.1	1330.4	17860	µg/L	17860	ppb	15:36:49
2	Na 589.592 Radial†	2617.0	2451.3	1239.8	µg/L	1239.8	ppb	15:36:49
2	Sr 421.552†	30552.5	30702.1	185.94	µg/L	185.94	ppb	15:36:29
2	Sc 361.383	1877664.3	1877664.3	96.285	%			15:38:03
2	Y 371.029	1329240.7	1329240.7	99.694	%			15:38:03
2	Ag 328.068†	-1663.3	-1204.0	1.0497	µg/L	1.0497	ppb	15:38:09
2	As 188.979†	18.5	22.6	17.148	µg/L	17.148	ppb	15:38:29
2	B 249.677†	1361.9	1137.1	-12.119	µg/L	-12.119	ppb	15:38:09
2	Ba 233.527†	35084.8	36465.7	844.05	µg/L	844.05	ppb	15:38:09
2	Be 313.107†	15675.6	17839.3	10.165	µg/L	10.165	ppb	15:38:09
2	Cd 226.502†	456.2	639.1	1.9313	µg/L	1.9313	ppb	15:38:09
2	Co 228.616†	900.2	900.6	35.834	µg/L	35.834	ppb	15:38:29
2	Cr 267.716†	4473.2	4553.5	106.37	µg/L	106.37	ppb	15:38:09
2	Cu 324.752†	11334.4	7547.9	75.653	µg/L	75.653	ppb	15:38:09
2	Mn 257.610†	781601.2	812501.3	2643.4	µg/L	2643.4	ppb	15:38:03
2	Mo 202.031†	-2.6	-15.0	3.3019	µg/L	3.3019	ppb	15:38:29
2	Ni 231.604†	1832.9	1546.2	93.096	µg/L	93.096	ppb	15:38:29
2	P 214.914†	663.3	401.0	623.83	µg/L	623.83	ppb	15:38:29
2	Pb 220.353†	315.9	288.5	89.170	µg/L	89.170	ppb	15:38:29

2	S 181.975 Axial†	158.3	141.4	470.28 µg/L	470.28 ppb		15:38:29
2	Sb 206.836†	17.3	-10.0	-10.983 µg/L	-10.983 ppb		15:38:29
2	Se 196.026†	-72.7	-97.3	295.49 µg/L	295.49 ppb		15:38:29
2	SiO2†	524860.6	542372.3	102740 µg/L	102740 ppb		15:38:03
2	Si 251.611†	644078.4	668510.6	47621 µg/L	47621 ppb		15:38:03
2	Sn 189.927†	-31.0	-27.0	-9.9849 µg/L	-9.9849 ppb		15:38:29
2	Ti 334.940†	949295.2	986618.2	2420.9 µg/L	2420.9 ppb		15:38:03
2	Tl 190.801†	-66.9	-35.1	11.794 µg/L	11.794 ppb		15:38:29
2	U 409.014†	-1732.1	-1759.1	-183.08 µg/L	-183.08 ppb		15:38:03
2	V 292.402†	15281.5	15772.0	182.41 µg/L	182.41 ppb		15:38:09
2	Zn 213.857†	16227.2	16195.1	384.11 µg/L	384.11 ppb		15:38:09
3	Sc RADIAL	90792.7	90792.7	98.9 %			15:36:55
3	Al 396.153Radial†	178688.6	180786.7	88514 µg/L	88514 ppb		15:36:55
3	Ca 317.933Radial†	49881.3	50080.7	18846 µg/L	18846 ppb		15:36:55
3	Fe 238.204 Radial†	10199.4	10296.7	128250 µg/L	128250 ppb		15:37:15
3	K 766.490 Radial†	28764.1	28670.6	13565 µg/L	13565 ppb		15:36:55
3	Mg 279.077 IEC†	1323.4	1328.7	17837 µg/L	17837 ppb		15:37:15
3	Na 589.592 Radial†	2610.4	2448.6	1238.4 µg/L	1238.4 ppb		15:37:15
3	Sr 421.552†	30613.5	30809.8	186.59 µg/L	186.59 ppb		15:36:55
3	Sc 361.383	1868571.7	1868571.7	95.818 %			15:38:37
3	Y 371.029	1321698.6	1321698.6	99.128 %			15:38:37
3	Ag 328.068†	-1604.3	-1150.8	1.4172 µg/L	1.4172 ppb		15:38:43
3	As 188.979†	14.2	18.2	10.357 µg/L	10.357 ppb		15:39:03
3	B 249.677†	1324.3	1104.8	-13.620 µg/L	-13.620 ppb		15:38:43
3	Ba 233.527†	33395.3	34879.8	807.34 µg/L	807.34 ppb		15:38:43
3	Be 313.107†	14573.9	16768.8	9.5376 µg/L	9.5376 ppb		15:38:43
3	Cd 226.502†	450.7	635.7	1.8486 µg/L	1.8486 ppb		15:38:43
3	Co 228.616†	799.1	799.5	31.455 µg/L	31.455 ppb		15:39:03
3	Cr 267.716†	4179.0	4269.1	99.728 µg/L	99.728 ppb		15:38:43
3	Cu 324.752†	10988.7	7244.4	73.558 µg/L	73.558 ppb		15:38:43
3	Mn 257.610†	749471.9	782919.9	2547.4 µg/L	2547.4 ppb		15:38:37
3	Mo 202.031†	9.0	-3.0	4.5582 µg/L	4.5582 ppb		15:39:03
3	Ni 231.604†	1692.7	1409.2	84.994 µg/L	84.994 ppb		15:39:03
3	P 214.914†	635.6	375.4	579.06 µg/L	579.06 ppb		15:39:03
3	Pb 220.353†	336.5	311.6	95.598 µg/L	95.598 ppb		15:39:03
3	S 181.975 Axial†	144.1	127.5	423.91 µg/L	423.91 ppb		15:39:03
3	Sb 206.836†	20.2	-6.8	-7.8474 µg/L	-7.8474 ppb		15:39:03
3	Se 196.026†	-59.5	-83.9	308.53 µg/L	308.53 ppb		15:39:03
3	SiO2†	507737.6	527154.7	99855 µg/L	99855 ppb		15:38:37
3	Si 251.611†	623067.0	649837.3	46291 µg/L	46291 ppb		15:38:37
3	Sn 189.927†	-24.7	-20.5	-7.2816 µg/L	-7.2816 ppb		15:39:03
3	Ti 334.940†	905994.7	946225.6	2321.7 µg/L	2321.7 ppb		15:38:37
3	Tl 190.801†	-60.2	-28.5	17.418 µg/L	17.418 ppb		15:39:03
3	U 409.014†	-1611.0	-1641.4	-172.08 µg/L	-172.08 ppb		15:38:37
3	V 292.402†	14396.2	14925.3	171.77 µg/L	171.77 ppb		15:38:43
3	Zn 213.857†	15481.6	15499.0	367.32 µg/L	367.32 ppb		15:38:43

Mean Data: 247178006|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1876983.8	96.250	%	0.4150				0.43%
Sc RADIAL	91009.3	99.2	%	0.29				0.29%
Y 371.029	1328249.7	99.620	%	0.4587				0.46%
Ag 328.068†	-1190.5	1.1033	µg/L	0.29079	1.1033	ppb	0.29079	26.36%
Al 396.153Radial†	180055.9	88156	µg/L	495.6	88156	ppb	495.6	0.56%
As 188.979†	21.0	14.644	µg/L	3.7306	14.644	ppb	3.7306	25.47%
B 249.677†	1130.7	-12.211	µg/L	1.3649	-12.211	ppb	1.3649	11.18%
Ba 233.527†	35799.7	828.63	µg/L	19.048	828.63	ppb	19.048	2.30%
Be 313.107†	17428.2	9.9223	µg/L	0.33698	9.9223	ppb	0.33698	3.40%
Ca 317.933Radial†	49952.9	18798	µg/L	80.6	18798	ppb	80.6	0.43%
Cd 226.502†	636.9	1.9195	µg/L	0.06584	1.9195	ppb	0.06584	3.43%
Co 228.616†	866.1	34.339	µg/L	2.4980	34.339	ppb	2.4980	7.27%
Cr 267.716†	4443.8	103.81	µg/L	3.572	103.81	ppb	3.572	3.44%
Cu 324.752†	7408.0	74.620	µg/L	1.0478	74.620	ppb	1.0478	1.40%
Fe 238.204 Radial†	10273.0	127950	µg/L	623.0	127950	ppb	623.0	0.49%
K 766.490 Radial†	28624.9	13543	µg/L	40.9	13543	ppb	40.9	0.30%
Mg 279.077 IEC†	1328.6	17837	µg/L	23.5	17837	ppb	23.5	0.13%
Mn 257.610†	802185.4	2609.9	µg/L	54.18	2609.9	ppb	54.18	2.08%
Mo 202.031†	-8.6	3.9617	µg/L	0.63052	3.9617	ppb	0.63052	15.92%
Na 589.592 Radial†	2441.8	1235.0	µg/L	7.11	1235.0	ppb	7.11	0.58%

Ni 231.604†	1504.8	90.643 µg/L	4.9055	90.643 ppb	4.9055	5.41%
P 214.914†	392.5	609.39 µg/L	26.273	609.39 ppb	26.273	4.31%
Pb 220.353†	303.1	93.215 µg/L	3.5219	93.215 ppb	3.5219	3.78%
S 181.975 Axial†	135.2	449.58 µg/L	23.580	449.58 ppb	23.580	5.24%
Sb 206.836†	-6.8	-7.9048 µg/L	3.05000	-7.9048 ppb	3.05000	38.58%
Se 196.026†	-93.9	297.59 µg/L	10.057	297.59 ppb	10.057	3.38%
SiO2†	537391.7	101790 µg/L	1679.5	101790 ppb	1679.5	1.65%
Si 251.611†	662553.9	47197 µg/L	785.0	47197 ppb	785.0	1.66%
Sn 189.927†	-23.4	-8.5002 µg/L	1.37116	-8.5002 ppb	1.37116	16.13%
Sr 421.552†	30667.8	185.73 µg/L	0.981	185.73 ppb	0.981	0.53%
Ti 334.940†	973063.2	2387.6 µg/L	57.06	2387.6 ppb	57.06	2.39%
Tl 190.801†	-32.2	14.380 µg/L	2.8391	14.380 ppb	2.8391	19.74%
U 409.014†	-1705.4	-178.01 µg/L	5.549	-178.01 ppb	5.549	3.12%
V 292.402†	15434.2	178.22 µg/L	5.667	178.22 ppb	5.667	3.18%
Zn 213.857†	15904.8	377.12 µg/L	8.742	377.12 ppb	8.742	2.32%

Sequence No.: 30
Sample ID: 247178007|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 322
Date Collected: 3/15/2010 15:39:13
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178007|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89158.3	89158.3	97.1	%			15:39:43
1	Al 396.153Radial†	93242.0	96142.3	47072	µg/L	47072	ppb	15:39:43
1	Ca 317.933Radial†	45859.9	46865.5	17636	µg/L	17636	ppb	15:39:43
1	Fe 238.204 Radial†	7816.3	8032.7	100050	µg/L	100050	ppb	15:40:03
1	K 766.490 Radial†	19560.3	19729.5	9334.6	µg/L	9334.6	ppb	15:39:43
1	Mg 279.077 IEC†	752.0	765.0	10242	µg/L	10242	ppb	15:40:03
1	Na 589.592 Radial†	1572.4	1428.4	722.44	µg/L	722.44	ppb	15:39:43
1	Sr 421.552†	21019.8	21501.6	130.22	µg/L	130.22	ppb	15:39:43
1	Sc 361.383	1866098.9	1866098.9	95.691	%			15:41:09
1	Y 371.029	1312816.9	1312816.9	98.462	%			15:41:09
1	Ag 328.068†	-1427.0	-967.8	0.4452	µg/L	0.4452	ppb	15:41:14
1	As 188.979†	13.7	17.7	13.071	µg/L	13.071	ppb	15:41:35
1	B 249.677†	1182.5	958.5	-5.9356	µg/L	-5.9356	ppb	15:41:14
1	Ba 233.527†	24905.8	26054.3	603.05	µg/L	603.05	ppb	15:41:14
1	Be 313.107†	14109.5	16303.7	8.9655	µg/L	8.9655	ppb	15:41:14
1	Cd 226.502†	354.1	535.3	2.4493	µg/L	2.4493	ppb	15:41:35
1	Co 228.616†	700.4	697.5	25.278	µg/L	25.278	ppb	15:41:35
1	Cr 267.716†	4377.4	4482.2	104.67	µg/L	104.67	ppb	15:41:14
1	Cu 324.752†	21991.1	18757.3	146.84	µg/L	146.84	ppb	15:41:14
1	Mn 257.610†	1019058.5	1065681.1	3463.9	µg/L	3463.9	ppb	15:41:09
1	Mo 202.031†	38.9	28.3	6.7673	µg/L	6.7673	ppb	15:41:35
1	Ni 231.604†	1359.6	1063.3	64.174	µg/L	64.174	ppb	15:41:35
1	P 214.914†	960.4	715.7	1182.7	µg/L	1182.7	ppb	15:41:35
1	Pb 220.353†	715.9	708.5	202.13	µg/L	202.13	ppb	15:41:35
1	S 181.975 Axial†	158.5	142.7	474.37	µg/L	474.37	ppb	15:41:35
1	Sb 206.836†	18.6	-8.4	-9.4286	µg/L	-9.4286	ppb	15:41:35
1	Se 196.026†	-51.2	-75.3	233.18	µg/L	233.18	ppb	15:41:35
1	SiO2†	409343.0	425032.0	80510	µg/L	80510	ppb	15:41:09
1	Si 251.611†	502369.8	524567.3	37368	µg/L	37368	ppb	15:41:09
1	Sn 189.927†	-38.4	-34.9	-13.337	µg/L	-13.337	ppb	15:41:35
1	Ti 334.940†	1194260.6	1248723.7	3064.9	µg/L	3064.9	ppb	15:41:09
1	Tl 190.801†	-65.6	-34.2	16.916	µg/L	16.916	ppb	15:41:35
1	U 409.014†	939.6	1021.8	80.326	µg/L	80.326	ppb	15:41:09
1	V 292.402†	10413.1	10782.8	123.47	µg/L	123.47	ppb	15:41:14
1	Zn 213.857†	17450.6	17578.0	419.34	µg/L	419.34	ppb	15:41:14
2	Sc RADIAL	89574.1	89574.1	97.6	%			15:40:09
2	Al 396.153Radial†	93870.9	96341.2	47169	µg/L	47169	ppb	15:40:09
2	Ca 317.933Radial†	46088.3	46880.4	17641	µg/L	17641	ppb	15:40:09
2	Fe 238.204 Radial†	7787.5	7965.9	99216	µg/L	99216	ppb	15:40:29
2	K 766.490 Radial†	19830.9	19913.3	9421.6	µg/L	9421.6	ppb	15:40:09
2	Mg 279.077 IEC†	743.1	752.3	10071	µg/L	10071	ppb	15:40:29
2	Na 589.592 Radial†	1564.7	1413.0	714.66	µg/L	714.66	ppb	15:40:09
2	Sr 421.552†	21141.9	21526.3	130.37	µg/L	130.37	ppb	15:40:09
2	Sc 361.383	1870316.9	1870316.9	95.908	%			15:41:43
2	Y 371.029	1315873.3	1315873.3	98.691	%			15:41:43
2	Ag 328.068†	-1335.9	-869.3	1.2068	µg/L	1.2068	ppb	15:41:48
2	As 188.979†	11.2	15.1	9.1224	µg/L	9.1224	ppb	15:42:09
2	B 249.677†	1162.4	934.7	-6.6449	µg/L	-6.6449	ppb	15:41:48
2	Ba 233.527†	24919.3	26009.6	602.02	µg/L	602.02	ppb	15:41:48
2	Be 313.107†	14169.0	16332.3	8.9831	µg/L	8.9831	ppb	15:41:48
2	Cd 226.502†	342.8	522.8	2.2217	µg/L	2.2217	ppb	15:42:09
2	Co 228.616†	701.2	696.7	25.240	µg/L	25.240	ppb	15:42:09
2	Cr 267.716†	4377.5	4472.0	104.43	µg/L	104.43	ppb	15:41:48
2	Cu 324.752†	22012.5	18727.9	146.48	µg/L	146.48	ppb	15:41:48
2	Mn 257.610†	1021660.0	1065991.9	3464.9	µg/L	3464.9	ppb	15:41:43
2	Mo 202.031†	33.1	22.2	6.0988	µg/L	6.0988	ppb	15:42:09
2	Ni 231.604†	1370.1	1071.1	64.620	µg/L	64.620	ppb	15:42:09
2	P 214.914†	966.1	719.4	1190.0	µg/L	1190.0	ppb	15:42:09
2	Pb 220.353†	713.8	704.6	201.05	µg/L	201.05	ppb	15:42:09

2	S 181.975 Axial†	161.2	145.2	482.61	µg/L	482.61 ppb	15:42:09
2	Sb 206.836†	16.2	-10.9	-11.826	µg/L	-11.826 ppb	15:42:09
2	Se 196.026†	-63.8	-88.3	217.65	µg/L	217.65 ppb	15:42:09
2	SiO2†	409643.9	424381.0	80387	µg/L	80387 ppb	15:41:43
2	Si 251.611†	502357.8	523370.8	37282	µg/L	37282 ppb	15:41:43
2	Sn 189.927†	-35.5	-31.7	-12.027	µg/L	-12.027 ppb	15:42:09
2	Ti 334.940†	1197217.7	1248992.3	3065.6	µg/L	3065.6 ppb	15:41:43
2	Tl 190.801†	-65.7	-34.2	16.852	µg/L	16.852 ppb	15:42:09
2	U 409.014†	940.3	1020.3	80.308	µg/L	80.308 ppb	15:41:43
2	V 292.402†	10405.3	10750.0	123.15	µg/L	123.15 ppb	15:41:48
2	Zn 213.857†	17542.9	17633.1	420.72	µg/L	420.72 ppb	15:41:48
3	Sc RADIAL	90112.5	90112.5	98.2	%		15:40:35
3	Al 396.153Radial†	91851.4	93709.6	45880	µg/L	45880 ppb	15:40:35
3	Ca 317.933Radial†	45120.8	45612.9	17164	µg/L	17164 ppb	15:40:35
3	Fe 238.204 Radial†	7695.9	7824.9	97460	µg/L	97460 ppb	15:40:55
3	K 766.490 Radial†	19465.9	19420.2	9188.3	µg/L	9188.3 ppb	15:40:35
3	Mg 279.077 IEC†	737.6	742.2	9935.9	µg/L	9935.9 ppb	15:40:55
3	Na 589.592 Radial†	1563.9	1402.6	709.42	µg/L	709.42 ppb	15:40:35
3	Sr 421.552†	20762.2	21010.2	127.24	µg/L	127.24 ppb	15:40:35
3	Sc 361.383	1855412.0	1855412.0	95.143	%		15:42:17
3	Y 371.029	1302363.8	1302363.8	97.678	%		15:42:17
3	Ag 328.068†	-1356.6	-902.4	0.7506	µg/L	0.7506 ppb	15:42:22
3	As 188.979†	9.8	13.7	7.2536	µg/L	7.2536 ppb	15:42:43
3	B 249.677†	1184.1	967.2	-4.1720	µg/L	-4.1720 ppb	15:42:22
3	Ba 233.527†	23680.1	24915.9	576.70	µg/L	576.70 ppb	15:42:22
3	Be 313.107†	13222.8	15456.6	8.4862	µg/L	8.4862 ppb	15:42:22
3	Cd 226.502†	286.9	466.8	0.9839	µg/L	0.9839 ppb	15:42:43
3	Co 228.616†	651.6	650.5	23.399	µg/L	23.399 ppb	15:42:43
3	Cr 267.716†	4112.9	4230.5	98.792	µg/L	98.792 ppb	15:42:22
3	Cu 324.752†	21101.6	17954.8	140.88	µg/L	140.88 ppb	15:42:22
3	Mn 257.610†	978269.6	1028944.1	3344.6	µg/L	3344.6 ppb	15:42:17
3	Mo 202.031†	36.7	26.3	6.4587	µg/L	6.4587 ppb	15:42:43
3	Ni 231.604†	1273.5	981.1	59.278	µg/L	59.278 ppb	15:42:43
3	P 214.914†	905.4	663.6	1093.1	µg/L	1093.1 ppb	15:42:43
3	Pb 220.353†	684.0	679.3	193.89	µg/L	193.89 ppb	15:42:43
3	S 181.975 Axial†	145.3	129.8	431.61	µg/L	431.61 ppb	15:42:43
3	Sb 206.836†	19.9	-6.9	-7.9402	µg/L	-7.9402 ppb	15:42:43
3	Se 196.026†	-45.9	-70.0	230.55	µg/L	230.55 ppb	15:42:43
3	SiO2†	395486.9	412932.5	78218	µg/L	78218 ppb	15:42:17
3	Si 251.611†	485274.7	509623.5	36303	µg/L	36303 ppb	15:42:17
3	Sn 189.927†	-25.5	-21.6	-7.8053	µg/L	-7.8053 ppb	15:42:43
3	Ti 334.940†	1139463.3	1198317.8	2941.2	µg/L	2941.2 ppb	15:42:17
3	Tl 190.801†	-67.4	-36.5	12.642	µg/L	12.642 ppb	15:42:43
3	U 409.014†	914.8	1001.4	78.814	µg/L	78.814 ppb	15:42:17
3	V 292.402†	9827.9	10230.3	116.82	µg/L	116.82 ppb	15:42:22
3	Zn 213.857†	16646.7	16838.1	401.61	µg/L	401.61 ppb	15:42:22

Mean Data: 247178007|954672|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1863942.6	95.581	%	0.3940				0.41%
Sc RADIAL	89615.0	97.6	%	0.52				0.53%
Y 371.029	1310351.3	98.277	%	0.5313				0.54%
Ag 328.068†	-913.2	0.8009	µg/L	0.38326	0.8009	ppb	0.38326	47.86%
Al 396.153Radial†	95397.7	46707	µg/L	717.4	46707	ppb	717.4	1.54%
As 188.979†	15.5	9.8157	µg/L	2.97007	9.8157	ppb	2.97007	30.26%
B 249.677†	953.5	-5.5842	µg/L	1.27334	-5.5842	ppb	1.27334	22.80%
Ba 233.527†	25659.9	593.92	µg/L	14.924	593.92	ppb	14.924	2.51%
Be 313.107†	16030.9	8.8116	µg/L	0.28197	8.8116	ppb	0.28197	3.20%
Ca 317.933Radial†	46452.9	17481	µg/L	273.8	17481	ppb	273.8	1.57%
Cd 226.502†	508.3	1.8849	µg/L	0.78859	1.8849	ppb	0.78859	41.84%
Co 228.616†	681.6	24.639	µg/L	1.0741	24.639	ppb	1.0741	4.36%
Cr 267.716†	4394.9	102.63	µg/L	3.326	102.63	ppb	3.326	3.24%
Cu 324.752†	18480.0	144.73	µg/L	3.345	144.73	ppb	3.345	2.31%
Fe 238.204 Radial†	7941.2	98908	µg/L	1321.2	98908	ppb	1321.2	1.34%
K 766.490 Radial†	19687.6	9314.9	µg/L	117.92	9314.9	ppb	117.92	1.27%
Mg 279.077 IEC†	753.2	10083	µg/L	153.3	10083	ppb	153.3	1.52%
Mn 257.610†	1053539.0	3424.5	µg/L	69.20	3424.5	ppb	69.20	2.02%
Mo 202.031†	25.6	6.4416	µg/L	0.33461	6.4416	ppb	0.33461	5.19%
Na 589.592 Radial†	1414.7	715.51	µg/L	6.552	715.51	ppb	6.552	0.92%

Ni 231.604†	1038.5	62.691	µg/L	2.9642	62.691	ppb	2.9642	4.73%
P 214.914†	699.6	1155.3	µg/L	53.94	1155.3	ppb	53.94	4.67%
Pb 220.353†	697.5	199.03	µg/L	4.481	199.03	ppb	4.481	2.25%
S 181.975 Axial†	139.2	462.86	µg/L	27.380	462.86	ppb	27.380	5.92%
Sb 206.836†	-8.8	-9.7317	µg/L	1.96074	-9.7317	ppb	1.96074	20.15%
Se 196.026†	-77.9	227.13	µg/L	8.308	227.13	ppb	8.308	3.66%
SiO2†	420781.8	79705	µg/L	1289.1	79705	ppb	1289.1	1.62%
Si 251.611†	519187.2	36984	µg/L	591.5	36984	ppb	591.5	1.60%
Sn 189.927†	-29.4	-11.057	µg/L	2.8910	-11.057	ppb	2.8910	26.15%
Sr 421.552†	21346.0	129.28	µg/L	1.763	129.28	ppb	1.763	1.36%
Ti 334.940†	1232011.3	3023.9	µg/L	71.63	3023.9	ppb	71.63	2.37%
Tl 190.801†	-35.0	15.470	µg/L	2.4493	15.470	ppb	2.4493	15.83%
U 409.014†	1014.5	79.816	µg/L	0.8680	79.816	ppb	0.8680	1.09%
V 292.402†	10587.7	121.15	µg/L	3.750	121.15	ppb	3.750	3.10%
Zn 213.857†	17349.8	413.89	µg/L	10.655	413.89	ppb	10.655	2.57%

Sequence No.: 31
Sample ID: 247178008|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 323
Date Collected: 3/15/2010 15:42:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178008|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88839.2	88839.2	96.8	%			15:43:23
1	Al 396.153Radial†	62399.2	64624.6	31640	µg/L	31640	ppb	15:43:23
1	Ca 317.933Radial†	28460.2	29060.2	10936	µg/L	10936	ppb	15:43:23
1	Fe 238.204 Radial†	6439.9	6639.7	82699	µg/L	82699	ppb	15:43:43
1	K 766.490 Radial†	11322.7	11291.9	5342.5	µg/L	5342.5	ppb	15:43:23
1	Mg 279.077 IEC†	416.4	421.1	5608.4	µg/L	5608.4	ppb	15:43:43
1	Na 589.592 Radial†	1667.7	1532.7	775.21	µg/L	775.21	ppb	15:43:23
1	Sr 421.552†	12780.8	13068.0	79.144	µg/L	79.144	ppb	15:43:23
1	Sc 361.383	1852492.8	1852492.8	94.994	%			15:44:48
1	Y 371.029	1319819.5	1319819.5	98.987	%			15:44:48
1	Ag 328.068†	-1155.3	-692.7	1.1228	µg/L	1.1228	ppb	15:44:53
1	As 188.979†	8.7	12.6	8.0991	µg/L	8.0991	ppb	15:45:14
1	B 249.677†	890.4	660.0	-11.339	µg/L	-11.339	ppb	15:44:53
1	Ba 233.527†	15897.9	16762.8	388.00	µg/L	388.00	ppb	15:44:53
1	Be 313.107†	11859.3	14043.1	7.7169	µg/L	7.7169	ppb	15:44:53
1	Cd 226.502†	290.9	471.6	2.7499	µg/L	2.7499	ppb	15:45:14
1	Co 228.616†	440.6	429.4	13.962	µg/L	13.962	ppb	15:45:14
1	Cr 267.716†	1796.2	1798.5	42.022	µg/L	42.022	ppb	15:45:14
1	Cu 324.752†	22212.6	19159.3	146.32	µg/L	146.32	ppb	15:44:53
1	Mn 257.610†	706930.7	744925.7	2422.2	µg/L	2422.2	ppb	15:44:48
1	Mo 202.031†	48.3	38.5	7.1861	µg/L	7.1861	ppb	15:45:14
1	Ni 231.604†	885.8	575.1	35.074	µg/L	35.074	ppb	15:45:14
1	P 214.914†	684.2	432.2	691.48	µg/L	691.48	ppb	15:45:14
1	Pb 220.353†	456.8	441.3	126.34	µg/L	126.34	ppb	15:45:14
1	S 181.975 Axial†	143.8	128.4	426.92	µg/L	426.92	ppb	15:45:14
1	Sb 206.836†	18.1	-8.8	-8.9878	µg/L	-8.9878	ppb	15:45:14
1	Se 196.026†	-43.7	-67.8	189.67	µg/L	189.67	ppb	15:45:14
1	SiO2†	369452.5	386181.2	73151	µg/L	73151	ppb	15:44:48
1	Si 251.611†	453052.1	476506.5	33944	µg/L	33944	ppb	15:44:48
1	Sn 189.927†	-30.6	-27.0	-10.627	µg/L	-10.627	ppb	15:45:14
1	Ti 334.940†	1026736.5	1081537.4	2654.8	µg/L	2654.8	ppb	15:44:48
1	Tl 190.801†	-62.8	-31.8	10.146	µg/L	10.146	ppb	15:45:14
1	U 409.014†	538.4	606.7	44.429	µg/L	44.429	ppb	15:44:48
1	V 292.402†	6868.5	7131.3	79.509	µg/L	79.509	ppb	15:44:53
1	Zn 213.857†	17421.2	17681.0	423.04	µg/L	423.04	ppb	15:44:53
2	Sc RADIAL	88853.3	88853.3	96.8	%			15:43:49
2	Al 396.153Radial†	63023.8	65259.5	31951	µg/L	31951	ppb	15:43:49
2	Ca 317.933Radial†	28746.7	29351.4	11045	µg/L	11045	ppb	15:43:49
2	Fe 238.204 Radial†	6480.6	6680.7	83209	µg/L	83209	ppb	15:44:09
2	K 766.490 Radial†	11557.6	11532.7	5456.5	µg/L	5456.5	ppb	15:43:49
2	Mg 279.077 IEC†	414.4	419.0	5578.8	µg/L	5578.8	ppb	15:44:09
2	Na 589.592 Radial†	1669.4	1534.1	775.94	µg/L	775.94	ppb	15:43:49
2	Sr 421.552†	12918.2	13207.8	79.991	µg/L	79.991	ppb	15:43:49
2	Sc 361.383	1848419.4	1848419.4	94.785	%			15:45:22
2	Y 371.029	1316954.0	1316954.0	98.772	%			15:45:22
2	Ag 328.068†	-1239.2	-783.9	0.4005	µg/L	0.4005	ppb	15:45:27
2	As 188.979†	13.3	17.4	15.498	µg/L	15.498	ppb	15:45:48
2	B 249.677†	932.4	706.4	-9.3734	µg/L	-9.3734	ppb	15:45:27
2	Ba 233.527†	15950.8	16855.5	390.14	µg/L	390.14	ppb	15:45:27
2	Be 313.107†	11958.7	14175.5	7.7983	µg/L	7.7983	ppb	15:45:27
2	Cd 226.502†	296.3	477.9	2.8520	µg/L	2.8520	ppb	15:45:48
2	Co 228.616†	456.5	447.2	14.765	µg/L	14.765	ppb	15:45:48
2	Cr 267.716†	1758.8	1763.3	41.200	µg/L	41.200	ppb	15:45:48
2	Cu 324.752†	22252.5	19252.9	147.06	µg/L	147.06	ppb	15:45:27
2	Mn 257.610†	707030.6	746671.1	2427.9	µg/L	2427.9	ppb	15:45:22
2	Mo 202.031†	48.3	38.6	7.2088	µg/L	7.2088	ppb	15:45:48
2	Ni 231.604†	863.4	553.5	33.803	µg/L	33.803	ppb	15:45:48
2	P 214.914†	685.3	435.0	696.00	µg/L	696.00	ppb	15:45:48
2	Pb 220.353†	451.6	436.8	125.12	µg/L	125.12	ppb	15:45:48

2	S 181.975 Axial†	139.4	124.2	412.92 µg/L	412.92 ppb	15:45:48
2	Sb 206.836†	20.0	-6.8	-6.9950 µg/L	-6.9950 ppb	15:45:48
2	Se 196.026†	-37.5	-61.4	197.69 µg/L	197.69 ppb	15:45:48
2	SiO2†	369124.0	386691.6	73248 µg/L	73248 ppb	15:45:22
2	Si 251.611†	452478.7	476952.5	33976 µg/L	33976 ppb	15:45:22
2	Sn 189.927†	-21.0	-16.9	-6.3737 µg/L	-6.3737 ppb	15:45:48
2	Ti 334.940†	1025336.9	1082442.7	2657.0 µg/L	2657.0 ppb	15:45:22
2	Tl 190.801†	-55.6	-24.3	18.029 µg/L	18.029 ppb	15:45:48
2	U 409.014†	622.1	696.2	52.703 µg/L	52.703 ppb	15:45:22
2	V 292.402†	6926.4	7208.3	80.420 µg/L	80.420 ppb	15:45:27
2	Zn 213.857†	17454.8	17756.8	424.86 µg/L	424.86 ppb	15:45:27
3	Sc RADIAL	87865.0	87865.0	95.7 %		15:44:14
3	Al 396.153Radial†	62582.7	65531.0	32084 µg/L	32084 ppb	15:44:14
3	Ca 317.933Radial†	28444.4	29369.6	11052 µg/L	11052 ppb	15:44:14
3	Fe 238.204 Radial†	6507.9	6784.5	84502 µg/L	84502 ppb	15:44:35
3	K 766.490 Radial†	11374.6	11475.8	5429.6 µg/L	5429.6 ppb	15:44:14
3	Mg 279.077 IEC†	417.9	427.5	5692.2 µg/L	5692.2 ppb	15:44:35
3	Na 589.592 Radial†	1675.2	1559.6	788.82 µg/L	788.82 ppb	15:44:14
3	Sr 421.552†	12724.1	13155.2	79.672 µg/L	79.672 ppb	15:44:14
3	Sc 361.383	1857584.3	1857584.3	95.255 %		15:45:56
3	Y 371.029	1322723.6	1322723.6	99.205 %		15:45:56
3	Ag 328.068†	-1242.5	-780.9	0.4719 µg/L	0.4719 ppb	15:46:01
3	As 188.979†	11.9	15.9	13.001 µg/L	13.001 ppb	15:46:22
3	B 249.677†	919.9	688.4	-10.919 µg/L	-10.919 ppb	15:46:01
3	Ba 233.527†	14998.4	15772.6	365.07 µg/L	365.07 ppb	15:46:01
3	Be 313.107†	11016.7	13124.4	7.1863 µg/L	7.1863 ppb	15:46:01
3	Cd 226.502†	245.6	423.2	1.3050 µg/L	1.3050 ppb	15:46:22
3	Co 228.616†	410.7	396.7	12.697 µg/L	12.697 ppb	15:46:22
3	Cr 267.716†	1612.3	1600.2	37.390 µg/L	37.390 ppb	15:46:22
3	Cu 324.752†	21116.5	17944.5	138.37 µg/L	138.37 ppb	15:46:01
3	Mn 257.610†	684194.5	719017.2	2338.2 µg/L	2338.2 ppb	15:45:56
3	Mo 202.031†	40.3	29.9	6.3542 µg/L	6.3542 ppb	15:46:22
3	Ni 231.604†	832.8	516.8	31.653 µg/L	31.653 ppb	15:46:22
3	P 214.914†	644.2	388.3	613.46 µg/L	613.46 ppb	15:46:22
3	Pb 220.353†	428.0	409.8	117.64 µg/L	117.64 ppb	15:46:22
3	S 181.975 Axial†	126.7	110.0	365.83 µg/L	365.83 ppb	15:46:22
3	Sb 206.836†	24.9	-1.8	-2.2062 µg/L	-2.2062 ppb	15:46:22
3	Se 196.026†	-37.3	-60.9	202.19 µg/L	202.19 ppb	15:46:22
3	SiO2†	360846.4	376080.3	71238 µg/L	71238 ppb	15:45:56
3	Si 251.611†	442666.8	464296.6	33074 µg/L	33074 ppb	15:45:56
3	Sn 189.927†	-18.0	-13.7	-5.0301 µg/L	-5.0301 ppb	15:46:22
3	Ti 334.940†	988375.4	1038302.8	2548.6 µg/L	2548.6 ppb	15:45:56
3	Tl 190.801†	-56.8	-25.3	15.877 µg/L	15.877 ppb	15:46:22
3	U 409.014†	449.0	511.3	35.270 µg/L	35.270 ppb	15:45:56
3	V 292.402†	6347.6	6564.6	72.116 µg/L	72.116 ppb	15:46:01
3	Zn 213.857†	16476.6	16639.1	397.78 µg/L	397.78 ppb	15:46:01

Mean Data: 247178008|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1852832.2	95.011	%	0.2355				0.25%
Sc RADIAL	88519.1	96.5	%	0.62				0.64%
Y 371.029	1319832.4	98.988	%	0.2164				0.22%
Ag 328.068†	-752.5	0.6650	µg/L	0.39800	0.6650	ppb	0.39800	59.85%
Al 396.153Radial†	65138.4	31892	µg/L	227.8	31892	ppb	227.8	0.71%
As 188.979†	15.3	12.199	µg/L	3.7641	12.199	ppb	3.7641	30.85%
B 249.677†	685.0	-10.544	µg/L	1.0352	-10.544	ppb	1.0352	9.82%
Ba 233.527†	16463.7	381.07	µg/L	13.895	381.07	ppb	13.895	3.65%
Be 313.107†	13781.0	7.5672	µg/L	0.33235	7.5672	ppb	0.33235	4.39%
Ca 317.933Radial†	29260.4	11011	µg/L	65.3	11011	ppb	65.3	0.59%
Cd 226.502†	457.5	2.3023	µg/L	0.86523	2.3023	ppb	0.86523	37.58%
Co 228.616†	424.5	13.808	µg/L	1.0423	13.808	ppb	1.0423	7.55%
Cr 267.716†	1720.7	40.204	µg/L	2.4711	40.204	ppb	2.4711	6.15%
Cu 324.752†	18785.5	143.92	µg/L	4.818	143.92	ppb	4.818	3.35%
Fe 238.204 Radial†	6701.6	83470	µg/L	929.6	83470	ppb	929.6	1.11%
K 766.490 Radial†	11433.4	5409.5	µg/L	59.56	5409.5	ppb	59.56	1.10%
Mg 279.077 IEC†	422.5	5626.5	µg/L	58.77	5626.5	ppb	58.77	1.04%
Mn 257.610†	736871.3	2396.1	µg/L	50.21	2396.1	ppb	50.21	2.10%
Mo 202.031†	35.7	6.9164	µg/L	0.48698	6.9164	ppb	0.48698	7.04%
Na 589.592 Radial†	1542.1	779.99	µg/L	7.659	779.99	ppb	7.659	0.98%

Ni 231.604†	548.5	33.510 µg/L	1.7295	33.510 ppb	1.7295	5.16%
P 214.914†	418.5	666.98 µg/L	46.407	666.98 ppb	46.407	6.96%
Pb 220.353†	429.3	123.03 µg/L	4.709	123.03 ppb	4.709	3.83%
S 181.975 Axial†	120.9	401.89 µg/L	32.001	401.89 ppb	32.001	7.96%
Sb 206.836†	-5.8	-6.0630 µg/L	3.48555	-6.0630 ppb	3.48555	57.49%
Se 196.026†	-63.4	196.52 µg/L	6.343	196.52 ppb	6.343	3.23%
SiO2†	382984.3	72546 µg/L	1133.6	72546 ppb	1133.6	1.56%
Si 251.611†	472585.2	33665 µg/L	511.6	33665 ppb	511.6	1.52%
Sn 189.927†	-19.2	-7.3437 µg/L	2.92201	-7.3437 ppb	2.92201	39.79%
Sr 421.552†	13143.7	79.602 µg/L	0.4277	79.602 ppb	0.4277	0.54%
Ti 334.940†	1067427.6	2620.1 µg/L	61.93	2620.1 ppb	61.93	2.36%
Tl 190.801†	-27.1	14.684 µg/L	4.0749	14.684 ppb	4.0749	27.75%
U 409.014†	604.7	44.134 µg/L	8.7202	44.134 ppb	8.7202	19.76%
V 292.402†	6968.1	77.349 µg/L	4.5543	77.349 ppb	4.5543	5.89%
Zn 213.857†	17359.0	415.23 µg/L	15.137	415.23 ppb	15.137	3.65%

Sequence No.: 32
Sample ID: 247178009|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 324
Date Collected: 3/15/2010 15:46:31
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178009|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	89439.0	89439.0	97.5	%			15:47:02
1	Al 396.153Radial†	73086.7	75159.1	36798	µg/L	36798	ppb	15:47:02
1	Ca 317.933Radial†	24492.5	24791.6	9329.2	µg/L	9329.2	ppb	15:47:02
1	Fe 238.204 Radial†	6863.2	7029.5	87553	µg/L	87553	ppb	15:47:22
1	K 766.490 Radial†	11249.3	11138.2	5269.8	µg/L	5269.8	ppb	15:47:02
1	Mg 279.077 IEC†	434.5	436.8	5814.5	µg/L	5814.5	ppb	15:47:22
1	Na 589.592 Radial†	1815.6	1672.9	846.15	µg/L	846.15	ppb	15:47:02
1	Sr 421.552†	11927.7	12104.1	73.306	µg/L	73.306	ppb	15:47:02
1	Sc 361.383	1856641.0	1856641.0	95.206	%			15:48:27
1	Y 371.029	1329538.7	1329538.7	99.716	%			15:48:27
1	Ag 328.068†	-1243.7	-782.8	0.7535	µg/L	0.7535	ppb	15:48:33
1	As 188.979†	9.7	13.6	9.3075	µg/L	9.3075	ppb	15:48:53
1	B 249.677†	906.6	674.9	-13.091	µg/L	-13.091	ppb	15:48:33
1	Ba 233.527†	12888.2	13564.2	314.00	µg/L	314.00	ppb	15:48:33
1	Be 313.107†	10562.5	12653.1	6.7987	µg/L	6.7987	ppb	15:48:33
1	Cd 226.502†	276.6	455.9	1.8134	µg/L	1.8134	ppb	15:48:53
1	Co 228.616†	438.7	426.4	13.526	µg/L	13.526	ppb	15:48:53
1	Cr 267.716†	3432.4	3512.9	82.024	µg/L	82.024	ppb	15:48:53
1	Cu 324.752†	13330.2	9777.4	83.197	µg/L	83.197	ppb	15:48:33
1	Mn 257.610†	562522.6	591584.1	1924.8	µg/L	1924.8	ppb	15:48:27
1	Mo 202.031†	53.6	43.9	7.9376	µg/L	7.9376	ppb	15:48:53
1	Ni 231.604†	1114.5	813.2	49.226	µg/L	49.226	ppb	15:48:53
1	P 214.914†	617.8	360.9	569.85	µg/L	569.85	ppb	15:48:53
1	Pb 220.353†	323.1	299.8	87.640	µg/L	87.640	ppb	15:48:53
1	S 181.975 Axial†	132.6	116.3	386.82	µg/L	386.82	ppb	15:48:53
1	Sb 206.836†	19.0	-7.9	-8.5296	µg/L	-8.5296	ppb	15:48:53
1	Se 196.026†	-49.7	-74.0	198.93	µg/L	198.93	ppb	15:48:53
1	SiO2†	368384.6	384190.6	72774	µg/L	72774	ppb	15:48:27
1	Si 251.611†	451502.0	473812.7	33752	µg/L	33752	ppb	15:48:27
1	Sn 189.927†	-19.1	-14.8	-5.6882	µg/L	-5.6882	ppb	15:48:53
1	Ti 334.940†	1084209.1	1139488.8	2797.0	µg/L	2797.0	ppb	15:48:27
1	Tl 190.801†	-59.3	-27.9	14.480	µg/L	14.480	ppb	15:48:53
1	U 409.014†	-620.4	-611.8	-69.802	µg/L	-69.802	ppb	15:48:27
1	V 292.402†	7063.4	7319.8	81.238	µg/L	81.238	ppb	15:48:33
1	Zn 213.857†	17091.9	17294.1	413.48	µg/L	413.48	ppb	15:48:33
2	Sc RADIAL	88788.2	88788.2	96.7	%			15:47:27
2	Al 396.153Radial†	72960.2	75578.0	37003	µg/L	37003	ppb	15:47:27
2	Ca 317.933Radial†	24384.7	24864.4	9356.6	µg/L	9356.6	ppb	15:47:27
2	Fe 238.204 Radial†	6874.5	7092.7	88341	µg/L	88341	ppb	15:47:48
2	K 766.490 Radial†	11245.5	11218.8	5308.0	µg/L	5308.0	ppb	15:47:27
2	Mg 279.077 IEC†	434.7	440.3	5861.2	µg/L	5861.2	ppb	15:47:48
2	Na 589.592 Radial†	1791.2	1661.3	840.26	µg/L	840.26	ppb	15:47:27
2	Sr 421.552†	11909.4	12174.9	73.735	µg/L	73.735	ppb	15:47:27
2	Sc 361.383	1851257.1	1851257.1	94.930	%			15:49:01
2	Y 371.029	1323976.5	1323976.5	99.299	%			15:49:01
2	Ag 328.068†	-1226.3	-768.3	0.9385	µg/L	0.9385	ppb	15:49:06
2	As 188.979†	11.2	15.2	11.736	µg/L	11.736	ppb	15:49:27
2	B 249.677†	917.5	689.2	-12.815	µg/L	-12.815	ppb	15:49:06
2	Ba 233.527†	12963.1	13682.4	316.73	µg/L	316.73	ppb	15:49:06
2	Be 313.107†	10709.4	12840.1	6.9141	µg/L	6.9141	ppb	15:49:06
2	Cd 226.502†	277.3	457.5	1.7661	µg/L	1.7661	ppb	15:49:27
2	Co 228.616†	440.4	429.5	13.663	µg/L	13.663	ppb	15:49:27
2	Cr 267.716†	3424.8	3515.3	82.082	µg/L	82.082	ppb	15:49:27
2	Cu 324.752†	13376.6	9867.0	83.957	µg/L	83.957	ppb	15:49:06
2	Mn 257.610†	561759.9	592499.1	1927.8	µg/L	1927.8	ppb	15:49:01
2	Mo 202.031†	52.7	43.2	7.8862	µg/L	7.8862	ppb	15:49:27
2	Ni 231.604†	1117.7	820.0	49.638	µg/L	49.638	ppb	15:49:27
2	P 214.914†	621.3	366.5	579.09	µg/L	579.09	ppb	15:49:27
2	Pb 220.353†	335.2	313.5	91.501	µg/L	91.501	ppb	15:49:27

2	S 181.975 Axial†	129.3	113.2	376.50 µg/L	376.50 ppb	15:49:27
2	Sb 206.836†	17.2	-9.8	-10.323 µg/L	-10.323 ppb	15:49:27
2	Se 196.026†	-47.5	-71.8	203.52 µg/L	203.52 ppb	15:49:27
2	SiO2†	367424.4	384304.3	72796 µg/L	72796 ppb	15:49:01
2	Si 251.611†	450617.4	474260.1	33784 µg/L	33784 ppb	15:49:01
2	Sn 189.927†	-17.4	-13.1	-4.9546 µg/L	-4.9546 ppb	15:49:27
2	Ti 334.940†	1081975.3	1140447.6	2799.3 µg/L	2799.3 ppb	15:49:01
2	Tl 190.801†	-66.1	-35.3	6.9327 µg/L	6.9327 ppb	15:49:27
2	U 409.014†	-638.0	-632.1	-71.815 µg/L	-71.815 ppb	15:49:01
2	V 292.402†	7071.3	7349.7	81.512 µg/L	81.512 ppb	15:49:06
2	Zn 213.857†	17201.2	17461.5	417.49 µg/L	417.49 ppb	15:49:06
3	Sc RADIAL	89652.0	89652.0	97.7 %		15:47:53
3	Al 396.153Radial†	73472.8	75376.2	36904 µg/L	36904 ppb	15:47:53
3	Ca 317.933Radial†	24631.7	24874.4	9360.4 µg/L	9360.4 ppb	15:47:53
3	Fe 238.204 Radial†	6863.8	7013.3	87352 µg/L	87352 ppb	15:48:14
3	K 766.490 Radial†	11314.2	11177.1	5288.3 µg/L	5288.3 ppb	15:47:53
3	Mg 279.077 IEC†	436.4	437.7	5827.2 µg/L	5827.2 ppb	15:48:14
3	Na 589.592 Radial†	1814.4	1667.3	843.29 µg/L	843.29 ppb	15:47:53
3	Sr 421.552†	11976.5	12125.0	73.433 µg/L	73.433 ppb	15:47:53
3	Sc 361.383	1861149.3	1861149.3	95.438 %		15:49:35
3	Y 371.029	1328461.5	1328461.5	99.636 %		15:49:35
3	Ag 328.068†	-1250.6	-786.9	0.6652 µg/L	0.6652 ppb	15:49:40
3	As 188.979†	8.6	12.4	7.4898 µg/L	7.4898 ppb	15:50:01
3	B 249.677†	890.7	656.0	-13.912 µg/L	-13.912 ppb	15:49:40
3	Ba 233.527†	12148.1	12755.9	295.28 µg/L	295.28 ppb	15:49:40
3	Be 313.107†	9746.7	11771.5	6.2994 µg/L	6.2994 ppb	15:49:40
3	Cd 226.502†	232.1	408.5	0.6187 µg/L	0.6187 ppb	15:50:01
3	Co 228.616†	380.8	364.6	10.985 µg/L	10.985 ppb	15:50:01
3	Cr 267.716†	3033.3	3086.0	72.059 µg/L	72.059 ppb	15:50:01
3	Cu 324.752†	12822.3	9211.3	79.295 µg/L	79.295 ppb	15:49:40
3	Mn 257.610†	542261.4	568923.2	1851.2 µg/L	1851.2 ppb	15:49:35
3	Mo 202.031†	49.2	39.3	7.4390 µg/L	7.4390 ppb	15:50:01
3	Ni 231.604†	1034.3	726.3	44.087 µg/L	44.087 ppb	15:50:01
3	P 214.914†	584.3	324.2	505.72 µg/L	505.72 ppb	15:50:01
3	Pb 220.353†	294.4	268.9	79.056 µg/L	79.056 ppb	15:50:01
3	S 181.975 Axial†	123.9	106.9	355.46 µg/L	355.46 ppb	15:50:01
3	Sb 206.836†	25.0	-1.7	-2.4974 µg/L	-2.4974 ppb	15:50:01
3	Se 196.026†	-35.1	-58.6	213.66 µg/L	213.66 ppb	15:50:01
3	SiO2†	357545.9	371896.4	70445 µg/L	70445 ppb	15:49:35
3	Si 251.611†	438249.5	458778.0	32681 µg/L	32681 ppb	15:49:35
3	Sn 189.927†	-11.6	-6.9	-2.3533 µg/L	-2.3533 ppb	15:50:01
3	Ti 334.940†	1037225.9	1087501.1	2669.4 µg/L	2669.4 ppb	15:49:35
3	Tl 190.801†	-67.9	-36.8	3.7820 µg/L	3.7820 ppb	15:50:01
3	U 409.014†	-628.8	-619.0	-70.454 µg/L	-70.454 ppb	15:49:35
3	V 292.402†	6641.5	6859.7	75.443 µg/L	75.443 ppb	15:49:40
3	Zn 213.857†	16208.5	16325.0	390.08 µg/L	390.08 ppb	15:49:40

Mean Data: 247178009|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1856349.1	95.192	%	0.2540				0.27%
Sc RADIAL	89293.1	97.3	%	0.49				0.50%
Y 371.029	1327325.6	99.550	%	0.2212				0.22%
Ag 328.068†	-779.3	0.7857	µg/L	0.13947	0.7857	ppb	0.13947	17.75%
Al 396.153Radial†	75371.1	36902	µg/L	102.6	36902	ppb	102.6	0.28%
As 188.979†	13.8	9.5113	µg/L	2.13064	9.5113	ppb	2.13064	22.40%
B 249.677†	673.4	-13.273	µg/L	0.5708	-13.273	ppb	0.5708	4.30%
Ba 233.527†	13334.2	308.67	µg/L	11.674	308.67	ppb	11.674	3.78%
Be 313.107†	12421.6	6.6707	µg/L	0.32673	6.6707	ppb	0.32673	4.90%
Ca 317.933Radial†	24843.4	9348.8	µg/L	17.01	9348.8	ppb	17.01	0.18%
Cd 226.502†	440.6	1.3994	µg/L	0.67649	1.3994	ppb	0.67649	48.34%
Co 228.616†	406.8	12.725	µg/L	1.5081	12.725	ppb	1.5081	11.85%
Cr 267.716†	3371.4	78.722	µg/L	5.7699	78.722	ppb	5.7699	7.33%
Cu 324.752†	9618.6	82.150	µg/L	2.5012	82.150	ppb	2.5012	3.04%
Fe 238.204 Radial†	7045.2	87749	µg/L	522.8	87749	ppb	522.8	0.60%
K 766.490 Radial†	11178.0	5288.7	µg/L	19.08	5288.7	ppb	19.08	0.36%
Mg 279.077 IEC†	438.2	5834.3	µg/L	24.13	5834.3	ppb	24.13	0.41%
Mn 257.610†	584335.5	1901.3	µg/L	43.37	1901.3	ppb	43.37	2.28%
Mo 202.031†	42.1	7.7542	µg/L	0.27421	7.7542	ppb	0.27421	3.54%
Na 589.592 Radial†	1667.2	843.23	µg/L	2.945	843.23	ppb	2.945	0.35%

Ni 231.604†	786.5	47.650	µg/L	3.0927	47.650	ppb	3.0927	6.49%
P 214.914†	350.5	551.55	µg/L	39.961	551.55	ppb	39.961	7.25%
Pb 220.353†	294.1	86.066	µg/L	6.3705	86.066	ppb	6.3705	7.40%
S 181.975 Axial†	112.2	372.93	µg/L	15.985	372.93	ppb	15.985	4.29%
Sb 206.836†	-6.5	-7.1167	µg/L	4.09972	-7.1167	ppb	4.09972	57.61%
Se 196.026†	-68.1	205.37	µg/L	7.535	205.37	ppb	7.535	3.67%
SiO2†	380130.4	72005	µg/L	1350.8	72005	ppb	1350.8	1.88%
Si 251.611†	468950.3	33406	µg/L	627.7	33406	ppb	627.7	1.88%
Sn 189.927†	-11.6	-4.3320	µg/L	1.75242	-4.3320	ppb	1.75242	40.45%
Sr 421.552†	12134.6	73.491	µg/L	0.2203	73.491	ppb	0.2203	0.30%
Ti 334.940†	1122479.2	2755.2	µg/L	74.37	2755.2	ppb	74.37	2.70%
Tl 190.801†	-33.3	8.3984	µg/L	5.49779	8.3984	ppb	5.49779	65.46%
U 409.014†	-621.0	-70.690	µg/L	1.0270	-70.690	ppb	1.0270	1.45%
V 292.402†	7176.4	79.398	µg/L	3.4274	79.398	ppb	3.4274	4.32%
Zn 213.857†	17026.9	407.02	µg/L	14.804	407.02	ppb	14.804	3.64%

Sequence No.: 33
Sample ID: 247178010|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 325
Date Collected: 3/15/2010 15:50:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178010|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	88698.7	88698.7	96.6	%			15:50:41
1	Al 396.153Radial†	59049.4	61260.6	29993	µg/L	29993	ppb	15:50:41
1	Ca 317.933Radial†	27041.6	27638.9	10401	µg/L	10401	ppb	15:50:41
1	Fe 238.204 Radial†	6529.9	6743.4	83990	µg/L	83990	ppb	15:51:01
1	K 766.490 Radial†	14158.9	14245.0	6739.8	µg/L	6739.8	ppb	15:50:41
1	Mg 279.077 IEC†	475.7	483.1	6446.0	µg/L	6446.0	ppb	15:51:01
1	Na 589.592 Radial†	2300.2	2189.8	1107.6	µg/L	1107.6	ppb	15:50:41
1	Sr 421.552†	13254.1	13578.6	82.237	µg/L	82.237	ppb	15:50:41
1	Sc 361.383	1867502.0	1867502.0	95.763	%			15:52:06
1	Y 371.029	1345428.1	1345428.1	100.91	%			15:52:06
1	Ag 328.068†	-1187.9	-717.0	1.0694	µg/L	1.0694	ppb	15:52:12
1	As 188.979†	18.1	22.3	23.137	µg/L	23.137	ppb	15:52:32
1	B 249.677†	997.1	763.9	-6.9485	µg/L	-6.9485	ppb	15:52:12
1	Ba 233.527†	14984.3	15674.3	362.83	µg/L	362.83	ppb	15:52:12
1	Be 313.107†	9519.2	11499.1	6.1376	µg/L	6.1376	ppb	15:52:12
1	Cd 226.502†	267.5	444.6	1.9375	µg/L	1.9375	ppb	15:52:32
1	Co 228.616†	482.6	469.5	15.789	µg/L	15.789	ppb	15:52:32
1	Cr 267.716†	3494.3	3556.5	83.046	µg/L	83.046	ppb	15:52:32
1	Cu 324.752†	12782.9	9124.5	78.071	µg/L	78.071	ppb	15:52:12
1	Mn 257.610†	658023.5	687873.8	2237.1	µg/L	2237.1	ppb	15:52:06
1	Mo 202.031†	34.6	23.8	5.6891	µg/L	5.6891	ppb	15:52:32
1	Ni 231.604†	1254.5	952.6	57.423	µg/L	57.423	ppb	15:52:32
1	P 214.914†	591.1	329.3	515.43	µg/L	515.43	ppb	15:52:32
1	Pb 220.353†	338.6	314.0	91.040	µg/L	91.040	ppb	15:52:32
1	S 181.975 Axial†	104.0	85.6	284.70	µg/L	284.70	ppb	15:52:32
1	Sb 206.836†	24.6	-2.2	-3.1702	µg/L	-3.1702	ppb	15:52:32
1	Se 196.026†	-41.6	-65.3	195.77	µg/L	195.77	ppb	15:52:32
1	SiO2†	373000.4	386760.2	73261	µg/L	73261	ppb	15:52:06
1	Si 251.611†	457378.1	477190.8	33993	µg/L	33993	ppb	15:52:06
1	Sn 189.927†	-6.8	-1.9	-0.1273	µg/L	-0.1273	ppb	15:52:32
1	Ti 334.940†	1033078.0	1079472.7	2649.6	µg/L	2649.6	ppb	15:52:06
1	Tl 190.801†	-60.8	-29.1	12.237	µg/L	12.237	ppb	15:52:32
1	U 409.014†	-612.1	-599.3	-68.211	µg/L	-68.211	ppb	15:52:06
1	V 292.402†	7524.1	7757.8	87.194	µg/L	87.194	ppb	15:52:12
1	Zn 213.857†	18279.2	18429.6	441.05	µg/L	441.05	ppb	15:52:12
2	Sc RADIAL	88630.2	88630.2	96.6	%			15:51:07
2	Al 396.153Radial†	59340.3	61609.1	30164	µg/L	30164	ppb	15:51:07
2	Ca 317.933Radial†	27142.7	27765.3	10448	µg/L	10448	ppb	15:51:07
2	Fe 238.204 Radial†	6534.5	6753.3	84114	µg/L	84114	ppb	15:51:27
2	K 766.490 Radial†	14351.5	14455.7	6839.5	µg/L	6839.5	ppb	15:51:07
2	Mg 279.077 IEC†	479.6	487.6	6505.7	µg/L	6505.7	ppb	15:51:27
2	Na 589.592 Radial†	2258.5	2148.5	1086.7	µg/L	1086.7	ppb	15:51:07
2	Sr 421.552†	13354.9	13693.6	82.933	µg/L	82.933	ppb	15:51:07
2	Sc 361.383	1860208.8	1860208.8	95.389	%			15:52:40
2	Y 371.029	1344705.2	1344705.2	100.85	%			15:52:40
2	Ag 328.068†	-1149.3	-681.3	1.3778	µg/L	1.3778	ppb	15:52:46
2	As 188.979†	9.9	13.8	9.8258	µg/L	9.8258	ppb	15:53:06
2	B 249.677†	985.8	756.1	-7.3906	µg/L	-7.3906	ppb	15:52:46
2	Ba 233.527†	14871.1	15617.0	361.50	µg/L	361.50	ppb	15:52:46
2	Be 313.107†	9336.1	11346.2	6.0431	µg/L	6.0431	ppb	15:52:46
2	Cd 226.502†	252.7	430.3	1.5547	µg/L	1.5547	ppb	15:53:06
2	Co 228.616†	468.6	456.8	15.218	µg/L	15.218	ppb	15:53:06
2	Cr 267.716†	3454.3	3528.9	82.402	µg/L	82.402	ppb	15:53:06
2	Cu 324.752†	12690.2	9079.6	77.788	µg/L	77.788	ppb	15:52:46
2	Mn 257.610†	653954.6	686302.2	2232.0	µg/L	2232.0	ppb	15:52:40
2	Mo 202.031†	33.2	22.5	5.5562	µg/L	5.5562	ppb	15:53:06
2	Ni 231.604†	1235.9	938.2	56.575	µg/L	56.575	ppb	15:53:06
2	P 214.914†	608.1	349.6	551.32	µg/L	551.32	ppb	15:53:06
2	Pb 220.353†	346.1	323.3	93.637	µg/L	93.637	ppb	15:53:06

2	S 181.975 Axial†	110.6	93.0	309.32	µg/L	309.32 ppb	15:53:06
2	Sb 206.836†	19.5	-7.4	-8.1397	µg/L	-8.1397 ppb	15:53:06
2	Se 196.026†	-37.9	-61.6	199.79	µg/L	199.79 ppb	15:53:06
2	SiO2†	371332.2	386538.4	73219	µg/L	73219 ppb	15:52:40
2	Si 251.611†	455265.3	476848.4	33968	µg/L	33968 ppb	15:52:40
2	Sn 189.927†	0.3	5.5	2.9823	µg/L	2.9823 ppb	15:53:06
2	Ti 334.940†	1028547.3	1078952.5	2648.3	µg/L	2648.3 ppb	15:52:40
2	Tl 190.801†	-62.3	-30.9	10.299	µg/L	10.299 ppb	15:53:06
2	U 409.014†	-738.9	-734.7	-80.860	µg/L	-80.860 ppb	15:52:40
2	V 292.402†	7478.8	7741.1	86.953	µg/L	86.953 ppb	15:52:46
2	Zn 213.857†	18122.6	18340.3	438.88	µg/L	438.88 ppb	15:52:46
3	Sc RADIAL	89083.7	89083.7	97.1	%		15:51:33
3	Al 396.153Radial†	59695.9	61662.7	30190	µg/L	30190 ppb	15:51:33
3	Ca 317.933Radial†	27165.1	27645.2	10403	µg/L	10403 ppb	15:51:33
3	Fe 238.204 Radial†	6527.4	6711.6	83593	µg/L	83593 ppb	15:51:53
3	K 766.490 Radial†	14344.3	14372.7	6800.2	µg/L	6800.2 ppb	15:51:33
3	Mg 279.077 IEC†	481.0	486.5	6491.4	µg/L	6491.4 ppb	15:51:53
3	Na 589.592 Radial†	2330.7	2211.0	1118.3	µg/L	1118.3 ppb	15:51:33
3	Sr 421.552†	13357.1	13625.5	82.520	µg/L	82.520 ppb	15:51:33
3	Sc 361.383	1865881.9	1865881.9	95.680	%		15:53:14
3	Y 371.029	1343679.4	1343679.4	100.78	%		15:53:14
3	Ag 328.068†	-1158.3	-687.0	1.2500	µg/L	1.2500 ppb	15:53:20
3	As 188.979†	12.1	16.0	13.478	µg/L	13.478 ppb	15:53:40
3	B 249.677†	936.4	701.4	-9.7648	µg/L	-9.7648 ppb	15:53:20
3	Ba 233.527†	14264.3	14935.3	345.72	µg/L	345.72 ppb	15:53:20
3	Be 313.107†	8901.5	10862.2	5.7837	µg/L	5.7837 ppb	15:53:20
3	Cd 226.502†	205.0	379.6	0.3139	µg/L	0.3139 ppb	15:53:40
3	Co 228.616†	432.6	417.7	13.668	µg/L	13.668 ppb	15:53:40
3	Cr 267.716†	3120.8	3169.4	74.009	µg/L	74.009 ppb	15:53:40
3	Cu 324.752†	12282.8	8613.4	74.508	µg/L	74.508 ppb	15:53:20
3	Mn 257.610†	633242.8	662571.0	2154.9	µg/L	2154.9 ppb	15:53:14
3	Mo 202.031†	31.0	20.0	5.2778	µg/L	5.2778 ppb	15:53:40
3	Ni 231.604†	1174.3	869.9	52.528	µg/L	52.528 ppb	15:53:40
3	P 214.914†	573.4	311.3	484.52	µg/L	484.52 ppb	15:53:40
3	Pb 220.353†	318.6	293.4	85.320	µg/L	85.320 ppb	15:53:40
3	S 181.975 Axial†	109.7	91.7	304.97	µg/L	304.97 ppb	15:53:40
3	Sb 206.836†	20.5	-6.5	-7.1128	µg/L	-7.1128 ppb	15:53:40
3	Se 196.026†	-32.8	-56.1	203.65	µg/L	203.65 ppb	15:53:40
3	SiO2†	362693.5	376326.2	71284	µg/L	71284 ppb	15:53:14
3	Si 251.611†	444766.7	464424.7	33083	µg/L	33083 ppb	15:53:14
3	Sn 189.927†	-5.5	-0.5	0.4466	µg/L	0.4466 ppb	15:53:40
3	Ti 334.940†	989279.6	1034633.6	2539.5	µg/L	2539.5 ppb	15:53:14
3	Tl 190.801†	-61.4	-29.8	10.168	µg/L	10.168 ppb	15:53:40
3	U 409.014†	-717.6	-710.1	-78.494	µg/L	-78.494 ppb	15:53:14
3	V 292.402†	7045.5	7264.4	80.997	µg/L	80.997 ppb	15:53:20
3	Zn 213.857†	17496.4	17628.0	421.71	µg/L	421.71 ppb	15:53:20

Mean Data: 247178010|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1864530.9	95.611	%	0.1964				0.21%
Sc RADIAL	88804.2	96.8	%	0.27				0.28%
Y 371.029	1344604.2	100.85	%	0.066				0.07%
Ag 328.068†	-695.1	1.2324	µg/L	0.15496	1.2324	ppb	0.15496	12.57%
Al 396.153Radial†	61510.8	30116	µg/L	106.9	30116	ppb	106.9	0.35%
As 188.979†	17.4	15.480	µg/L	6.8775	15.480	ppb	6.8775	44.43%
B 249.677†	740.5	-8.0346	µg/L	1.51458	-8.0346	ppb	1.51458	18.85%
Ba 233.527†	15408.9	356.68	µg/L	9.517	356.68	ppb	9.517	2.67%
Be 313.107†	11235.9	5.9881	µg/L	0.18325	5.9881	ppb	0.18325	3.06%
Ca 317.933Radial†	27683.1	10417	µg/L	26.8	10417	ppb	26.8	0.26%
Cd 226.502†	418.2	1.2687	µg/L	0.84874	1.2687	ppb	0.84874	66.90%
Co 228.616†	448.0	14.892	µg/L	1.0974	14.892	ppb	1.0974	7.37%
Cr 267.716†	3418.3	79.819	µg/L	5.0416	79.819	ppb	5.0416	6.32%
Cu 324.752†	8939.2	76.789	µg/L	1.9805	76.789	ppb	1.9805	2.58%
Fe 238.204 Radial†	6736.1	83899	µg/L	271.9	83899	ppb	271.9	0.32%
K 766.490 Radial†	14357.8	6793.1	µg/L	50.23	6793.1	ppb	50.23	0.74%
Mg 279.077 IEC†	485.7	6481.0	µg/L	31.21	6481.0	ppb	31.21	0.48%
Mn 257.610†	678915.7	2208.0	µg/L	46.03	2208.0	ppb	46.03	2.08%
Mo 202.031†	22.1	5.5077	µg/L	0.20990	5.5077	ppb	0.20990	3.81%
Na 589.592 Radial†	2183.1	1104.2	µg/L	16.07	1104.2	ppb	16.07	1.46%

Ni 231.604†	920.2	55.509 µg/L	2.6162	55.509 ppb	2.6162	4.71%
P 214.914†	330.0	517.09 µg/L	33.427	517.09 ppb	33.427	6.46%
Pb 220.353†	310.2	89.999 µg/L	4.2549	89.999 ppb	4.2549	4.73%
S 181.975 Axial†	90.1	299.66 µg/L	13.139	299.66 ppb	13.139	4.38%
Sb 206.836†	-5.4	-6.1409 µg/L	2.62346	-6.1409 ppb	2.62346	42.72%
Se 196.026†	-61.0	199.73 µg/L	3.941	199.73 ppb	3.941	1.97%
SiO2†	383208.3	72588 µg/L	1129.2	72588 ppb	1129.2	1.56%
Si 251.611†	472821.3	33681 µg/L	518.1	33681 ppb	518.1	1.54%
Sn 189.927†	1.1	1.1006 µg/L	1.65474	1.1006 ppb	1.65474	150.35%
Sr 421.552†	13632.6	82.563 µg/L	0.3502	82.563 ppb	0.3502	0.42%
Ti 334.940†	1064353.0	2612.5 µg/L	63.19	2612.5 ppb	63.19	2.42%
Tl 190.801†	-29.9	10.901 µg/L	1.1586	10.901 ppb	1.1586	10.63%
U 409.014†	-681.4	-75.855 µg/L	6.7246	-75.855 ppb	6.7246	8.87%
V 292.402†	7587.8	85.048 µg/L	3.5101	85.048 ppb	3.5101	4.13%
Zn 213.857†	18132.6	433.88 µg/L	10.599	433.88 ppb	10.599	2.44%

Sequence No.: 34
Sample ID: 247178011|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 326
Date Collected: 3/15/2010 15:53:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178011|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90910.9	90910.9	99.1	%			15:54:20
1	Al 396.153Radial†	101417.8	102545.6	50207	µg/L	50207	ppb	15:54:20
1	Ca 317.933Radial†	34030.6	34013.6	12800	µg/L	12800	ppb	15:54:20
1	Fe 238.204 Radial†	6880.7	6933.1	86352	µg/L	86352	ppb	15:54:40
1	K 766.490 Radial†	16779.1	16533.7	7822.6	µg/L	7822.6	ppb	15:54:20
1	Mg 279.077 IEC†	638.6	635.6	8506.4	µg/L	8506.4	ppb	15:54:40
1	Na 589.592 Radial†	1062.7	882.7	446.43	µg/L	446.43	ppb	15:54:20
1	Sr 421.552†	17732.9	17766.3	107.60	µg/L	107.60	ppb	15:54:20
1	Sc 361.383	1868054.7	1868054.7	95.792	%			15:55:46
1	Y 371.029	1314701.1	1314701.1	98.603	%			15:55:46
1	Ag 328.068†	-1265.6	-797.7	0.7531	µg/L	0.7531	ppb	15:55:51
1	As 188.979†	20.2	24.4	25.956	µg/L	25.956	ppb	15:56:12
1	B 249.677†	1015.2	782.5	-7.3448	µg/L	-7.3448	ppb	15:55:51
1	Ba 233.527†	20541.3	21470.8	496.99	µg/L	496.99	ppb	15:55:51
1	Be 313.107†	15447.9	17685.4	10.074	µg/L	10.074	ppb	15:55:51
1	Cd 226.502†	305.7	484.5	2.6722	µg/L	2.6722	ppb	15:56:12
1	Co 228.616†	563.6	554.0	20.127	µg/L	20.127	ppb	15:56:12
1	Cr 267.716†	2059.0	2057.1	48.077	µg/L	48.077	ppb	15:56:12
1	Cu 324.752†	35076.6	32393.6	237.34	µg/L	237.34	ppb	15:55:51
1	Mn 257.610†	622710.7	650806.4	2116.8	µg/L	2116.8	ppb	15:55:46
1	Mo 202.031†	26.4	15.2	4.8778	µg/L	4.8778	ppb	15:56:12
1	Ni 231.604†	985.8	671.7	40.833	µg/L	40.833	ppb	15:56:12
1	P 214.914†	679.9	421.8	666.01	µg/L	666.01	ppb	15:56:12
1	Pb 220.353†	576.2	561.9	161.14	µg/L	161.14	ppb	15:56:12
1	S 181.975 Axial†	115.8	98.0	325.80	µg/L	325.80	ppb	15:56:12
1	Sb 206.836†	21.7	-5.2	-5.6374	µg/L	-5.6374	ppb	15:56:12
1	Se 196.026†	-38.2	-61.7	205.12	µg/L	205.12	ppb	15:56:12
1	SiO2†	447073.0	463971.6	87886	µg/L	87886	ppb	15:55:46
1	Si 251.611†	548740.2	572425.2	40777	µg/L	40777	ppb	15:55:46
1	Sn 189.927†	-18.7	-14.2	-5.0895	µg/L	-5.0895	ppb	15:56:12
1	Ti 334.940†	939666.9	981638.7	2409.3	µg/L	2409.3	ppb	15:55:46
1	Tl 190.801†	-55.9	-24.0	15.648	µg/L	15.648	ppb	15:56:12
1	U 409.014†	1101.1	1189.3	98.153	µg/L	98.153	ppb	15:55:46
1	V 292.402†	9612.3	9935.4	114.42	µg/L	114.42	ppb	15:55:51
1	Zn 213.857†	15450.9	15471.4	369.09	µg/L	369.09	ppb	15:55:51
2	Sc RADIAL	90392.7	90392.7	98.5	%			15:54:46
2	Al 396.153Radial†	101304.3	103017.4	50438	µg/L	50438	ppb	15:54:46
2	Ca 317.933Radial†	33889.8	34067.6	12820	µg/L	12820	ppb	15:54:46
2	Fe 238.204 Radial†	6863.6	6955.6	86633	µg/L	86633	ppb	15:55:06
2	K 766.490 Radial†	16694.5	16544.8	7827.9	µg/L	7827.9	ppb	15:54:46
2	Mg 279.077 IEC†	630.9	631.5	8449.4	µg/L	8449.4	ppb	15:55:06
2	Na 589.592 Radial†	1091.2	917.8	464.20	µg/L	464.20	ppb	15:54:46
2	Sr 421.552†	17646.2	17781.0	107.69	µg/L	107.69	ppb	15:54:46
2	Sc 361.383	1858302.4	1858302.4	95.292	%			15:56:20
2	Y 371.029	1306454.7	1306454.7	97.985	%			15:56:20
2	Ag 328.068†	-1319.6	-861.3	0.2477	µg/L	0.2477	ppb	15:56:25
2	As 188.979†	11.9	15.9	12.543	µg/L	12.543	ppb	15:56:45
2	B 249.677†	1030.5	804.1	-6.4538	µg/L	-6.4538	ppb	15:56:25
2	Ba 233.527†	20633.2	21679.8	501.82	µg/L	501.82	ppb	15:56:25
2	Be 313.107†	15526.4	17852.4	10.178	µg/L	10.178	ppb	15:56:25
2	Cd 226.502†	327.9	509.4	3.2773	µg/L	3.2773	ppb	15:56:45
2	Co 228.616†	564.7	558.1	20.313	µg/L	20.313	ppb	15:56:45
2	Cr 267.716†	2035.7	2044.0	47.772	µg/L	47.772	ppb	15:56:45
2	Cu 324.752†	35179.8	32694.1	239.45	µg/L	239.45	ppb	15:56:25
2	Mn 257.610†	620289.2	651676.7	2119.6	µg/L	2119.6	ppb	15:56:20
2	Mo 202.031†	27.1	16.1	4.9850	µg/L	4.9850	ppb	15:56:45
2	Ni 231.604†	974.6	665.3	40.456	µg/L	40.456	ppb	15:56:45
2	P 214.914†	674.5	419.8	662.11	µg/L	662.11	ppb	15:56:45
2	Pb 220.353†	571.8	560.5	160.79	µg/L	160.79	ppb	15:56:45

2	S 181.975 Axial†	116.4	99.2	329.96	µg/L	329.96 ppb	15:56:45
2	Sb 206.836†	25.0	-1.6	-2.2394	µg/L	-2.2394 ppb	15:56:45
2	Se 196.026†	-44.4	-68.4	199.33	µg/L	199.33 ppb	15:56:45
2	SiO2†	444597.2	463822.8	87858	µg/L	87858 ppb	15:56:20
2	Si 251.611†	545499.7	572030.9	40749	µg/L	40749 ppb	15:56:20
2	Sn 189.927†	-18.2	-13.8	-4.9139	µg/L	-4.9139 ppb	15:56:45
2	Ti 334.940†	935128.3	982023.9	2410.3	µg/L	2410.3 ppb	15:56:20
2	Tl 190.801†	-60.3	-28.9	10.547	µg/L	10.547 ppb	15:56:45
2	U 409.014†	1052.2	1144.0	93.890	µg/L	93.890 ppb	15:56:20
2	V 292.402†	9660.7	10038.8	115.68	µg/L	115.68 ppb	15:56:25
2	Zn 213.857†	15511.0	15619.1	372.65	µg/L	372.65 ppb	15:56:25
3	Sc RADIAL	89777.0	89777.0	97.8	%		15:55:12
3	Al 396.153Radial†	100690.5	103095.3	50476	µg/L	50476 ppb	15:55:12
3	Ca 317.933Radial†	33620.9	34028.7	12805	µg/L	12805 ppb	15:55:12
3	Fe 238.204 Radial†	6860.9	7000.6	87193	µg/L	87193 ppb	15:55:32
3	K 766.490 Radial†	16671.2	16637.3	7871.6	µg/L	7871.6 ppb	15:55:12
3	Mg 279.077 IEC†	636.6	641.7	8587.8	µg/L	8587.8 ppb	15:55:32
3	Na 589.592 Radial†	1042.1	875.2	442.66	µg/L	442.66 ppb	15:55:12
3	Sr 421.552†	17556.1	17811.7	107.87	µg/L	107.87 ppb	15:55:12
3	Sc 361.383	1860697.7	1860697.7	95.415	%		15:56:53
3	Y 371.029	1308118.2	1308118.2	98.110	%		15:56:53
3	Ag 328.068†	-1203.9	-738.3	1.2624	µg/L	1.2624 ppb	15:56:59
3	As 188.979†	12.4	16.4	13.313	µg/L	13.313 ppb	15:57:19
3	B 249.677†	1000.2	771.0	-8.3448	µg/L	-8.3448 ppb	15:56:59
3	Ba 233.527†	19479.2	20442.4	473.18	µg/L	473.18 ppb	15:56:59
3	Be 313.107†	14427.1	16679.3	9.4909	µg/L	9.4909 ppb	15:56:59
3	Cd 226.502†	274.0	452.5	1.7569	µg/L	1.7569 ppb	15:57:19
3	Co 228.616†	512.9	503.2	18.049	µg/L	18.049 ppb	15:57:19
3	Cr 267.716†	1812.3	1807.1	42.237	µg/L	42.237 ppb	15:57:19
3	Cu 324.752†	33354.5	30733.5	226.17	µg/L	226.17 ppb	15:56:59
3	Mn 257.610†	595485.1	624842.7	2032.5	µg/L	2032.5 ppb	15:56:53
3	Mo 202.031†	22.6	11.3	4.4990	µg/L	4.4990 ppb	15:57:19
3	Ni 231.604†	930.9	618.2	37.682	µg/L	37.682 ppb	15:57:19
3	P 214.914†	646.7	389.8	609.92	µg/L	609.92 ppb	15:57:19
3	Pb 220.353†	525.9	511.6	147.20	µg/L	147.20 ppb	15:57:19
3	S 181.975 Axial†	107.1	89.4	297.12	µg/L	297.12 ppb	15:57:19
3	Sb 206.836†	18.8	-8.1	-8.3939	µg/L	-8.3939 ppb	15:57:19
3	Se 196.026†	-30.4	-53.6	215.82	µg/L	215.82 ppb	15:57:19
3	SiO2†	431099.2	449075.5	85065	µg/L	85065 ppb	15:56:53
3	Si 251.611†	528916.8	553914.1	39458	µg/L	39458 ppb	15:56:53
3	Sn 189.927†	-22.0	-17.8	-6.5930	µg/L	-6.5930 ppb	15:57:19
3	Ti 334.940†	892982.3	936589.1	2298.7	µg/L	2298.7 ppb	15:56:53
3	Tl 190.801†	-60.5	-29.0	9.2423	µg/L	9.2423 ppb	15:57:19
3	U 409.014†	1064.1	1155.1	94.845	µg/L	94.845 ppb	15:56:53
3	V 292.402†	8941.6	9272.1	105.94	µg/L	105.94 ppb	15:56:59
3	Zn 213.857†	14756.6	14807.5	353.02	µg/L	353.02 ppb	15:56:59

Mean Data: 247178011|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1862351.6	95.499	%	0.2606				0.27%
Sc RADIAL	90360.2	98.5	%	0.62				0.63%
Y 371.029	1309758.0	98.233	%	0.3271				0.33%
Ag 328.068†	-799.1	0.7544	µg/L	0.50735	0.7544	ppb	0.50735	67.25%
Al 396.153Radial†	102886.1	50373	µg/L	145.6	50373	ppb	145.6	0.29%
As 188.979†	18.9	17.271	µg/L	7.5318	17.271	ppb	7.5318	43.61%
B 249.677†	785.8	-7.3811	µg/L	0.94601	-7.3811	ppb	0.94601	12.82%
Ba 233.527†	21197.6	490.66	µg/L	15.334	490.66	ppb	15.334	3.13%
Be 313.107†	17405.7	9.9142	µg/L	0.37021	9.9142	ppb	0.37021	3.73%
Ca 317.933Radial†	34036.6	12808	µg/L	10.5	12808	ppb	10.5	0.08%
Cd 226.502†	482.1	2.5688	µg/L	0.76545	2.5688	ppb	0.76545	29.80%
Co 228.616†	538.4	19.496	µg/L	1.2568	19.496	ppb	1.2568	6.45%
Cr 267.716†	1969.4	46.029	µg/L	3.2870	46.029	ppb	3.2870	7.14%
Cu 324.752†	31940.4	234.32	µg/L	7.136	234.32	ppb	7.136	3.05%
Fe 238.204 Radial†	6963.1	86726	µg/L	428.0	86726	ppb	428.0	0.49%
K 766.490 Radial†	16571.9	7840.7	µg/L	26.91	7840.7	ppb	26.91	0.34%
Mg 279.077 IEC†	636.3	8514.6	µg/L	69.57	8514.6	ppb	69.57	0.82%
Mn 257.610†	642442.0	2089.6	µg/L	49.47	2089.6	ppb	49.47	2.37%
Mo 202.031†	14.2	4.7873	µg/L	0.25531	4.7873	ppb	0.25531	5.33%
Na 589.592 Radial†	891.9	451.10	µg/L	11.506	451.10	ppb	11.506	2.55%

Ni 231.604†	651.7	39.657	µg/L	1.7204	39.657	ppb	1.7204	4.34%
P 214.914†	410.5	646.01	µg/L	31.316	646.01	ppb	31.316	4.85%
Pb 220.353†	544.7	156.38	µg/L	7.948	156.38	ppb	7.948	5.08%
S 181.975 Axial†	95.5	317.63	µg/L	17.882	317.63	ppb	17.882	5.63%
Sb 206.836†	-5.0	-5.4235	µg/L	3.08281	-5.4235	ppb	3.08281	56.84%
Se 196.026†	-61.2	206.75	µg/L	8.366	206.75	ppb	8.366	4.05%
SiO2†	458956.7	86936	µg/L	1621.0	86936	ppb	1621.0	1.86%
Si 251.611†	566123.4	40328	µg/L	753.3	40328	ppb	753.3	1.87%
Sn 189.927†	-15.3	-5.5321	µg/L	0.92297	-5.5321	ppb	0.92297	16.68%
Sr 421.552†	17786.3	107.72	µg/L	0.140	107.72	ppb	0.140	0.13%
Ti 334.940†	966750.6	2372.8	µg/L	64.13	2372.8	ppb	64.13	2.70%
Tl 190.801†	-27.3	11.813	µg/L	3.3852	11.813	ppb	3.3852	28.66%
U 409.014†	1162.8	95.629	µg/L	2.2375	95.629	ppb	2.2375	2.34%
V 292.402†	9748.8	112.01	µg/L	5.299	112.01	ppb	5.299	4.73%
Zn 213.857†	15299.3	364.92	µg/L	10.458	364.92	ppb	10.458	2.87%

Sequence No.: 35
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/15/2010 15:57:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc RADIAL	90343.0	90343.0	98.4	%			15:58:01
1	Al 396.153Radial†	9879.2	10198.3	4982.0	µg/L	4982.0	ppb	15:58:01
1	Ca 317.933Radial†	13409.7	13281.5	4997.9	µg/L	4997.9	ppb	15:58:01
1	Fe 238.204 Radial†	412.2	405.6	5063.0	µg/L	5063.0	ppb	15:58:22
1	K 766.490 Radial†	10468.0	10228.9	4839.6	µg/L	4839.6	ppb	15:58:01
1	Mg 279.077 IEC†	364.8	361.5	4893.7	µg/L	4893.7	ppb	15:58:22
1	Na 589.592 Radial†	20234.0	20364.9	10300	µg/L	10300	ppb	15:58:01
1	Sr 421.552†	82046.8	83213.1	503.96	µg/L	503.96	ppb	15:58:01
1	Sc 361.383	1865125.6	1865125.6	95.642	%			15:59:26
1	Y 371.029	1271983.2	1271983.2	95.400	%			15:59:26
1	Ag 328.068†	57581.9	60729.5	514.90	µg/L	514.90	ppb	15:59:31
1	As 188.979†	321.4	339.4	527.96	µg/L	527.96	ppb	15:59:52
1	B 249.677†	10384.2	10580.1	507.10	µg/L	507.10	ppb	15:59:31
1	Ba 233.527†	21415.6	22418.6	519.63	µg/L	519.63	ppb	15:59:31
1	Be 313.107†	791306.4	828925.4	515.02	µg/L	515.02	ppb	15:59:26
1	Cd 226.502†	19182.3	20221.8	517.14	µg/L	517.14	ppb	15:59:31
1	Co 228.616†	11035.1	11503.6	521.74	µg/L	521.74	ppb	15:59:31
1	Cr 267.716†	21555.0	22445.0	524.03	µg/L	524.03	ppb	15:59:31
1	Cu 324.752†	76737.4	76010.5	519.77	µg/L	519.77	ppb	15:59:31
1	Mn 257.610†	152753.1	160453.5	520.73	µg/L	520.73	ppb	15:59:26
1	Mo 202.031†	4937.1	5149.7	540.70	µg/L	540.70	ppb	15:59:52
1	Ni 231.604†	8804.0	8847.7	522.90	µg/L	522.90	ppb	15:59:31
1	P 214.914†	1714.5	1504.6	2608.2	µg/L	2608.2	ppb	15:59:52
1	Pb 220.353†	1865.0	1910.4	532.40	µg/L	532.40	ppb	15:59:52
1	S 181.975 Axial†	322.6	314.4	1045.3	µg/L	1045.3	ppb	15:59:52
1	Sb 206.836†	557.5	555.0	531.00	µg/L	531.00	ppb	15:59:52
1	Se 196.026†	523.0	525.0	538.82	µg/L	538.82	ppb	15:59:52
1	SiO2†	30844.9	29508.8	5589.6	µg/L	5589.6	ppb	15:59:31
1	Si 251.611†	35558.4	36757.2	2618.4	µg/L	2618.4	ppb	15:59:31
1	Sn 189.927†	1223.0	1283.9	539.83	µg/L	539.83	ppb	15:59:52
1	Ti 334.940†	200882.2	210727.8	517.00	µg/L	517.00	ppb	15:59:26
1	Tl 190.801†	446.0	500.7	527.00	µg/L	527.00	ppb	15:59:52
1	U 409.014†	5374.9	5659.7	526.92	µg/L	526.92	ppb	15:59:31
1	V 292.402†	39423.4	41120.8	523.14	µg/L	523.14	ppb	15:59:31
1	Zn 213.857†	21292.7	21604.7	518.89	µg/L	518.89	ppb	15:59:31
2	Sc RADIAL	89654.6	89654.6	97.7	%			15:58:27
2	Al 396.153Radial†	9794.8	10189.1	4977.8	µg/L	4977.8	ppb	15:58:27
2	Ca 317.933Radial†	13265.9	13238.8	4981.9	µg/L	4981.9	ppb	15:58:27
2	Fe 238.204 Radial†	414.7	411.4	5135.4	µg/L	5135.4	ppb	15:58:48
2	K 766.490 Radial†	10371.7	10212.0	4831.6	µg/L	4831.6	ppb	15:58:27
2	Mg 279.077 IEC†	372.7	372.4	5041.7	µg/L	5041.7	ppb	15:58:48
2	Na 589.592 Radial†	20099.9	20385.4	10311	µg/L	10311	ppb	15:58:27
2	Sr 421.552†	81383.8	83174.4	503.73	µg/L	503.73	ppb	15:58:27
2	Sc 361.383	1876002.8	1876002.8	96.199	%			15:59:59
2	Y 371.029	1276634.2	1276634.2	95.748	%			15:59:59
2	Ag 328.068†	57525.1	60321.3	511.45	µg/L	511.45	ppb	16:00:04
2	As 188.979†	318.4	334.4	520.19	µg/L	520.19	ppb	16:00:25
2	B 249.677†	10338.5	10469.6	501.75	µg/L	501.75	ppb	16:00:04
2	Ba 233.527†	21403.7	22276.4	516.33	µg/L	516.33	ppb	16:00:04
2	Be 313.107†	793613.9	826526.9	513.53	µg/L	513.53	ppb	15:59:59
2	Cd 226.502†	19103.8	20023.9	512.07	µg/L	512.07	ppb	16:00:04
2	Co 228.616†	11023.3	11424.4	518.14	µg/L	518.14	ppb	16:00:04
2	Cr 267.716†	21554.5	22313.8	520.97	µg/L	520.97	ppb	16:00:04
2	Cu 324.752†	76666.5	75471.6	516.11	µg/L	516.11	ppb	16:00:04
2	Mn 257.610†	153761.0	160575.2	521.12	µg/L	521.12	ppb	15:59:59
2	Mo 202.031†	4843.0	5022.0	527.30	µg/L	527.30	ppb	16:00:25
2	Ni 231.604†	8826.7	8818.0	521.15	µg/L	521.15	ppb	16:00:04
2	P 214.914†	1703.0	1482.3	2568.9	µg/L	2568.9	ppb	16:00:25
2	Pb 220.353†	1841.6	1874.7	522.46	µg/L	522.46	ppb	16:00:25

2	S 181.975 Axial†	326.8	316.8	1053.4 µg/L	1053.4 ppb	16:00:25
2	Sb 206.836†	555.0	549.0	525.14 µg/L	525.14 ppb	16:00:25
2	Se 196.026†	510.7	509.0	522.93 µg/L	522.93 ppb	16:00:25
2	SiO2†	30881.7	29360.1	5561.4 µg/L	5561.4 ppb	16:00:04
2	Si 251.611†	35651.2	36638.0	2609.9 µg/L	2609.9 ppb	16:00:04
2	Sn 189.927†	1195.2	1247.6	524.56 µg/L	524.56 ppb	16:00:25
2	Ti 334.940†	201668.5	210327.4	516.01 µg/L	516.01 ppb	15:59:59
2	Tl 190.801†	441.8	493.7	519.68 µg/L	519.68 ppb	16:00:25
2	U 409.014†	5304.2	5553.6	517.01 µg/L	517.01 ppb	16:00:04
2	V 292.402†	39353.1	40808.7	519.08 µg/L	519.08 ppb	16:00:04
2	Zn 213.857†	21269.1	21451.1	515.18 µg/L	515.18 ppb	16:00:04
3	Sc RADIAL	90208.8	90208.8	98.3 %		15:58:53
3	Al 396.153Radial†	9853.8	10187.4	4978.9 µg/L	4978.9 ppb	15:58:53
3	Ca 317.933Radial†	13354.9	13246.0	4984.6 µg/L	4984.6 ppb	15:58:53
3	Fe 238.204 Radial†	414.7	408.8	5101.4 µg/L	5101.4 ppb	15:59:14
3	K 766.490 Radial†	10456.3	10232.8	4841.5 µg/L	4841.5 ppb	15:58:53
3	Mg 279.077 IEC†	371.1	368.4	4986.1 µg/L	4986.1 ppb	15:59:14
3	Na 589.592 Radial†	20309.2	20471.9	10354 µg/L	10354 ppb	15:58:53
3	Sr 421.552†	81888.4	83176.0	503.74 µg/L	503.74 ppb	15:58:53
3	Sc 361.383	1871934.8	1871934.8	95.991 %		16:00:32
3	Y 371.029	1276047.1	1276047.1	95.704 %		16:00:32
3	Ag 328.068†	53382.1	56135.2	475.82 µg/L	475.82 ppb	16:00:38
3	As 188.979†	264.0	278.4	432.90 µg/L	432.90 ppb	16:00:58
3	B 249.677†	9531.7	9652.5	462.34 µg/L	462.34 ppb	16:00:38
3	Ba 233.527†	19174.8	20002.8	463.62 µg/L	463.62 ppb	16:00:38
3	Be 313.107†	724702.0	756529.6	470.04 µg/L	470.04 ppb	16:00:32
3	Cd 226.502†	17139.7	18020.9	460.78 µg/L	460.78 ppb	16:00:38
3	Co 228.616†	9729.2	10101.1	458.07 µg/L	458.07 ppb	16:00:38
3	Cr 267.716†	18482.4	19162.1	447.39 µg/L	447.39 ppb	16:00:38
3	Cu 324.752†	68327.9	66957.8	457.99 µg/L	457.99 ppb	16:00:38
3	Mn 257.610†	140801.3	147421.5	478.43 µg/L	478.43 ppb	16:00:32
3	Mo 202.031†	3970.7	4124.2	433.07 µg/L	433.07 ppb	16:00:58
3	Ni 231.604†	7778.0	7745.4	457.76 µg/L	457.76 ppb	16:00:38
3	P 214.914†	1475.6	1249.3	2162.0 µg/L	2162.0 ppb	16:00:58
3	Pb 220.353†	1583.7	1610.3	448.74 µg/L	448.74 ppb	16:00:58
3	S 181.975 Axial†	282.5	271.4	902.41 µg/L	902.41 ppb	16:00:58
3	Sb 206.836†	467.6	459.3	439.05 µg/L	439.05 ppb	16:00:58
3	Se 196.026†	440.3	436.9	450.47 µg/L	450.47 ppb	16:00:58
3	SiO2†	28431.9	26877.7	5091.2 µg/L	5091.2 ppb	16:00:38
3	Si 251.611†	32518.5	33455.0	2383.2 µg/L	2383.2 ppb	16:00:38
3	Sn 189.927†	963.2	1008.7	424.20 µg/L	424.20 ppb	16:00:58
3	Ti 334.940†	182779.8	191105.3	468.83 µg/L	468.83 ppb	16:00:32
3	Tl 190.801†	393.1	443.9	467.30 µg/L	467.30 ppb	16:00:58
3	U 409.014†	4587.7	4819.2	448.51 µg/L	448.51 ppb	16:00:38
3	V 292.402†	34677.3	36026.5	457.90 µg/L	457.90 ppb	16:00:38
3	Zn 213.857†	18861.2	18990.6	456.05 µg/L	456.05 ppb	16:00:38

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1871021.0	95.944	%	0.2818				0.29%
Sc RADIAL	90068.8	98.1	%	0.40				0.41%
Y 371.029	1274888.2	95.617	%	0.1900				0.20%
Ag 328.068†	59062.0	500.72	µg/L	21.637	500.72	ppb	21.637	4.32%
QC value within limits for Ag 328.068 Recovery = 100.14%								
Al 396.153Radial†	10191.6	4979.6	µg/L	2.21	4979.6	ppb	2.21	0.04%
QC value within limits for Al 396.153Radial Recovery = 99.59%								
As 188.979†	317.4	493.68	µg/L	52.782	493.68	ppb	52.782	10.69%
QC value within limits for As 188.979 Recovery = 98.74%								
B 249.677†	10234.1	490.40	µg/L	24.443	490.40	ppb	24.443	4.98%
QC value within limits for B 249.677 Recovery = 98.08%								
Ba 233.527†	21566.0	499.86	µg/L	31.429	499.86	ppb	31.429	6.29%
QC value within limits for Ba 233.527 Recovery = 99.97%								
Be 313.107†	803994.0	499.53	µg/L	25.549	499.53	ppb	25.549	5.11%
QC value within limits for Be 313.107 Recovery = 99.91%								
Ca 317.933Radial†	13255.4	4988.1	µg/L	8.59	4988.1	ppb	8.59	0.17%
QC value within limits for Ca 317.933Radial Recovery = 99.76%								
Cd 226.502†	19422.2	496.66	µg/L	31.177	496.66	ppb	31.177	6.28%
QC value within limits for Cd 226.502 Recovery = 99.33%								
Co 228.616†	11009.7	499.32	µg/L	35.768	499.32	ppb	35.768	7.16%

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   QC value within limits for Co 228.616  Recovery = 99.86%
Cr 267.716†            21306.9      497.47 µg/L        43.391      497.47 ppb         43.391   8.72%
   QC value within limits for Cr 267.716  Recovery = 99.49%
Cu 324.752†            72813.3      497.96 µg/L        34.661      497.96 ppb         34.661   6.96%
   QC value within limits for Cu 324.752  Recovery = 99.59%
Fe 238.204 Radial†       408.6      5099.9 µg/L         36.22      5099.9 ppb          36.22   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.00%
K 766.490 Radial†      10224.6      4837.6 µg/L          5.24      4837.6 ppb           5.24   0.11%
   QC value within limits for K 766.490 Radial  Recovery = 96.75%
Mg 279.077 IEC†          367.5      4973.8 µg/L         74.78      4973.8 ppb          74.78   1.50%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.48%
Mn 257.610†           156150.1      506.76 µg/L        24.535      506.76 ppb         24.535   4.84%
   QC value within limits for Mn 257.610  Recovery = 101.35%
Mo 202.031†             4765.3      500.36 µg/L        58.659      500.36 ppb         58.659  11.72%
   QC value within limits for Mo 202.031  Recovery = 100.07%
Na 589.592 Radial†     20407.4       10322 µg/L          28.7       10322 ppb           28.7   0.28%
   QC value within limits for Na 589.592 Radial  Recovery = 103.22%
Ni 231.604†             8470.4      500.60 µg/L        37.114      500.60 ppb         37.114   7.41%
   QC value within limits for Ni 231.604  Recovery = 100.12%
P 214.914†              1412.1      2446.4 µg/L        247.07      2446.4 ppb         247.07  10.10%
   QC value within limits for P 214.914  Recovery = 97.86%
Pb 220.353†             1798.5      501.20 µg/L        45.703      501.20 ppb         45.703   9.12%
   QC value within limits for Pb 220.353  Recovery = 100.24%
S 181.975 Axial†         300.9      1000.4 µg/L         84.92      1000.4 ppb          84.92   8.49%
   QC value within limits for S 181.975 Axial  Recovery = 100.04%
Sb 206.836†              521.1      498.40 µg/L        51.482      498.40 ppb         51.482  10.33%
   QC value within limits for Sb 206.836  Recovery = 99.68%
Se 196.026†              490.3      504.07 µg/L        47.095      504.07 ppb         47.095   9.34%
   QC value within limits for Se 196.026  Recovery = 100.81%
SiO2†                  28582.2      5414.1 µg/L        279.96      5414.1 ppb         279.96   5.17%
   QC value within limits for SiO2  Recovery = 101.25%
Si 251.611†            35616.7      2537.2 µg/L        133.43      2537.2 ppb         133.43   5.26%
   QC value within limits for Si 251.611  Recovery = 101.49%
Sn 189.927†             1180.1      496.20 µg/L        62.818      496.20 ppb         62.818  12.66%
   QC value within limits for Sn 189.927  Recovery = 99.24%
Sr 421.552†            83187.8      503.81 µg/L         0.132      503.81 ppb          0.132   0.03%
   QC value within limits for Sr 421.552  Recovery = 100.76%
Ti 334.940†           204053.5      500.61 µg/L        27.533      500.61 ppb         27.533   5.50%
   QC value within limits for Ti 334.940  Recovery = 100.12%
Tl 190.801†              479.4      504.66 µg/L        32.560      504.66 ppb         32.560   6.45%
   QC value within limits for Tl 190.801  Recovery = 100.93%
U 409.014†              5344.2      497.48 µg/L        42.697      497.48 ppb         42.697   8.58%
   QC value within limits for U 409.014  Recovery = 99.50%
V 292.402†             39318.6      500.04 µg/L        36.554      500.04 ppb         36.554   7.31%
   QC value within limits for V 292.402  Recovery = 100.01%
Zn 213.857†            20682.2      496.71 µg/L        35.261      496.71 ppb         35.261   7.10%
   QC value within limits for Zn 213.857  Recovery = 99.34%
All analyte(s) passed QC.
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Sequence No.: 36
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/15/2010 16:01:08
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc RADIAL	87879.0	87879.0	95.8	%			16:01:38
1	Al 396.153Radial†	-157.3	-1.8	-0.9229	µg/L	-0.9229	ppb	16:01:38
1	Ca 317.933Radial†	348.1	22.6	8.4876	µg/L	8.4876	ppb	16:01:58
1	Fe 238.204 Radial†	13.4	0.9	11.771	µg/L	11.771	ppb	16:01:58
1	K 766.490 Radial†	326.4	-64.3	-30.434	µg/L	-30.434	ppb	16:01:38
1	Mg 279.077 IEC†	7.3	-1.5	-20.114	µg/L	-20.114	ppb	16:01:58
1	Na 589.592 Radial†	206.7	25.7	12.992	µg/L	12.992	ppb	16:01:38
1	Sr 421.552†	119.5	-10.5	-0.0636	µg/L	-0.0636	ppb	16:01:38
1	Sc 361.383	1837969.8	1837969.8	94.249	%			16:03:00
1	Y 371.029	1256585.4	1256585.4	94.245	%			16:03:00
1	Ag 328.068†	-574.4	-85.9	-0.7224	µg/L	-0.7224	ppb	16:03:06
1	As 188.979†	-0.5	2.9	4.5075	µg/L	4.5075	ppb	16:03:26
1	B 249.677†	277.8	17.4	0.8308	µg/L	0.8308	ppb	16:03:06
1	Ba 233.527†	-22.5	3.2	0.0746	µg/L	0.0746	ppb	16:03:26
1	Be 313.107†	-1215.9	268.7	0.1669	µg/L	0.1669	ppb	16:03:06
1	Cd 226.502†	-174.4	-19.7	-0.5042	µg/L	-0.5042	ppb	16:03:26
1	Co 228.616†	31.1	-1.4	-0.0621	µg/L	-0.0621	ppb	16:03:26
1	Cr 267.716†	90.4	3.6	0.0842	µg/L	0.0842	ppb	16:03:06
1	Cu 324.752†	4058.1	81.8	0.5607	µg/L	0.5607	ppb	16:03:06
1	Mn 257.610†	-647.0	52.9	0.1737	µg/L	0.1737	ppb	16:03:26
1	Mo 202.031†	27.1	16.4	1.7222	µg/L	1.7222	ppb	16:03:26
1	Ni 231.604†	369.2	34.3	2.0312	µg/L	2.0312	ppb	16:03:26
1	P 214.914†	289.3	19.0	33.566	µg/L	33.566	ppb	16:03:26
1	Pb 220.353†	54.1	17.8	4.9542	µg/L	4.9542	ppb	16:03:26
1	S 181.975 Axial†	19.1	-2.7	-8.8268	µg/L	-8.8268	ppb	16:03:26
1	Sb 206.836†	30.5	4.5	4.3406	µg/L	4.3406	ppb	16:03:26
1	Se 196.026†	19.8	-0.8	-0.7689	µg/L	-0.7689	ppb	16:03:26
1	SiO2†	2697.6	120.5	22.827	µg/L	22.827	ppb	16:03:06
1	Si 251.611†	555.9	168.1	11.973	µg/L	11.973	ppb	16:03:26
1	Sn 189.927†	-2.1	3.0	1.2784	µg/L	1.2784	ppb	16:03:26
1	Ti 334.940†	-502.5	158.2	0.3901	µg/L	0.3901	ppb	16:03:06
1	Tl 190.801†	-35.4	-3.2	-3.3463	µg/L	-3.3463	ppb	16:03:26
1	U 409.014†	-8.0	31.4	2.9259	µg/L	2.9259	ppb	16:03:06
1	V 292.402†	88.2	-5.6	-0.0557	µg/L	-0.0557	ppb	16:03:06
1	Zn 213.857†	626.6	6.5	0.1488	µg/L	0.1488	ppb	16:03:26
2	Sc RADIAL	87364.5	87364.5	95.2	%			16:02:04
2	Al 396.153Radial†	-136.5	19.1	9.3251	µg/L	9.3251	ppb	16:02:04
2	Ca 317.933Radial†	337.7	13.8	5.2020	µg/L	5.2020	ppb	16:02:24
2	Fe 238.204 Radial†	14.8	2.4	30.319	µg/L	30.319	ppb	16:02:24
2	K 766.490 Radial†	308.8	-80.7	-38.192	µg/L	-38.192	ppb	16:02:04
2	Mg 279.077 IEC†	8.3	-0.4	-5.4168	µg/L	-5.4168	ppb	16:02:24
2	Na 589.592 Radial†	191.3	10.8	5.4747	µg/L	5.4747	ppb	16:02:04
2	Sr 421.552†	121.2	-8.0	-0.0484	µg/L	-0.0484	ppb	16:02:04
2	Sc 361.383	1821154.3	1821154.3	93.387	%			16:03:32
2	Y 371.029	1244253.8	1244253.8	93.320	%			16:03:32
2	Ag 328.068†	-539.3	-54.0	-0.4532	µg/L	-0.4532	ppb	16:03:38
2	As 188.979†	-2.9	0.3	0.5076	µg/L	0.5076	ppb	16:03:58
2	B 249.677†	249.5	-10.2	-0.5052	µg/L	-0.5052	ppb	16:03:38
2	Ba 233.527†	-22.5	3.0	0.0683	µg/L	0.0683	ppb	16:03:58
2	Be 313.107†	-1278.1	190.2	0.1181	µg/L	0.1181	ppb	16:03:38
2	Cd 226.502†	-150.0	4.7	0.1183	µg/L	0.1183	ppb	16:03:58
2	Co 228.616†	20.2	-12.8	-0.5822	µg/L	-0.5822	ppb	16:03:58
2	Cr 267.716†	78.7	-8.1	-0.1880	µg/L	-0.1880	ppb	16:03:38
2	Cu 324.752†	4004.5	64.1	0.4432	µg/L	0.4432	ppb	16:03:38
2	Mn 257.610†	-658.3	34.5	0.1140	µg/L	0.1140	ppb	16:03:58
2	Mo 202.031†	17.0	5.8	0.6131	µg/L	0.6131	ppb	16:03:58
2	Ni 231.604†	349.2	16.5	0.9780	µg/L	0.9780	ppb	16:03:58
2	P 214.914†	281.1	13.0	22.880	µg/L	22.880	ppb	16:03:58
2	Pb 220.353†	39.8	3.0	0.8386	µg/L	0.8386	ppb	16:03:58

2	S 181.975 Axial†	21.6	0.2	0.7220 µg/L	0.7220 ppb	16:03:58
2	Sb 206.836†	33.3	7.8	7.4502 µg/L	7.4502 ppb	16:03:58
2	Se 196.026†	18.0	-2.6	-2.4836 µg/L	-2.4836 ppb	16:03:58
2	SiO2†	2635.9	80.9	15.325 µg/L	15.325 ppb	16:03:38
2	Si 251.611†	575.6	194.7	13.868 µg/L	13.868 ppb	16:03:58
2	Sn 189.927†	-5.2	-0.3	-0.1420 µg/L	-0.1420 ppb	16:03:58
2	Ti 334.940†	-476.4	181.2	0.4454 µg/L	0.4454 ppb	16:03:38
2	Tl 190.801†	-35.6	-3.8	-3.9526 µg/L	-3.9526 ppb	16:03:58
2	U 409.014†	6.5	46.9	4.3697 µg/L	4.3697 ppb	16:03:38
2	V 292.402†	77.4	-16.4	-0.2012 µg/L	-0.2012 ppb	16:03:38
2	Zn 213.857†	618.3	3.8	0.0854 µg/L	0.0854 ppb	16:03:58
3	Sc RADIAL	87202.3	87202.3	95.0 %		16:02:30
3	Al 396.153Radial†	-131.6	23.9	11.666 µg/L	11.666 ppb	16:02:30
3	Ca 317.933Radial†	327.3	3.5	1.3104 µg/L	1.3104 ppb	16:02:50
3	Fe 238.204 Radial†	13.4	1.0	12.422 µg/L	12.422 ppb	16:02:50
3	K 766.490 Radial†	380.3	-4.9	-2.3091 µg/L	-2.3091 ppb	16:02:30
3	Mg 279.077 IEC†	5.9	-2.8	-38.179 µg/L	-38.179 ppb	16:02:50
3	Na 589.592 Radial†	182.4	1.8	0.9263 µg/L	0.9263 ppb	16:02:30
3	Sr 421.552†	113.9	-15.4	-0.0934 µg/L	-0.0934 ppb	16:02:30
3	Sc 361.383	1823403.1	1823403.1	93.502 %		16:04:04
3	Y 371.029	1246605.4	1246605.4	93.496 %		16:04:04
3	Ag 328.068†	-480.5	9.6	0.0788 µg/L	0.0788 ppb	16:04:10
3	As 188.979†	-4.4	-1.3	-2.0537 µg/L	-2.0537 ppb	16:04:30
3	B 249.677†	269.2	10.6	0.5010 µg/L	0.5010 ppb	16:04:10
3	Ba 233.527†	-21.0	4.7	0.1068 µg/L	0.1068 ppb	16:04:30
3	Be 313.107†	-1419.4	40.8	0.0251 µg/L	0.0251 ppb	16:04:10
3	Cd 226.502†	-180.3	-27.5	-0.7047 µg/L	-0.7047 ppb	16:04:30
3	Co 228.616†	38.2	6.4	0.2905 µg/L	0.2905 ppb	16:04:30
3	Cr 267.716†	53.7	-34.9	-0.8139 µg/L	-0.8139 ppb	16:04:10
3	Cu 324.752†	4046.8	104.1	0.7131 µg/L	0.7131 ppb	16:04:10
3	Mn 257.610†	-656.8	37.0	0.1234 µg/L	0.1234 ppb	16:04:30
3	Mo 202.031†	27.1	16.6	1.7428 µg/L	1.7428 ppb	16:04:30
3	Ni 231.604†	344.8	11.3	0.6686 µg/L	0.6686 ppb	16:04:30
3	P 214.914†	297.6	30.3	53.388 µg/L	53.388 ppb	16:04:30
3	Pb 220.353†	41.3	4.6	1.2742 µg/L	1.2742 ppb	16:04:30
3	S 181.975 Axial†	20.9	-0.6	-2.0635 µg/L	-2.0635 ppb	16:04:30
3	Sb 206.836†	25.4	-0.7	-0.6132 µg/L	-0.6132 ppb	16:04:30
3	Se 196.026†	30.0	10.2	10.343 µg/L	10.343 ppb	16:04:30
3	SiO2†	2703.8	150.0	28.405 µg/L	28.405 ppb	16:04:10
3	Si 251.611†	577.4	195.8	13.950 µg/L	13.950 ppb	16:04:30
3	Sn 189.927†	-3.5	1.5	0.6231 µg/L	0.6231 ppb	16:04:30
3	Ti 334.940†	-466.7	192.3	0.4750 µg/L	0.4750 ppb	16:04:10
3	Tl 190.801†	-32.2	-0.1	-0.0759 µg/L	-0.0759 ppb	16:04:30
3	U 409.014†	-21.1	17.4	1.6186 µg/L	1.6186 ppb	16:04:10
3	V 292.402†	57.4	-37.9	-0.4651 µg/L	-0.4651 ppb	16:04:10
3	Zn 213.857†	629.6	15.1	0.3625 µg/L	0.3625 ppb	16:04:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	1827509.1	93.713	%	0.4681				0.50%
Sc RADIAL	87481.9	95.3	%	0.38				0.40%
Y 371.029	1249148.2	93.687	%	0.4910				0.52%
Ag 328.068†	-43.4	-0.3656	µg/L	0.40775	-0.3656	ppb	0.40775	111.53%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	13.7	6.6894	µg/L	6.69555	6.6894	ppb	6.69555	100.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.6	0.9871	µg/L	3.30678	0.9871	ppb	3.30678	334.98%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	5.9	0.2755	µg/L	0.69594	0.2755	ppb	0.69594	252.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.6	0.0832	µg/L	0.02065	0.0832	ppb	0.02065	24.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	166.6	0.1034	µg/L	0.07200	0.1034	ppb	0.07200	69.65%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	13.3	5.0000	µg/L	3.59285	5.0000	ppb	3.59285	71.86%
QC value within limits for Ca 317.933Radial Recovery = Not calculated								
Cd 226.502†	-14.2	-0.3635	µg/L	0.42918	-0.3635	ppb	0.42918	118.06%
QC value within limits for Cd 226.502 Recovery = Not calculated								
Co 228.616†	-2.6	-0.1179	µg/L	0.43903	-0.1179	ppb	0.43903	372.32%

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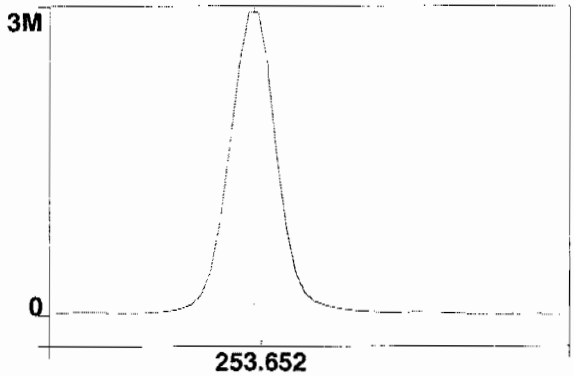
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              -13.1     -0.3059 µg/L       0.46051     -0.3059 ppb        0.46051 150.56%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               83.4      0.5723 µg/L       0.13529      0.5723 ppb        0.13529  23.64%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         1.5      18.171 µg/L       10.5256      18.171 ppb        10.5256  57.93%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        -50.0     -23.645 µg/L       18.8800     -23.645 ppb        18.8800  79.85%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           -1.6     -21.237 µg/L       16.4101     -21.237 ppb        16.4101  77.27%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               41.4      0.1370 µg/L       0.03211      0.1370 ppb        0.03211  23.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               12.9      1.3594 µg/L       0.64639      1.3594 ppb        0.64639  47.55%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        12.8      6.4644 µg/L       6.09351      6.4644 ppb        6.09351  94.26%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               20.7      1.2259 µg/L       0.71435      1.2259 ppb        0.71435  58.27%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                20.8      36.611 µg/L       15.4799      36.611 ppb        15.4799  42.28%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                8.5      2.3557 µg/L       2.26088      2.3557 ppb        2.26088  95.98%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          -1.0     -3.3895 µg/L       4.91055     -3.3895 ppb        4.91055 144.88%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                3.9      3.7259 µg/L       4.06668      3.7259 ppb        4.06668 109.15%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                2.3      2.3636 µg/L       6.96354      2.3636 ppb        6.96354 294.62%
   QC value within limits for Se 196.026  Recovery = Not calculated
SiO2†                     117.1      22.186 µg/L        6.5637      22.186 ppb         6.5637  29.59%
   QC value within limits for SiO2  Recovery = Not calculated
Si 251.611†               186.2      13.264 µg/L        1.1184      13.264 ppb         1.1184   8.43%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                1.4      0.5865 µg/L       0.71090      0.5865 ppb        0.71090 121.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -11.3     -0.0684 µg/L       0.02289     -0.0684 ppb        0.02289  33.45%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               177.2      0.4369 µg/L       0.04309      0.4369 ppb        0.04309   9.86%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -2.4     -2.4583 µg/L       2.08537     -2.4583 ppb        2.08537  84.83%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                31.9      2.9714 µg/L       1.37612      2.9714 ppb        1.37612  46.31%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               -19.9     -0.2407 µg/L       0.20750     -0.2407 ppb        0.20750  86.22%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                8.5      0.1989 µg/L       0.14515      0.1989 ppb        0.14515  72.98%
   QC value within limits for Zn 213.857  Recovery = Not calculated
All analyte(s) passed QC.
```

Method: Hg_ReAlign
Result: 031910

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 3106044.9 cps
Conc:

1

==========

Analysis Begun

Start Time: 3/10/2010 16:32:56 **Plasma On Time: 3/8/2010 08:27:38**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif
Batch ID:
Results Data Set: 031010
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 3/10/2010 16:32:57**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3225.1	3225.1	0.000	%	16:35:10
1	Y RADIAL	2632.7	2632.7	0.000	%	16:35:10
1	Al 396.153Radial†	-59.7	-59.4	[0.00]	ug/L	16:35:10
1	Ca 317.933Radial†	11.9	11.8	[0.00]	ug/L	16:35:10
1	Fe 238.204 Radial†	10.7	10.6	[0.00]	ug/L	16:35:10
1	K 766.490 Radial†	2010.0	1997.2	[0.00]	ug/L	16:34:50
1	Mg 279.077 IEC†	3.4	3.4	[0.00]	ug/L	16:35:10
1	Na 589.592 Radial†	-743.7	-739.0	[0.00]	ug/L	16:34:50
1	Sr 421.552†	35.3	35.1	[0.00]	ug/L	16:34:50
1	Sc 361.383	788962.0	788962.0	0.0000	%	16:36:07
1	Y 371.029	674779.7	674779.7	0.0000	%	16:36:07
1	Ag 328.068†	76.4	76.7	[0.00]	ug/L	16:36:07
1	As 188.979†	-18.2	-18.2	[0.00]	ug/L	16:36:27
1	B 249.677†	-349.7	-351.0	[0.00]	ug/L	16:36:27
1	Ba 233.527†	-4.3	-4.4	[0.00]	ug/L	16:36:27
1	Be 313.107†	-3523.2	-3536.6	[0.00]	ug/L	16:36:07
1	Cd 226.502†	-151.2	-151.7	[0.00]	ug/L	16:36:27
1	Co 228.616†	-50.6	-50.8	[0.00]	ug/L	16:36:27
1	Cr 267.716†	58.8	59.0	[0.00]	ug/L	16:36:27
1	Cu 324.752†	6175.6	6199.1	[0.00]	ug/L	16:36:07
1	Mn 257.610†	402.6	404.2	[0.00]	ug/L	16:36:27
1	Mo 202.031†	10.9	10.9	[0.00]	ug/L	16:36:27
1	Ni 231.604†	59.3	59.5	[0.00]	ug/L	16:36:27
1	P 214.914†	157.1	157.7	[0.00]	ug/L	16:36:27
1	Pb 220.353†	-44.2	-44.4	[0.00]	ug/L	16:36:27
1	S 181.975 Axial†	32.5	32.6	[0.00]	ug/L	16:36:27
1	Sb 206.836†	28.0	28.1	[0.00]	ug/L	16:36:27
1	Se 196.026†	-21.8	-21.9	[0.00]	ug/L	16:36:27
1	Si 251.611†	474.7	476.5	[0.00]	ug/L	16:36:27
1	Sn 189.927†	10.3	10.3	[0.00]	ug/L	16:36:27
1	Ti 334.940†	-878.2	-881.5	[0.00]	ug/L	16:36:07
1	Tl 190.801†	-30.4	-30.5	[0.00]	ug/L	16:36:27
1	U 409.014†	-1952.1	-1959.6	[0.00]	ug/L	16:36:07
1	V 292.402†	-1236.9	-1241.6	[0.00]	ug/L	16:36:07
1	Zn 213.857†	514.3	516.3	[0.00]	ug/L	16:36:27
1	SiO2†	463.4	465.1	[0.00]	ug/L	16:37:38
2	Sc Radial	3187.5	3187.5	0.000	%	16:35:35
2	Y RADIAL	2619.6	2619.6	0.000	%	16:35:35
2	Al 396.153Radial†	-58.5	-58.8	[0.00]	ug/L	16:35:35
2	Ca 317.933Radial†	12.4	12.5	[0.00]	ug/L	16:35:35
2	Fe 238.204 Radial†	8.5	8.6	[0.00]	ug/L	16:35:35
2	K 766.490 Radial†	1956.1	1966.6	[0.00]	ug/L	16:35:15
2	Mg 279.077 IEC†	-1.4	-1.4	[0.00]	ug/L	16:35:35
2	Na 589.592 Radial†	-777.4	-781.6	[0.00]	ug/L	16:35:15
2	Sr 421.552†	39.0	39.2	[0.00]	ug/L	16:35:15
2	Sc 361.383	793522.6	793522.6	0.0000	%	16:36:32
2	Y 371.029	678954.5	678954.5	0.0000	%	16:36:32

2	Ag 328.068†	131.5	131.2	[0.00]	ug/L	16:36:32
2	As 188.979†	-18.7	-18.7	[0.00]	ug/L	16:36:52
2	B 249.677†	-387.4	-386.7	[0.00]	ug/L	16:36:52
2	Ba 233.527†	-10.9	-10.9	[0.00]	ug/L	16:36:52
2	Be 313.107†	-3560.8	-3553.8	[0.00]	ug/L	16:36:32
2	Cd 226.502†	-158.1	-157.8	[0.00]	ug/L	16:36:52
2	Co 228.616†	-47.4	-47.3	[0.00]	ug/L	16:36:52
2	Cr 267.716†	49.9	49.8	[0.00]	ug/L	16:36:52
2	Cu 324.752†	6248.8	6236.6	[0.00]	ug/L	16:36:32
2	Mn 257.610†	390.5	389.8	[0.00]	ug/L	16:36:52
2	Mo 202.031†	13.6	13.6	[0.00]	ug/L	16:36:52
2	Ni 231.604†	57.5	57.3	[0.00]	ug/L	16:36:52
2	P 214.914†	168.3	168.0	[0.00]	ug/L	16:36:52
2	Pb 220.353†	-49.5	-49.4	[0.00]	ug/L	16:36:52
2	S 181.975 Axial†	28.7	28.6	[0.00]	ug/L	16:36:52
2	Sb 206.836†	20.4	20.3	[0.00]	ug/L	16:36:52
2	Se 196.026†	-21.0	-20.9	[0.00]	ug/L	16:36:52
2	Si 251.611†	490.8	489.9	[0.00]	ug/L	16:36:52
2	Sn 189.927†	9.6	9.6	[0.00]	ug/L	16:36:52
2	Ti 334.940†	-948.2	-946.3	[0.00]	ug/L	16:36:32
2	Tl 190.801†	-22.2	-22.2	[0.00]	ug/L	16:36:52
2	U 409.014†	-1949.5	-1945.7	[0.00]	ug/L	16:36:32
2	V 292.402†	-1151.1	-1148.9	[0.00]	ug/L	16:36:32
2	Zn 213.857†	512.1	511.1	[0.00]	ug/L	16:36:52
2	SiO2†	471.3	470.3	[0.00]	ug/L	16:37:58
3	Sc Radial	3201.1	3201.1	0.000	%	16:36:00
3	Y RADIAL	2630.1	2630.1	0.000	%	16:36:00
3	Al 396.153Radial†	-67.8	-67.8	[0.00]	ug/L	16:36:00
3	Ca 317.933Radial†	13.1	13.1	[0.00]	ug/L	16:36:00
3	Fe 238.204 Radial†	9.2	9.2	[0.00]	ug/L	16:36:00
3	K 766.490 Radial†	2113.9	2116.2	[0.00]	ug/L	16:35:40
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	16:36:00
3	Na 589.592 Radial†	-676.5	-677.2	[0.00]	ug/L	16:35:40
3	Sr 421.552†	29.6	29.6	[0.00]	ug/L	16:35:40
3	Sc 361.383	793410.7	793410.7	0.0000	%	16:36:57
3	Y 371.029	679187.8	679187.8	0.0000	%	16:36:57
3	Ag 328.068†	186.4	186.1	[0.00]	ug/L	16:36:57
3	As 188.979†	-19.6	-19.6	[0.00]	ug/L	16:37:17
3	B 249.677†	-394.8	-394.1	[0.00]	ug/L	16:37:17
3	Ba 233.527†	14.4	14.3	[0.00]	ug/L	16:37:17
3	Be 313.107†	-3541.8	-3535.4	[0.00]	ug/L	16:36:57
3	Cd 226.502†	-159.5	-159.3	[0.00]	ug/L	16:37:17
3	Co 228.616†	-39.7	-39.6	[0.00]	ug/L	16:37:17
3	Cr 267.716†	49.7	49.7	[0.00]	ug/L	16:37:17
3	Cu 324.752†	6211.6	6200.3	[0.00]	ug/L	16:36:57
3	Mn 257.610†	403.4	402.6	[0.00]	ug/L	16:37:17
3	Mo 202.031†	14.6	14.6	[0.00]	ug/L	16:37:17
3	Ni 231.604†	65.1	65.0	[0.00]	ug/L	16:37:17
3	P 214.914†	167.6	167.3	[0.00]	ug/L	16:37:17
3	Pb 220.353†	-37.3	-37.3	[0.00]	ug/L	16:37:17
3	S 181.975 Axial†	31.2	31.2	[0.00]	ug/L	16:37:17
3	Sb 206.836†	19.7	19.7	[0.00]	ug/L	16:37:17
3	Se 196.026†	-19.3	-19.3	[0.00]	ug/L	16:37:17
3	Si 251.611†	462.8	461.9	[0.00]	ug/L	16:37:17
3	Sn 189.927†	3.5	3.5	[0.00]	ug/L	16:37:17
3	Ti 334.940†	-959.2	-957.4	[0.00]	ug/L	16:36:57
3	Tl 190.801†	-25.2	-25.2	[0.00]	ug/L	16:37:17
3	U 409.014†	-2014.6	-2010.9	[0.00]	ug/L	16:36:57
3	V 292.402†	-1188.4	-1186.3	[0.00]	ug/L	16:36:57
3	Zn 213.857†	507.7	506.8	[0.00]	ug/L	16:37:17
3	SiO2†	490.5	489.7	[0.00]	ug/L	16:38:18

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	791965.1	2601.35	0.33%	0.0000	%
Sc Radial	3204.6	19.03	0.59%	0.000	%
Y 371.029	677640.7	2480.38	0.37%	0.0000	%
Y RADIAL	2627.5	6.91	0.26%	0.000	%
Ag 328.068†	131.3	54.70	41.65%	[0.00]	ug/L

Al 396.153Radial†	-62.0	5.05	8.14%	[0.00] ug/L
As 188.979†	-18.8	0.70	3.72%	[0.00] ug/L
B 249.677†	-377.3	23.01	6.10%	[0.00] ug/L
Ba 233.527†	-0.3	13.08	>999.9%	[0.00] ug/L
Be 313.107†	-3541.9	10.32	0.29%	[0.00] ug/L
Ca 317.933Radial†	12.5	0.67	5.35%	[0.00] ug/L
Cd 226.502†	-156.3	3.98	2.54%	[0.00] ug/L
Co 228.616†	-45.9	5.72	12.46%	[0.00] ug/L
Cr 267.716†	52.8	5.38	10.18%	[0.00] ug/L
Cu 324.752†	6212.0	21.28	0.34%	[0.00] ug/L
Fe 238.204 Radial†	9.5	1.05	11.02%	[0.00] ug/L
K 766.490 Radial†	2026.7	79.04	3.90%	[0.00] ug/L
Mg 279.077 IEC†	1.7	2.67	156.13%	[0.00] ug/L
Mn 257.610†	398.9	7.90	1.98%	[0.00] ug/L
Mo 202.031†	13.0	1.89	14.51%	[0.00] ug/L
Na 589.592 Radial†	-732.6	52.47	7.16%	[0.00] ug/L
Ni 231.604†	60.6	3.96	6.53%	[0.00] ug/L
P 214.914†	164.3	5.75	3.50%	[0.00] ug/L
Pb 220.353†	-43.7	6.08	13.92%	[0.00] ug/L
S 181.975 Axial†	30.8	2.03	6.58%	[0.00] ug/L
Sb 206.836†	22.7	4.69	20.65%	[0.00] ug/L
Se 196.026†	-20.7	1.33	6.42%	[0.00] ug/L
Si 251.611†	476.1	13.96	2.93%	[0.00] ug/L
Sn 189.927†	7.8	3.77	48.35%	[0.00] ug/L
Sr 421.552†	34.6	4.83	13.94%	[0.00] ug/L
Ti 334.940†	-928.4	41.01	4.42%	[0.00] ug/L
Tl 190.801†	-26.0	4.24	16.34%	[0.00] ug/L
U 409.014†	-1972.1	34.35	1.74%	[0.00] ug/L
V 292.402†	-1192.3	46.67	3.91%	[0.00] ug/L
Zn 213.857†	511.4	4.77	0.93%	[0.00] ug/L
SiO2†	475.0	12.93	2.72%	[0.00] ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/10/2010 16:40:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3391.4	3391.4	106	%	16:42:42
1	Y RADIAL	2782.4	2782.4	105.9	%	16:42:42
1	K 766.490 Radial†	4144.4	1889.4	[1000]	ug/L	16:42:21
1	Sr 421.552†	11257.0	10602.0	[100]	ug/L	16:42:42
1	Sc 361.383	819759.9	819759.9	103.51	%	16:43:38
1	Y 371.029	700353.7	700353.7	103.35	%	16:43:38
1	Ag 328.068†	20390.8	19568.1	[100]	ug/L	16:43:38
1	As 188.979†	160.2	173.6	[100]	ug/L	16:43:59
1	B 249.677†	3227.1	3494.9	[100]	ug/L	16:43:38
1	Ba 233.527†	10836.7	10469.6	[100]	ug/L	16:43:38
1	Be 313.107†	232718.9	228370.2	[100]	ug/L	16:43:38
1	Cd 226.502†	6798.9	6724.6	[100]	ug/L	16:43:59
1	Co 228.616†	3913.9	3827.1	[100]	ug/L	16:43:59
1	Cr 267.716†	7876.0	7556.1	[100]	ug/L	16:43:38
1	Cu 324.752†	37685.2	30195.5	[100]	ug/L	16:43:38
1	Mn 257.610†	78646.5	75581.1	[100]	ug/L	16:43:38
1	Mo 202.031†	1185.0	1131.8	[100]	ug/L	16:43:59
1	Ni 231.604†	3346.4	3172.3	[100]	ug/L	16:43:59
1	P 214.914†	841.8	649.0	[500]	ug/L	16:43:59
1	Pb 220.353†	621.3	643.9	[100]	ug/L	16:43:59
1	S 181.975 Axial†	136.7	101.2	[200]	ug/L	16:43:59
1	Sb 206.836†	273.5	241.5	[100]	ug/L	16:43:59
1	Se 196.026†	107.8	124.8	[100]	ug/L	16:43:59
1	Si 251.611†	14031.9	13080.1	[500]	ug/L	16:43:38
1	Sn 189.927†	455.0	431.8	[100]	ug/L	16:43:59
1	Ti 334.940†	58272.8	57225.4	[100]	ug/L	16:43:38
1	Tl 190.801†	241.0	258.8	[100]	ug/L	16:43:59
1	U 409.014†	1682.6	3597.6	[100]	ug/L	16:43:38
1	V 292.402†	11714.4	12509.5	[100]	ug/L	16:43:38
1	Zn 213.857†	8940.3	8125.8	[100]	ug/L	16:43:38
1	SiO2†	13988.0	13038.7	[1069.5]	ug/L	16:44:55
2	Sc Radial	3340.1	3340.1	104	%	16:43:07
2	Y RADIAL	2749.9	2749.9	104.7	%	16:43:07
2	K 766.490 Radial†	4092.1	1899.4	[1000]	ug/L	16:42:47
2	Sr 421.552†	11075.9	10591.9	[100]	ug/L	16:43:07
2	Sc 361.383	831257.4	831257.4	104.96	%	16:44:04
2	Y 371.029	710207.1	710207.1	104.81	%	16:44:04
2	Ag 328.068†	20713.8	19603.3	[100]	ug/L	16:44:04
2	As 188.979†	160.4	171.6	[100]	ug/L	16:44:24
2	B 249.677†	3327.8	3547.8	[100]	ug/L	16:44:04
2	Ba 233.527†	11034.2	10512.9	[100]	ug/L	16:44:04
2	Be 313.107†	236491.5	228854.8	[100]	ug/L	16:44:04
2	Cd 226.502†	6793.4	6628.5	[100]	ug/L	16:44:24
2	Co 228.616†	3929.7	3789.8	[100]	ug/L	16:44:24
2	Cr 267.716†	8028.8	7596.4	[100]	ug/L	16:44:04
2	Cu 324.752†	38159.1	30143.4	[100]	ug/L	16:44:04
2	Mn 257.610†	79821.2	75649.3	[100]	ug/L	16:44:04
2	Mo 202.031†	1186.7	1117.6	[100]	ug/L	16:44:24
2	Ni 231.604†	3364.4	3144.7	[100]	ug/L	16:44:24
2	P 214.914†	838.3	634.3	[500]	ug/L	16:44:24
2	Pb 220.353†	635.4	649.0	[100]	ug/L	16:44:24
2	S 181.975 Axial†	132.9	95.8	[200]	ug/L	16:44:24
2	Sb 206.836†	273.5	237.8	[100]	ug/L	16:44:24
2	Se 196.026†	111.5	126.9	[100]	ug/L	16:44:24
2	Si 251.611†	14243.9	13094.5	[500]	ug/L	16:44:04
2	Sn 189.927†	459.9	430.4	[100]	ug/L	16:44:24
2	Ti 334.940†	59325.5	57449.7	[100]	ug/L	16:44:04
2	Tl 190.801†	250.5	264.6	[100]	ug/L	16:44:24
2	U 409.014†	1688.5	3580.8	[100]	ug/L	16:44:04

2	V 292.402†	11930.9	12559.2	[100]	ug/L	16:44:04
2	Zn 213.857†	9065.7	8125.8	[100]	ug/L	16:44:04
2	SiO2†	13942.6	12808.5	[1069.5]	ug/L	16:45:00
3	Sc Radial	3368.1	3368.1	105	%	16:43:32
3	Y RADIAL	2759.0	2759.0	105.0	%	16:43:32
3	K 766.490 Radial†	3984.8	1764.6	[1000]	ug/L	16:43:12
3	Sr 421.552†	11114.2	10539.8	[100]	ug/L	16:43:32
3	Sc 361.383	817163.3	817163.3	103.18	%	16:44:30
3	Y 371.029	697945.3	697945.3	103.00	%	16:44:30
3	Ag 328.068†	20389.9	19629.8	[100]	ug/L	16:44:30
3	As 188.979†	157.5	171.5	[100]	ug/L	16:44:50
3	B 249.677†	3232.5	3510.1	[100]	ug/L	16:44:30
3	Ba 233.527†	10868.1	10533.3	[100]	ug/L	16:44:30
3	Be 313.107†	232406.5	228781.9	[100]	ug/L	16:44:30
3	Cd 226.502†	6777.9	6725.2	[100]	ug/L	16:44:50
3	Co 228.616†	3898.5	3824.2	[100]	ug/L	16:44:50
3	Cr 267.716†	7870.1	7574.6	[100]	ug/L	16:44:30
3	Cu 324.752†	37732.8	30357.3	[100]	ug/L	16:44:30
3	Mn 257.610†	78751.9	75924.6	[100]	ug/L	16:44:30
3	Mo 202.031†	1189.4	1139.7	[100]	ug/L	16:44:50
3	Ni 231.604†	3339.7	3176.1	[100]	ug/L	16:44:50
3	P 214.914†	829.5	639.6	[500]	ug/L	16:44:50
3	Pb 220.353†	603.3	628.4	[100]	ug/L	16:44:50
3	S 181.975 Axial†	136.6	101.6	[200]	ug/L	16:44:50
3	Sb 206.836†	265.9	234.9	[100]	ug/L	16:44:50
3	Se 196.026†	102.9	120.4	[100]	ug/L	16:44:50
3	Si 251.611†	14028.0	13119.4	[500]	ug/L	16:44:30
3	Sn 189.927†	455.0	433.2	[100]	ug/L	16:44:50
3	Ti 334.940†	58302.0	57432.6	[100]	ug/L	16:44:30
3	Tl 190.801†	232.9	251.6	[100]	ug/L	16:44:50
3	U 409.014†	1581.6	3504.9	[100]	ug/L	16:44:30
3	V 292.402†	11687.3	12519.2	[100]	ug/L	16:44:30
3	Zn 213.857†	8939.3	8152.2	[100]	ug/L	16:44:30
3	SiO2†	13898.0	12994.4	[1069.5]	ug/L	16:45:05

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	822726.9	7500.91	0.91%	103.88	%
Sc Radial	3366.6	25.71	0.76%	105	%
Y 371.029	702835.3	6496.67	0.92%	103.72	%
Y RADIAL	2763.8	16.77	0.61%	105.2	%
Ag 328.068†	19600.4	30.98	0.16%	[100]	ug/L
As 188.979†	172.2	1.20	0.70%	[100]	ug/L
B 249.677†	3517.6	27.24	0.77%	[100]	ug/L
Ba 233.527†	10505.3	32.53	0.31%	[100]	ug/L
Be 313.107†	228669.0	261.29	0.11%	[100]	ug/L
Cd 226.502†	6692.8	55.63	0.83%	[100]	ug/L
Co 228.616†	3813.7	20.75	0.54%	[100]	ug/L
Cr 267.716†	7575.7	20.16	0.27%	[100]	ug/L
Cu 324.752†	30232.0	111.52	0.37%	[100]	ug/L
K 766.490 Radial†	1851.2	75.10	4.06%	[1000]	ug/L
Mn 257.610†	75718.3	181.89	0.24%	[100]	ug/L
Mo 202.031†	1129.7	11.23	0.99%	[100]	ug/L
Ni 231.604†	3164.4	17.14	0.54%	[100]	ug/L
P 214.914†	641.0	7.41	1.16%	[500]	ug/L
Pb 220.353†	640.4	10.74	1.68%	[100]	ug/L
S 181.975 Axial†	99.5	3.21	3.23%	[200]	ug/L
Sb 206.836†	238.1	3.27	1.37%	[100]	ug/L
Se 196.026†	124.0	3.32	2.68%	[100]	ug/L
Si 251.611†	13098.0	19.88	0.15%	[500]	ug/L
Sn 189.927†	431.8	1.41	0.33%	[100]	ug/L
Sr 421.552†	10577.9	33.38	0.32%	[100]	ug/L
Ti 334.940†	57369.3	124.83	0.22%	[100]	ug/L
Tl 190.801†	258.4	6.51	2.52%	[100]	ug/L
U 409.014†	3561.1	49.41	1.39%	[100]	ug/L
V 292.402†	12529.3	26.36	0.21%	[100]	ug/L
Zn 213.857†	8134.6	15.27	0.19%	[100]	ug/L
SiO2†	12947.2	122.11	0.94%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/10/2010 16:47:16
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	3341.8	3341.8	104	%	16:49:28
1	Y RADIAL	2729.1	2729.1	103.9	%	16:49:28
1	Al 396.153Radial†	2289.7	2257.7	[5000]	ug/L	16:49:08
1	Ca 317.933Radial†	1311.1	1244.8	[5000]	ug/L	16:49:28
1	K 766.490 Radial†	12877.3	10321.8	[5000]	ug/L	16:49:08
1	Mg 279.077 IEC†	52.8	48.9	[5000]	ug/L	16:49:28
1	Sr 421.552†	52881.2	50674.9	[500]	ug/L	16:49:08
1	Sc 361.383	838716.0	838716.0	105.90	%	16:50:26
1	Y 371.029	709497.2	709497.2	104.70	%	16:50:26
1	Ag 328.068†	101896.8	96085.6	[500]	ug/L	16:50:31
1	As 188.979†	902.4	870.9	[500]	ug/L	16:50:51
1	B 249.677†	17924.0	17302.2	[500]	ug/L	16:50:31
1	Ba 233.527†	54137.1	51119.7	[500]	ug/L	16:50:31
1	Be 313.107†	1205583.6	1141925.1	[500]	ug/L	16:50:26
1	Cd 226.502†	35140.7	33338.1	[500]	ug/L	16:50:31
1	Co 228.616†	19811.5	18753.1	[500]	ug/L	16:50:31
1	Cr 267.716†	39344.3	37098.4	[500]	ug/L	16:50:31
1	Cu 324.752†	165256.1	149832.6	[500]	ug/L	16:50:31
1	Mn 257.610†	393593.2	371255.0	[500]	ug/L	16:50:26
1	Mo 202.031†	5949.7	5605.0	[500]	ug/L	16:50:51
1	Ni 231.604†	16523.9	15542.2	[500]	ug/L	16:50:31
1	P 214.914†	3544.5	3182.6	[2500]	ug/L	16:50:51
1	Pb 220.353†	3248.4	3111.0	[500]	ug/L	16:50:51
1	S 181.975 Axial†	600.7	536.4	[1000]	ug/L	16:50:51
1	Sb 206.836†	1272.8	1179.1	[500]	ug/L	16:50:51
1	Se 196.026†	617.2	603.5	[500]	ug/L	16:50:51
1	Si 251.611†	68896.8	64580.3	[2500]	ug/L	16:50:31
1	Sn 189.927†	2274.7	2140.1	[500]	ug/L	16:50:51
1	Ti 334.940†	293311.6	277890.6	[500]	ug/L	16:50:31
1	Tl 190.801†	1291.2	1245.1	[500]	ug/L	16:50:51
1	U 409.014†	16131.1	17204.0	[500]	ug/L	16:50:31
1	V 292.402†	64278.6	61887.9	[500]	ug/L	16:50:31
1	Zn 213.857†	42782.1	39886.0	[500]	ug/L	16:50:31
1	SiO2†	69484.8	65136.6	[5347.5]	ug/L	16:51:58
2	Sc Radial	3356.3	3356.3	105	%	16:49:54
2	Y RADIAL	2715.4	2715.4	103.3	%	16:49:54
2	Al 396.153Radial†	2290.2	2248.6	[5000]	ug/L	16:49:33
2	Ca 317.933Radial†	1308.6	1237.0	[5000]	ug/L	16:49:54
2	K 766.490 Radial†	12880.8	10271.7	[5000]	ug/L	16:49:33
2	Mg 279.077 IEC†	53.4	49.3	[5000]	ug/L	16:49:54
2	Sr 421.552†	52649.8	50234.1	[500]	ug/L	16:49:33
2	Sc 361.383	846396.6	846396.6	106.87	%	16:50:57
2	Y 371.029	716229.1	716229.1	105.69	%	16:50:57
2	Ag 328.068†	102043.3	95349.6	[500]	ug/L	16:51:02
2	As 188.979†	904.2	864.9	[500]	ug/L	16:51:22
2	B 249.677†	18037.2	17254.4	[500]	ug/L	16:51:02
2	Ba 233.527†	54310.0	50817.6	[500]	ug/L	16:51:02
2	Be 313.107†	1192902.0	1119728.7	[500]	ug/L	16:50:57
2	Cd 226.502†	35209.8	33101.8	[500]	ug/L	16:51:02
2	Co 228.616†	19893.8	18660.3	[500]	ug/L	16:51:02
2	Cr 267.716†	39317.6	36736.3	[500]	ug/L	16:51:02
2	Cu 324.752†	165208.7	148372.1	[500]	ug/L	16:51:02
2	Mn 257.610†	389278.1	363844.9	[500]	ug/L	16:50:57
2	Mo 202.031†	5930.2	5535.8	[500]	ug/L	16:51:22
2	Ni 231.604†	16519.5	15396.5	[500]	ug/L	16:51:02
2	P 214.914†	3537.2	3145.4	[2500]	ug/L	16:51:22
2	Pb 220.353†	3265.1	3098.8	[500]	ug/L	16:51:22
2	S 181.975 Axial†	599.8	530.5	[1000]	ug/L	16:51:22
2	Sb 206.836†	1273.3	1168.6	[500]	ug/L	16:51:22

2	Se 196.026†	613.8	595.0	[500]	ug/L	16:51:22
2	Si 251.611†	68967.6	64056.2	[2500]	ug/L	16:51:02
2	Sn 189.927†	2282.1	2127.6	[500]	ug/L	16:51:22
2	Ti 334.940†	293660.7	275703.9	[500]	ug/L	16:51:02
2	Tl 190.801†	1283.5	1226.9	[500]	ug/L	16:51:22
2	U 409.014†	16033.3	16974.3	[500]	ug/L	16:51:02
2	V 292.402†	64411.3	61461.3	[500]	ug/L	16:51:02
2	Zn 213.857†	42767.4	39505.7	[500]	ug/L	16:51:02
2	SiO2†	68759.1	63862.2	[5347.5]	ug/L	16:52:03
3	Sc Radial	2957.7	2957.7	92.3	%	16:50:19
3	Y RADIAL	2406.1	2406.1	91.57	%	16:50:19
3	Al 396.153Radial†	2274.2	2526.1	[5000]	ug/L	16:49:59
3	Ca 317.933Radial†	1321.9	1419.7	[5000]	ug/L	16:50:19
3	K 766.490 Radial†	12790.3	11831.3	[5000]	ug/L	16:49:59
3	Mg 279.077 IEC†	56.7	59.8	[5000]	ug/L	16:50:19
3	Sr 421.552†	52258.8	56586.6	[500]	ug/L	16:49:59
3	Sc 361.383	854125.8	854125.8	107.85	%	16:51:28
3	Y 371.029	722123.4	722123.4	106.56	%	16:51:28
3	Ag 328.068†	102130.0	94566.0	[500]	ug/L	16:51:33
3	As 188.979†	892.0	845.9	[500]	ug/L	16:51:53
3	B 249.677†	17974.1	17043.2	[500]	ug/L	16:51:33
3	Ba 233.527†	54633.2	50657.4	[500]	ug/L	16:51:33
3	Be 313.107†	1204455.8	1120341.1	[500]	ug/L	16:51:28
3	Cd 226.502†	35550.5	33119.5	[500]	ug/L	16:51:33
3	Co 228.616†	20054.4	18640.8	[500]	ug/L	16:51:33
3	Cr 267.716†	39490.6	36563.7	[500]	ug/L	16:51:33
3	Cu 324.752†	165304.4	147062.1	[500]	ug/L	16:51:33
3	Mn 257.610†	394313.7	365217.9	[500]	ug/L	16:51:28
3	Mo 202.031†	5898.1	5455.8	[500]	ug/L	16:51:53
3	Ni 231.604†	16674.6	15400.5	[500]	ug/L	16:51:33
3	P 214.914†	3533.3	3111.8	[2500]	ug/L	16:51:53
3	Pb 220.353†	3241.8	3049.5	[500]	ug/L	16:51:53
3	S 181.975 Axial†	590.7	516.9	[1000]	ug/L	16:51:53
3	Sb 206.836†	1268.3	1153.3	[500]	ug/L	16:51:53
3	Se 196.026†	610.7	586.9	[500]	ug/L	16:51:53
3	Si 251.611†	69188.4	63677.0	[2500]	ug/L	16:51:33
3	Sn 189.927†	2259.6	2087.3	[500]	ug/L	16:51:53
3	Ti 334.940†	294352.3	273858.7	[500]	ug/L	16:51:33
3	Tl 190.801†	1286.5	1218.8	[500]	ug/L	16:51:53
3	U 409.014†	15967.2	16777.3	[500]	ug/L	16:51:33
3	V 292.402†	64516.9	61013.9	[500]	ug/L	16:51:33
3	Zn 213.857†	42999.7	39358.9	[500]	ug/L	16:51:33
3	SiO2†	68280.7	62836.4	[5347.5]	ug/L	16:52:09

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	846412.8	7704.92	0.91%	106.88	%
Sc Radial	3218.6	226.10	7.02%	100	%
Y 371.029	715949.9	6317.71	0.88%	105.65	%
Y RADIAL	2616.8	182.66	6.98%	99.60	%
Ag 328.068†	95333.8	759.95	0.80%	[500]	ug/L
Al 396.153Radial†	2344.1	157.64	6.72%	[5000]	ug/L
As 188.979†	860.6	13.08	1.52%	[500]	ug/L
B 249.677†	17199.9	137.80	0.80%	[500]	ug/L
Ba 233.527†	50864.9	234.74	0.46%	[500]	ug/L
Be 313.107†	1127331.6	12642.01	1.12%	[500]	ug/L
Ca 317.933Radial†	1300.5	103.32	7.94%	[5000]	ug/L
Cd 226.502†	33186.5	131.65	0.40%	[500]	ug/L
Co 228.616†	18684.7	59.99	0.32%	[500]	ug/L
Cr 267.716†	36799.5	272.87	0.74%	[500]	ug/L
Cu 324.752†	148422.3	1385.95	0.93%	[500]	ug/L
K 766.490 Radial†	10808.3	886.35	8.20%	[5000]	ug/L
Mg 279.077 IEC†	52.7	6.15	11.68%	[5000]	ug/L
Mn 257.610†	366772.6	3942.15	1.07%	[500]	ug/L
Mo 202.031†	5532.2	74.69	1.35%	[500]	ug/L
Ni 231.604†	15446.4	82.99	0.54%	[500]	ug/L
P 214.914†	3146.6	35.43	1.13%	[2500]	ug/L
Pb 220.353†	3086.4	32.54	1.05%	[500]	ug/L
S 181.975 Axial†	527.9	9.99	1.89%	[1000]	ug/L

Sb 206.836†	1167.0	13.00	1.11%	[500]	ug/L
Se 196.026†	595.1	8.26	1.39%	[500]	ug/L
Si 251.611†	64104.5	453.61	0.71%	[2500]	ug/L
Sn 189.927†	2118.3	27.57	1.30%	[500]	ug/L
Sr 421.552†	52498.5	3547.25	6.76%	[500]	ug/L
Ti 334.940†	275817.7	2018.35	0.73%	[500]	ug/L
Tl 190.801†	1230.3	13.50	1.10%	[500]	ug/L
U 409.014†	16985.2	213.59	1.26%	[500]	ug/L
V 292.402†	61454.4	437.08	0.71%	[500]	ug/L
Zn 213.857†	39583.5	272.04	0.69%	[500]	ug/L
SiO2†	63945.1	1152.34	1.80%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/10/2010 16:54:19
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	3359.9	3359.9	105	%	16:56:32
1	Y RADIAL	2751.6	2751.6	104.7	%	16:56:32
1	Al 396.153Radial†	4639.9	4487.5	[10000]	ug/L	16:56:12
1	Ca 317.933Radial†	2550.9	2420.5	[10000]	ug/L	16:56:32
1	Fe 238.204 Radial†	380.4	353.3	[10000]	ug/L	16:56:32
1	K 766.490 Radial†	23104.7	20010.2	[10000]	ug/L	16:56:12
1	Mg 279.077 IEC†	106.0	99.4	[10000]	ug/L	16:56:32
1	Na 589.592 Radial†	31241.2	30529.8	[10000]	ug/L	16:56:12
1	Sr 421.552†	107711.7	102698.5	[1000]	ug/L	16:56:12
1	Sc 361.383	847989.8	847989.8	107.07	%	16:57:31
1	Y 371.029	716432.2	716432.2	105.72	%	16:57:31
1	Ag 328.068†	201482.4	188039.6	[1000]	ug/L	16:57:31
1	As 188.979†	1801.1	1701.0	[1000]	ug/L	16:57:51
1	B 249.677†	36367.1	34341.6	[1000]	ug/L	16:57:31
1	Ba 233.527†	107906.7	100777.9	[1000]	ug/L	16:57:31
1	Be 313.107†	2354801.0	2202766.7	[1000]	ug/L	16:57:31
1	Cd 226.502†	69836.8	65379.1	[1000]	ug/L	16:57:31
1	Co 228.616†	38328.8	35842.4	[1000]	ug/L	16:57:51
1	Cr 267.716†	77885.6	72687.1	[1000]	ug/L	16:57:31
1	Cu 324.752†	323410.2	295831.3	[1000]	ug/L	16:57:31
1	Mn 257.610†	771116.8	719772.1	[1000]	ug/L	16:57:31
1	Mo 202.031†	11687.3	10902.1	[1000]	ug/L	16:57:51
1	Ni 231.604†	31766.7	29607.4	[1000]	ug/L	16:57:51
1	P 214.914†	6792.6	6179.5	[5000]	ug/L	16:57:51
1	Pb 220.353†	6440.5	6058.7	[1000]	ug/L	16:57:51
1	S 181.975 Axial†	1149.7	1042.9	[2000]	ug/L	16:57:51
1	Sb 206.836†	2506.4	2318.1	[1000]	ug/L	16:57:51
1	Se 196.026†	1224.3	1164.1	[1000]	ug/L	16:57:51
1	Si 251.611†	137337.3	127787.6	[5000]	ug/L	16:57:31
1	Sn 189.927†	4478.6	4175.0	[1000]	ug/L	16:57:51
1	Ti 334.940†	596985.4	558472.4	[1000]	ug/L	16:57:31
1	Tl 190.801†	2561.7	2418.4	[1000]	ug/L	16:57:51
1	U 409.014†	32860.4	32661.4	[1000]	ug/L	16:57:31
1	V 292.402†	129215.9	121871.2	[1000]	ug/L	16:57:31
1	Zn 213.857†	83942.0	77884.8	[1000]	ug/L	16:57:31
1	SiO2†	136834.9	127319.5	[10695]	ug/L	16:58:52
2	Sc Radial	3348.7	3348.7	104	%	16:56:57
2	Y RADIAL	2743.8	2743.8	104.4	%	16:56:57
2	Al 396.153Radial†	4707.9	4567.3	[10000]	ug/L	16:56:37
2	Ca 317.933Radial†	2551.4	2429.1	[10000]	ug/L	16:56:57
2	Fe 238.204 Radial†	378.7	352.9	[10000]	ug/L	16:56:57
2	K 766.490 Radial†	23314.1	20284.1	[10000]	ug/L	16:56:37
2	Mg 279.077 IEC†	106.0	99.7	[10000]	ug/L	16:56:57
2	Na 589.592 Radial†	31689.5	31058.4	[10000]	ug/L	16:56:37
2	Sr 421.552†	108730.6	104016.8	[1000]	ug/L	16:56:37
2	Sc 361.383	849747.5	849747.5	107.30	%	16:57:59
2	Y 371.029	717436.8	717436.8	105.87	%	16:57:59
2	Ag 328.068†	201654.2	187810.5	[1000]	ug/L	16:57:59
2	As 188.979†	1815.0	1710.4	[1000]	ug/L	16:58:19
2	B 249.677†	36421.6	34322.2	[1000]	ug/L	16:57:59
2	Ba 233.527†	107902.0	100565.0	[1000]	ug/L	16:57:59
2	Be 313.107†	2354174.0	2197633.3	[1000]	ug/L	16:57:59
2	Cd 226.502†	69806.2	65215.7	[1000]	ug/L	16:57:59
2	Co 228.616†	38454.6	35885.6	[1000]	ug/L	16:58:19
2	Cr 267.716†	77831.7	72486.3	[1000]	ug/L	16:57:59
2	Cu 324.752†	324187.2	295930.7	[1000]	ug/L	16:57:59
2	Mn 257.610†	771858.7	718973.8	[1000]	ug/L	16:57:59
2	Mo 202.031†	11688.0	10880.2	[1000]	ug/L	16:58:19
2	Ni 231.604†	31772.8	29551.6	[1000]	ug/L	16:58:19

2	P 214.914†	6835.9	6206.7	[5000] ug/L	16:58:19
2	Pb 220.353†	6471.8	6075.4	[1000] ug/L	16:58:19
2	S 181.975 Axial†	1156.8	1047.4	[2000] ug/L	16:58:19
2	Sb 206.836†	2512.8	2319.2	[1000] ug/L	16:58:19
2	Se 196.026†	1225.1	1162.5	[1000] ug/L	16:58:19
2	Si 251.611†	137414.4	127594.2	[5000] ug/L	16:57:59
2	Sn 189.927†	4502.0	4188.1	[1000] ug/L	16:58:19
2	Ti 334.940†	598149.5	558404.0	[1000] ug/L	16:57:59
2	Tl 190.801†	2568.6	2419.9	[1000] ug/L	16:58:19
2	U 409.014†	32817.8	32558.2	[1000] ug/L	16:57:59
2	V 292.402†	129255.2	121658.2	[1000] ug/L	16:57:59
2	Zn 213.857†	84003.6	77780.0	[1000] ug/L	16:57:59
2	SiO2†	137104.4	127306.3	[10695] ug/L	16:58:57
3	Sc Radial	3368.7	3368.7	105 %	16:57:22
3	Y RADIAL	2748.5	2748.5	104.6 %	16:57:22
3	Al 396.153Radial†	4728.8	4560.4	[10000] ug/L	16:57:02
3	Ca 317.933Radial†	2560.2	2423.0	[10000] ug/L	16:57:22
3	Fe 238.204 Radial†	383.1	355.0	[10000] ug/L	16:57:22
3	K 766.490 Radial†	23480.0	20309.6	[10000] ug/L	16:57:02
3	Mg 279.077 IEC†	106.2	99.3	[10000] ug/L	16:57:22
3	Na 589.592 Radial†	31746.6	30932.7	[10000] ug/L	16:57:02
3	Sr 421.552†	109237.7	103881.7	[1000] ug/L	16:57:02
3	Sc 361.383	845362.0	845362.0	106.74 %	16:58:26
3	Y 371.029	713238.7	713238.7	105.25 %	16:58:26
3	Ag 328.068†	201005.5	188177.8	[1000] ug/L	16:58:26
3	As 188.979†	1793.7	1699.3	[1000] ug/L	16:58:46
3	B 249.677†	36287.8	34372.9	[1000] ug/L	16:58:26
3	Ba 233.527†	107796.4	100987.8	[1000] ug/L	16:58:26
3	Be 313.107†	2342063.8	2197670.5	[1000] ug/L	16:58:26
3	Cd 226.502†	69660.9	65417.1	[1000] ug/L	16:58:26
3	Co 228.616†	38491.4	36106.0	[1000] ug/L	16:58:46
3	Cr 267.716†	77661.6	72703.3	[1000] ug/L	16:58:26
3	Cu 324.752†	322314.7	295743.8	[1000] ug/L	16:58:26
3	Mn 257.610†	770494.2	721427.5	[1000] ug/L	16:58:26
3	Mo 202.031†	11723.7	10970.2	[1000] ug/L	16:58:46
3	Ni 231.604†	31876.7	29802.6	[1000] ug/L	16:58:46
3	P 214.914†	6842.6	6246.1	[5000] ug/L	16:58:46
3	Pb 220.353†	6452.1	6088.2	[1000] ug/L	16:58:46
3	S 181.975 Axial†	1149.3	1045.9	[2000] ug/L	16:58:46
3	Sb 206.836†	2524.1	2342.0	[1000] ug/L	16:58:46
3	Se 196.026†	1222.6	1166.1	[1000] ug/L	16:58:46
3	Si 251.611†	137081.9	127947.1	[5000] ug/L	16:58:26
3	Sn 189.927†	4494.2	4202.6	[1000] ug/L	16:58:46
3	Ti 334.940†	596288.5	559552.7	[1000] ug/L	16:58:26
3	Tl 190.801†	2563.8	2427.8	[1000] ug/L	16:58:46
3	U 409.014†	32779.5	32681.0	[1000] ug/L	16:58:26
3	V 292.402†	128848.4	121902.1	[1000] ug/L	16:58:26
3	Zn 213.857†	83830.8	78024.2	[1000] ug/L	16:58:26
3	SiO2†	135822.5	126768.3	[10695] ug/L	16:59:02

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	847699.8	2207.10	0.26%	107.04	%
Sc Radial	3359.1	10.02	0.30%	105	%
Y 371.029	715702.6	2192.08	0.31%	105.62	%
Y RADIAL	2748.0	3.95	0.14%	104.6	%
Ag 328.068†	188009.3	185.49	0.10%	[1000]	ug/L
Al 396.153Radial†	4538.4	44.24	0.97%	[10000]	ug/L
As 188.979†	1703.5	6.01	0.35%	[1000]	ug/L
B 249.677†	34345.6	25.60	0.07%	[1000]	ug/L
Ba 233.527†	100776.9	211.37	0.21%	[1000]	ug/L
Be 313.107†	2199356.8	2953.08	0.13%	[1000]	ug/L
Ca 317.933Radial†	2424.2	4.44	0.18%	[10000]	ug/L
Cd 226.502†	65337.3	107.01	0.16%	[1000]	ug/L
Co 228.616†	35944.6	141.39	0.39%	[1000]	ug/L
Cr 267.716†	72625.6	120.86	0.17%	[1000]	ug/L
Cu 324.752†	295835.3	93.49	0.03%	[1000]	ug/L
Fe 238.204 Radial†	353.7	1.08	0.31%	[10000]	ug/L
K 766.490 Radial†	20201.3	166.00	0.82%	[10000]	ug/L

Mg 279.077 IEC†	99.5	0.23	0.23%	[10000]	ug/L
Mn 257.610†	720057.8	1251.53	0.17%	[1000]	ug/L
Mo 202.031†	10917.5	46.92	0.43%	[1000]	ug/L
Na 589.592 Radial†	30840.3	276.13	0.90%	[10000]	ug/L
Ni 231.604†	29653.9	131.80	0.44%	[1000]	ug/L
P 214.914†	6210.7	33.48	0.54%	[5000]	ug/L
Pb 220.353†	6074.1	14.79	0.24%	[1000]	ug/L
S 181.975 Axial†	1045.4	2.25	0.22%	[2000]	ug/L
Sb 206.836†	2326.4	13.50	0.58%	[1000]	ug/L
Se 196.026†	1164.2	1.78	0.15%	[1000]	ug/L
Si 251.611†	127776.3	176.70	0.14%	[5000]	ug/L
Sn 189.927†	4188.5	13.82	0.33%	[1000]	ug/L
Sr 421.552†	103532.4	725.25	0.70%	[1000]	ug/L
Ti 334.940†	558809.7	644.35	0.12%	[1000]	ug/L
Tl 190.801†	2422.0	5.07	0.21%	[1000]	ug/L
U 409.014†	32633.6	65.96	0.20%	[1000]	ug/L
V 292.402†	121810.5	132.79	0.11%	[1000]	ug/L
Zn 213.857†	77896.3	122.53	0.16%	[1000]	ug/L
SiO2†	127131.4	314.48	0.25%	[10695]	ug/L

Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/10/2010 17:01:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3310.8	3310.8	103	%	17:03:26
1	Y RADIAL	2712.0	2712.0	103.2	%	17:03:26
1	Al 396.153Radial†	23785.4	23083.9	[50000]	ug/L	17:03:06
1	Ca 317.933Radial†	12355.9	11946.8	[50000]	ug/L	17:03:06
1	Fe 238.204 Radial†	725.2	692.4	[20000]	ug/L	17:03:26
1	Mg 279.077 IEC†	500.9	483.2	[50000]	ug/L	17:03:26
1	Na 589.592 Radial†	64579.1	63238.9	[20000]	ug/L	17:03:06
1	Sc 361.383	819482.9	819482.9	103.47	%	17:04:23
1	Y 371.029	689581.6	689581.6	101.76	%	17:04:23
2	Sc Radial	3301.0	3301.0	103	%	17:03:51
2	Y RADIAL	2689.2	2689.2	102.3	%	17:03:51
2	Al 396.153Radial†	23944.8	23307.6	[50000]	ug/L	17:03:31
2	Ca 317.933Radial†	12427.7	12052.3	[50000]	ug/L	17:03:31
2	Fe 238.204 Radial†	725.7	695.0	[20000]	ug/L	17:03:51
2	Mg 279.077 IEC†	496.3	480.1	[50000]	ug/L	17:03:51
2	Na 589.592 Radial†	65353.0	64177.2	[20000]	ug/L	17:03:31
2	Sc 361.383	825396.3	825396.3	104.22	%	17:04:29
2	Y 371.029	694166.5	694166.5	102.44	%	17:04:29
3	Sc Radial	3369.6	3369.6	105	%	17:04:16
3	Y RADIAL	2747.7	2747.7	104.6	%	17:04:16
3	Al 396.153Radial†	24090.1	22972.2	[50000]	ug/L	17:03:56
3	Ca 317.933Radial†	12475.6	11852.1	[50000]	ug/L	17:03:56
3	Fe 238.204 Radial†	733.1	687.8	[20000]	ug/L	17:04:16
3	Mg 279.077 IEC†	509.9	483.2	[50000]	ug/L	17:04:16
3	Na 589.592 Radial†	65900.2	63405.1	[20000]	ug/L	17:03:56
3	Sc 361.383	820149.1	820149.1	103.56	%	17:04:34
3	Y 371.029	690175.9	690175.9	101.85	%	17:04:34

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	821676.1	3238.92	0.39%	103.75	%
Sc Radial	3327.1	37.11	1.12%	104	%
Y 371.029	691308.0	2493.33	0.36%	102.02	%
Y RADIAL	2716.3	29.52	1.09%	103.4	%
Al 396.153Radial†	23121.2	170.79	0.74%	[50000]	ug/L
Ca 317.933Radial†	11950.4	100.18	0.84%	[50000]	ug/L
Fe 238.204 Radial†	691.7	3.68	0.53%	[20000]	ug/L
Mg 279.077 IEC†	482.2	1.76	0.37%	[50000]	ug/L
Na 589.592 Radial†	63607.1	500.73	0.79%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	188.6	0.00000	0.999978	
Al 396.153Radial	3	Lin Thru 0	0.0	0.4622	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	1.707	0.00000	0.999991	
B 249.677	3	Lin Thru 0	0.0	34.36	0.00000	0.999998	
Ba 233.527	3	Lin Thru 0	0.0	101.0	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	2211	0.00000	0.999946	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.2393	0.00000	0.999960	
Cd 226.502	3	Lin Thru 0	0.0	65.56	0.00000	0.999978	
Co 228.616	3	Lin Thru 0	0.0	36.24	0.00000	0.999866	
Cr 267.716	3	Lin Thru 0	0.0	72.84	0.00000	0.999979	
Cu 324.752	3	Lin Thru 0	0.0	296.1	0.00000	0.999997	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0347	0.00000	0.999959	
K 766.490 Radial	3	Lin Thru 0	0.0	2.047	0.00000	0.999584	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0097	0.00000	0.999943
Mn 257.610	3	Lin Thru 0	0.0	723.0	0.00000	0.999963
Mo 202.031	3	Lin Thru 0	0.0	10.95	0.00000	0.999982
Na 589.592 Radia	2	Lin Thru 0	0.0	3.161	0.00000	0.999926
Ni 231.604	3	Lin Thru 0	0.0	29.92	0.00000	0.999851
P 214.914	3	Lin Thru 0	0.0	1.246	0.00000	0.999983
Pb 220.353	3	Lin Thru 0	0.0	6.096	0.00000	0.999969
S 181.975 Axial	3	Lin Thru 0	0.0	0.5235	0.00000	0.999982
Sb 206.836	3	Lin Thru 0	0.0	2.328	0.00000	0.999997
Se 196.026	3	Lin Thru 0	0.0	1.170	0.00000	0.999946
Si 251.611	3	Lin Thru 0	0.0	25.58	0.00000	0.999997
Sn 189.927	3	Lin Thru 0	0.0	4.199	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	103.8	0.00000	0.999983
Ti 334.940	3	Lin Thru 0	0.0	557.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	2.431	0.00000	0.999964
U 409.014	3	Lin Thru 0	0.0	32.92	0.00000	0.999843
V 292.402	3	Lin Thru 0	0.0	122.1	0.00000	0.999991
Zn 213.857	3	Lin Thru 0	0.0	78.18	0.00000	0.999972
SiO2	3	Lin Thru 0	0.0	11.90	0.00000	0.999996

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/10/2010 17:06:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3325.8	3325.8	104	%			17:08:59
1	Y RADIAL	2701.2	2701.2	102.8	%			17:08:59
1	Al 396.153Radial†	2328.7	2305.8	4963.4	ug/L	4963.4	ppb	17:08:39
1	Ca 317.933Radial†	1264.8	1206.2	5039.8	ug/L	5039.8	ppb	17:08:59
1	Fe 238.204 Radial†	191.9	175.4	5063.7	ug/L	5063.7	ppb	17:08:59
1	K 766.490 Radial†	7346.1	5051.7	2464.6	ug/L	2464.6	ppb	17:08:39
1	Mg 279.077 IEC†	55.8	52.1	5386.7	ug/L	5386.7	ppb	17:08:59
1	Na 589.592 Radial†	7032.3	7508.5	2375.3	ug/L	2375.3	ppb	17:08:39
1	Sr 421.552†	55793.2	53724.9	517.34	ug/L	517.34	ppb	17:08:39
1	Sc 361.383	834717.9	834717.9	105.40	%			17:09:56
1	Y 371.029	709677.8	709677.8	104.73	%			17:09:56
1	Ag 328.068†	50954.8	48213.6	258.78	ug/L	258.78	ppb	17:09:56
1	As 188.979†	837.7	813.7	480.77	ug/L	480.77	ppb	17:10:16
1	B 249.677†	18334.6	17772.8	514.91	ug/L	514.91	ppb	17:09:56
1	Ba 233.527†	54038.2	51270.8	508.90	ug/L	508.90	ppb	17:09:56
1	Be 313.107†	600496.9	573282.4	260.40	ug/L	260.40	ppb	17:09:56
1	Cd 226.502†	34270.0	32671.0	498.27	ug/L	498.27	ppb	17:09:56
1	Co 228.616†	19662.4	18701.2	516.14	ug/L	516.14	ppb	17:09:56
1	Cr 267.716†	37520.4	35545.9	488.70	ug/L	488.70	ppb	17:09:56
1	Cu 324.752†	163950.7	149341.5	504.38	ug/L	504.38	ppb	17:09:56
1	Mn 257.610†	388452.2	368157.5	509.47	ug/L	509.47	ppb	17:09:56
1	Mo 202.031†	6160.0	5831.4	533.02	ug/L	533.02	ppb	17:10:16
1	Ni 231.604†	16184.2	15294.7	510.95	ug/L	510.95	ppb	17:09:56
1	P 214.914†	3464.1	3122.3	2408.4	ug/L	2408.4	ppb	17:10:16
1	Pb 220.353†	3169.4	3050.7	501.91	ug/L	501.91	ppb	17:10:16
1	S 181.975 Axial†	1398.6	1296.2	2474.9	ug/L	2474.9	ppb	17:10:16
1	Sb 206.836†	1249.5	1162.7	518.60	ug/L	518.60	ppb	17:10:16
1	Se 196.026†	3132.2	2992.4	2574.6	ug/L	2574.6	ppb	17:10:16
1	Si 251.611†	132757.0	125481.3	4899.4	ug/L	4899.4	ppb	17:09:56
1	Sn 189.927†	2366.3	2237.3	533.41	ug/L	533.41	ppb	17:10:16
1	Ti 334.940†	287857.1	274042.0	491.40	ug/L	491.40	ppb	17:09:56
1	Tl 190.801†	1330.9	1288.7	533.44	ug/L	533.44	ppb	17:10:16
1	U 409.014†	14771.1	15986.6	483.92	ug/L	483.92	ppb	17:09:56
1	V 292.402†	63702.8	61632.3	512.07	ug/L	512.07	ppb	17:09:56
1	Zn 213.857†	42332.0	39652.4	502.53	ug/L	502.53	ppb	17:09:56
1	SiO2†	133481.0	126169.3	10585	ug/L	10585	ppb	17:11:14
2	Sc Radial	3347.1	3347.1	104	%			17:09:24
2	Y RADIAL	2730.8	2730.8	103.9	%			17:09:24
2	Al 396.153Radial†	2279.9	2244.9	4831.6	ug/L	4831.6	ppb	17:09:04
2	Ca 317.933Radial†	1272.2	1205.6	5037.1	ug/L	5037.1	ppb	17:09:24
2	Fe 238.204 Radial†	192.4	174.8	5045.5	ug/L	5045.5	ppb	17:09:24
2	K 766.490 Radial†	7375.3	5034.7	2456.3	ug/L	2456.3	ppb	17:09:04
2	Mg 279.077 IEC†	53.3	49.3	5105.1	ug/L	5105.1	ppb	17:09:24
2	Na 589.592 Radial†	6990.4	7425.4	2349.0	ug/L	2349.0	ppb	17:09:04
2	Sr 421.552†	55417.3	53023.3	510.58	ug/L	510.58	ppb	17:09:04
2	Sc 361.383	837512.3	837512.3	105.75	%			17:10:22
2	Y 371.029	711184.4	711184.4	104.95	%			17:10:22
2	Ag 328.068†	50903.0	48003.4	257.65	ug/L	257.65	ppb	17:10:22
2	As 188.979†	836.0	809.3	478.24	ug/L	478.24	ppb	17:10:42
2	B 249.677†	18362.4	17741.0	513.99	ug/L	513.99	ppb	17:10:22
2	Ba 233.527†	54348.1	51392.7	510.10	ug/L	510.10	ppb	17:10:22
2	Be 313.107†	602536.7	573310.3	260.41	ug/L	260.41	ppb	17:10:22
2	Cd 226.502†	34428.8	32712.7	498.91	ug/L	498.91	ppb	17:10:22
2	Co 228.616†	19824.2	18792.0	518.63	ug/L	518.63	ppb	17:10:22
2	Cr 267.716†	37663.3	35562.2	488.92	ug/L	488.92	ppb	17:10:22
2	Cu 324.752†	164513.9	149355.0	504.42	ug/L	504.42	ppb	17:10:22
2	Mn 257.610†	390507.7	368871.5	510.46	ug/L	510.46	ppb	17:10:22
2	Mo 202.031†	6160.2	5812.2	531.26	ug/L	531.26	ppb	17:10:42
2	Ni 231.604†	16228.4	15285.2	510.63	ug/L	510.63	ppb	17:10:22

2	P 214.914†	3478.4	3124.9	2410.4 ug/L	2410.4 ppb	17:10:42
2	Pb 220.353†	3178.2	3049.1	501.61 ug/L	501.61 ppb	17:10:42
2	S 181.975 Axial†	1400.1	1293.2	2469.2 ug/L	2469.2 ppb	17:10:42
2	Sb 206.836†	1268.3	1176.6	524.52 ug/L	524.52 ppb	17:10:42
2	Se 196.026†	3150.4	2999.8	2580.8 ug/L	2580.8 ppb	17:10:42
2	Si 251.611†	133292.2	125567.1	4902.7 ug/L	4902.7 ppb	17:10:22
2	Sn 189.927†	2376.4	2239.4	533.90 ug/L	533.90 ppb	17:10:42
2	Ti 334.940†	289394.9	274584.9	492.39 ug/L	492.39 ppb	17:10:22
2	Tl 190.801†	1341.2	1294.2	535.70 ug/L	535.70 ppb	17:10:42
2	U 409.014†	14988.0	16145.0	488.73 ug/L	488.73 ppb	17:10:22
2	V 292.402†	63918.0	61634.2	512.07 ug/L	512.07 ppb	17:10:22
2	Zn 213.857†	42649.5	39818.7	504.66 ug/L	504.66 ppb	17:10:22
2	SiO2†	135760.2	127902.0	10731 ug/L	10731 ppb	17:11:19
3	Sc Radial	3350.9	3350.9	105 %		17:09:49
3	Y RADIAL	2742.2	2742.2	104.4 %		17:09:49
3	Al 396.153Radial†	2346.9	2306.4	4964.6 ug/L	4964.6 ppb	17:09:29
3	Ca 317.933Radial†	1278.0	1209.7	5054.3 ug/L	5054.3 ppb	17:09:49
3	Fe 238.204 Radial†	193.3	175.4	5063.2 ug/L	5063.2 ppb	17:09:49
3	K 766.490 Radial†	7303.7	4958.1	2418.8 ug/L	2418.8 ppb	17:09:29
3	Mg 279.077 IEC†	55.4	51.3	5310.6 ug/L	5310.6 ppb	17:09:49
3	Na 589.592 Radial†	7101.6	7524.1	2380.2 ug/L	2380.2 ppb	17:09:29
3	Sr 421.552†	56696.6	54186.0	521.78 ug/L	521.78 ppb	17:09:29
3	Sc 361.383	834025.5	834025.5	105.31 %		17:10:48
3	Y 371.029	707977.5	707977.5	104.48 %		17:10:48
3	Ag 328.068†	50758.9	48067.8	258.00 ug/L	258.00 ppb	17:10:48
3	As 188.979†	839.8	816.3	482.30 ug/L	482.30 ppb	17:11:08
3	B 249.677†	18317.3	17770.8	514.85 ug/L	514.85 ppb	17:10:48
3	Ba 233.527†	54116.6	51387.7	510.06 ug/L	510.06 ppb	17:10:48
3	Be 313.107†	599983.7	573268.1	260.39 ug/L	260.39 ppb	17:10:48
3	Cd 226.502†	34313.8	32739.6	499.32 ug/L	499.32 ppb	17:10:48
3	Co 228.616†	19741.0	18791.3	518.63 ug/L	518.63 ppb	17:10:48
3	Cr 267.716†	37486.9	35543.6	488.67 ug/L	488.67 ppb	17:10:48
3	Cu 324.752†	163538.2	149078.9	503.49 ug/L	503.49 ppb	17:10:48
3	Mn 257.610†	389357.8	369323.4	511.08 ug/L	511.08 ppb	17:10:48
3	Mo 202.031†	6177.1	5852.6	534.95 ug/L	534.95 ppb	17:11:08
3	Ni 231.604†	16191.7	15314.5	511.61 ug/L	511.61 ppb	17:10:48
3	P 214.914†	3464.8	3125.7	2411.3 ug/L	2411.3 ppb	17:11:08
3	Pb 220.353†	3176.3	3059.8	503.40 ug/L	503.40 ppb	17:11:08
3	S 181.975 Axial†	1409.4	1307.5	2496.6 ug/L	2496.6 ppb	17:11:08
3	Sb 206.836†	1258.1	1171.9	522.63 ug/L	522.63 ppb	17:11:08
3	Se 196.026†	3129.1	2992.0	2574.2 ug/L	2574.2 ppb	17:11:08
3	Si 251.611†	132833.3	125658.4	4906.3 ug/L	4906.3 ppb	17:10:48
3	Sn 189.927†	2375.4	2247.8	535.91 ug/L	535.91 ppb	17:11:08
3	Ti 334.940†	287884.9	274295.1	491.86 ug/L	491.86 ppb	17:10:48
3	Tl 190.801†	1327.2	1286.2	532.39 ug/L	532.39 ppb	17:11:08
3	U 409.014†	14919.9	16139.6	488.56 ug/L	488.56 ppb	17:10:48
3	V 292.402†	63650.8	61633.1	512.11 ug/L	512.11 ppb	17:10:48
3	Zn 213.857†	42455.5	39803.1	504.45 ug/L	504.45 ppb	17:10:48
3	SiO2†	133630.9	126416.8	10606 ug/L	10606 ppb	17:11:24

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	835418.6	105.49	%	0.233				0.22%
Sc Radial	3341.2	104	%	0.4				0.40%
Y 371.029	709613.2	104.72	%	0.237				0.23%
Y RADIAL	2724.7	103.7	%	0.81				0.78%
Ag 328.068†	48094.9	258.14	ug/L	0.576	258.14	ppb	0.576	0.22%
QC value within limits for Ag 328.068 Recovery = 103.26%								
Al 396.153Radial†	2285.7	4919.9	ug/L	76.43	4919.9	ppb	76.43	1.55%
QC value within limits for Al 396.153Radial Recovery = 98.40%								
As 188.979†	813.1	480.44	ug/L	2.052	480.44	ppb	2.052	0.43%
QC value within limits for As 188.979 Recovery = 96.09%								
B 249.677†	17761.5	514.58	ug/L	0.517	514.58	ppb	0.517	0.10%
QC value within limits for B 249.677 Recovery = 102.92%								
Ba 233.527†	51350.4	509.69	ug/L	0.683	509.69	ppb	0.683	0.13%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	573286.9	260.40	ug/L	0.010	260.40	ppb	0.010	0.00%
QC value within limits for Be 313.107 Recovery = 104.16%								
Ca 317.933Radial†	1207.2	5043.8	ug/L	9.25	5043.8	ppb	9.25	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†            32707.8      498.83 ug/L         0.528      498.83 ppb          0.528   0.11%
   QC value within limits for Cd 226.502  Recovery = 99.77%
Co 228.616†            18761.5      517.80 ug/L         1.441      517.80 ppb          1.441   0.28%
   QC value within limits for Co 228.616  Recovery = 103.56%
Cr 267.716†            35550.6      488.77 ug/L         0.138      488.77 ppb          0.138   0.03%
   QC value within limits for Cr 267.716  Recovery = 97.75%
Cu 324.752†           149258.5      504.10 ug/L         0.526      504.10 ppb          0.526   0.10%
   QC value within limits for Cu 324.752  Recovery = 100.82%
Fe 238.204 Radial†       175.2      5057.4 ug/L        10.38       5057.4 ppb         10.38   0.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.15%
K 766.490 Radial†       5014.8      2446.6 ug/L        24.37       2446.6 ppb         24.37   1.00%
   QC value within limits for K 766.490 Radial  Recovery = 97.86%
Mg 279.077 IEC†           50.9      5267.5 ug/L       145.66       5267.5 ppb        145.66   2.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.35%
Mn 257.610†           368784.1      510.34 ug/L         0.815      510.34 ppb          0.815   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.07%
Mo 202.031†            5832.1       533.08 ug/L         1.845      533.08 ppb          1.845   0.35%
   QC value within limits for Mo 202.031  Recovery = 106.62%
Na 589.592 Radial†     7486.0      2368.2 ug/L        16.78       2368.2 ppb         16.78   0.71%
   QC value within limits for Na 589.592 Radial  Recovery = 94.73%
Ni 231.604†           15298.1      511.07 ug/L         0.500      511.07 ppb          0.500   0.10%
   QC value within limits for Ni 231.604  Recovery = 102.21%
P 214.914†             3124.3      2410.0 ug/L         1.51       2410.0 ppb          1.51   0.06%
   QC value within limits for P 214.914  Recovery = 96.40%
Pb 220.353†            3053.2      502.31 ug/L         0.961      502.31 ppb          0.961   0.19%
   QC value within limits for Pb 220.353  Recovery = 100.46%
S 181.975 Axial†       1299.0      2480.3 ug/L        14.46       2480.3 ppb         14.46   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 99.21%
Sb 206.836†            1170.4      521.91 ug/L         3.023      521.91 ppb          3.023   0.58%
   QC value within limits for Sb 206.836  Recovery = 104.38%
Se 196.026†            2994.7      2576.5 ug/L         3.68       2576.5 ppb          3.68   0.14%
   QC value within limits for Se 196.026  Recovery = 103.06%
Si 251.611†           125568.9      4902.8 ug/L         3.45       4902.8 ppb          3.45   0.07%
   QC value within limits for Si 251.611  Recovery = 98.06%
Sn 189.927†            2241.5      534.41 ug/L         1.324      534.41 ppb          1.324   0.25%
   QC value within limits for Sn 189.927  Recovery = 106.88%
Sr 421.552†           53644.7      516.57 ug/L         5.638      516.57 ppb          5.638   1.09%
   QC value within limits for Sr 421.552  Recovery = 103.31%
Ti 334.940†           274307.3      491.88 ug/L         0.498      491.88 ppb          0.498   0.10%
   QC value within limits for Ti 334.940  Recovery = 98.38%
Tl 190.801†            1289.7      533.84 ug/L         1.691      533.84 ppb          1.691   0.32%
   QC value within limits for Tl 190.801  Recovery = 106.77%
U 409.014†            16090.4      487.07 ug/L         2.731      487.07 ppb          2.731   0.56%
   QC value within limits for U 409.014  Recovery = 97.41%
V 292.402†            61633.2      512.09 ug/L         0.025      512.09 ppb          0.025   0.00%
   QC value within limits for V 292.402  Recovery = 102.42%
Zn 213.857†           39758.1      503.88 ug/L         1.175      503.88 ppb          1.175   0.23%
   QC value within limits for Zn 213.857  Recovery = 100.78%
SiO2†                126829.3       10641 ug/L          78.8       10641 ppb           78.8   0.74%
   QC value within limits for SiO2  Recovery = 99.49%
All analyte(s) passed QC.
```

Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/10/2010 17:13:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3233.0	3233.0	101	%			17:15:48
1	Y RADIAL	2653.1	2653.1	101.0	%			17:15:48
1	Al 396.153Radial†	-61.4	1.1	2.4288	ug/L	2.4288	ppb	17:15:48
1	Ca 317.933Radial†	9.5	-3.1	-12.892	ug/L	-12.892	ppb	17:15:48
1	Fe 238.204 Radial†	6.8	-2.7	-77.655	ug/L	-77.655	ppb	17:15:48
1	K 766.490 Radial†	1974.8	-69.2	-33.813	ug/L	-33.813	ppb	17:15:28
1	Mg 279.077 IEC†	1.2	-0.5	-54.844	ug/L	-54.844	ppb	17:15:48
1	Na 589.592 Radial†	-693.3	45.4	14.358	ug/L	14.358	ppb	17:15:28
1	Sr 421.552†	46.1	11.0	0.1063	ug/L	0.1063	ppb	17:15:28
1	Sc 361.383	794657.3	794657.3	100.34	%			17:16:45
1	Y 371.029	680293.5	680293.5	100.39	%			17:16:45
1	Ag 328.068†	222.3	90.2	0.4543	ug/L	0.4543	ppb	17:16:45
1	As 188.979†	-16.5	2.4	1.3585	ug/L	1.3585	ppb	17:17:05
1	B 249.677†	-41.2	336.2	9.7982	ug/L	9.7982	ppb	17:17:05
1	Ba 233.527†	22.8	23.0	0.2252	ug/L	0.2252	ppb	17:17:05
1	Be 313.107†	-3451.1	102.5	0.0462	ug/L	0.0462	ppb	17:16:45
1	Cd 226.502†	-151.5	5.2	0.0879	ug/L	0.0879	ppb	17:17:05
1	Co 228.616†	-54.6	-8.6	-0.2351	ug/L	-0.2351	ppb	17:17:05
1	Cr 267.716†	68.2	15.1	0.2046	ug/L	0.2046	ppb	17:17:05
1	Cu 324.752†	6139.7	-93.1	-0.3181	ug/L	-0.3181	ppb	17:16:45
1	Mn 257.610†	426.3	26.0	0.0305	ug/L	0.0305	ppb	17:17:05
1	Mo 202.031†	12.8	-0.3	-0.0334	ug/L	-0.0334	ppb	17:17:05
1	Ni 231.604†	67.2	6.4	0.2133	ug/L	0.2133	ppb	17:17:05
1	P 214.914†	166.6	1.7	1.5076	ug/L	1.5076	ppb	17:17:05
1	Pb 220.353†	-66.6	-22.7	-3.7159	ug/L	-3.7159	ppb	17:17:05
1	S 181.975 Axial†	28.2	-2.7	-5.1138	ug/L	-5.1138	ppb	17:17:05
1	Sb 206.836†	30.3	7.5	3.2150	ug/L	3.2150	ppb	17:17:05
1	Se 196.026†	-24.9	-4.2	-3.7677	ug/L	-3.7677	ppb	17:17:05
1	Si 251.611†	495.5	17.7	0.6926	ug/L	0.6926	ppb	17:17:05
1	Sn 189.927†	11.2	3.4	0.8126	ug/L	0.8126	ppb	17:17:05
1	Ti 334.940†	-969.0	-37.3	-0.0639	ug/L	-0.0639	ppb	17:16:45
1	Tl 190.801†	-21.9	4.1	1.6990	ug/L	1.6990	ppb	17:17:05
1	U 409.014†	-2003.9	-25.0	-0.7520	ug/L	-0.7520	ppb	17:16:45
1	V 292.402†	-1225.6	-29.2	-0.2307	ug/L	-0.2307	ppb	17:16:45
1	Zn 213.857†	517.5	4.3	0.0658	ug/L	0.0658	ppb	17:17:05
1	SiO2†	491.8	15.1	1.2658	ug/L	1.2658	ppb	17:18:16
2	Sc Radial	3175.6	3175.6	99.1	%			17:16:13
2	Y RADIAL	2610.4	2610.4	99.35	%			17:16:13
2	Al 396.153Radial†	-51.4	10.2	21.970	ug/L	21.970	ppb	17:16:13
2	Ca 317.933Radial†	9.7	-2.7	-11.448	ug/L	-11.448	ppb	17:16:13
2	Fe 238.204 Radial†	7.7	-1.7	-49.950	ug/L	-49.950	ppb	17:16:13
2	K 766.490 Radial†	2032.9	24.8	12.131	ug/L	12.131	ppb	17:15:53
2	Mg 279.077 IEC†	-1.0	-2.7	-277.06	ug/L	-277.06	ppb	17:16:13
2	Na 589.592 Radial†	-755.2	-29.4	-9.3145	ug/L	-9.3145	ppb	17:15:53
2	Sr 421.552†	12.3	-22.3	-0.2144	ug/L	-0.2144	ppb	17:15:53
2	Sc 361.383	792924.8	792924.8	100.12	%			17:17:10
2	Y 371.029	677870.8	677870.8	100.03	%			17:17:10
2	Ag 328.068†	144.0	12.5	0.0482	ug/L	0.0482	ppb	17:17:10
2	As 188.979†	-15.6	3.2	1.8678	ug/L	1.8678	ppb	17:17:30
2	B 249.677†	-53.3	324.0	9.4358	ug/L	9.4358	ppb	17:17:30
2	Ba 233.527†	6.2	6.5	0.0623	ug/L	0.0623	ppb	17:17:30
2	Be 313.107†	-3488.7	57.4	0.0262	ug/L	0.0262	ppb	17:17:10
2	Cd 226.502†	-131.5	24.9	0.3859	ug/L	0.3859	ppb	17:17:30
2	Co 228.616†	-40.4	5.6	0.1548	ug/L	0.1548	ppb	17:17:30
2	Cr 267.716†	56.3	3.4	0.0429	ug/L	0.0429	ppb	17:17:30
2	Cu 324.752†	6169.7	-49.8	-0.1725	ug/L	-0.1725	ppb	17:17:10
2	Mn 257.610†	431.0	31.6	0.0502	ug/L	0.0502	ppb	17:17:30
2	Mo 202.031†	15.5	2.5	0.2202	ug/L	0.2202	ppb	17:17:30
2	Ni 231.604†	64.7	4.0	0.1329	ug/L	0.1329	ppb	17:17:30

2	P 214.914†	166.4	1.9	1.5761 ug/L	1.5761 ppb	17:17:30
2	Pb 220.353†	-38.6	5.1	0.8445 ug/L	0.8445 ppb	17:17:30
2	S 181.975 Axial†	24.9	-5.9	-11.293 ug/L	-11.293 ppb	17:17:30
2	Sb 206.836†	22.6	-0.2	-0.0479 ug/L	-0.0479 ppb	17:17:30
2	Se 196.026†	-22.0	-1.3	-1.2344 ug/L	-1.2344 ppb	17:17:30
2	Si 251.611†	484.7	8.0	0.3085 ug/L	0.3085 ppb	17:17:30
2	Sn 189.927†	12.1	4.3	1.0173 ug/L	1.0173 ppb	17:17:30
2	Ti 334.940†	-875.3	54.1	0.1168 ug/L	0.1168 ppb	17:17:10
2	Tl 190.801†	-22.5	3.5	1.4275 ug/L	1.4275 ppb	17:17:30
2	U 409.014†	-1871.2	103.2	3.1388 ug/L	3.1388 ppb	17:17:10
2	V 292.402†	-1201.9	-8.2	-0.0559 ug/L	-0.0559 ppb	17:17:10
2	Zn 213.857†	503.1	-8.9	-0.1074 ug/L	-0.1074 ppb	17:17:30
2	SiO2†	492.2	16.6	1.3890 ug/L	1.3890 ppb	17:18:36
3	Sc Radial	3178.4	3178.4	99.2 %		17:16:38
3	Y RADIAL	2619.6	2619.6	99.70 %		17:16:38
3	Al 396.153Radial†	-67.3	-5.8	-12.556 ug/L	-12.556 ppb	17:16:38
3	Ca 317.933Radial†	7.5	-4.9	-20.366 ug/L	-20.366 ppb	17:16:38
3	Fe 238.204 Radial†	9.2	-0.2	-4.6521 ug/L	-4.6521 ppb	17:16:38
3	K 766.490 Radial†	2140.4	131.4	64.199 ug/L	64.199 ppb	17:16:18
3	Mg 279.077 IEC†	0.3	-1.4	-144.49 ug/L	-144.49 ppb	17:16:38
3	Na 589.592 Radial†	-772.3	-46.0	-14.557 ug/L	-14.557 ppb	17:16:18
3	Sr 421.552†	17.5	-17.0	-0.1635 ug/L	-0.1635 ppb	17:16:18
3	Sc 361.383	782197.8	782197.8	98.767 %		17:17:36
3	Y 371.029	668759.1	668759.1	98.689 %		17:17:36
3	Ag 328.068†	156.4	27.0	0.1403 ug/L	0.1403 ppb	17:17:36
3	As 188.979†	-25.1	-6.6	-3.8440 ug/L	-3.8440 ppb	17:17:56
3	B 249.677†	-81.3	295.0	8.5837 ug/L	8.5837 ppb	17:17:56
3	Ba 233.527†	6.7	7.1	0.0697 ug/L	0.0697 ppb	17:17:56
3	Be 313.107†	-3458.6	40.2	0.0179 ug/L	0.0179 ppb	17:17:36
3	Cd 226.502†	-144.3	10.1	0.1552 ug/L	0.1552 ppb	17:17:56
3	Co 228.616†	-32.9	12.5	0.3467 ug/L	0.3467 ppb	17:17:56
3	Cr 267.716†	72.4	20.5	0.2798 ug/L	0.2798 ppb	17:17:56
3	Cu 324.752†	6094.3	-41.6	-0.1414 ug/L	-0.1414 ppb	17:17:36
3	Mn 257.610†	399.6	5.7	0.0134 ug/L	0.0134 ppb	17:17:56
3	Mo 202.031†	15.7	2.9	0.2622 ug/L	0.2622 ppb	17:17:56
3	Ni 231.604†	55.7	-4.3	-0.1425 ug/L	-0.1425 ppb	17:17:56
3	P 214.914†	173.1	11.0	8.8460 ug/L	8.8460 ppb	17:17:56
3	Pb 220.353†	-29.2	14.1	2.3110 ug/L	2.3110 ppb	17:17:56
3	S 181.975 Axial†	24.9	-5.6	-10.599 ug/L	-10.599 ppb	17:17:56
3	Sb 206.836†	25.0	2.6	1.1413 ug/L	1.1413 ppb	17:17:56
3	Se 196.026†	-19.7	0.8	0.6446 ug/L	0.6446 ppb	17:17:56
3	Si 251.611†	489.6	19.6	0.7647 ug/L	0.7647 ppb	17:17:56
3	Sn 189.927†	12.1	4.5	1.0669 ug/L	1.0669 ppb	17:17:56
3	Ti 334.940†	-972.3	-56.1	-0.0922 ug/L	-0.0922 ppb	17:17:36
3	Tl 190.801†	-25.1	0.6	0.2437 ug/L	0.2437 ppb	17:17:56
3	U 409.014†	-1902.2	46.2	1.4018 ug/L	1.4018 ppb	17:17:36
3	V 292.402†	-1202.0	-24.7	-0.1980 ug/L	-0.1980 ppb	17:17:36
3	Zn 213.857†	509.6	4.6	0.0607 ug/L	0.0607 ppb	17:17:56
3	SiO2†	494.0	25.1	2.1037 ug/L	2.1037 ppb	17:18:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	789926.6	99.743	%	0.8522				0.85%
Sc Radial	3195.7	99.7	%	1.01				1.01%
Y 371.029	675641.1	99.705	%	0.8975				0.90%
Y RADIAL	2627.7	100.0	%	0.85				0.85%
Ag 328.068†	43.3	0.2142	ug/L	0.21292	0.2142	ppb	0.21292	99.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	3.9475	ug/L	17.31264	3.9475	ppb	17.31264	438.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.2059	ug/L	3.16099	-0.2059	ppb	3.16099	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	318.4	9.2726	ug/L	0.62351	9.2726	ppb	0.62351	6.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.1190	ug/L	0.09199	0.1190	ppb	0.09199	77.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	66.7	0.0301	ug/L	0.01454	0.0301	ppb	0.01454	48.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.6	-14.902	ug/L	4.7867	-14.902	ppb	4.7867	32.12%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                13.4      0.2097 ug/L       0.15626      0.2097 ppb        0.15626  74.53%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0888 ug/L       0.29646      0.0888 ppb        0.29646 333.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                13.0      0.1758 ug/L       0.12106      0.1758 ppb        0.12106  68.87%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -61.5     -0.2107 ug/L       0.09434     -0.2107 ppb        0.09434  44.78%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -44.086 ug/L       36.8532     -44.086 ppb        36.8532  83.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          29.0      14.172 ug/L       49.0380      14.172 ppb        49.0380 346.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.5     -158.80 ug/L       111.795     -158.80 ppb        111.795  70.40%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                21.1      0.0313 ug/L       0.01842      0.0313 ppb        0.01842  58.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.7      0.1497 ug/L       0.15995      0.1497 ppb        0.15995 106.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -10.0     -3.1714 ug/L      15.40529     -3.1714 ppb       15.40529 485.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.0      0.0679 ug/L       0.18663      0.0679 ppb        0.18663 274.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.8      3.9766 ug/L       4.21721      3.9766 ppb        4.21721 106.05%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.2     -0.1868 ug/L       3.14302     -0.1868 ppb        3.14302 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.7     -9.0021 ug/L       3.38520     -9.0021 ppb        3.38520  37.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.3      1.4361 ug/L       1.65132      1.4361 ppb        1.65132 114.98%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.6     -1.4525 ug/L       2.21424     -1.4525 ppb        2.21424 152.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                15.1      0.5886 ug/L       0.24522      0.5886 ppb        0.24522  41.66%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.1      0.9656 ug/L       0.13483      0.9656 ppb        0.13483  13.96%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -9.4     -0.0905 ug/L       0.17235     -0.0905 ppb        0.17235 190.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.1     -0.0131 ug/L       0.11340     -0.0131 ppb        0.11340 865.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.7      1.1234 ug/L       0.77386      1.1234 ppb        0.77386  68.89%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 41.4      1.2628 ug/L       1.94910      1.2628 ppb        1.94910 154.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -20.7     -0.1616 ug/L       0.09291     -0.1616 ppb        0.09291  57.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -0.0      0.0064 ug/L       0.09854      0.0064 ppb        0.09854 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      18.9      1.5862 ug/L       0.45242      1.5862 ppb        0.45242  28.52%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 3/10/2010 17:21:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3212.8	3212.8	100	%			17:23:22
1	Y RADIAL	2638.2	2638.2	100.4	%			17:23:22
1	Al 396.153Radial†	37.9	99.8	215.42	ug/L	215.42	ppb	17:23:22
1	Ca 317.933Radial†	62.8	50.2	209.69	ug/L	209.69	ppb	17:23:22
1	Fe 238.204 Radial†	12.3	2.8	79.924	ug/L	79.924	ppb	17:23:22
1	K 766.490 Radial†	2360.9	328.3	160.16	ug/L	160.16	ppb	17:23:02
1	Mg 279.077 IEC†	3.5	1.8	187.46	ug/L	187.46	ppb	17:23:22
1	Na 589.592 Radial†	241.0	973.0	307.81	ug/L	307.81	ppb	17:23:02
1	Sr 421.552†	539.7	503.7	4.8488	ug/L	4.8488	ppb	17:23:02
1	Sc 361.383	806124.5	806124.5	101.79	%			17:24:19
1	Y 371.029	689288.3	689288.3	101.72	%			17:24:19
1	Ag 328.068†	1129.7	978.5	5.1853	ug/L	5.1853	ppb	17:24:19
1	As 188.979†	33.6	51.9	30.433	ug/L	30.433	ppb	17:24:39
1	B 249.677†	1480.5	1831.7	53.276	ug/L	53.276	ppb	17:24:19
1	Ba 233.527†	514.1	505.3	5.0156	ug/L	5.0156	ppb	17:24:39
1	Be 313.107†	7619.9	11028.0	4.9990	ug/L	4.9990	ppb	17:24:19
1	Cd 226.502†	184.4	337.4	5.1522	ug/L	5.1522	ppb	17:24:39
1	Co 228.616†	151.1	194.3	5.3726	ug/L	5.3726	ppb	17:24:39
1	Cr 267.716†	437.1	376.6	5.1591	ug/L	5.1591	ppb	17:24:39
1	Cu 324.752†	9295.6	2920.3	9.8384	ug/L	9.8384	ppb	17:24:19
1	Mn 257.610†	8079.5	7538.7	10.427	ug/L	10.427	ppb	17:24:19
1	Mo 202.031†	121.1	105.9	9.6803	ug/L	9.6803	ppb	17:24:39
1	Ni 231.604†	232.6	167.9	5.6100	ug/L	5.6100	ppb	17:24:39
1	P 214.914†	361.7	191.0	151.46	ug/L	151.46	ppb	17:24:39
1	Pb 220.353†	16.0	59.3	9.7911	ug/L	9.7911	ppb	17:24:39
1	S 181.975 Axial†	78.1	46.0	87.745	ug/L	87.745	ppb	17:24:39
1	Sb 206.836†	53.7	30.1	13.248	ug/L	13.248	ppb	17:24:39
1	Se 196.026†	24.4	44.6	38.445	ug/L	38.445	ppb	17:24:39
1	Si 251.611†	3008.4	2479.5	96.820	ug/L	96.820	ppb	17:24:39
1	Sn 189.927†	48.2	39.5	9.4472	ug/L	9.4472	ppb	17:24:39
1	Ti 334.940†	1884.1	2779.5	4.9736	ug/L	4.9736	ppb	17:24:19
1	Tl 190.801†	18.4	44.0	18.164	ug/L	18.164	ppb	17:24:39
1	U 409.014†	-259.0	1717.7	52.152	ug/L	52.152	ppb	17:24:19
1	V 292.402†	-665.7	538.2	4.6311	ug/L	4.6311	ppb	17:24:19
1	Zn 213.857†	1485.2	947.7	12.062	ug/L	12.062	ppb	17:24:39
1	SiO2†	3087.0	2557.7	214.62	ug/L	214.62	ppb	17:25:35
2	Sc Radial	3267.2	3267.2	102	%			17:23:47
2	Y RADIAL	2683.3	2683.3	102.1	%			17:23:47
2	Al 396.153Radial†	37.2	98.5	212.73	ug/L	212.73	ppb	17:23:47
2	Ca 317.933Radial†	60.4	46.8	195.48	ug/L	195.48	ppb	17:23:47
2	Fe 238.204 Radial†	11.3	1.6	45.429	ug/L	45.429	ppb	17:23:47
2	K 766.490 Radial†	2336.4	264.9	129.24	ug/L	129.24	ppb	17:23:27
2	Mg 279.077 IEC†	7.3	5.5	564.22	ug/L	564.22	ppb	17:23:47
2	Na 589.592 Radial†	149.2	879.0	278.07	ug/L	278.07	ppb	17:23:27
2	Sr 421.552†	532.3	487.4	4.6926	ug/L	4.6926	ppb	17:23:27
2	Sc 361.383	801531.1	801531.1	101.21	%			17:24:44
2	Y 371.029	685747.5	685747.5	101.20	%			17:24:44
2	Ag 328.068†	1128.2	983.5	5.1989	ug/L	5.1989	ppb	17:24:44
2	As 188.979†	28.8	47.3	27.756	ug/L	27.756	ppb	17:25:04
2	B 249.677†	1472.8	1832.5	53.306	ug/L	53.306	ppb	17:24:44
2	Ba 233.527†	523.7	517.7	5.1367	ug/L	5.1367	ppb	17:25:04
2	Be 313.107†	7641.9	11092.6	5.0283	ug/L	5.0283	ppb	17:24:44
2	Cd 226.502†	189.7	343.7	5.2527	ug/L	5.2527	ppb	17:25:04
2	Co 228.616†	137.7	182.0	5.0319	ug/L	5.0319	ppb	17:25:04
2	Cr 267.716†	431.5	373.5	5.1137	ug/L	5.1137	ppb	17:25:04
2	Cu 324.752†	9292.4	2969.6	10.002	ug/L	10.002	ppb	17:24:44
2	Mn 257.610†	8024.0	7529.4	10.395	ug/L	10.395	ppb	17:24:44
2	Mo 202.031†	119.2	104.7	9.5675	ug/L	9.5675	ppb	17:25:04
2	Ni 231.604†	241.6	178.1	5.9515	ug/L	5.9515	ppb	17:25:04

2	P 214.914†	357.0	188.4	149.36 ug/L	149.36 ppb	17:25:04
2	Pb 220.353†	28.2	71.5	11.791 ug/L	11.791 ppb	17:25:04
2	S 181.975 Axial†	84.3	52.5	100.30 ug/L	100.30 ppb	17:25:04
2	Sb 206.836†	40.4	17.2	7.7434 ug/L	7.7434 ppb	17:25:04
2	Se 196.026†	19.1	39.5	34.009 ug/L	34.009 ppb	17:25:04
2	Si 251.611†	2997.5	2485.6	97.062 ug/L	97.062 ppb	17:25:04
2	Sn 189.927†	50.7	42.3	10.095 ug/L	10.095 ppb	17:25:04
2	Ti 334.940†	1891.8	2797.7	4.9726 ug/L	4.9726 ppb	17:24:44
2	Tl 190.801†	29.4	55.0	22.683 ug/L	22.683 ppb	17:25:04
2	U 409.014†	-181.4	1792.9	54.440 ug/L	54.440 ppb	17:24:44
2	V 292.402†	-671.3	528.9	4.5700 ug/L	4.5700 ppb	17:24:44
2	Zn 213.857†	1467.9	939.0	11.953 ug/L	11.953 ppb	17:25:04
2	SiO2†	3035.0	2523.7	211.77 ug/L	211.77 ppb	17:25:40
3	Sc Radial	3246.9	3246.9	101 %		17:24:12
3	Y RADIAL	2662.3	2662.3	101.3 %		17:24:12
3	Al 396.153Radial†	42.2	103.7	223.90 ug/L	223.90 ppb	17:24:12
3	Ca 317.933Radial†	63.0	49.7	207.49 ug/L	207.49 ppb	17:24:12
3	Fe 238.204 Radial†	11.1	1.4	41.691 ug/L	41.691 ppb	17:24:12
3	K 766.490 Radial†	2407.7	349.6	170.62 ug/L	170.62 ppb	17:23:52
3	Mg 279.077 IEC†	5.6	3.8	390.62 ug/L	390.62 ppb	17:24:12
3	Na 589.592 Radial†	102.0	833.3	263.60 ug/L	263.60 ppb	17:23:52
3	Sr 421.552†	527.6	486.0	4.6790 ug/L	4.6790 ppb	17:23:52
3	Sc 361.383	790532.8	790532.8	99.819 %		17:25:09
3	Y 371.029	677458.5	677458.5	99.973 %		17:25:09
3	Ag 328.068†	1034.1	904.6	4.7769 ug/L	4.7769 ppb	17:25:09
3	As 188.979†	30.0	48.9	28.660 ug/L	28.660 ppb	17:25:29
3	B 249.677†	1514.5	1894.5	55.112 ug/L	55.112 ppb	17:25:09
3	Ba 233.527†	526.4	527.7	5.2349 ug/L	5.2349 ppb	17:25:29
3	Be 313.107†	7522.7	11078.3	5.0213 ug/L	5.0213 ppb	17:25:09
3	Cd 226.502†	194.9	351.5	5.3727 ug/L	5.3727 ppb	17:25:29
3	Co 228.616†	145.5	191.7	5.2988 ug/L	5.2988 ppb	17:25:29
3	Cr 267.716†	428.3	376.3	5.1504 ug/L	5.1504 ppb	17:25:29
3	Cu 324.752†	9165.6	2970.2	10.002 ug/L	10.002 ppb	17:25:09
3	Mn 257.610†	7853.3	7468.6	10.318 ug/L	10.318 ppb	17:25:09
3	Mo 202.031†	112.6	99.7	9.1139 ug/L	9.1139 ppb	17:25:29
3	Ni 231.604†	222.2	162.0	5.4111 ug/L	5.4111 ppb	17:25:29
3	P 214.914†	356.5	192.8	152.91 ug/L	152.91 ppb	17:25:29
3	Pb 220.353†	11.4	55.1	9.0943 ug/L	9.0943 ppb	17:25:29
3	S 181.975 Axial†	81.4	50.8	96.919 ug/L	96.919 ppb	17:25:29
3	Sb 206.836†	49.5	26.8	11.870 ug/L	11.870 ppb	17:25:29
3	Se 196.026†	18.2	39.0	33.516 ug/L	33.516 ppb	17:25:29
3	Si 251.611†	2973.2	2502.5	97.729 ug/L	97.729 ppb	17:25:29
3	Sn 189.927†	50.7	43.0	10.284 ug/L	10.284 ppb	17:25:29
3	Ti 334.940†	1733.4	2664.9	4.7491 ug/L	4.7491 ppb	17:25:09
3	Tl 190.801†	15.7	41.6	17.189 ug/L	17.189 ppb	17:25:29
3	U 409.014†	-92.9	1879.0	57.057 ug/L	57.057 ppb	17:25:09
3	V 292.402†	-679.1	512.0	4.4271 ug/L	4.4271 ppb	17:25:09
3	Zn 213.857†	1453.8	945.1	12.035 ug/L	12.035 ppb	17:25:29
3	SiO2†	3098.5	2629.0	220.63 ug/L	220.63 ppb	17:25:45

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	799396.1	100.94	%	1.012				1.00%
Sc Radial	3242.3	101	%	0.9				0.85%
Y 371.029	684164.7	100.96	%	0.896				0.89%
Y RADIAL	2661.3	101.3	%	0.86				0.85%
Ag 328.068†	955.5	5.0537	ug/L	0.23985	5.0537	ppb	0.23985	4.75%
QC value within limits for Ag 328.068 Recovery = 101.07%								
Al 396.153Radial†	100.7	217.35	ug/L	5.831	217.35	ppb	5.831	2.68%
QC value within limits for Al 396.153Radial Recovery = 108.67%								
As 188.979†	49.4	28.950	ug/L	1.3619	28.950	ppb	1.3619	4.70%
QC value within limits for As 188.979 Recovery = 96.50%								
B 249.677†	1852.9	53.898	ug/L	1.0511	53.898	ppb	1.0511	1.95%
QC value within limits for B 249.677 Recovery = 107.80%								
Ba 233.527†	516.9	5.1291	ug/L	0.10983	5.1291	ppb	0.10983	2.14%
QC value within limits for Ba 233.527 Recovery = 102.58%								
Be 313.107†	11066.3	5.0162	ug/L	0.01530	5.0162	ppb	0.01530	0.31%
QC value within limits for Be 313.107 Recovery = 100.32%								
Ca 317.933Radial†	48.9	204.22	ug/L	7.652	204.22	ppb	7.652	3.75%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              344.2      5.2592 ug/L       0.11038      5.2592 ppb        0.11038   2.10%
   QC value within limits for Cd 226.502  Recovery = 105.18%
Co 228.616†              189.3      5.2344 ug/L       0.17924      5.2344 ppb        0.17924   3.42%
   QC value within limits for Co 228.616  Recovery = 104.69%
Cr 267.716†              375.5      5.1411 ug/L       0.02406      5.1411 ppb        0.02406   0.47%
   QC value within limits for Cr 267.716  Recovery = 102.82%
Cu 324.752†             2953.4      9.9474 ug/L       0.09442      9.9474 ppb        0.09442   0.95%
   QC value within limits for Cu 324.752  Recovery = 99.47%
Fe 238.204 Radial†         1.9      55.681 ug/L       21.0779      55.681 ppb        21.0779  37.85%
   QC value less than the lower limit for Fe 238.204 Radial  Recovery = 55.68%
K 766.490 Radial†        314.3      153.34 ug/L        21.518      153.34 ppb         21.518  14.03%
   QC value within limits for K 766.490 Radial  Recovery = 102.23%
Mg 279.077 IEC†            3.7      380.77 ug/L       188.574      380.77 ppb        188.574  49.52%
   QC value within limits for Mg 279.077 IEC  Recovery = 126.92%
Mn 257.610†             7512.2      10.380 ug/L        0.0561      10.380 ppb         0.0561   0.54%
   QC value within limits for Mn 257.610  Recovery = 103.80%
Mo 202.031†              103.4      9.4539 ug/L       0.29981      9.4539 ppb        0.29981   3.17%
   QC value within limits for Mo 202.031  Recovery = 94.54%
Na 589.592 Radial†       895.1      283.16 ug/L        22.542      283.16 ppb         22.542   7.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.39%
Ni 231.604†              169.3      5.6575 ug/L       0.27333      5.6575 ppb        0.27333   4.83%
   QC value within limits for Ni 231.604  Recovery = 113.15%
P 214.914†               190.8      151.24 ug/L         1.785      151.24 ppb          1.785   1.18%
   QC value within limits for P 214.914  Recovery = 100.83%
Pb 220.353†               62.0      10.225 ug/L        1.3998      10.225 ppb         1.3998  13.69%
   QC value within limits for Pb 220.353  Recovery = 102.25%
S 181.975 Axial†          49.8      94.987 ug/L        6.4960      94.987 ppb         6.4960   6.84%
   QC value within limits for S 181.975 Axial  Recovery = 94.99%
Sb 206.836†               24.7      10.954 ug/L        2.8646      10.954 ppb         2.8646  26.15%
   QC value within limits for Sb 206.836  Recovery = 109.54%
Se 196.026†               41.0      35.323 ug/L        2.7145      35.323 ppb         2.7145   7.68%
   QC value within limits for Se 196.026  Recovery = 117.74%
Si 251.611†             2489.2      97.203 ug/L        0.4706      97.203 ppb         0.4706   0.48%
   QC value within limits for Si 251.611  Recovery = 97.20%
Sn 189.927†               41.6      9.9419 ug/L       0.43866      9.9419 ppb        0.43866   4.41%
   QC value within limits for Sn 189.927  Recovery = 99.42%
Sr 421.552†              492.4      4.7401 ug/L       0.09432      4.7401 ppb        0.09432   1.99%
   QC value within limits for Sr 421.552  Recovery = 94.80%
Ti 334.940†             2747.3      4.8984 ug/L       0.12932      4.8984 ppb        0.12932   2.64%
   QC value within limits for Ti 334.940  Recovery = 97.97%
Tl 190.801†               46.9      19.345 ug/L        2.9315      19.345 ppb         2.9315  15.15%
   QC value within limits for Tl 190.801  Recovery = 96.73%
U 409.014†              1796.5      54.550 ug/L        2.4542      54.550 ppb         2.4542   4.50%
   QC value within limits for U 409.014  Recovery = 109.10%
V 292.402†               526.4      4.5427 ug/L       0.10472      4.5427 ppb        0.10472   2.31%
   QC value within limits for V 292.402  Recovery = 90.85%
Zn 213.857†              943.9      12.017 ug/L        0.0568      12.017 ppb         0.0568   0.47%
   QC value within limits for Zn 213.857  Recovery = 120.17%
SiO2†                   2570.2      215.67 ug/L         4.522      215.67 ppb          4.522   2.10%
   QC value within limits for SiO2  Recovery = 101.25%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 3/10/2010 17:27:57
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSA

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3111.8	3111.8	97.1	%			17:30:11
1	Y RADIAL	2539.8	2539.8	96.66	%			17:30:11
1	Al 396.153Radial†	226812.0	233637.4	505540	ug/L	505540	ppb	17:29:51
1	Ca 317.933Radial†	109445.2	112696.2	470870	ug/L	470870	ppb	17:29:51
1	Fe 238.204 Radial†	6144.4	6318.2	181850	ug/L	181850	ppb	17:30:11
1	K 766.490 Radial†	1924.4	-44.8	-179.42	ug/L	-179.42	ppb	17:29:51
1	Mg 279.077 IEC†	4577.0	4711.8	487400	ug/L	487400	ppb	17:30:11
1	Na 589.592 Radial†	-523.0	194.0	61.380	ug/L	61.380	ppb	17:30:11
1	Sr 421.552†	384.7	361.6	-0.0341	ug/L	-0.0341	ppb	17:30:11
1	Sc 361.383	729561.3	729561.3	92.120	%			17:31:08
1	Y 371.029	611690.9	611690.9	90.268	%			17:31:08
1	Ag 328.068†	-8653.7	-9525.3	-0.6430	ug/L	-0.6430	ppb	17:31:08
1	As 188.979†	-88.2	-76.9	-2.6441	ug/L	-2.6441	ppb	17:31:28
1	B 249.677†	569.3	995.2	-0.5738	ug/L	-0.5738	ppb	17:31:08
1	Ba 233.527†	-460.1	-499.2	0.6282	ug/L	0.6282	ppb	17:31:28
1	Be 313.107†	-3788.7	-570.9	-0.3169	ug/L	-0.3169	ppb	17:31:08
1	Cd 226.502†	1114.7	1366.3	2.0696	ug/L	2.0696	ppb	17:31:28
1	Co 228.616†	6.1	52.5	-1.1733	ug/L	-1.1733	ppb	17:31:28
1	Cr 267.716†	-523.5	-621.1	-1.0617	ug/L	-1.0617	ppb	17:31:28
1	Cu 324.752†	3837.7	-2046.0	2.6860	ug/L	2.6860	ppb	17:31:28
1	Mn 257.610†	298.3	-75.0	-2.0793	ug/L	-2.0793	ppb	17:31:08
1	Mo 202.031†	-208.5	-239.3	-2.1381	ug/L	-2.1381	ppb	17:31:28
1	Ni 231.604†	132.8	83.5	2.7918	ug/L	2.7918	ppb	17:31:28
1	P 214.914†	123.9	-29.9	-43.795	ug/L	-43.795	ppb	17:31:28
1	Pb 220.353†	-563.7	-568.2	-0.6877	ug/L	-0.6877	ppb	17:31:28
1	S 181.975 Axial†	43.6	16.5	-63.245	ug/L	-63.245	ppb	17:31:28
1	Sb 206.836†	50.6	32.1	-3.4424	ug/L	-3.4424	ppb	17:31:28
1	Se 196.026†	-716.4	-757.0	-3.1077	ug/L	-3.1077	ppb	17:31:28
1	Si 251.611†	348.0	-98.3	-3.5750	ug/L	-3.5750	ppb	17:31:28
1	Sn 189.927†	-311.2	-345.7	-9.1032	ug/L	-9.1032	ppb	17:31:28
1	Ti 334.940†	-14126.6	-14406.5	-2.5311	ug/L	-2.5311	ppb	17:31:08
1	Tl 190.801†	-73.9	-54.3	-22.581	ug/L	-22.581	ppb	17:31:28
1	U 409.014†	-226.0	1726.8	31.738	ug/L	31.738	ppb	17:31:08
1	V 292.402†	850.9	2116.0	0.0902	ug/L	0.0902	ppb	17:31:28
1	Zn 213.857†	2451.1	2149.3	0.2711	ug/L	0.2711	ppb	17:31:28
1	SiO2†	357.7	-86.7	-6.6884	ug/L	-6.6884	ppb	17:32:24
2	Sc Radial	3125.3	3125.3	97.5	%			17:30:36
2	Y RADIAL	2558.7	2558.7	97.38	%			17:30:36
2	Al 396.153Radial†	224247.5	229995.2	497660	ug/L	497660	ppb	17:30:16
2	Ca 317.933Radial†	108373.3	111108.6	464230	ug/L	464230	ppb	17:30:16
2	Fe 238.204 Radial†	6150.0	6296.4	181220	ug/L	181220	ppb	17:30:36
2	K 766.490 Radial†	1935.6	-42.0	-175.80	ug/L	-175.80	ppb	17:30:16
2	Mg 279.077 IEC†	4609.3	4724.4	488710	ug/L	488710	ppb	17:30:36
2	Na 589.592 Radial†	-595.2	122.3	38.690	ug/L	38.690	ppb	17:30:36
2	Sr 421.552†	399.4	374.9	0.1435	ug/L	0.1435	ppb	17:30:36
2	Sc 361.383	726310.0	726310.0	91.710	%			17:31:33
2	Y 371.029	608445.8	608445.8	89.789	%			17:31:33
2	Ag 328.068†	-8729.4	-9649.8	-1.4031	ug/L	-1.4031	ppb	17:31:33
2	As 188.979†	-61.3	-48.0	14.176	ug/L	14.176	ppb	17:31:53
2	B 249.677†	518.2	942.3	-2.0110	ug/L	-2.0110	ppb	17:31:33
2	Ba 233.527†	-462.4	-503.9	0.5622	ug/L	0.5622	ppb	17:31:53
2	Be 313.107†	-3731.7	-527.1	-0.2973	ug/L	-0.2973	ppb	17:31:33
2	Cd 226.502†	1113.2	1370.1	2.1918	ug/L	2.1918	ppb	17:31:53
2	Co 228.616†	11.4	58.3	-1.0010	ug/L	-1.0010	ppb	17:31:53
2	Cr 267.716†	-549.8	-652.4	-1.5148	ug/L	-1.5148	ppb	17:31:53
2	Cu 324.752†	3756.5	-2115.9	2.4194	ug/L	2.4194	ppb	17:31:53
2	Mn 257.610†	237.0	-140.5	-2.2850	ug/L	-2.2850	ppb	17:31:33
2	Mo 202.031†	-195.6	-226.3	-1.0746	ug/L	-1.0746	ppb	17:31:53
2	Ni 231.604†	124.2	74.8	2.4997	ug/L	2.4997	ppb	17:31:53

2	P 214.914†	134.5	-17.7	-35.430 ug/L	-35.430 ppb	17:31:53
2	Pb 220.353†	-558.2	-565.0	-1.9047 ug/L	-1.9047 ppb	17:31:53
2	S 181.975 Axial†	38.5	11.2	-71.854 ug/L	-71.854 ppb	17:31:53
2	Sb 206.836†	53.4	35.5	-1.7430 ug/L	-1.7430 ppb	17:31:53
2	Se 196.026†	-744.2	-790.8	-35.962 ug/L	-35.962 ppb	17:31:53
2	Si 251.611†	405.6	-33.8	-1.0675 ug/L	-1.0675 ppb	17:31:53
2	Sn 189.927†	-309.4	-345.2	-10.131 ug/L	-10.131 ppb	17:31:53
2	Ti 334.940†	-14101.2	-14447.5	-3.5987 ug/L	-3.5987 ppb	17:31:33
2	Tl 190.801†	-56.6	-35.7	-14.944 ug/L	-14.944 ppb	17:31:53
2	U 409.014†	-367.8	1571.0	27.079 ug/L	27.079 ppb	17:31:33
2	V 292.402†	839.4	2107.5	0.1449 ug/L	0.1449 ppb	17:31:53
2	Zn 213.857†	2457.6	2168.4	0.6106 ug/L	0.6106 ppb	17:31:53
2	SiO2†	340.7	-103.5	-8.1333 ug/L	-8.1333 ppb	17:32:29
3	Sc Radial	3125.6	3125.6	97.5 %		17:31:01
3	Y RADIAL	2549.0	2549.0	97.01 %		17:31:01
3	Al 396.153Radial†	227846.1	233666.6	505600 ug/L	505600 ppb	17:30:41
3	Ca 317.933Radial†	109957.5	112724.0	470980 ug/L	470980 ppb	17:30:41
3	Fe 238.204 Radial†	6145.0	6290.8	181060 ug/L	181060 ppb	17:31:01
3	K 766.490 Radial†	1937.3	-40.3	-177.25 ug/L	-177.25 ppb	17:30:41
3	Mg 279.077 IEC†	4601.5	4716.1	487840 ug/L	487840 ppb	17:31:01
3	Na 589.592 Radial†	-562.8	155.6	49.217 ug/L	49.217 ppb	17:31:01
3	Sr 421.552†	390.6	365.8	0.0062 ug/L	0.0062 ppb	17:31:01
3	Sc 361.383	719376.9	719376.9	90.834 %		17:31:59
3	Y 371.029	603067.5	603067.5	88.995 %		17:31:59
3	Ag 328.068†	-8573.3	-9569.7	-1.1178 ug/L	-1.1178 ppb	17:31:59
3	As 188.979†	-77.3	-66.3	3.4296 ug/L	3.4296 ppb	17:32:19
3	B 249.677†	465.8	890.1	-3.5044 ug/L	-3.5044 ppb	17:31:59
3	Ba 233.527†	-483.6	-532.1	0.2788 ug/L	0.2788 ppb	17:32:19
3	Be 313.107†	-3761.4	-599.0	-0.3302 ug/L	-0.3302 ppb	17:31:59
3	Cd 226.502†	1108.3	1376.4	2.3036 ug/L	2.3036 ppb	17:32:19
3	Co 228.616†	-5.9	39.4	-1.5227 ug/L	-1.5227 ppb	17:32:19
3	Cr 267.716†	-512.1	-616.6	-1.0293 ug/L	-1.0293 ppb	17:32:19
3	Cu 324.752†	3719.0	-2117.7	2.4064 ug/L	2.4064 ppb	17:32:19
3	Mn 257.610†	268.8	-102.9	-2.2138 ug/L	-2.2138 ppb	17:31:59
3	Mo 202.031†	-203.7	-237.3	-2.0155 ug/L	-2.0155 ppb	17:32:19
3	Ni 231.604†	132.2	85.0	2.8393 ug/L	2.8393 ppb	17:32:19
3	P 214.914†	128.6	-22.8	-37.452 ug/L	-37.452 ppb	17:32:19
3	Pb 220.353†	-565.0	-578.3	-2.2222 ug/L	-2.2222 ppb	17:32:19
3	S 181.975 Axial†	34.8	7.5	-80.450 ug/L	-80.450 ppb	17:32:19
3	Sb 206.836†	67.8	51.9	5.0213 ug/L	5.0213 ppb	17:32:19
3	Se 196.026†	-726.5	-779.1	-24.164 ug/L	-24.164 ppb	17:32:19
3	Si 251.611†	366.4	-72.8	-2.5777 ug/L	-2.5777 ppb	17:32:19
3	Sn 189.927†	-318.9	-358.9	-12.190 ug/L	-12.190 ppb	17:32:19
3	Ti 334.940†	-14064.0	-14554.7	-2.8145 ug/L	-2.8145 ppb	17:31:59
3	Tl 190.801†	-73.1	-54.5	-22.681 ug/L	-22.681 ppb	17:32:19
3	U 409.014†	-439.1	1488.7	24.595 ug/L	24.595 ppb	17:31:59
3	V 292.402†	843.1	2120.4	0.2385 ug/L	0.2385 ppb	17:32:19
3	Zn 213.857†	2451.0	2186.9	0.8694 ug/L	0.8694 ppb	17:32:19
3	SiO2†	350.2	-89.5	-6.9314 ug/L	-6.9314 ppb	17:32:34

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	725082.7	91.555	%	0.6568				0.72%
Sc Radial	3120.9	97.4	%	0.25				0.25%
Y 371.029	607734.7	89.684	%	0.6427				0.72%
Y RADIAL	2549.2	97.02	%	0.361				0.37%
Ag 328.068†	-9581.6	-1.0546	ug/L	0.38395	-1.0546	ppb	0.38395	36.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	232433.0	502930	ug/L	4568.4	502930	ppb	4568.4	0.91%
QC value within limits for Al 396.153Radial Recovery = 100.59%								
As 188.979†	-63.7	4.9873	ug/L	8.51772	4.9873	ppb	8.51772	170.79%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	942.5	-2.0297	ug/L	1.46536	-2.0297	ppb	1.46536	72.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-511.7	0.4898	ug/L	0.18562	0.4898	ppb	0.18562	37.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-565.7	-0.3148	ug/L	0.01657	-0.3148	ppb	0.01657	5.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	112176.3	468690	ug/L	3863.7	468690	ppb	3863.7	0.82%

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   QC value within limits for Ca 317.933Radial  Recovery = 93.74%
Cd 226.502†            1370.9      2.1883 ug/L       0.11704      2.1883 ppb        0.11704   5.35%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              50.1     -1.2323 ug/L       0.26578     -1.2323 ppb        0.26578  21.57%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -630.0     -1.2019 ug/L       0.27143     -1.2019 ppb        0.27143  22.58%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2093.2      2.5039 ug/L       0.15785      2.5039 ppb        0.15785   6.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     6301.8      181380 ug/L         416.0      181380 ppb          416.0   0.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 90.69%
K 766.490 Radial†       -42.4     -177.49 ug/L         1.820     -177.49 ppb          1.820   1.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        4717.4      487980 ug/L         664.2      487980 ppb          664.2   0.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.60%
Mn 257.610†            -106.1     -2.1927 ug/L       0.10447     -2.1927 ppb        0.10447   4.76%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -234.3     -1.7428 ug/L       0.58185     -1.7428 ppb        0.58185  33.39%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      157.3      49.762 ug/L       11.3547      49.762 ppb        11.3547  22.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              81.1      2.7103 ug/L       0.18389      2.7103 ppb        0.18389   6.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -23.4     -38.892 ug/L        4.3643     -38.892 ppb         4.3643  11.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -570.5     -1.6048 ug/L       0.81001     -1.6048 ppb        0.81001  50.47%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         11.7     -71.850 ug/L        8.6027     -71.850 ppb         8.6027  11.97%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              39.9     -0.0547 ug/L       4.47729     -0.0547 ppb        4.47729 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -775.6     -21.078 ug/L       16.6432     -21.078 ppb        16.6432  78.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -68.3     -2.4067 ug/L       1.26246     -2.4067 ppb        1.26246  52.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -349.9     -10.475 ug/L        1.5720     -10.475 ppb         1.5720  15.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             367.4      0.0385 ug/L       0.09312      0.0385 ppb        0.09312 241.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -14469.6     -2.9814 ug/L       0.55308     -2.9814 ppb        0.55308  18.55%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -48.2     -20.068 ug/L        4.4385     -20.068 ppb         4.4385  22.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1595.5      27.804 ug/L        3.6259      27.804 ppb         3.6259  13.04%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2114.6      0.1578 ug/L       0.07502      0.1578 ppb        0.07502  47.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2168.2      0.5837 ug/L       0.30008      0.5837 ppb        0.30008  51.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -93.2     -7.2511 ug/L       0.77369     -7.2511 ppb        0.77369  10.67%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 3/10/2010 17:34:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3096.4	3096.4	96.6	%			17:36:58
1	Y RADIAL	2547.9	2547.9	96.97	%			17:36:58
1	Al 396.153Radial†	232858.7	241052.1	521560	ug/L	521560	ppb	17:36:38
1	Ca 317.933Radial†	111212.6	115083.7	480840	ug/L	480840	ppb	17:36:38
1	Fe 238.204 Radial†	6240.3	6448.7	185620	ug/L	185620	ppb	17:36:58
1	K 766.490 Radial†	13507.0	11952.0	5675.5	ug/L	5675.5	ppb	17:36:38
1	Mg 279.077 IEC†	4636.1	4796.3	496140	ug/L	496140	ppb	17:36:58
1	Na 589.592 Radial†	15925.3	17214.0	5445.6	ug/L	5445.6	ppb	17:36:38
1	Sr 421.552†	51806.9	53581.3	512.40	ug/L	512.40	ppb	17:36:38
1	Sc 361.383	732866.6	732866.6	92.538	%			17:37:56
1	Y 371.029	615168.1	615168.1	90.781	%			17:37:56
1	Ag 328.068†	39199.0	42228.7	276.45	ug/L	276.45	ppb	17:37:56
1	As 188.979†	736.6	814.8	523.82	ug/L	523.82	ppb	17:38:16
1	B 249.677†	17157.1	18917.9	519.10	ug/L	519.10	ppb	17:37:56
1	Ba 233.527†	46182.0	49906.4	500.93	ug/L	500.93	ppb	17:37:56
1	Be 313.107†	499478.2	543298.1	246.82	ug/L	246.82	ppb	17:37:56
1	Cd 226.502†	28959.1	31450.7	460.98	ug/L	460.98	ppb	17:38:16
1	Co 228.616†	15125.5	16391.1	449.66	ug/L	449.66	ppb	17:38:16
1	Cr 267.716†	32264.7	34813.7	486.07	ug/L	486.07	ppb	17:37:56
1	Cu 324.752†	156972.3	163418.6	561.45	ug/L	561.45	ppb	17:37:56
1	Mn 257.610†	322560.4	348172.8	479.59	ug/L	479.59	ppb	17:37:56
1	Mo 202.031†	4771.2	5143.0	489.82	ug/L	489.82	ppb	17:38:16
1	Ni 231.604†	12560.7	13513.0	451.43	ug/L	451.43	ppb	17:38:16
1	P 214.914†	3090.8	3175.7	2424.0	ug/L	2424.0	ppb	17:38:16
1	Pb 220.353†	1997.4	2202.1	457.79	ug/L	457.79	ppb	17:38:16
1	S 181.975 Axial†	1339.2	1416.4	2607.7	ug/L	2607.7	ppb	17:38:16
1	Sb 206.836†	1198.1	1272.0	546.32	ug/L	546.32	ppb	17:38:16
1	Se 196.026†	2020.3	2203.9	2544.0	ug/L	2544.0	ppb	17:38:16
1	Si 251.611†	126343.9	136056.2	5313.6	ug/L	5313.6	ppb	17:37:56
1	Sn 189.927†	1571.0	1689.9	477.21	ug/L	477.21	ppb	17:38:16
1	Ti 334.940†	248557.0	269529.1	507.00	ug/L	507.00	ppb	17:37:56
1	Tl 190.801†	967.5	1071.5	444.10	ug/L	444.10	ppb	17:38:16
1	U 409.014†	14762.1	17924.6	522.22	ug/L	522.22	ppb	17:37:56
1	V 292.402†	58440.2	64345.1	516.72	ug/L	516.72	ppb	17:37:56
1	Zn 213.857†	38863.3	41485.8	499.27	ug/L	499.27	ppb	17:37:56
1	SiO2†	123363.6	132836.7	11147	ug/L	11147	ppb	17:39:12
2	Sc Radial	3139.2	3139.2	98.0	%			17:37:24
2	Y RADIAL	2576.3	2576.3	98.05	%			17:37:24
2	Al 396.153Radial†	231641.3	236528.1	511770	ug/L	511770	ppb	17:37:04
2	Ca 317.933Radial†	110696.8	112990.0	472090	ug/L	472090	ppb	17:37:04
2	Fe 238.204 Radial†	6311.9	6433.9	185190	ug/L	185190	ppb	17:37:24
2	K 766.490 Radial†	13388.8	11641.0	5526.5	ug/L	5526.5	ppb	17:37:04
2	Mg 279.077 IEC†	4698.1	4794.3	495930	ug/L	495930	ppb	17:37:24
2	Na 589.592 Radial†	15806.5	16868.3	5336.2	ug/L	5336.2	ppb	17:37:04
2	Sr 421.552†	51283.0	52316.6	500.29	ug/L	500.29	ppb	17:37:04
2	Sc 361.383	725944.0	725944.0	91.664	%			17:38:21
2	Y 371.029	608293.9	608293.9	89.766	%			17:38:21
2	Ag 328.068†	38730.2	42121.2	275.87	ug/L	275.87	ppb	17:38:21
2	As 188.979†	743.9	830.4	532.85	ug/L	532.85	ppb	17:38:41
2	B 249.677†	17014.7	18939.4	519.80	ug/L	519.80	ppb	17:38:21
2	Ba 233.527†	45711.2	49868.7	500.55	ug/L	500.55	ppb	17:38:21
2	Be 313.107†	494065.5	542540.3	246.48	ug/L	246.48	ppb	17:38:21
2	Cd 226.502†	28660.7	31423.6	460.61	ug/L	460.61	ppb	17:38:41
2	Co 228.616†	14927.3	16330.7	448.00	ug/L	448.00	ppb	17:38:41
2	Cr 267.716†	31984.9	34840.9	486.42	ug/L	486.42	ppb	17:38:21
2	Cu 324.752†	155390.4	163310.4	561.06	ug/L	561.06	ppb	17:38:21
2	Mn 257.610†	319883.1	348576.1	480.11	ug/L	480.11	ppb	17:38:21
2	Mo 202.031†	4730.3	5147.5	490.10	ug/L	490.10	ppb	17:38:41
2	Ni 231.604†	12463.8	13536.7	452.23	ug/L	452.23	ppb	17:38:41

2	P 214.914†	3034.1	3145.8	2397.9	ug/L	2397.9 ppb	17:38:41
2	Pb 220.353†	1986.7	2211.0	457.03	ug/L	457.03 ppb	17:38:41
2	S 181.975 Axial†	1317.7	1406.7	2591.1	ug/L	2591.1 ppb	17:38:41
2	Sb 206.836†	1169.6	1253.3	538.59	ug/L	538.59 ppb	17:38:41
2	Se 196.026†	1990.3	2192.0	2529.9	ug/L	2529.9 ppb	17:38:41
2	Si 251.611†	125375.0	136301.1	5323.2	ug/L	5323.2 ppb	17:38:21
2	Sn 189.927†	1569.8	1704.8	479.22	ug/L	479.22 ppb	17:38:41
2	Ti 334.940†	246867.5	270247.3	507.13	ug/L	507.13 ppb	17:38:21
2	Tl 190.801†	962.6	1076.1	446.01	ug/L	446.01 ppb	17:38:41
2	U 409.014†	14642.2	17945.9	522.91	ug/L	522.91 ppb	17:38:21
2	V 292.402†	57890.8	64348.0	516.81	ug/L	516.81 ppb	17:38:21
2	Zn 213.857†	38442.9	41427.7	498.59	ug/L	498.59 ppb	17:38:21
2	SiO2†	123713.8	134489.9	11286	ug/L	11286 ppb	17:39:17
3	Sc Radial	3102.5	3102.5	96.8	%		17:37:49
3	Y RADIAL	2552.3	2552.3	97.14	%		17:37:49
3	Al 396.153Radial†	233950.2	241707.9	522980	ug/L	522980 ppb	17:37:29
3	Ca 317.933Radial†	111711.2	115373.4	482050	ug/L	482050 ppb	17:37:29
3	Fe 238.204 Radial†	6241.4	6437.2	185290	ug/L	185290 ppb	17:37:49
3	K 766.490 Radial†	13450.5	11866.3	5633.2	ug/L	5633.2 ppb	17:37:29
3	Mg 279.077 IEC†	4636.7	4787.5	495230	ug/L	495230 ppb	17:37:49
3	Na 589.592 Radial†	15909.7	17165.7	5430.3	ug/L	5430.3 ppb	17:37:29
3	Sr 421.552†	51758.3	53426.3	510.90	ug/L	510.90 ppb	17:37:29
3	Sc 361.383	725559.0	725559.0	91.615	%		17:38:47
3	Y 371.029	608403.4	608403.4	89.783	%		17:38:47
3	Ag 328.068†	38775.6	42193.2	276.14	ug/L	276.14 ppb	17:38:47
3	As 188.979†	741.3	828.0	531.48	ug/L	531.48 ppb	17:39:07
3	B 249.677†	17000.5	18933.7	519.61	ug/L	519.61 ppb	17:38:47
3	Ba 233.527†	45654.5	49833.3	500.20	ug/L	500.20 ppb	17:38:47
3	Be 313.107†	492926.4	541583.0	246.04	ug/L	246.04 ppb	17:38:47
3	Cd 226.502†	28859.3	31656.9	464.16	ug/L	464.16 ppb	17:39:07
3	Co 228.616†	15051.9	16475.4	451.99	ug/L	451.99 ppb	17:39:07
3	Cr 267.716†	31912.3	34780.2	485.59	ug/L	485.59 ppb	17:38:47
3	Cu 324.752†	155286.6	163287.1	560.99	ug/L	560.99 ppb	17:38:47
3	Mn 257.610†	319088.0	347893.3	479.20	ug/L	479.20 ppb	17:38:47
3	Mo 202.031†	4730.4	5150.3	490.48	ug/L	490.48 ppb	17:39:07
3	Ni 231.604†	12511.7	13596.2	454.21	ug/L	454.21 ppb	17:39:07
3	P 214.914†	3063.1	3179.2	2427.5	ug/L	2427.5 ppb	17:39:07
3	Pb 220.353†	1992.8	2218.9	460.93	ug/L	460.93 ppb	17:39:07
3	S 181.975 Axial†	1331.9	1423.0	2620.0	ug/L	2620.0 ppb	17:39:07
3	Sb 206.836†	1194.5	1281.1	550.28	ug/L	550.28 ppb	17:39:07
3	Se 196.026†	1995.2	2198.5	2538.8	ug/L	2538.8 ppb	17:39:07
3	Si 251.611†	125099.4	136073.0	5314.2	ug/L	5314.2 ppb	17:38:47
3	Sn 189.927†	1573.4	1709.6	482.14	ug/L	482.14 ppb	17:39:07
3	Ti 334.940†	246209.8	269672.3	507.49	ug/L	507.49 ppb	17:38:47
3	Tl 190.801†	961.8	1075.8	445.88	ug/L	445.88 ppb	17:39:07
3	U 409.014†	14695.1	18012.1	524.92	ug/L	524.92 ppb	17:38:47
3	V 292.402†	57762.8	64241.8	515.92	ug/L	515.92 ppb	17:38:47
3	Zn 213.857†	38492.7	41504.4	499.54	ug/L	499.54 ppb	17:38:47
3	SiO2†	125479.6	136488.9	11454	ug/L	11454 ppb	17:39:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	728123.2	91.939	%	0.5193				0.56%
Sc Radial	3112.7	97.1	%	0.72				0.74%
Y 371.029	610621.8	90.110	%	0.5811				0.64%
Y RADIAL	2558.9	97.39	%	0.582				0.60%
Ag 328.068†	42181.0	276.16	ug/L	0.292	276.16	ppb	0.292	0.11%
QC value within limits for Ag 328.068 Recovery = 110.46%								
Al 396.153Radial†	239762.7	518770	ug/L	6102.6	518770	ppb	6102.6	1.18%
QC value within limits for Al 396.153Radial Recovery = 103.75%								
As 188.979†	824.4	529.38	ug/L	4.867	529.38	ppb	4.867	0.92%
QC value within limits for As 188.979 Recovery = 105.88%								
B 249.677†	18930.3	519.50	ug/L	0.362	519.50	ppb	0.362	0.07%
QC value within limits for B 249.677 Recovery = 103.90%								
Ba 233.527†	49869.5	500.56	ug/L	0.368	500.56	ppb	0.368	0.07%
QC value within limits for Ba 233.527 Recovery = 100.11%								
Be 313.107†	542473.8	246.45	ug/L	0.389	246.45	ppb	0.389	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	114482.4	478330	ug/L	5433.7	478330	ppb	5433.7	1.14%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.67%
Cd 226.502†            31510.4      461.92 ug/L         1.953      461.92 ppb          1.953   0.42%
   QC value within limits for Cd 226.502  Recovery = 92.38%
Co 228.616†            16399.1      449.88 ug/L         2.006      449.88 ppb          2.006   0.45%
   QC value within limits for Co 228.616  Recovery = 89.98%
Cr 267.716†            34811.6      486.03 ug/L         0.417      486.03 ppb          0.417   0.09%
   QC value within limits for Cr 267.716  Recovery = 97.21%
Cu 324.752†           163338.7      561.17 ug/L         0.249      561.17 ppb          0.249   0.04%
   QC value within limits for Cu 324.752  Recovery = 112.23%
Fe 238.204 Radial†      6439.9      185370 ug/L         223.2      185370 ppb          223.2   0.12%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.68%
K 766.490 Radial†      11819.8      5611.7 ug/L         76.78      5611.7 ppb          76.78   1.37%
   QC value within limits for K 766.490 Radial  Recovery = 112.23%
Mg 279.077 IEC†         4792.7      495770 ug/L         476.2      495770 ppb          476.2   0.10%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.15%
Mn 257.610†           348214.1      479.63 ug/L         0.455      479.63 ppb          0.455   0.09%
   QC value within limits for Mn 257.610  Recovery = 95.93%
Mo 202.031†             5146.9      490.13 ug/L         0.330      490.13 ppb          0.330   0.07%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     17082.7      5404.0 ug/L         59.22      5404.0 ppb          59.22   1.10%
   QC value within limits for Na 589.592 Radial  Recovery = 108.08%
Ni 231.604†            13548.7      452.62 ug/L         1.432      452.62 ppb          1.432   0.32%
   QC value within limits for Ni 231.604  Recovery = 90.52%
P 214.914†              3166.9      2416.5 ug/L         16.14      2416.5 ppb          16.14   0.67%
   QC value within limits for P 214.914  Recovery = 96.66%
Pb 220.353†             2210.7      458.58 ug/L         2.066      458.58 ppb          2.066   0.45%
   QC value within limits for Pb 220.353  Recovery = 91.72%
S 181.975 Axial†        1415.4      2606.3 ug/L         14.50      2606.3 ppb          14.50   0.56%
   QC value within limits for S 181.975 Axial  Recovery = 104.25%
Sb 206.836†             1268.8      545.06 ug/L         5.947      545.06 ppb          5.947   1.09%
   QC value within limits for Sb 206.836  Recovery = 109.01%
Se 196.026†             2198.1      2537.6 ug/L          7.15      2537.6 ppb           7.15   0.28%
   QC value within limits for Se 196.026  Recovery = 101.50%
Si 251.611†           136143.4      5317.0 ug/L          5.35      5317.0 ppb           5.35   0.10%
   QC value within limits for Si 251.611  Recovery = 106.34%
Sn 189.927†             1701.4      479.53 ug/L         2.478      479.53 ppb          2.478   0.52%
   QC value within limits for Sn 189.927  Recovery = 95.91%
Sr 421.552†            53108.0      507.87 ug/L         6.603      507.87 ppb          6.603   1.30%
   QC value within limits for Sr 421.552  Recovery = 101.57%
Ti 334.940†           269816.2      507.21 ug/L         0.255      507.21 ppb          0.255   0.05%
   QC value within limits for Ti 334.940  Recovery = 101.44%
Tl 190.801†             1074.5      445.33 ug/L         1.066      445.33 ppb          1.066   0.24%
   QC value within limits for Tl 190.801  Recovery = 89.07%
U 409.014†             17960.9      523.35 ug/L         1.400      523.35 ppb          1.400   0.27%
   QC value within limits for U 409.014  Recovery = 104.67%
V 292.402†             64311.6      516.48 ug/L         0.490      516.48 ppb          0.490   0.09%
   QC value within limits for V 292.402  Recovery = 103.30%
Zn 213.857†            41472.6      499.13 ug/L         0.492      499.13 ppb          0.492   0.10%
   QC value within limits for Zn 213.857  Recovery = 99.83%
SiO2†                 134605.2       11296 ug/L         153.6       11296 ppb          153.6   1.36%
   QC value within limits for SiO2  Recovery = 105.62%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 3/10/2010 17:41:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3041.1	3041.1	94.9	%			17:43:45
1	Y RADIAL	2499.1	2499.1	95.11	%			17:43:45
1	Al 396.153Radial†	224027.1	236133.1	510940	ug/L	510940	ppb	17:43:25
1	Ca 317.933Radial†	110852.3	116799.4	488010	ug/L	488010	ppb	17:43:25
1	Fe 238.204 Radial†	14344.5	15106.2	434790	ug/L	434790	ppb	17:43:45
1	K 766.490 Radial†	2502.4	610.3	-57.796	ug/L	-57.796	ppb	17:43:25
1	Mg 279.077 IEC†	4641.8	4889.7	505540	ug/L	505540	ppb	17:43:45
1	Na 589.592 Radial†	1481728.5	1562120.8	494170	ug/L	494170	ppb	17:43:25
1	Sr 421.552†	1207.8	1238.1	8.2791	ug/L	8.2791	ppb	17:43:45
1	Sc 361.383	708216.3	708216.3	89.425	%			17:44:44
1	Y 371.029	595223.0	595223.0	87.838	%			17:44:44
1	Ag 328.068†	-20165.8	-22681.8	-4.6998	ug/L	-4.6998	ppb	17:44:44
1	As 188.979†	-147.5	-146.1	16.199	ug/L	16.199	ppb	17:45:04
1	B 249.677†	1659.5	2233.0	-5.6438	ug/L	-5.6438	ppb	17:44:44
1	Ba 233.527†	-1269.1	-1418.9	-0.7581	ug/L	-0.7581	ppb	17:45:04
1	Be 313.107†	-10014.5	-7656.8	-3.5144	ug/L	-3.5144	ppb	17:44:44
1	Cd 226.502†	2875.1	3371.3	9.4727	ug/L	9.4727	ppb	17:45:04
1	Co 228.616†	193.6	262.3	0.8986	ug/L	0.8986	ppb	17:45:04
1	Cr 267.716†	-356.0	-451.0	5.6794	ug/L	5.6794	ppb	17:45:04
1	Cu 324.752†	1718.6	-4290.1	0.1334	ug/L	0.1334	ppb	17:44:44
1	Mn 257.610†	-18812.7	-21436.3	-7.3944	ug/L	-7.3944	ppb	17:44:44
1	Mo 202.031†	-421.6	-484.5	-4.6934	ug/L	-4.6934	ppb	17:45:04
1	Ni 231.604†	240.9	208.8	6.9739	ug/L	6.9739	ppb	17:45:04
1	P 214.914†	464.6	355.2	64.359	ug/L	64.359	ppb	17:45:04
1	Pb 220.353†	-408.3	-412.9	-9.8189	ug/L	-9.8189	ppb	17:45:04
1	S 181.975 Axial†	62.5	39.1	-21.020	ug/L	-21.020	ppb	17:45:04
1	Sb 206.836†	42.9	25.3	-9.9411	ug/L	-9.9411	ppb	17:45:04
1	Se 196.026†	-1749.3	-1935.5	-310.80	ug/L	-310.80	ppb	17:45:04
1	Si 251.611†	-378.6	-899.5	-34.622	ug/L	-34.622	ppb	17:45:04
1	Sn 189.927†	-336.4	-383.9	-29.694	ug/L	-29.694	ppb	17:45:04
1	Ti 334.940†	-12120.4	-12625.2	-5.1736	ug/L	-5.1736	ppb	17:44:44
1	Tl 190.801†	-106.8	-93.4	-38.854	ug/L	-38.854	ppb	17:45:04
1	U 409.014†	444449.2	498978.8	15107	ug/L	15107	ppb	17:44:44
1	V 292.402†	2020.2	3451.4	3.1328	ug/L	3.1328	ppb	17:45:04
1	Zn 213.857†	4727.1	4774.7	-4.0148	ug/L	-4.0148	ppb	17:45:04
1	SiO2†	-403.5	-926.3	-76.616	ug/L	-76.616	ppb	17:46:01
2	Sc Radial	3053.4	3053.4	95.3	%			17:44:11
2	Y RADIAL	2517.1	2517.1	95.80	%			17:44:11
2	Al 396.153Radial†	222609.1	233690.5	505650	ug/L	505650	ppb	17:43:51
2	Ca 317.933Radial†	110426.4	115880.1	484170	ug/L	484170	ppb	17:43:51
2	Fe 238.204 Radial†	14367.5	15069.2	433720	ug/L	433720	ppb	17:44:11
2	K 766.490 Radial†	2544.7	644.0	-37.702	ug/L	-37.702	ppb	17:43:51
2	Mg 279.077 IEC†	4647.5	4875.8	504110	ug/L	504110	ppb	17:44:11
2	Na 589.592 Radial†	1469738.3	1543224.1	488190	ug/L	488190	ppb	17:43:51
2	Sr 421.552†	1219.9	1245.7	8.3806	ug/L	8.3806	ppb	17:44:11
2	Sc 361.383	711092.3	711092.3	89.788	%			17:45:09
2	Y 371.029	596632.2	596632.2	88.046	%			17:45:09
2	Ag 328.068†	-20205.8	-22635.1	-4.7286	ug/L	-4.7286	ppb	17:45:09
2	As 188.979†	-143.2	-140.7	19.115	ug/L	19.115	ppb	17:45:30
2	B 249.677†	1667.4	2234.3	-5.4383	ug/L	-5.4383	ppb	17:45:09
2	Ba 233.527†	-1289.6	-1436.0	-0.9587	ug/L	-0.9587	ppb	17:45:30
2	Be 313.107†	-9932.6	-7520.3	-3.4529	ug/L	-3.4529	ppb	17:45:09
2	Cd 226.502†	2863.5	3345.5	9.1881	ug/L	9.1881	ppb	17:45:30
2	Co 228.616†	225.4	296.9	1.8693	ug/L	1.8693	ppb	17:45:30
2	Cr 267.716†	-345.0	-437.1	5.8260	ug/L	5.8260	ppb	17:45:30
2	Cu 324.752†	1625.7	-4401.4	-0.2992	ug/L	-0.2992	ppb	17:45:09
2	Mn 257.610†	-18851.1	-21393.9	-7.3822	ug/L	-7.3822	ppb	17:45:09
2	Mo 202.031†	-415.5	-475.8	-4.0229	ug/L	-4.0229	ppb	17:45:30
2	Ni 231.604†	247.1	214.6	7.1670	ug/L	7.1670	ppb	17:45:30

2	P 214.914†	464.6	353.1	62.326	ug/L	62.326 ppb	17:45:30
2	Pb 220.353†	-417.4	-421.2	-12.247	ug/L	-12.247 ppb	17:45:30
2	S 181.975 Axial†	51.8	26.9	-43.459	ug/L	-43.459 ppb	17:45:30
2	Sb 206.836†	43.8	26.1	-9.3659	ug/L	-9.3659 ppb	17:45:30
2	Se 196.026†	-1747.8	-1925.9	-306.96	ug/L	-306.96 ppb	17:45:30
2	Si 251.611†	-428.2	-953.0	-36.726	ug/L	-36.726 ppb	17:45:30
2	Sn 189.927†	-324.2	-368.9	-26.727	ug/L	-26.727 ppb	17:45:30
2	Ti 334.940†	-12214.0	-12674.7	-5.6606	ug/L	-5.6606 ppb	17:45:09
2	Tl 190.801†	-87.3	-71.3	-29.733	ug/L	-29.733 ppb	17:45:30
2	U 409.014†	446273.0	498999.9	15107	ug/L	15107 ppb	17:45:09
2	V 292.402†	2068.3	3495.7	3.6364	ug/L	3.6364 ppb	17:45:30
2	Zn 213.857†	4783.5	4816.1	-3.3264	ug/L	-3.3264 ppb	17:45:30
2	SiO2†	-441.5	-966.7	-80.035	ug/L	-80.035 ppb	17:46:06
3	Sc Radial	3066.8	3066.8	95.7	%		17:44:37
3	Y RADIAL	2531.8	2531.8	96.36	%		17:44:37
3	Al 396.153Radial†	226013.2	236225.2	511140	ug/L	511140 ppb	17:44:17
3	Ca 317.933Radial†	111898.3	116911.0	488480	ug/L	488480 ppb	17:44:17
3	Fe 238.204 Radial†	14430.4	15068.9	433710	ug/L	433710 ppb	17:44:37
3	K 766.490 Radial†	2419.6	501.6	-109.76	ug/L	-109.76 ppb	17:44:17
3	Mg 279.077 IEC†	4676.5	4884.8	505040	ug/L	505040 ppb	17:44:37
3	Na 589.592 Radial†	1484470.6	1551869.2	490930	ug/L	490930 ppb	17:44:17
3	Sr 421.552†	1237.6	1258.5	8.4720	ug/L	8.4720 ppb	17:44:37
3	Sc 361.383	711939.5	711939.5	89.895	%		17:45:35
3	Y 371.029	597879.3	597879.3	88.230	%		17:45:35
3	Ag 328.068†	-20327.4	-22743.6	-5.3750	ug/L	-5.3750 ppb	17:45:35
3	As 188.979†	-142.4	-139.6	19.751	ug/L	19.751 ppb	17:45:55
3	B 249.677†	1583.7	2138.9	-8.2089	ug/L	-8.2089 ppb	17:45:35
3	Ba 233.527†	-1263.0	-1404.6	-0.6509	ug/L	-0.6509 ppb	17:45:55
3	Be 313.107†	-9913.4	-7485.8	-3.4380	ug/L	-3.4380 ppb	17:45:35
3	Cd 226.502†	2861.1	3338.9	9.0895	ug/L	9.0895 ppb	17:45:55
3	Co 228.616†	201.4	269.9	1.1237	ug/L	1.1237 ppb	17:45:55
3	Cr 267.716†	-343.0	-434.4	5.8593	ug/L	5.8593 ppb	17:45:55
3	Cu 324.752†	1575.6	-4459.2	-0.4986	ug/L	-0.4986 ppb	17:45:35
3	Mn 257.610†	-18646.4	-21141.2	-7.0716	ug/L	-7.0716 ppb	17:45:35
3	Mo 202.031†	-424.8	-485.6	-4.8673	ug/L	-4.8673 ppb	17:45:55
3	Ni 231.604†	197.5	159.0	5.3119	ug/L	5.3119 ppb	17:45:55
3	P 214.914†	455.6	342.5	55.176	ug/L	55.176 ppb	17:45:55
3	Pb 220.353†	-438.3	-443.9	-14.709	ug/L	-14.709 ppb	17:45:55
3	S 181.975 Axial†	66.7	43.4	-12.958	ug/L	-12.958 ppb	17:45:55
3	Sb 206.836†	46.2	28.6	-8.4944	ug/L	-8.4944 ppb	17:45:55
3	Se 196.026†	-1733.8	-1908.0	-290.19	ug/L	-290.19 ppb	17:45:55
3	Si 251.611†	-439.9	-965.5	-37.202	ug/L	-37.202 ppb	17:45:55
3	Sn 189.927†	-337.1	-382.8	-29.291	ug/L	-29.291 ppb	17:45:55
3	Ti 334.940†	-12392.4	-12857.0	-5.4887	ug/L	-5.4887 ppb	17:45:35
3	Tl 190.801†	-96.0	-80.8	-33.658	ug/L	-33.658 ppb	17:45:55
3	U 409.014†	447003.3	499220.9	15114	ug/L	15114 ppb	17:45:35
3	V 292.402†	1951.7	3363.3	2.5709	ug/L	2.5709 ppb	17:45:55
3	Zn 213.857†	4741.1	4762.7	-3.9963	ug/L	-3.9963 ppb	17:45:55
3	SiO2†	-438.3	-962.6	-79.667	ug/L	-79.667 ppb	17:46:11

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	710416.0	89.703	%	0.2464				0.27%
Sc Radial	3053.8	95.3	%	0.40				0.42%
Y 371.029	596578.1	88.038	%	0.1961				0.22%
Y RADIAL	2516.0	95.76	%	0.622				0.65%
Ag 328.068†	-22686.8	-4.9345	ug/L	0.38180	-4.9345	ppb	0.38180	7.74%
Al 396.153Radial†	235349.6	509240	ug/L	3110.6	509240	ppb	3110.6	0.61%
QC value within limits for Al 396.153Radial Recovery = 101.85%								
As 188.979†	-142.1	18.355	ug/L	1.8936	18.355	ppb	1.8936	10.32%
B 249.677†	2202.1	-6.4304	ug/L	1.54371	-6.4304	ppb	1.54371	24.01%
Ba 233.527†	-1419.8	-0.7892	ug/L	0.15623	-0.7892	ppb	0.15623	19.80%
Be 313.107†	-7554.3	-3.4685	ug/L	0.04050	-3.4685	ppb	0.04050	1.17%
Ca 317.933Radial†	116530.2	486880	ug/L	2363.7	486880	ppb	2363.7	0.49%
QC value within limits for Ca 317.933Radial Recovery = 97.38%								
Cd 226.502†	3351.9	9.2501	ug/L	0.19899	9.2501	ppb	0.19899	2.15%
Co 228.616†	276.4	1.2972	ug/L	0.50809	1.2972	ppb	0.50809	39.17%
Cr 267.716†	-440.8	5.7883	ug/L	0.09573	5.7883	ppb	0.09573	1.65%
Cu 324.752†	-4383.6	-0.2214	ug/L	0.32311	-0.2214	ppb	0.32311	145.91%

Fe 238.204 Radial†	15081.5	434070 ug/L	617.2	434070 ppb	617.2	0.14%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.81%						
K 766.490 Radial†	585.3	-68.421 ug/L	37.1873	-68.421 ppb	37.1873	54.35%
Mg 279.077 IEC†	4883.4	504900 ug/L	728.2	504900 ppb	728.2	0.14%
QC value within limits for Mg 279.077 IEC Recovery = 100.98%						
Mn 257.610†	-21323.8	-7.2827 ug/L	0.18293	-7.2827 ppb	0.18293	2.51%
Mo 202.031†	-482.0	-4.5278 ug/L	0.44586	-4.5278 ppb	0.44586	9.85%
Na 589.592 Radial†	1552404.7	491100 ug/L	2992.6	491100 ppb	2992.6	0.61%
QC value within limits for Na 589.592 Radial Recovery = 98.22%						
Ni 231.604†	194.1	6.4843 ug/L	1.01989	6.4843 ppb	1.01989	15.73%
P 214.914†	350.3	60.620 ug/L	4.8232	60.620 ppb	4.8232	7.96%
Pb 220.353†	-426.0	-12.258 ug/L	2.4449	-12.258 ppb	2.4449	19.95%
S 181.975 Axial†	36.5	-25.812 ug/L	15.8050	-25.812 ppb	15.8050	61.23%
Sb 206.836†	26.6	-9.2671 ug/L	0.72835	-9.2671 ppb	0.72835	7.86%
Se 196.026†	-1923.1	-302.65 ug/L	10.961	-302.65 ppb	10.961	3.62%
Si 251.611†	-939.3	-36.183 ug/L	1.3728	-36.183 ppb	1.3728	3.79%
Sn 189.927†	-378.5	-28.571 ug/L	1.6091	-28.571 ppb	1.6091	5.63%
Sr 421.552†	1247.4	8.3772 ug/L	0.09653	8.3772 ppb	0.09653	1.15%
Ti 334.940†	-12719.0	-5.4410 ug/L	0.24699	-5.4410 ppb	0.24699	4.54%
Tl 190.801†	-81.8	-34.082 ug/L	4.5751	-34.082 ppb	4.5751	13.42%
U 409.014†	499066.5	15109 ug/L	4.1	15109 ppb	4.1	0.03%
QC value within limits for U 409.014 Recovery = 100.73%						
V 292.402†	3436.8	3.1134 ug/L	0.53298	3.1134 ppb	0.53298	17.12%
Zn 213.857†	4784.5	-3.7792 ug/L	0.39222	-3.7792 ppb	0.39222	10.38%
SiO2†	-951.9	-78.773 ug/L	1.8767	-78.773 ppb	1.8767	2.38%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 3/10/2010 17:48:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3310.9	3310.9	103	%			17:50:39
1	Y RADIAL	2699.3	2699.3	102.7	%			17:50:39
1	Al 396.153Radial†	156.1	213.1	-15.569	ug/L	-15.569	ppb	17:50:39
1	Ca 317.933Radial†	22.4	9.2	38.554	ug/L	38.554	ppb	17:50:39
1	Fe 238.204 Radial†	-2.5	-11.9	-55.942	ug/L	-55.942	ppb	17:50:39
1	K 766.490 Radial†	663136.4	639804.6	312560	ug/L	312560	ppb	17:50:14
1	Mg 279.077 IEC†	-0.1	-1.8	-84.716	ug/L	-84.716	ppb	17:50:39
1	Na 589.592 Radial†	149.4	877.2	277.51	ug/L	277.51	ppb	17:50:19
1	Sr 421.552†	1022669.2	989778.4	9531.7	ug/L	9531.7	ppb	17:50:14
1	Sc 361.383	822561.3	822561.3	103.86	%			17:51:56
1	Y 371.029	688529.6	688529.6	101.61	%			17:51:56
1	Ag 328.068†	-7003.2	-6874.0	4.6347	ug/L	4.6347	ppb	17:52:01
1	As 188.979†	17589.7	16954.3	9993.2	ug/L	9993.2	ppb	17:52:01
1	B 249.677†	177345.1	171125.7	4952.5	ug/L	4952.5	ppb	17:52:01
1	Ba 233.527†	1195987.2	1151501.3	11423	ug/L	11423	ppb	17:51:56
1	Be 313.107†	6659337.7	6415177.3	2924.0	ug/L	2924.0	ppb	17:51:50
1	Cd 226.502†	672614.7	647752.2	9887.3	ug/L	9887.3	ppb	17:51:56
1	Co 228.616†	361925.0	348508.6	9612.1	ug/L	9612.1	ppb	17:52:01
1	Cr 267.716†	1856190.1	1787094.0	24548	ug/L	24548	ppb	17:51:56
1	Cu 324.752†	6263520.2	6024328.8	20346	ug/L	20346	ppb	17:51:50
1	Mn 257.610†	7138500.6	6872576.4	9505.2	ug/L	9505.2	ppb	17:51:50
1	Mo 202.031†	111780.8	107610.0	9827.7	ug/L	9827.7	ppb	17:52:01
1	Ni 231.604†	306253.7	294801.6	9848.7	ug/L	9848.7	ppb	17:52:01
1	P 214.914†	24141.2	23078.9	14581	ug/L	14581	ppb	17:52:01
1	Pb 220.353†	151215.4	145634.4	23902	ug/L	23902	ppb	17:52:01
1	S 181.975 Axial†	27940.1	26870.0	51325	ug/L	51325	ppb	17:52:01
1	Sb 206.836†	25183.3	24223.8	10768	ug/L	10768	ppb	17:52:01
1	Se 196.026†	12305.9	11868.9	10174	ug/L	10174	ppb	17:52:01
1	Si 251.611†	1273608.9	1225759.4	47802	ug/L	47802	ppb	17:51:56
1	Sn 189.927†	44509.3	42845.9	10204	ug/L	10204	ppb	17:52:01
1	Ti 334.940†	5743744.8	5531027.5	9912.2	ug/L	9912.2	ppb	17:51:50
1	Tl 190.801†	24460.5	23576.6	9764.9	ug/L	9764.9	ppb	17:52:01
1	U 409.014†	-883.8	1121.2	-20.808	ug/L	-20.808	ppb	17:52:01
1	V 292.402†	1290832.5	1244010.7	10312	ug/L	10312	ppb	17:51:56
1	Zn 213.857†	1160803.2	1117114.3	14200	ug/L	14200	ppb	17:51:56
1	SiO2†	1263382.0	1215913.9	101890	ug/L	101890	ppb	17:52:46
2	Sc Radial	3346.6	3346.6	104	%			17:51:09
2	Y RADIAL	2710.1	2710.1	103.1	%			17:51:09
2	Al 396.153Radial†	165.9	220.8	6.7442	ug/L	6.7442	ppb	17:51:09
2	Ca 317.933Radial†	18.4	5.1	21.475	ug/L	21.475	ppb	17:51:09
2	Fe 238.204 Radial†	-1.4	-10.8	-25.603	ug/L	-25.603	ppb	17:51:09
2	K 766.490 Radial†	671314.2	640798.6	313050	ug/L	313050	ppb	17:50:44
2	Mg 279.077 IEC†	-0.6	-2.3	-138.31	ug/L	-138.31	ppb	17:51:09
2	Na 589.592 Radial†	105.4	833.6	263.69	ug/L	263.69	ppb	17:50:49
2	Sr 421.552†	1037954.7	993871.8	9571.1	ug/L	9571.1	ppb	17:50:44
2	Sc 361.383	829293.5	829293.5	104.71	%			17:52:15
2	Y 371.029	694151.1	694151.1	102.44	%			17:52:15
2	Ag 328.068†	-7055.0	-6868.8	4.5074	ug/L	4.5074	ppb	17:52:20
2	As 188.979†	17560.5	16788.9	9896.0	ug/L	9896.0	ppb	17:52:20
2	B 249.677†	176767.2	169187.8	4896.4	ug/L	4896.4	ppb	17:52:20
2	Ba 233.527†	1196895.8	1143021.1	11339	ug/L	11339	ppb	17:52:15
2	Be 313.107†	6643461.6	6347966.2	2893.4	ug/L	2893.4	ppb	17:52:09
2	Cd 226.502†	673207.0	643060.6	9815.7	ug/L	9815.7	ppb	17:52:15
2	Co 228.616†	361763.7	345525.8	9529.7	ug/L	9529.7	ppb	17:52:20
2	Cr 267.716†	1860907.2	1777090.7	24410	ug/L	24410	ppb	17:52:15
2	Cu 324.752†	6264173.8	5975997.1	20183	ug/L	20183	ppb	17:52:09
2	Mn 257.610†	7136298.7	6814678.8	9425.2	ug/L	9425.2	ppb	17:52:09
2	Mo 202.031†	111392.5	106365.4	9714.0	ug/L	9714.0	ppb	17:52:20
2	Ni 231.604†	305911.8	292081.4	9757.8	ug/L	9757.8	ppb	17:52:20

2	P 214.914†	24129.9	22879.4	14453	ug/L	14453 ppb	17:52:20
2	Pb 220.353†	151092.9	144335.5	23689	ug/L	23689 ppb	17:52:20
2	S 181.975 Axial†	27816.7	26533.8	50683	ug/L	50683 ppb	17:52:20
2	Sb 206.836†	25076.0	23924.5	10636	ug/L	10636 ppb	17:52:20
2	Se 196.026†	12249.0	11718.3	10045	ug/L	10045 ppb	17:52:20
2	Si 251.611†	1280745.2	1222619.8	47681	ug/L	47681 ppb	17:52:15
2	Sn 189.927†	44493.9	42483.3	10117	ug/L	10117 ppb	17:52:20
2	Ti 334.940†	5747870.5	5490074.2	9838.8	ug/L	9838.8 ppb	17:52:09
2	Tl 190.801†	24503.4	23426.4	9702.5	ug/L	9702.5 ppb	17:52:20
2	U 409.014†	-614.6	1385.1	-12.486	ug/L	-12.486 ppb	17:52:20
2	V 292.402†	1296375.1	1239214.6	10271	ug/L	10271 ppb	17:52:15
2	Zn 213.857†	1162813.1	1109960.8	14109	ug/L	14109 ppb	17:52:15
2	SiO2†	1280815.6	1222688.2	102460	ug/L	102460 ppb	17:52:52
3	Sc Radial	3342.7	3342.7	104	%		17:51:40
3	Y RADIAL	2709.8	2709.8	103.1	%		17:51:40
3	Al 396.153Radial†	158.2	213.7	-10.572	ug/L	-10.572 ppb	17:51:40
3	Ca 317.933Radial†	17.8	4.6	19.339	ug/L	19.339 ppb	17:51:40
3	Fe 238.204 Radial†	-0.8	-10.2	-7.9875	ug/L	-7.9875 ppb	17:51:40
3	K 766.490 Radial†	670775.3	641035.0	313160	ug/L	313160 ppb	17:51:15
3	Mg 279.077 IEC†	-0.7	-2.4	-143.24	ug/L	-143.24 ppb	17:51:40
3	Na 589.592 Radial†	-10.4	722.6	228.61	ug/L	228.61 ppb	17:51:20
3	Sr 421.552†	1035317.5	992507.9	9558.0	ug/L	9558.0 ppb	17:51:15
3	Sc 361.383	833102.2	833102.2	105.19	%		17:52:35
3	Y 371.029	697383.7	697383.7	102.91	%		17:52:35
3	Ag 328.068†	-6999.7	-6785.4	4.8083	ug/L	4.8083 ppb	17:52:40
3	As 188.979†	17712.5	16856.7	9935.3	ug/L	9935.3 ppb	17:52:40
3	B 249.677†	178852.2	170398.1	4931.6	ug/L	4931.6 ppb	17:52:40
3	Ba 233.527†	1198334.4	1139163.1	11301	ug/L	11301 ppb	17:52:35
3	Be 313.107†	6648023.9	6323298.2	2882.2	ug/L	2882.2 ppb	17:52:29
3	Cd 226.502†	672850.2	639782.4	9765.7	ug/L	9765.7 ppb	17:52:35
3	Co 228.616†	364065.8	346134.8	9546.7	ug/L	9546.7 ppb	17:52:40
3	Cr 267.716†	1859800.7	1767914.2	24284	ug/L	24284 ppb	17:52:35
3	Cu 324.752†	6290536.1	5973708.7	20175	ug/L	20175 ppb	17:52:29
3	Mn 257.610†	7135665.3	6782920.0	9381.2	ug/L	9381.2 ppb	17:52:29
3	Mo 202.031†	112338.5	106778.4	9751.8	ug/L	9751.8 ppb	17:52:40
3	Ni 231.604†	308014.4	292744.6	9780.0	ug/L	9780.0 ppb	17:52:40
3	P 214.914†	24237.9	22876.8	14452	ug/L	14452 ppb	17:52:40
3	Pb 220.353†	152104.9	144637.9	23738	ug/L	23738 ppb	17:52:40
3	S 181.975 Axial†	28125.7	26706.1	51012	ug/L	51012 ppb	17:52:40
3	Sb 206.836†	25258.7	23988.7	10664	ug/L	10664 ppb	17:52:40
3	Se 196.026†	12377.5	11787.1	10104	ug/L	10104 ppb	17:52:40
3	Si 251.611†	1282768.0	1218951.1	47537	ug/L	47537 ppb	17:52:35
3	Sn 189.927†	44681.5	42467.4	10113	ug/L	10113 ppb	17:52:40
3	Ti 334.940†	5757137.2	5473788.5	9809.6	ug/L	9809.6 ppb	17:52:29
3	Tl 190.801†	24657.0	23465.4	9718.1	ug/L	9718.1 ppb	17:52:40
3	U 409.014†	-650.3	1353.9	-13.157	ug/L	-13.157 ppb	17:52:40
3	V 292.402†	1297654.6	1234771.0	10235	ug/L	10235 ppb	17:52:35
3	Zn 213.857†	1161863.2	1103981.1	14032	ug/L	14032 ppb	17:52:35
3	SiO2†	1279027.0	1215395.9	101840	ug/L	101840 ppb	17:52:58

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	828319.0	104.59	%	0.674				0.64%
Sc Radial	3333.4	104	%	0.6				0.59%
Y 371.029	693354.8	102.32	%	0.661				0.65%
Y RADIAL	2706.4	103.0	%	0.24				0.23%
Ag 328.068†	-6842.8	4.6501	ug/L	0.15105	4.6501	ppb	0.15105	3.25%
Al 396.153Radial†	215.9	-6.4656	ug/L	11.70960	-6.4656	ppb	11.70960	181.11%
As 188.979†	16866.6	9941.5	ug/L	48.89	9941.5	ppb	48.89	0.49%
QC value within limits for As 188.979 Recovery = 99.41%								
B 249.677†	170237.2	4926.8	ug/L	28.38	4926.8	ppb	28.38	0.58%
QC value within limits for B 249.677 Recovery = 98.54%								
Ba 233.527†	1144561.8	11355	ug/L	62.6	11355	ppb	62.6	0.55%
QC value less than the lower limit for Ba 233.527 Recovery = 75.70%								
Be 313.107†	6362147.3	2899.9	ug/L	21.63	2899.9	ppb	21.63	0.75%
QC value within limits for Be 313.107 Recovery = 96.66%								
Ca 317.933Radial†	6.3	26.456	ug/L	10.5318	26.456	ppb	10.5318	39.81%
Cd 226.502†	643531.7	9822.9	ug/L	61.13	9822.9	ppb	61.13	0.62%
QC value within limits for Cd 226.502 Recovery = 98.23%								

Co 228.616†	346723.1	9562.9 ug/L	43.50	9562.9 ppb	43.50	0.45%
QC value within limits for Co 228.616 Recovery = 95.63%						
Cr 267.716†	1777366.3	24414 ug/L	131.7	24414 ppb	131.7	0.54%
QC value within limits for Cr 267.716 Recovery = 97.66%						
Cu 324.752†	5991344.9	20235 ug/L	96.6	20235 ppb	96.6	0.48%
QC value within limits for Cu 324.752 Recovery = 101.18%						
Fe 238.204 Radial†	-11.0	-29.844 ug/L	24.2570	-29.844 ppb	24.2570	81.28%
K 766.490 Radial†	640546.1	312920 ug/L	319.1	312920 ppb	319.1	0.10%
QC value within limits for K 766.490 Radial Recovery = 104.31%						
Mg 279.077 IEC†	-2.2	-122.09 ug/L	32.458	-122.09 ppb	32.458	26.59%
Mn 257.610†	6823391.7	9437.2 ug/L	62.87	9437.2 ppb	62.87	0.67%
QC value within limits for Mn 257.610 Recovery = 94.37%						
Mo 202.031†	106917.9	9764.5 ug/L	57.89	9764.5 ppb	57.89	0.59%
QC value within limits for Mo 202.031 Recovery = 97.64%						
Na 589.592 Radial†	811.1	256.60 ug/L	25.213	256.60 ppb	25.213	9.83%
Ni 231.604†	293209.2	9795.5 ug/L	47.39	9795.5 ppb	47.39	0.48%
QC value within limits for Ni 231.604 Recovery = 97.95%						
P 214.914†	22945.0	14495 ug/L	74.4	14495 ppb	74.4	0.51%
QC value within limits for P 214.914 Recovery = 96.63%						
Pb 220.353†	144869.3	23776 ug/L	111.6	23776 ppb	111.6	0.47%
QC value within limits for Pb 220.353 Recovery = 95.10%						
S 181.975 Axial†	26703.3	51006 ug/L	321.1	51006 ppb	321.1	0.63%
QC value within limits for S 181.975 Axial Recovery = 102.01%						
Sb 206.836†	24045.7	10689 ug/L	69.6	10689 ppb	69.6	0.65%
QC value within limits for Sb 206.836 Recovery = 106.89%						
Se 196.026†	11791.4	10107 ug/L	64.5	10107 ppb	64.5	0.64%
QC value within limits for Se 196.026 Recovery = 101.07%						
Si 251.611†	1222443.4	47673 ug/L	132.8	47673 ppb	132.8	0.28%
QC value within limits for Si 251.611 Recovery = 95.35%						
Sn 189.927†	42598.9	10145 ug/L	51.0	10145 ppb	51.0	0.50%
QC value within limits for Sn 189.927 Recovery = 101.45%						
Sr 421.552†	992052.7	9553.6 ug/L	20.07	9553.6 ppb	20.07	0.21%
QC value within limits for Sr 421.552 Recovery = 95.54%						
Ti 334.940†	5498296.7	9853.5 ug/L	52.85	9853.5 ppb	52.85	0.54%
QC value within limits for Ti 334.940 Recovery = 98.54%						
Tl 190.801†	23489.5	9728.5 ug/L	32.45	9728.5 ppb	32.45	0.33%
QC value within limits for Tl 190.801 Recovery = 97.29%						
U 409.014†	1286.7	-15.484 ug/L	4.6231	-15.484 ppb	4.6231	29.86%
V 292.402†	1239332.1	10272 ug/L	38.3	10272 ppb	38.3	0.37%
QC value within limits for V 292.402 Recovery = 102.72%						
Zn 213.857†	1110352.1	14114 ug/L	83.8	14114 ppb	83.8	0.59%
QC value within limits for Zn 213.857 Recovery = 94.09%						
SiO2†	1217999.3	102060 ug/L	343.0	102060 ppb	343.0	0.34%
QC value within limits for SiO2 Recovery = 95.39%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/10/2010 17:55:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3327.0	3327.0	104	%			17:57:21
1	Y RADIAL	2697.8	2697.8	102.7	%			17:57:21
1	Al 396.153Radial†	2292.4	2270.1	4887.5	ug/L	4887.5	ppb	17:57:01
1	Ca 317.933Radial†	1294.2	1234.1	5156.2	ug/L	5156.2	ppb	17:57:21
1	Fe 238.204 Radial†	189.8	173.4	5005.0	ug/L	5005.0	ppb	17:57:21
1	K 766.490 Radial†	14217.9	11668.1	5694.3	ug/L	5694.3	ppb	17:57:01
1	Mg 279.077 IEC†	58.7	54.8	5670.3	ug/L	5670.3	ppb	17:57:21
1	Na 589.592 Radial†	30156.7	29779.8	9420.7	ug/L	9420.7	ppb	17:57:01
1	Sr 421.552†	52544.7	50576.9	487.02	ug/L	487.02	ppb	17:57:01
1	Sc 361.383	842360.9	842360.9	106.36	%			17:58:18
1	Y 371.029	712833.7	712833.7	105.19	%			17:58:18
1	Ag 328.068†	101430.1	95230.6	508.02	ug/L	508.02	ppb	17:58:24
1	As 188.979†	940.8	903.3	533.37	ug/L	533.37	ppb	17:58:44
1	B 249.677†	19429.6	18644.4	540.29	ug/L	540.29	ppb	17:58:24
1	Ba 233.527†	54364.5	51112.3	507.33	ug/L	507.33	ppb	17:58:24
1	Be 313.107†	1177228.5	1110340.6	503.31	ug/L	503.31	ppb	17:58:18
1	Cd 226.502†	35304.6	33348.7	508.62	ug/L	508.62	ppb	17:58:24
1	Co 228.616†	19899.3	18754.7	517.53	ug/L	517.53	ppb	17:58:24
1	Cr 267.716†	39336.7	36930.5	507.70	ug/L	507.70	ppb	17:58:24
1	Cu 324.752†	164770.8	148701.1	502.20	ug/L	502.20	ppb	17:58:24
1	Mn 257.610†	381685.5	358451.6	496.03	ug/L	496.03	ppb	17:58:24
1	Mo 202.031†	5892.1	5526.6	505.18	ug/L	505.18	ppb	17:58:44
1	Ni 231.604†	16510.5	15462.1	516.55	ug/L	516.55	ppb	17:58:24
1	P 214.914†	3506.5	3132.4	2416.7	ug/L	2416.7	ppb	17:58:44
1	Pb 220.353†	3283.3	3130.5	514.93	ug/L	514.93	ppb	17:58:44
1	S 181.975 Axial†	595.4	529.0	1009.4	ug/L	1009.4	ppb	17:58:44
1	Sb 206.836†	1296.1	1195.8	531.79	ug/L	531.79	ppb	17:58:44
1	Se 196.026†	614.1	598.1	527.88	ug/L	527.88	ppb	17:58:44
1	Si 251.611†	69155.5	64542.0	2517.2	ug/L	2517.2	ppb	17:58:24
1	Sn 189.927†	2264.6	2121.3	505.82	ug/L	505.82	ppb	17:58:44
1	Ti 334.940†	292894.9	276300.3	495.42	ug/L	495.42	ppb	17:58:24
1	Tl 190.801†	1287.3	1236.3	511.83	ug/L	511.83	ppb	17:58:44
1	U 409.014†	15916.6	16936.4	512.73	ug/L	512.73	ppb	17:58:24
1	V 292.402†	64171.7	61524.8	510.86	ug/L	510.86	ppb	17:58:24
1	Zn 213.857†	42943.0	39862.4	505.19	ug/L	505.19	ppb	17:58:24
1	SiO2†	68947.2	64347.3	5392.3	ug/L	5392.3	ppb	17:59:51
2	Sc Radial	3347.3	3347.3	104	%			17:57:46
2	Y RADIAL	2718.4	2718.4	103.5	%			17:57:46
2	Al 396.153Radial†	2261.6	2227.1	4794.6	ug/L	4794.6	ppb	17:57:26
2	Ca 317.933Radial†	1297.9	1230.1	5139.6	ug/L	5139.6	ppb	17:57:46
2	Fe 238.204 Radial†	191.9	174.3	5030.7	ug/L	5030.7	ppb	17:57:46
2	K 766.490 Radial†	13958.3	11336.3	5532.2	ug/L	5532.2	ppb	17:57:26
2	Mg 279.077 IEC†	51.0	47.1	4871.3	ug/L	4871.3	ppb	17:57:46
2	Na 589.592 Radial†	29958.5	29413.3	9304.8	ug/L	9304.8	ppb	17:57:26
2	Sr 421.552†	52096.0	49839.3	479.92	ug/L	479.92	ppb	17:57:26
2	Sc 361.383	843961.5	843961.5	106.57	%			17:58:49
2	Y 371.029	712814.2	712814.2	105.19	%			17:58:49
2	Ag 328.068†	100655.5	94322.8	503.21	ug/L	503.21	ppb	17:58:54
2	As 188.979†	936.1	897.2	529.78	ug/L	529.78	ppb	17:59:14
2	B 249.677†	19228.1	18420.7	533.78	ug/L	533.78	ppb	17:58:54
2	Ba 233.527†	54091.4	50759.1	503.82	ug/L	503.82	ppb	17:58:54
2	Be 313.107†	1177292.7	1108301.6	502.38	ug/L	502.38	ppb	17:58:49
2	Cd 226.502†	35247.7	33232.3	506.84	ug/L	506.84	ppb	17:58:54
2	Co 228.616†	19840.7	18664.2	515.04	ug/L	515.04	ppb	17:58:54
2	Cr 267.716†	39100.3	36638.5	503.69	ug/L	503.69	ppb	17:58:54
2	Cu 324.752†	162774.5	146534.0	494.89	ug/L	494.89	ppb	17:58:54
2	Mn 257.610†	380112.2	356294.7	493.08	ug/L	493.08	ppb	17:58:54
2	Mo 202.031†	5876.5	5501.4	502.88	ug/L	502.88	ppb	17:59:14
2	Ni 231.604†	16449.7	15375.6	513.66	ug/L	513.66	ppb	17:58:54

2	P 214.914†	3486.1	3107.0	2397.6 ug/L	2397.6 ppb	17:59:14
2	Pb 220.353†	3261.0	3103.7	510.50 ug/L	510.50 ppb	17:59:14
2	S 181.975 Axial†	592.1	524.8	1001.5 ug/L	1001.5 ppb	17:59:14
2	Sb 206.836†	1293.1	1190.7	529.49 ug/L	529.49 ppb	17:59:14
2	Se 196.026†	609.9	593.0	523.62 ug/L	523.62 ppb	17:59:14
2	Si 251.611†	68559.9	63859.8	2490.5 ug/L	2490.5 ppb	17:58:54
2	Sn 189.927†	2253.0	2106.4	502.24 ug/L	502.24 ppb	17:59:14
2	Ti 334.940†	290993.9	273994.2	491.35 ug/L	491.35 ppb	17:58:54
2	Tl 190.801†	1283.6	1230.5	509.41 ug/L	509.41 ppb	17:59:14
2	U 409.014†	15768.1	16768.7	507.64 ug/L	507.64 ppb	17:58:54
2	V 292.402†	63774.8	61038.0	506.81 ug/L	506.81 ppb	17:58:54
2	Zn 213.857†	42749.9	39604.7	501.92 ug/L	501.92 ppb	17:58:54
2	SiO2†	68218.2	63540.2	5324.6 ug/L	5324.6 ppb	17:59:56
3	Sc Radial	3302.8	3302.8	103 %		17:58:11
3	Y RADIAL	2690.4	2690.4	102.4 %		17:58:11
3	Al 396.153Radial†	2264.1	2258.8	4863.3 ug/L	4863.3 ppb	17:57:51
3	Ca 317.933Radial†	1283.2	1232.5	5149.7 ug/L	5149.7 ppb	17:58:11
3	Fe 238.204 Radial†	191.0	175.8	5075.5 ug/L	5075.5 ppb	17:58:11
3	K 766.490 Radial†	13803.5	11366.5	5546.9 ug/L	5546.9 ppb	17:57:51
3	Mg 279.077 IEC†	55.5	52.2	5396.8 ug/L	5396.8 ppb	17:58:11
3	Na 589.592 Radial†	29763.7	29611.5	9367.5 ug/L	9367.5 ppb	17:57:51
3	Sr 421.552†	51991.2	50410.8	485.42 ug/L	485.42 ppb	17:57:51
3	Sc 361.383	845363.3	845363.3	106.74 %		17:59:20
3	Y 371.029	714121.5	714121.5	105.38 %		17:59:20
3	Ag 328.068†	100676.2	94185.6	502.48 ug/L	502.48 ppb	17:59:25
3	As 188.979†	918.8	879.6	519.45 ug/L	519.45 ppb	17:59:45
3	B 249.677†	19028.9	18204.2	527.48 ug/L	527.48 ppb	17:59:25
3	Ba 233.527†	53872.0	50469.5	500.95 ug/L	500.95 ppb	17:59:25
3	Be 313.107†	1176126.8	1105377.5	501.05 ug/L	501.05 ppb	17:59:20
3	Cd 226.502†	34898.6	32850.5	501.01 ug/L	501.01 ppb	17:59:25
3	Co 228.616†	19754.2	18552.3	511.94 ug/L	511.94 ppb	17:59:25
3	Cr 267.716†	38938.6	36426.2	500.77 ug/L	500.77 ppb	17:59:25
3	Cu 324.752†	162933.0	146429.2	494.53 ug/L	494.53 ppb	17:59:25
3	Mn 257.610†	378744.2	354421.6	490.47 ug/L	490.47 ppb	17:59:25
3	Mo 202.031†	5845.4	5463.1	499.38 ug/L	499.38 ppb	17:59:45
3	Ni 231.604†	16434.6	15335.9	512.33 ug/L	512.33 ppb	17:59:25
3	P 214.914†	3465.8	3082.5	2378.0 ug/L	2378.0 ppb	17:59:45
3	Pb 220.353†	3234.4	3073.8	505.59 ug/L	505.59 ppb	17:59:45
3	S 181.975 Axial†	585.0	517.2	987.09 ug/L	987.09 ppb	17:59:45
3	Sb 206.836†	1286.7	1182.7	525.93 ug/L	525.93 ppb	17:59:45
3	Se 196.026†	612.8	594.8	525.22 ug/L	525.22 ppb	17:59:45
3	Si 251.611†	68494.6	63691.9	2484.0 ug/L	2484.0 ppb	17:59:25
3	Sn 189.927†	2240.5	2091.1	498.62 ug/L	498.62 ppb	17:59:45
3	Ti 334.940†	290044.2	272651.6	488.90 ug/L	488.90 ppb	17:59:25
3	Tl 190.801†	1281.6	1226.6	507.79 ug/L	507.79 ppb	17:59:45
3	U 409.014†	15856.4	16826.9	509.41 ug/L	509.41 ppb	17:59:25
3	V 292.402†	63554.7	60732.4	504.27 ug/L	504.27 ppb	17:59:25
3	Zn 213.857†	42459.3	39265.9	497.59 ug/L	497.59 ppb	17:59:25
3	SiO2†	68315.1	63524.9	5323.4 ug/L	5323.4 ppb	18:00:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	843895.2	106.56	%	0.190				0.18%
Sc Radial	3325.7	104	%	0.7				0.67%
Y 371.029	713256.4	105.26	%	0.111				0.11%
Y RADIAL	2702.2	102.8	%	0.55				0.54%
Ag 328.068†	94579.6	504.57	ug/L	3.012	504.57	ppb	3.012	0.60%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	2252.0	4848.5	ug/L	48.17	4848.5	ppb	48.17	0.99%
QC value within limits for Al 396.153Radial Recovery = 96.97%								
As 188.979†	893.4	527.53	ug/L	7.227	527.53	ppb	7.227	1.37%
QC value within limits for As 188.979 Recovery = 105.51%								
B 249.677†	18423.1	533.85	ug/L	6.403	533.85	ppb	6.403	1.20%
QC value within limits for B 249.677 Recovery = 106.77%								
Ba 233.527†	50780.3	504.03	ug/L	3.194	504.03	ppb	3.194	0.63%
QC value within limits for Ba 233.527 Recovery = 100.81%								
Be 313.107†	1108006.6	502.25	ug/L	1.136	502.25	ppb	1.136	0.23%
QC value within limits for Be 313.107 Recovery = 100.45%								
Ca 317.933Radial†	1232.2	5148.5	ug/L	8.39	5148.5	ppb	8.39	0.16%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.97%
Cd 226.502†            33143.8      505.49 ug/L        3.981      505.49 ppb         3.981   0.79%
   QC value within limits for Cd 226.502  Recovery = 101.10%
Co 228.616†            18657.1      514.84 ug/L        2.798      514.84 ppb         2.798   0.54%
   QC value within limits for Co 228.616  Recovery = 102.97%
Cr 267.716†            36665.1      504.05 ug/L        3.479      504.05 ppb         3.479   0.69%
   QC value within limits for Cr 267.716  Recovery = 100.81%
Cu 324.752†           147221.4      497.21 ug/L        4.329      497.21 ppb         4.329   0.87%
   QC value within limits for Cu 324.752  Recovery = 99.44%
Fe 238.204 Radial†       174.5      5037.1 ug/L       35.67      5037.1 ppb        35.67   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      11457.0      5591.2 ug/L       89.62      5591.2 ppb        89.62   1.60%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 111.82%
Mg 279.077 IEC†           51.3      5312.8 ug/L      406.06      5312.8 ppb       406.06   7.64%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.26%
Mn 257.610†           356389.3      493.19 ug/L        2.780      493.19 ppb         2.780   0.56%
   QC value within limits for Mn 257.610  Recovery = 98.64%
Mo 202.031†             5497.0      502.48 ug/L        2.917      502.48 ppb         2.917   0.58%
   QC value within limits for Mo 202.031  Recovery = 100.50%
Na 589.592 Radial†     29601.5      9364.3 ug/L       58.04      9364.3 ppb        58.04   0.62%
   QC value within limits for Na 589.592 Radial  Recovery = 93.64%
Ni 231.604†            15391.2      514.18 ug/L        2.156      514.18 ppb         2.156   0.42%
   QC value within limits for Ni 231.604  Recovery = 102.84%
P 214.914†              3107.3      2397.5 ug/L       19.31      2397.5 ppb        19.31   0.81%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             3102.7      510.34 ug/L        4.672      510.34 ppb         4.672   0.92%
   QC value within limits for Pb 220.353  Recovery = 102.07%
S 181.975 Axial†         523.7      999.33 ug/L       11.331      999.33 ppb        11.331   1.13%
   QC value within limits for S 181.975 Axial  Recovery = 99.93%
Sb 206.836†             1189.7      529.07 ug/L        2.953      529.07 ppb         2.953   0.56%
   QC value within limits for Sb 206.836  Recovery = 105.81%
Se 196.026†              595.3      525.57 ug/L        2.151      525.57 ppb         2.151   0.41%
   QC value within limits for Se 196.026  Recovery = 105.11%
Si 251.611†            64031.3      2497.2 ug/L       17.57      2497.2 ppb        17.57   0.70%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             2106.3      502.23 ug/L        3.599      502.23 ppb         3.599   0.72%
   QC value within limits for Sn 189.927  Recovery = 100.45%
Sr 421.552†            50275.7      484.12 ug/L        3.726      484.12 ppb         3.726   0.77%
   QC value within limits for Sr 421.552  Recovery = 96.82%
Ti 334.940†           274315.4      491.89 ug/L        3.293      491.89 ppb         3.293   0.67%
   QC value within limits for Ti 334.940  Recovery = 98.38%
Tl 190.801†             1231.1      509.68 ug/L        2.030      509.68 ppb         2.030   0.40%
   QC value within limits for Tl 190.801  Recovery = 101.94%
U 409.014†             16844.0      509.93 ug/L        2.583      509.93 ppb         2.583   0.51%
   QC value within limits for U 409.014  Recovery = 101.99%
V 292.402†             61098.4      507.31 ug/L        3.321      507.31 ppb         3.321   0.65%
   QC value within limits for V 292.402  Recovery = 101.46%
Zn 213.857†            39577.7      501.56 ug/L        3.814      501.56 ppb         3.814   0.76%
   QC value within limits for Zn 213.857  Recovery = 100.31%
SiO2†                  63804.1      5346.8 ug/L       39.46      5346.8 ppb        39.46   0.74%
   QC value within limits for SiO2  Recovery = 99.99%
QC Failed.  Continue with analysis.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/10/2010 18:02:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3227.2	3227.2	101	%			18:04:23
1	Y RADIAL	2637.0	2637.0	100.4	%			18:04:23
1	Al 396.153Radial†	-62.0	0.4	0.9021	ug/L	0.9021	ppb	18:04:23
1	Ca 317.933Radial†	10.0	-2.6	-10.853	ug/L	-10.853	ppb	18:04:23
1	Fe 238.204 Radial†	11.0	1.4	40.155	ug/L	40.155	ppb	18:04:23
1	K 766.490 Radial†	2611.7	566.7	276.85	ug/L	276.85	ppb	18:04:03
1	Mg 279.077 IEC†	2.7	1.0	105.38	ug/L	105.38	ppb	18:04:23
1	Na 589.592 Radial†	-622.4	114.6	36.240	ug/L	36.240	ppb	18:04:03
1	Sr 421.552†	59.3	24.2	0.2332	ug/L	0.2332	ppb	18:04:03
1	Sc 361.383	801551.8	801551.8	101.21	%			18:05:20
1	Y 371.029	685310.5	685310.5	101.13	%			18:05:20
1	Ag 328.068†	208.7	74.9	0.4057	ug/L	0.4057	ppb	18:05:20
1	As 188.979†	0.2	19.0	11.134	ug/L	11.134	ppb	18:05:40
1	B 249.677†	536.7	907.5	26.402	ug/L	26.402	ppb	18:05:40
1	Ba 233.527†	26.6	26.6	0.2645	ug/L	0.2645	ppb	18:05:40
1	Be 313.107†	-3432.2	150.8	0.0686	ug/L	0.0686	ppb	18:05:20
1	Cd 226.502†	-89.2	68.1	1.0362	ug/L	1.0362	ppb	18:05:40
1	Co 228.616†	-38.9	7.5	0.2065	ug/L	0.2065	ppb	18:05:40
1	Cr 267.716†	109.4	55.3	0.7588	ug/L	0.7588	ppb	18:05:40
1	Cu 324.752†	6442.4	153.4	0.5178	ug/L	0.5178	ppb	18:05:20
1	Mn 257.610†	483.2	78.6	0.1083	ug/L	0.1083	ppb	18:05:40
1	Mo 202.031†	22.4	9.1	0.8379	ug/L	0.8379	ppb	18:05:40
1	Ni 231.604†	61.1	-0.3	-0.0098	ug/L	-0.0098	ppb	18:05:40
1	P 214.914†	174.8	8.4	6.6581	ug/L	6.6581	ppb	18:05:40
1	Pb 220.353†	-13.4	30.4	4.9889	ug/L	4.9889	ppb	18:05:40
1	S 181.975 Axial†	27.3	-3.8	-7.2599	ug/L	-7.2599	ppb	18:05:40
1	Sb 206.836†	37.2	14.0	6.0756	ug/L	6.0756	ppb	18:05:40
1	Se 196.026†	-17.6	3.3	2.9326	ug/L	2.9326	ppb	18:05:40
1	Si 251.611†	555.8	73.0	2.8442	ug/L	2.8442	ppb	18:05:40
1	Sn 189.927†	18.6	10.6	2.5162	ug/L	2.5162	ppb	18:05:40
1	Ti 334.940†	-840.8	97.7	0.1630	ug/L	0.1630	ppb	18:05:20
1	Tl 190.801†	-20.9	5.3	2.1866	ug/L	2.1866	ppb	18:05:40
1	U 409.014†	-1849.0	145.2	4.4040	ug/L	4.4040	ppb	18:05:20
1	V 292.402†	-1213.1	-6.3	-0.0355	ug/L	-0.0355	ppb	18:05:20
1	Zn 213.857†	651.2	132.0	1.6815	ug/L	1.6815	ppb	18:05:40
1	SiO2†	568.4	86.6	7.2506	ug/L	7.2506	ppb	18:06:51
2	Sc Radial	3220.7	3220.7	101	%			18:04:48
2	Y RADIAL	2630.2	2630.2	100.1	%			18:04:48
2	Al 396.153Radial†	-60.4	1.9	4.1114	ug/L	4.1114	ppb	18:04:48
2	Ca 317.933Radial†	14.9	2.4	9.8541	ug/L	9.8541	ppb	18:04:48
2	Fe 238.204 Radial†	8.1	-1.4	-40.593	ug/L	-40.593	ppb	18:04:48
2	K 766.490 Radial†	2451.4	412.5	201.51	ug/L	201.51	ppb	18:04:28
2	Mg 279.077 IEC†	-0.0	-1.7	-180.99	ug/L	-180.99	ppb	18:04:48
2	Na 589.592 Radial†	-634.4	101.4	32.071	ug/L	32.071	ppb	18:04:28
2	Sr 421.552†	28.1	-6.7	-0.0645	ug/L	-0.0645	ppb	18:04:28
2	Sc 361.383	798262.6	798262.6	100.80	%			18:05:45
2	Y 371.029	681956.8	681956.8	100.64	%			18:05:45
2	Ag 328.068†	190.6	57.8	0.2956	ug/L	0.2956	ppb	18:05:45
2	As 188.979†	-4.3	14.5	8.5111	ug/L	8.5111	ppb	18:06:05
2	B 249.677†	531.1	904.2	26.318	ug/L	26.318	ppb	18:06:05
2	Ba 233.527†	29.0	29.1	0.2865	ug/L	0.2865	ppb	18:06:05
2	Be 313.107†	-3496.2	73.3	0.0333	ug/L	0.0333	ppb	18:05:45
2	Cd 226.502†	-88.3	68.7	1.0515	ug/L	1.0515	ppb	18:06:05
2	Co 228.616†	-34.1	12.1	0.3338	ug/L	0.3338	ppb	18:06:05
2	Cr 267.716†	69.8	16.4	0.2247	ug/L	0.2247	ppb	18:06:05
2	Cu 324.752†	6380.4	118.1	0.3980	ug/L	0.3980	ppb	18:05:45
2	Mn 257.610†	440.4	38.1	0.0560	ug/L	0.0560	ppb	18:06:05
2	Mo 202.031†	16.3	3.1	0.2836	ug/L	0.2836	ppb	18:06:05
2	Ni 231.604†	62.9	1.8	0.0602	ug/L	0.0602	ppb	18:06:05

2	P 214.914†	170.7	5.0	4.0051 ug/L	4.0051 ppb	18:06:05
2	Pb 220.353†	-9.0	34.7	5.7000 ug/L	5.7000 ppb	18:06:05
2	S 181.975 Axial†	27.5	-3.5	-6.7256 ug/L	-6.7256 ppb	18:06:05
2	Sb 206.836†	45.9	22.8	9.8572 ug/L	9.8572 ppb	18:06:05
2	Se 196.026†	-9.5	11.3	9.5567 ug/L	9.5567 ppb	18:06:05
2	Si 251.611†	570.6	90.0	3.5168 ug/L	3.5168 ppb	18:06:05
2	Sn 189.927†	20.8	12.8	3.0569 ug/L	3.0569 ppb	18:06:05
2	Ti 334.940†	-910.8	24.8	0.0615 ug/L	0.0615 ppb	18:05:45
2	Tl 190.801†	-15.2	10.9	4.4761 ug/L	4.4761 ppb	18:06:05
2	U 409.014†	-2066.9	-78.5	-2.3813 ug/L	-2.3813 ppb	18:05:45
2	V 292.402†	-1204.1	-2.3	-0.0169 ug/L	-0.0169 ppb	18:05:45
2	Zn 213.857†	636.8	120.4	1.5452 ug/L	1.5452 ppb	18:06:05
2	SiO2†	560.6	81.2	6.8101 ug/L	6.8101 ppb	18:07:11
3	Sc Radial	3231.4	3231.4	101 %		18:05:13
3	Y RADIAL	2643.6	2643.6	100.6 %		18:05:13
3	Al 396.153Radial†	-60.5	2.0	4.3874 ug/L	4.3874 ppb	18:05:13
3	Ca 317.933Radial†	9.0	-3.5	-14.721 ug/L	-14.721 ppb	18:05:13
3	Fe 238.204 Radial†	6.4	-3.2	-90.928 ug/L	-90.928 ppb	18:05:13
3	K 766.490 Radial†	2495.2	447.8	218.77 ug/L	218.77 ppb	18:04:53
3	Mg 279.077 IEC†	-1.5	-3.2	-331.69 ug/L	-331.69 ppb	18:05:13
3	Na 589.592 Radial†	-645.7	92.3	29.203 ug/L	29.203 ppb	18:04:53
3	Sr 421.552†	63.7	28.5	0.2749 ug/L	0.2749 ppb	18:04:53
3	Sc 361.383	797964.2	797964.2	100.76 %		18:06:10
3	Y 371.029	682101.6	682101.6	100.66 %		18:06:10
3	Ag 328.068†	224.9	91.9	0.4561 ug/L	0.4561 ppb	18:06:10
3	As 188.979†	-2.6	16.2	9.4899 ug/L	9.4899 ppb	18:06:30
3	B 249.677†	519.7	893.1	26.004 ug/L	26.004 ppb	18:06:30
3	Ba 233.527†	34.0	34.1	0.3344 ug/L	0.3344 ppb	18:06:30
3	Be 313.107†	-3534.5	33.9	0.0158 ug/L	0.0158 ppb	18:06:10
3	Cd 226.502†	-100.6	56.4	0.8705 ug/L	0.8705 ppb	18:06:30
3	Co 228.616†	-51.0	-4.7	-0.1296 ug/L	-0.1296 ppb	18:06:30
3	Cr 267.716†	86.6	33.1	0.4488 ug/L	0.4488 ppb	18:06:30
3	Cu 324.752†	6479.3	218.6	0.7314 ug/L	0.7314 ppb	18:06:10
3	Mn 257.610†	442.2	40.0	0.0599 ug/L	0.0599 ppb	18:06:30
3	Mo 202.031†	13.2	0.1	0.0006 ug/L	0.0006 ppb	18:06:30
3	Ni 231.604†	74.3	13.1	0.4388 ug/L	0.4388 ppb	18:06:30
3	P 214.914†	175.7	10.1	8.0102 ug/L	8.0102 ppb	18:06:30
3	Pb 220.353†	-14.1	29.6	4.8763 ug/L	4.8763 ppb	18:06:30
3	S 181.975 Axial†	34.7	3.7	6.9712 ug/L	6.9712 ppb	18:06:30
3	Sb 206.836†	44.0	20.9	9.0017 ug/L	9.0017 ppb	18:06:30
3	Se 196.026†	-17.2	3.6	2.8362 ug/L	2.8362 ppb	18:06:30
3	Si 251.611†	561.2	80.9	3.1620 ug/L	3.1620 ppb	18:06:30
3	Sn 189.927†	14.4	6.5	1.5535 ug/L	1.5535 ppb	18:06:30
3	Ti 334.940†	-827.9	106.8	0.2148 ug/L	0.2148 ppb	18:06:10
3	Tl 190.801†	-15.0	11.1	4.5764 ug/L	4.5764 ppb	18:06:30
3	U 409.014†	-1860.0	126.0	3.8376 ug/L	3.8376 ppb	18:06:10
3	V 292.402†	-1202.3	-1.0	0.0056 ug/L	0.0056 ppb	18:06:10
3	Zn 213.857†	629.6	113.4	1.4607 ug/L	1.4607 ppb	18:06:30
3	SiO2†	582.4	103.0	8.6510 ug/L	8.6510 ppb	18:07:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	799259.6	100.92	%	0.251				0.25%
Sc Radial	3226.5	101	%	0.2				0.17%
Y 371.029	683123.0	100.81	%	0.280				0.28%
Y RADIAL	2636.9	100.4	%	0.25				0.25%
Ag 328.068†	74.8	0.3858	ug/L	0.08206	0.3858	ppb	0.08206	21.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.5	3.1336	ug/L	1.93747	3.1336	ppb	1.93747	61.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	16.6	9.7118	ug/L	1.32567	9.7118	ppb	1.32567	13.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	901.6	26.241	ug/L	0.2096	26.241	ppb	0.2096	0.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.9	0.2951	ug/L	0.03575	0.2951	ppb	0.03575	12.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	86.0	0.0392	ug/L	0.02691	0.0392	ppb	0.02691	68.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.3	-5.2400	ug/L	13.21411	-5.2400	ppb	13.21411	252.18%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                 64.4      0.9861 ug/L       0.10034      0.9861 ppb        0.10034  10.18%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                  4.9      0.1369 ug/L       0.23941      0.1369 ppb        0.23941 174.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                 34.9      0.4774 ug/L       0.26821      0.4774 ppb        0.26821  56.18%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                163.4      0.5491 ug/L       0.16889      0.5491 ppb        0.16889  30.76%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          -1.1     -30.455 ug/L       66.1266     -30.455 ppb        66.1266 217.13%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          475.7      232.38 ug/L        39.468      232.38 ppb         39.468  16.98%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             -1.3     -135.77 ug/L       222.014     -135.77 ppb        222.014 163.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                 52.2      0.0748 ug/L       0.02913      0.0748 ppb        0.02913  38.97%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                  4.1      0.3740 ug/L       0.42591      0.3740 ppb        0.42591 113.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         102.7      32.505 ug/L        3.5384      32.505 ppb         3.5384  10.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                  4.9      0.1631 ug/L       0.24139      0.1631 ppb        0.24139 148.03%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                   7.8      6.2245 ug/L       2.03744      6.2245 ppb        2.03744  32.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 31.6      5.1884 ug/L       0.44660      5.1884 ppb        0.44660   8.61%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            -1.2     -2.3381 ug/L       8.06652     -2.3381 ppb        8.06652 345.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 19.2      8.3115 ug/L       1.98300      8.3115 ppb        1.98300  23.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                  6.1      5.1085 ug/L       3.85258      5.1085 ppb        3.85258  75.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                 81.3      3.1743 ug/L       0.33647      3.1743 ppb        0.33647  10.60%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 10.0      2.3756 ug/L       0.76151      2.3756 ppb        0.76151  32.06%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 15.4      0.1479 ug/L       0.18509      0.1479 ppb        0.18509 125.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                 76.4      0.1464 ug/L       0.07800      0.1464 ppb        0.07800  53.27%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                  9.1      3.7464 ug/L       1.35174      3.7464 ppb        1.35174  36.08%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  64.2      1.9534 ug/L       3.76465      1.9534 ppb        3.76465 192.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                  -3.2     -0.0156 ug/L       0.02060     -0.0156 ppb        0.02060 132.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                121.9      1.5625 ug/L       0.11142      1.5625 ppb        0.11142   7.13%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                       90.2      7.5706 ug/L       0.96128      7.5706 ppb        0.96128  12.70%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

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Analysis Begun

Start Time: 3/10/2010 18:15:20 **Plasma On Time: 3/8/2010 08:27:38**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif
Batch ID:
Results Data Set: 031010
Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded
Method Name: General Eng.2AX **Method Last Saved: 3/10/2010 15:33:04**
IEC File: 011110.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	Yes
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	Yes
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
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
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
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: CCV **Date Collected: 3/10/2010 18:15:21**
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	3320.2	3320.2	104	%			18:17:34
1	Y RADIAL	2690.9	2690.9	102.4	%			18:17:34
1	Al 396.153Radial†	2242.7	2226.6	4793.8	ug/L	4793.8	ppb	18:17:14

1	Ca 317.933Radial†	1285.7	1228.5	5132.8 ug/L	5132.8 ppb	18:17:34
1	Fe 238.204 Radial†	189.8	173.7	5014.0 ug/L	5014.0 ppb	18:17:34
1	K 766.490 Radial†	12873.0	10398.1	5073.8 ug/L	5073.8 ppb	18:17:14
1	Mg 279.077 IEC†	53.9	50.4	5210.9 ug/L	5210.9 ppb	18:17:34
1	Na 589.592 Radial†	29813.3	29507.6	9334.6 ug/L	9334.6 ppb	18:17:14
1	Sr 421.552†	52432.3	50571.6	486.97 ug/L	486.97 ppb	18:17:14
1	Sc 361.383	850750.2	850750.2	107.42 %		18:18:31
1	Y 371.029	718366.4	718366.4	106.01 %		18:18:31
1	Ag 328.068†	100975.7	93867.2	500.77 ug/L	500.77 ppb	18:18:36
1	As 188.979†	888.4	845.8	499.65 ug/L	499.65 ppb	18:18:56
1	B 249.677†	18233.2	17350.6	502.65 ug/L	502.65 ppb	18:18:36
1	Ba 233.527†	54001.5	50270.3	498.97 ug/L	498.97 ppb	18:18:36
1	Be 313.107†	1186732.6	1108273.6	502.36 ug/L	502.36 ppb	18:18:31
1	Cd 226.502†	35101.4	32832.3	500.74 ug/L	500.74 ppb	18:18:36
1	Co 228.616†	19854.2	18528.2	511.28 ug/L	511.28 ppb	18:18:36
1	Cr 267.716†	39168.7	36409.4	500.54 ug/L	500.54 ppb	18:18:36
1	Cu 324.752†	163316.4	145819.6	492.47 ug/L	492.47 ppb	18:18:36
1	Mn 257.610†	379947.9	353295.4	488.91 ug/L	488.91 ppb	18:18:36
1	Mo 202.031†	5862.5	5444.4	497.67 ug/L	497.67 ppb	18:18:56
1	Ni 231.604†	16507.8	15306.5	511.35 ug/L	511.35 ppb	18:18:36
1	P 214.914†	3490.6	3085.1	2380.5 ug/L	2380.5 ppb	18:18:56
1	Pb 220.353†	3241.4	3061.1	503.50 ug/L	503.50 ppb	18:18:56
1	S 181.975 Axial†	585.7	514.4	981.72 ug/L	981.72 ppb	18:18:56
1	Sb 206.836†	1262.0	1152.1	512.76 ug/L	512.76 ppb	18:18:56
1	Se 196.026†	604.0	583.0	514.95 ug/L	514.95 ppb	18:18:56
1	Si 251.611†	68428.6	63224.2	2465.7 ug/L	2465.7 ppb	18:18:36
1	Sn 189.927†	2255.6	2091.9	498.81 ug/L	498.81 ppb	18:18:56
1	Ti 334.940†	291086.2	271901.2	487.57 ug/L	487.57 ppb	18:18:36
1	Tl 190.801†	1270.0	1208.3	500.23 ug/L	500.23 ppb	18:18:56
1	U 409.014†	15882.7	16757.3	507.30 ug/L	507.30 ppb	18:18:36
1	V 292.402†	63829.9	60611.6	503.26 ug/L	503.26 ppb	18:18:36
1	Zn 213.857†	42516.3	39067.1	495.06 ug/L	495.06 ppb	18:18:36
1	SiO2†	67843.4	62680.5	5252.5 ug/L	5252.5 ppb	18:20:03
2	Sc Radial	3350.6	3350.6	105 %		18:17:59
2	Y RADIAL	2721.8	2721.8	103.6 %		18:17:59
2	Al 396.153Radial†	2238.4	2202.9	4742.3 ug/L	4742.3 ppb	18:17:39
2	Ca 317.933Radial†	1296.9	1227.9	5130.3 ug/L	5130.3 ppb	18:17:59
2	Fe 238.204 Radial†	191.8	173.9	5021.1 ug/L	5021.1 ppb	18:17:59
2	K 766.490 Radial†	12820.1	10234.5	4994.0 ug/L	4994.0 ppb	18:17:39
2	Mg 279.077 IEC†	53.9	49.8	5156.0 ug/L	5156.0 ppb	18:17:59
2	Na 589.592 Radial†	29467.8	28915.7	9147.4 ug/L	9147.4 ppb	18:17:39
2	Sr 421.552†	51520.4	49239.6	474.15 ug/L	474.15 ppb	18:17:39
2	Sc 361.383	847016.5	847016.5	106.95 %		18:19:02
2	Y 371.029	716019.2	716019.2	105.66 %		18:19:02
2	Ag 328.068†	101555.4	94823.6	505.87 ug/L	505.87 ppb	18:19:07
2	As 188.979†	898.3	858.7	507.24 ug/L	507.24 ppb	18:19:27
2	B 249.677†	18365.3	17548.9	508.41 ug/L	508.41 ppb	18:19:07
2	Ba 233.527†	54402.6	50867.0	504.89 ug/L	504.89 ppb	18:19:07
2	Be 313.107†	1182644.5	1109321.1	502.84 ug/L	502.84 ppb	18:19:02
2	Cd 226.502†	35341.0	33200.3	506.36 ug/L	506.36 ppb	18:19:07
2	Co 228.616†	19935.1	18685.3	515.60 ug/L	515.60 ppb	18:19:07
2	Cr 267.716†	39419.1	36804.3	505.96 ug/L	505.96 ppb	18:19:07
2	Cu 324.752†	164400.0	147503.0	498.16 ug/L	498.16 ppb	18:19:07
2	Mn 257.610†	382215.9	356975.1	494.01 ug/L	494.01 ppb	18:19:07
2	Mo 202.031†	5841.6	5448.9	498.08 ug/L	498.08 ppb	18:19:27
2	Ni 231.604†	16523.1	15388.5	514.09 ug/L	514.09 ppb	18:19:07
2	P 214.914†	3469.1	3079.3	2374.8 ug/L	2374.8 ppb	18:19:27
2	Pb 220.353†	3213.9	3048.7	501.45 ug/L	501.45 ppb	18:19:27
2	S 181.975 Axial†	582.0	513.4	979.73 ug/L	979.73 ppb	18:19:27
2	Sb 206.836†	1266.3	1161.2	516.68 ug/L	516.68 ppb	18:19:27
2	Se 196.026†	600.3	581.9	514.07 ug/L	514.07 ppb	18:19:27
2	Si 251.611†	68904.8	63950.2	2494.1 ug/L	2494.1 ppb	18:19:07
2	Sn 189.927†	2241.4	2087.9	497.85 ug/L	497.85 ppb	18:19:27
2	Ti 334.940†	292830.5	274726.6	492.64 ug/L	492.64 ppb	18:19:07
2	Tl 190.801†	1276.0	1219.0	504.71 ug/L	504.71 ppb	18:19:27
2	U 409.014†	15892.6	16831.7	509.55 ug/L	509.55 ppb	18:19:07
2	V 292.402†	64308.6	61321.2	509.07 ug/L	509.07 ppb	18:19:07
2	Zn 213.857†	42771.1	39479.8	500.31 ug/L	500.31 ppb	18:19:07
2	SiO2†	68661.1	63723.5	5340.1 ug/L	5340.1 ppb	18:20:08
3	Sc Radial	3333.2	3333.2	104 %		18:18:24
3	Y RADIAL	2705.0	2705.0	102.9 %		18:18:24

3	Al 396.153Radial†	2277.3	2251.4	4847.1 ug/L	4847.1 ppb	18:18:04
3	Ca 317.933Radial†	1289.9	1227.6	5129.3 ug/L	5129.3 ppb	18:18:24
3	Fe 238.204 Radial†	191.1	174.3	5030.7 ug/L	5030.7 ppb	18:18:24
3	K 766.490 Radial†	12944.6	10418.4	5083.8 ug/L	5083.8 ppb	18:18:04
3	Mg 279.077 IEC†	50.4	46.7	4835.8 ug/L	4835.8 ppb	18:18:24
3	Na 589.592 Radial†	29941.4	29518.7	9338.1 ug/L	9338.1 ppb	18:18:04
3	Sr 421.552†	52446.1	50387.7	485.20 ug/L	485.20 ppb	18:18:04
3	Sc 361.383	844128.7	844128.7	106.59 %		18:19:32
3	Y 371.029	713545.1	713545.1	105.30 %		18:19:32
3	Ag 328.068†	100848.0	94484.6	504.07 ug/L	504.07 ppb	18:19:38
3	As 188.979†	900.0	863.2	509.85 ug/L	509.85 ppb	18:19:58
3	B 249.677†	18240.2	17490.3	506.70 ug/L	506.70 ppb	18:19:38
3	Ba 233.527†	54177.5	50829.9	504.52 ug/L	504.52 ppb	18:19:38
3	Be 313.107†	1178522.9	1109237.0	502.80 ug/L	502.80 ppb	18:19:32
3	Cd 226.502†	35108.7	33095.4	504.75 ug/L	504.75 ppb	18:19:38
3	Co 228.616†	19895.6	18712.0	516.35 ug/L	516.35 ppb	18:19:38
3	Cr 267.716†	39128.9	36658.0	503.95 ug/L	503.95 ppb	18:19:38
3	Cu 324.752†	163284.9	146982.6	496.40 ug/L	496.40 ppb	18:19:38
3	Mn 257.610†	380726.7	356800.5	493.78 ug/L	493.78 ppb	18:19:38
3	Mo 202.031†	5871.7	5495.8	502.36 ug/L	502.36 ppb	18:19:58
3	Ni 231.604†	16471.9	15393.4	514.25 ug/L	514.25 ppb	18:19:38
3	P 214.914†	3506.0	3125.0	2411.9 ug/L	2411.9 ppb	18:19:58
3	Pb 220.353†	3267.2	3109.0	511.37 ug/L	511.37 ppb	18:19:58
3	S 181.975 Axial†	583.5	516.6	985.85 ug/L	985.85 ppb	18:19:58
3	Sb 206.836†	1275.5	1174.0	522.35 ug/L	522.35 ppb	18:19:58
3	Se 196.026†	611.2	594.1	524.55 ug/L	524.55 ppb	18:19:58
3	Si 251.611†	68631.2	63914.0	2492.7 ug/L	2492.7 ppb	18:19:38
3	Sn 189.927†	2264.6	2116.9	504.75 ug/L	504.75 ppb	18:19:58
3	Ti 334.940†	290909.9	273861.3	491.12 ug/L	491.12 ppb	18:19:38
3	Tl 190.801†	1278.2	1225.2	507.21 ug/L	507.21 ppb	18:19:58
3	U 409.014†	15739.2	16738.7	506.73 ug/L	506.73 ppb	18:19:38
3	V 292.402†	63823.1	61071.3	507.08 ug/L	507.08 ppb	18:19:38
3	Zn 213.857†	42660.5	39512.9	500.74 ug/L	500.74 ppb	18:19:38
3	SiO2†	68828.7	64100.3	5371.6 ug/L	5371.6 ppb	18:20:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847298.5	106.99	%	0.419				0.39%
Sc Radial	3334.7	104	%	0.5				0.46%
Y 371.029	715976.9	105.66	%	0.356				0.34%
Y RADIAL	2705.9	103.0	%	0.59				0.57%
Ag 328.068†	94391.8	503.57	ug/L	2.584	503.57	ppb	2.584	0.51%
QC value within limits for Ag 328.068 Recovery = 100.71%								
Al 396.153Radial†	2227.0	4794.4	ug/L	52.42	4794.4	ppb	52.42	1.09%
QC value within limits for Al 396.153Radial Recovery = 95.89%								
As 188.979†	855.9	505.58	ug/L	5.297	505.58	ppb	5.297	1.05%
QC value within limits for As 188.979 Recovery = 101.12%								
B 249.677†	17463.3	505.92	ug/L	2.957	505.92	ppb	2.957	0.58%
QC value within limits for B 249.677 Recovery = 101.18%								
Ba 233.527†	50655.7	502.80	ug/L	3.316	502.80	ppb	3.316	0.66%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1108943.9	502.67	ug/L	0.269	502.67	ppb	0.269	0.05%
QC value within limits for Be 313.107 Recovery = 100.53%								
Ca 317.933Radial†	1228.0	5130.8	ug/L	1.80	5130.8	ppb	1.80	0.04%
QC value within limits for Ca 317.933Radial Recovery = 102.62%								
Cd 226.502†	33042.6	503.95	ug/L	2.893	503.95	ppb	2.893	0.57%
QC value within limits for Cd 226.502 Recovery = 100.79%								
Co 228.616†	18641.8	514.41	ug/L	2.739	514.41	ppb	2.739	0.53%
QC value within limits for Co 228.616 Recovery = 102.88%								
Cr 267.716†	36623.9	503.48	ug/L	2.744	503.48	ppb	2.744	0.55%
QC value within limits for Cr 267.716 Recovery = 100.70%								
Cu 324.752†	146768.4	495.68	ug/L	2.911	495.68	ppb	2.911	0.59%
QC value within limits for Cu 324.752 Recovery = 99.14%								
Fe 238.204 Radial†	173.9	5021.9	ug/L	8.36	5021.9	ppb	8.36	0.17%
QC value within limits for Fe 238.204 Radial Recovery = 100.44%								
K 766.490 Radial†	10350.3	5050.5	ug/L	49.22	5050.5	ppb	49.22	0.97%
QC value within limits for K 766.490 Radial Recovery = 101.01%								
Mg 279.077 IEC†	49.0	5067.6	ug/L	202.61	5067.6	ppb	202.61	4.00%
QC value within limits for Mg 279.077 IEC Recovery = 101.35%								

Mn 257.610†	355690.3	492.23 ug/L	2.877	492.23 ppb	2.877	0.58%
QC value within limits for Mn 257.610 Recovery = 98.45%						
Mo 202.031†	5463.0	499.37 ug/L	2.599	499.37 ppb	2.599	0.52%
QC value within limits for Mo 202.031 Recovery = 99.87%						
Na 589.592 Radial†	29314.0	9273.4 ug/L	109.12	9273.4 ppb	109.12	1.18%
QC value within limits for Na 589.592 Radial Recovery = 92.73%						
Ni 231.604†	15362.8	513.23 ug/L	1.631	513.23 ppb	1.631	0.32%
QC value within limits for Ni 231.604 Recovery = 102.65%						
P 214.914†	3096.5	2389.1 ug/L	19.97	2389.1 ppb	19.97	0.84%
QC value within limits for P 214.914 Recovery = 95.56%						
Pb 220.353†	3072.9	505.44 ug/L	5.238	505.44 ppb	5.238	1.04%
QC value within limits for Pb 220.353 Recovery = 101.09%						
S 181.975 Axial†	514.8	982.43 ug/L	3.122	982.43 ppb	3.122	0.32%
QC value within limits for S 181.975 Axial Recovery = 98.24%						
Sb 206.836†	1162.4	517.26 ug/L	4.823	517.26 ppb	4.823	0.93%
QC value within limits for Sb 206.836 Recovery = 103.45%						
Se 196.026†	586.3	517.86 ug/L	5.817	517.86 ppb	5.817	1.12%
QC value within limits for Se 196.026 Recovery = 103.57%						
Si 251.611†	63696.1	2484.2 ug/L	15.98	2484.2 ppb	15.98	0.64%
QC value within limits for Si 251.611 Recovery = 99.37%						
Sn 189.927†	2098.9	500.47 ug/L	3.736	500.47 ppb	3.736	0.75%
QC value within limits for Sn 189.927 Recovery = 100.09%						
Sr 421.552†	50066.3	482.11 ug/L	6.951	482.11 ppb	6.951	1.44%
QC value within limits for Sr 421.552 Recovery = 96.42%						
Ti 334.940†	273496.4	490.44 ug/L	2.601	490.44 ppb	2.601	0.53%
QC value within limits for Ti 334.940 Recovery = 98.09%						
Tl 190.801†	1217.5	504.05 ug/L	3.533	504.05 ppb	3.533	0.70%
QC value within limits for Tl 190.801 Recovery = 100.81%						
U 409.014†	16775.9	507.86 ug/L	1.492	507.86 ppb	1.492	0.29%
QC value within limits for U 409.014 Recovery = 101.57%						
V 292.402†	61001.4	506.47 ug/L	2.954	506.47 ppb	2.954	0.58%
QC value within limits for V 292.402 Recovery = 101.29%						
Zn 213.857†	39353.3	498.70 ug/L	3.162	498.70 ppb	3.162	0.63%
QC value within limits for Zn 213.857 Recovery = 99.74%						
SiO2†	63501.4	5321.4 ug/L	61.74	5321.4 ppb	61.74	1.16%
QC value within limits for SiO2 Recovery = 99.51%						

All analyte(s) passed QC.

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/10/2010 18:22:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3227.3	3227.3	101	%			18:24:36
1	Y RADIAL	2633.8	2633.8	100.2	%			18:24:36
1	Al 396.153Radial†	-62.3	0.2	0.4027	ug/L	0.4027	ppb	18:24:36
1	Ca 317.933Radial†	9.8	-2.8	-11.501	ug/L	-11.501	ppb	18:24:36
1	Fe 238.204 Radial†	11.9	2.3	66.432	ug/L	66.432	ppb	18:24:36
1	K 766.490 Radial†	2235.2	192.8	94.195	ug/L	94.195	ppb	18:24:16
1	Mg 279.077 IEC†	0.4	-1.3	-135.94	ug/L	-135.94	ppb	18:24:36
1	Na 589.592 Radial†	-686.5	51.0	16.126	ug/L	16.126	ppb	18:24:16
1	Sr 421.552†	31.7	-3.2	-0.0303	ug/L	-0.0303	ppb	18:24:16
1	Sc 361.383	800872.2	800872.2	101.12	%			18:25:33
1	Y 371.029	684513.5	684513.5	101.01	%			18:25:33
1	Ag 328.068†	149.5	16.5	0.1056	ug/L	0.1056	ppb	18:25:33
1	As 188.979†	-10.7	8.2	4.8474	ug/L	4.8474	ppb	18:25:53
1	B 249.677†	165.5	540.9	15.730	ug/L	15.730	ppb	18:25:53
1	Ba 233.527†	30.2	30.1	0.3002	ug/L	0.3002	ppb	18:25:53
1	Be 313.107†	-3466.2	114.2	0.0519	ug/L	0.0519	ppb	18:25:33
1	Cd 226.502†	-114.1	43.4	0.6565	ug/L	0.6565	ppb	18:25:53
1	Co 228.616†	-39.6	6.7	0.1855	ug/L	0.1855	ppb	18:25:53
1	Cr 267.716†	83.7	29.9	0.4120	ug/L	0.4120	ppb	18:25:53
1	Cu 324.752†	6395.8	112.7	0.3822	ug/L	0.3822	ppb	18:25:33
1	Mn 257.610†	442.0	38.2	0.0649	ug/L	0.0649	ppb	18:25:53
1	Mo 202.031†	15.9	2.7	0.2546	ug/L	0.2546	ppb	18:25:53
1	Ni 231.604†	73.0	11.6	0.3875	ug/L	0.3875	ppb	18:25:53
1	P 214.914†	171.0	4.8	3.7495	ug/L	3.7495	ppb	18:25:53
1	Pb 220.353†	-30.7	13.3	2.1704	ug/L	2.1704	ppb	18:25:53
1	S 181.975 Axial†	27.6	-3.5	-6.6644	ug/L	-6.6644	ppb	18:25:53
1	Sb 206.836†	32.4	9.3	4.0214	ug/L	4.0214	ppb	18:25:53
1	Se 196.026†	-21.4	-0.5	-0.2581	ug/L	-0.2581	ppb	18:25:53
1	Si 251.611†	513.7	31.9	1.2431	ug/L	1.2431	ppb	18:25:53
1	Sn 189.927†	13.3	5.3	1.2627	ug/L	1.2627	ppb	18:25:53
1	Ti 334.940†	-880.8	57.4	0.1108	ug/L	0.1108	ppb	18:25:33
1	Tl 190.801†	-25.1	1.2	0.4857	ug/L	0.4857	ppb	18:25:53
1	U 409.014†	-1881.8	111.2	3.3687	ug/L	3.3687	ppb	18:25:33
1	V 292.402†	-1202.7	2.9	0.0215	ug/L	0.0215	ppb	18:25:33
1	Zn 213.857†	639.3	120.8	1.5321	ug/L	1.5321	ppb	18:25:53
1	SiO2†	517.0	36.3	3.0397	ug/L	3.0397	ppb	18:27:04
2	Sc Radial	3212.2	3212.2	100	%			18:25:01
2	Y RADIAL	2626.4	2626.4	99.96	%			18:25:01
2	Al 396.153Radial†	-58.9	3.3	7.0798	ug/L	7.0798	ppb	18:25:01
2	Ca 317.933Radial†	16.2	3.6	15.174	ug/L	15.174	ppb	18:25:01
2	Fe 238.204 Radial†	8.7	-0.8	-23.955	ug/L	-23.955	ppb	18:25:01
2	K 766.490 Radial†	2254.7	222.6	108.76	ug/L	108.76	ppb	18:24:41
2	Mg 279.077 IEC†	2.0	0.3	29.523	ug/L	29.523	ppb	18:25:01
2	Na 589.592 Radial†	-683.6	50.7	16.023	ug/L	16.023	ppb	18:24:41
2	Sr 421.552†	22.4	-12.3	-0.1184	ug/L	-0.1184	ppb	18:24:41
2	Sc 361.383	805773.8	805773.8	101.74	%			18:25:58
2	Y 371.029	689268.2	689268.2	101.72	%			18:25:58
2	Ag 328.068†	126.2	-7.3	-0.0466	ug/L	-0.0466	ppb	18:25:58
2	As 188.979†	-16.4	2.7	1.6009	ug/L	1.6009	ppb	18:26:18
2	B 249.677†	135.6	510.5	14.860	ug/L	14.860	ppb	18:26:18
2	Ba 233.527†	20.3	20.2	0.1999	ug/L	0.1999	ppb	18:26:18
2	Be 313.107†	-3485.7	115.9	0.0525	ug/L	0.0525	ppb	18:25:58
2	Cd 226.502†	-114.2	44.0	0.6748	ug/L	0.6748	ppb	18:26:18
2	Co 228.616†	-45.6	1.1	0.0293	ug/L	0.0293	ppb	18:26:18
2	Cr 267.716†	95.0	40.5	0.5551	ug/L	0.5551	ppb	18:26:18
2	Cu 324.752†	6400.3	78.7	0.2635	ug/L	0.2635	ppb	18:25:58
2	Mn 257.610†	472.0	65.1	0.0864	ug/L	0.0864	ppb	18:26:18
2	Mo 202.031†	7.7	-5.5	-0.5052	ug/L	-0.5052	ppb	18:26:18
2	Ni 231.604†	66.7	4.9	0.1636	ug/L	0.1636	ppb	18:26:18

2	P 214.914†	169.4	2.1	1.6886 ug/L	1.6886 ppb	18:26:18
2	Pb 220.353†	-44.4	0.0	0.0076 ug/L	0.0076 ppb	18:26:18
2	S 181.975 Axial†	29.8	-1.5	-2.8657 ug/L	-2.8657 ppb	18:26:18
2	Sb 206.836†	28.9	5.6	2.4129 ug/L	2.4129 ppb	18:26:18
2	Se 196.026†	-19.5	1.5	1.2117 ug/L	1.2117 ppb	18:26:18
2	Si 251.611†	511.9	27.0	1.0629 ug/L	1.0629 ppb	18:26:18
2	Sn 189.927†	6.9	-1.0	-0.2287 ug/L	-0.2287 ppb	18:26:18
2	Ti 334.940†	-917.1	27.0	0.0471 ug/L	0.0471 ppb	18:25:58
2	Tl 190.801†	-21.9	4.5	1.8339 ug/L	1.8339 ppb	18:26:18
2	U 409.014†	-1952.1	53.4	1.6246 ug/L	1.6246 ppb	18:25:58
2	V 292.402†	-1189.0	23.7	0.1936 ug/L	0.1936 ppb	18:25:58
2	Zn 213.857†	638.6	116.2	1.4891 ug/L	1.4891 ppb	18:26:18
2	SiO2†	504.0	20.3	1.7203 ug/L	1.7203 ppb	18:27:24
3	Sc Radial	3194.8	3194.8	99.7 %		18:25:27
3	Y RADIAL	2604.3	2604.3	99.12 %		18:25:27
3	Al 396.153Radial†	-52.3	9.5	20.620 ug/L	20.620 ppb	18:25:27
3	Ca 317.933Radial†	15.6	3.1	13.089 ug/L	13.089 ppb	18:25:27
3	Fe 238.204 Radial†	8.7	-0.8	-23.088 ug/L	-23.088 ppb	18:25:27
3	K 766.490 Radial†	2242.0	222.2	108.55 ug/L	108.55 ppb	18:25:06
3	Mg 279.077 IEC†	3.0	1.3	139.22 ug/L	139.22 ppb	18:25:27
3	Na 589.592 Radial†	-689.1	41.4	13.091 ug/L	13.091 ppb	18:25:06
3	Sr 421.552†	54.0	19.5	0.1875 ug/L	0.1875 ppb	18:25:06
3	Sc 361.383	804978.2	804978.2	101.64 %		18:26:24
3	Y 371.029	687861.3	687861.3	101.51 %		18:26:24
3	Ag 328.068†	125.5	-7.9	-0.0469 ug/L	-0.0469 ppb	18:26:24
3	As 188.979†	-22.7	-3.5	-2.0507 ug/L	-2.0507 ppb	18:26:44
3	B 249.677†	135.5	510.5	14.861 ug/L	14.861 ppb	18:26:44
3	Ba 233.527†	14.5	14.6	0.1436 ug/L	0.1436 ppb	18:26:44
3	Be 313.107†	-3362.7	233.6	0.1061 ug/L	0.1061 ppb	18:26:24
3	Cd 226.502†	-119.4	38.8	0.5936 ug/L	0.5936 ppb	18:26:44
3	Co 228.616†	-41.1	5.4	0.1500 ug/L	0.1500 ppb	18:26:44
3	Cr 267.716†	93.2	38.8	0.5333 ug/L	0.5333 ppb	18:26:44
3	Cu 324.752†	6472.9	156.3	0.5278 ug/L	0.5278 ppb	18:26:24
3	Mn 257.610†	466.8	60.4	0.0755 ug/L	0.0755 ppb	18:26:44
3	Mo 202.031†	14.7	1.4	0.1264 ug/L	0.1264 ppb	18:26:44
3	Ni 231.604†	69.3	7.5	0.2522 ug/L	0.2522 ppb	18:26:44
3	P 214.914†	175.9	8.8	6.9549 ug/L	6.9549 ppb	18:26:44
3	Pb 220.353†	-22.6	21.4	3.5264 ug/L	3.5264 ppb	18:26:44
3	S 181.975 Axial†	31.1	-0.2	-0.4665 ug/L	-0.4665 ppb	18:26:44
3	Sb 206.836†	33.8	10.5	4.5075 ug/L	4.5075 ppb	18:26:44
3	Se 196.026†	-16.9	4.1	3.4215 ug/L	3.4215 ppb	18:26:44
3	Si 251.611†	507.5	23.2	0.9048 ug/L	0.9048 ppb	18:26:44
3	Sn 189.927†	8.0	0.1	0.0320 ug/L	0.0320 ppb	18:26:44
3	Ti 334.940†	-821.1	120.6	0.2074 ug/L	0.2074 ppb	18:26:24
3	Tl 190.801†	-22.8	3.6	1.4662 ug/L	1.4662 ppb	18:26:44
3	U 409.014†	-2078.2	-72.6	-2.2031 ug/L	-2.2031 ppb	18:26:24
3	V 292.402†	-1200.2	11.4	0.0969 ug/L	0.0969 ppb	18:26:24
3	Zn 213.857†	647.3	125.4	1.6056 ug/L	1.6056 ppb	18:26:44
3	SiO2†	510.3	27.0	2.2651 ug/L	2.2651 ppb	18:27:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	803874.7	101.50	%	0.332				0.33%
Sc Radial	3211.4	100	%	0.5				0.51%
Y 371.029	687214.3	101.41	%	0.360				0.36%
Y RADIAL	2621.5	99.77	%	0.584				0.59%
Ag 328.068†	0.5	0.0040	ug/L	0.08799	0.0040	ppb	0.08799	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.3	9.3674	ug/L	10.30069	9.3674	ppb	10.30069	109.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.4659	ug/L	3.45102	1.4659	ppb	3.45102	235.42%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	520.7	15.150	ug/L	0.5022	15.150	ppb	0.5022	3.31%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	21.6	0.2146	ug/L	0.07934	0.2146	ppb	0.07934	36.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.6	0.0702	ug/L	0.03114	0.0702	ppb	0.03114	44.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.3	5.5873	ug/L	14.83543	5.5873	ppb	14.83543	265.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                42.1      0.6416 ug/L       0.04261      0.6416 ppb        0.04261   6.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 4.4      0.1216 ug/L       0.08189      0.1216 ppb        0.08189  67.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                36.4      0.5001 ug/L       0.07711      0.5001 ppb        0.07711  15.42%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               115.9      0.3911 ug/L       0.13238      0.3911 ppb        0.13238  33.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†          0.2      6.4631 ug/L      51.93633      6.4631 ppb       51.93633 803.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         212.6      103.84 ug/L         8.350      103.84 ppb          8.350   8.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†             0.1      10.935 ug/L      138.5216      10.935 ppb       138.5216 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                54.5      0.0756 ug/L       0.01076      0.0756 ppb        0.01076  14.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.5     -0.0414 ug/L       0.40674     -0.0414 ppb        0.40674 982.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         47.7      15.080 ug/L        1.7234      15.080 ppb         1.7234  11.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 8.0      0.2678 ug/L       0.11275      0.2678 ppb        0.11275  42.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  5.2      4.1310 ug/L       2.65380      4.1310 ppb        2.65380  64.24%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.6      1.9015 ug/L       1.77477      1.9015 ppb        1.77477  93.34%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.7     -3.3322 ug/L       3.12518     -3.3322 ppb        3.12518  93.79%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.5      3.6473 ug/L       1.09627      3.6473 ppb        1.09627  30.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.7      1.4583 ug/L       1.85215      1.4583 ppb        1.85215 127.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                27.4      1.0703 ug/L       0.16930      1.0703 ppb        0.16930  15.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 1.5      0.3553 ug/L       0.79657      0.3553 ppb        0.79657 224.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                 1.3      0.0129 ug/L       0.15749      0.0129 ppb        0.15749 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                68.3      0.1218 ug/L       0.08070      0.1218 ppb        0.08070  66.26%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 3.1      1.2619 ug/L       0.69691      1.2619 ppb        0.69691  55.23%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 30.7      0.9301 ug/L       2.85008      0.9301 ppb        2.85008 306.43%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 12.7      0.1040 ug/L       0.08624      0.1040 ppb        0.08624  82.91%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               120.8      1.5422 ug/L       0.05890      1.5422 ppb        0.05890   3.82%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      27.9      2.3417 ug/L       0.66300      2.3417 ppb        0.66300  28.31%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: LR1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/10/2010 18:29:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3299.0	3299.0	103	%			18:32:08
1	Y RADIAL	2712.7	2712.7	103.2	%			18:32:08
1	Al 396.153Radial†	-74.5	-10.3	-21.194	ug/L	-21.194	ppb	18:32:08
1	Ca 317.933Radial†	14.7	1.8	7.4376	ug/L	7.4376	ppb	18:32:08
1	Fe 238.204 Radial†	13699.8	13298.2	382750	ug/L	382750	ppb	18:31:48
1	K 766.490 Radial†	2176.8	87.9	42.957	ug/L	42.957	ppb	18:31:48
1	Mg 279.077 IEC†	5.3	3.5	-42.139	ug/L	-42.139	ppb	18:32:08
1	Na 589.592 Radial†	-672.8	79.0	24.999	ug/L	24.999	ppb	18:31:48
1	Sr 421.552†	61.3	24.9	0.2397	ug/L	0.2397	ppb	18:31:48
1	Sc 361.383	835088.3	835088.3	105.45	%			18:33:05
1	Y 371.029	711830.1	711830.1	105.05	%			18:33:05
1	Ag 328.068†	-22917.5	-21865.4	2.6053	ug/L	2.6053	ppb	18:33:05
1	As 188.979†	-166.5	-139.1	8.2483	ug/L	8.2483	ppb	18:33:25
1	B 249.677†	2101.6	2370.3	6.7745	ug/L	6.7745	ppb	18:33:05
1	Ba 233.527†	-1508.5	-1430.3	-2.3917	ug/L	-2.3917	ppb	18:33:05
1	Be 313.107†	-3526.8	197.3	0.0891	ug/L	0.0891	ppb	18:33:05
1	Cd 226.502†	2743.7	2758.3	2.5543	ug/L	2.5543	ppb	18:33:05
1	Co 228.616†	600.0	614.9	11.376	ug/L	11.376	ppb	18:33:25
1	Cr 267.716†	-464.3	-493.2	8.9876	ug/L	8.9876	ppb	18:33:25
1	Cu 324.752†	538.8	-5701.0	0.9689	ug/L	0.9689	ppb	18:33:05
1	Mn 257.610†	-30454.8	-29281.0	-2.7097	ug/L	-2.7097	ppb	18:33:05
1	Mo 202.031†	-268.8	-267.9	5.2444	ug/L	5.2444	ppb	18:33:05
1	Ni 231.604†	152.9	84.4	2.8116	ug/L	2.8116	ppb	18:33:25
1	P 214.914†	583.1	388.6	7.4665	ug/L	7.4665	ppb	18:33:25
1	Pb 220.353†	200.0	233.3	-16.242	ug/L	-16.242	ppb	18:33:25
1	S 181.975 Axial†	47.7	14.4	27.499	ug/L	27.499	ppb	18:33:25
1	Sb 206.836†	16.5	-7.1	-7.7157	ug/L	-7.7157	ppb	18:33:25
1	Se 196.026†	-1529.8	-1430.1	-165.96	ug/L	-165.96	ppb	18:33:25
1	Si 251.611†	-427.2	-881.2	-34.152	ug/L	-34.152	ppb	18:33:05
1	Sn 189.927†	-8.2	-15.5	-25.673	ug/L	-25.673	ppb	18:33:25
1	Ti 334.940†	-997.7	-17.8	-0.0860	ug/L	-0.0860	ppb	18:33:05
1	Tl 190.801†	-29.0	-1.6	-1.0208	ug/L	-1.0208	ppb	18:33:25
1	U 409.014†	150.1	2114.4	20.606	ug/L	20.606	ppb	18:33:05
1	V 292.402†	6012.0	6893.8	0.5226	ug/L	0.5226	ppb	18:33:05
1	Zn 213.857†	4194.3	3466.3	-12.930	ug/L	-12.930	ppb	18:33:25
1	SiO2†	-287.4	-747.6	-62.144	ug/L	-62.144	ppb	18:34:23
2	Sc Radial	3315.3	3315.3	103	%			18:32:33
2	Y RADIAL	2728.0	2728.0	103.8	%			18:32:33
2	Al 396.153Radial†	-68.0	-3.7	-6.6133	ug/L	-6.6133	ppb	18:32:33
2	Ca 317.933Radial†	17.3	4.2	17.677	ug/L	17.677	ppb	18:32:33
2	Fe 238.204 Radial†	13500.8	13040.4	375330	ug/L	375330	ppb	18:32:13
2	K 766.490 Radial†	2171.1	71.9	35.158	ug/L	35.158	ppb	18:32:13
2	Mg 279.077 IEC†	7.3	5.4	165.53	ug/L	165.53	ppb	18:32:33
2	Na 589.592 Radial†	-710.2	46.1	14.585	ug/L	14.585	ppb	18:32:13
2	Sr 421.552†	60.2	23.6	0.2270	ug/L	0.2270	ppb	18:32:13
2	Sc 361.383	836336.8	836336.8	105.60	%			18:33:31
2	Y 371.029	712288.5	712288.5	105.11	%			18:33:31
2	Ag 328.068†	-22982.1	-21894.1	0.1606	ug/L	0.1606	ppb	18:33:31
2	As 188.979†	-169.9	-142.0	4.8042	ug/L	4.8042	ppb	18:33:51
2	B 249.677†	2072.6	2339.9	7.0948	ug/L	7.0948	ppb	18:33:31
2	Ba 233.527†	-1536.6	-1454.8	-2.8587	ug/L	-2.8587	ppb	18:33:31
2	Be 313.107†	-3511.1	217.1	0.0982	ug/L	0.0982	ppb	18:33:31
2	Cd 226.502†	2757.9	2767.9	3.4673	ug/L	3.4673	ppb	18:33:31
2	Co 228.616†	599.6	613.7	11.440	ug/L	11.440	ppb	18:33:51
2	Cr 267.716†	-459.9	-488.3	8.7512	ug/L	8.7512	ppb	18:33:51
2	Cu 324.752†	600.8	-5643.0	0.7718	ug/L	0.7718	ppb	18:33:31
2	Mn 257.610†	-30156.0	-28955.0	-2.9999	ug/L	-2.9999	ppb	18:33:31
2	Mo 202.031†	-319.7	-315.8	0.2962	ug/L	0.2962	ppb	18:33:31
2	Ni 231.604†	147.4	79.0	2.6308	ug/L	2.6308	ppb	18:33:51

2	P 214.914†	585.0	389.7	14.243	ug/L	14.243 ppb	18:33:51
2	Pb 220.353†	210.1	242.6	-13.675	ug/L	-13.675 ppb	18:33:51
2	S 181.975 Axial†	47.1	13.8	26.437	ug/L	26.437 ppb	18:33:51
2	Sb 206.836†	17.6	-6.0	-7.2590	ug/L	-7.2590 ppb	18:33:51
2	Se 196.026†	-1521.1	-1419.7	-177.54	ug/L	-177.54 ppb	18:33:51
2	Si 251.611†	-410.6	-864.9	-33.460	ug/L	-33.460 ppb	18:33:31
2	Sn 189.927†	-10.3	-17.5	-25.714	ug/L	-25.714 ppb	18:33:51
2	Ti 334.940†	-977.7	2.6	-0.0644	ug/L	-0.0644 ppb	18:33:31
2	Tl 190.801†	-23.3	3.9	1.2203	ug/L	1.2203 ppb	18:33:51
2	U 409.014†	155.3	2119.1	21.595	ug/L	21.595 ppb	18:33:31
2	V 292.402†	6119.3	6986.9	2.3084	ug/L	2.3084 ppb	18:33:31
2	Zn 213.857†	4189.0	3455.3	-11.959	ug/L	-11.959 ppb	18:33:51
2	SiO2†	-495.2	-944.0	-78.523	ug/L	-78.523 ppb	18:34:28
3	Sc Radial	3327.0	3327.0	104	%		18:32:58
3	Y RADIAL	2725.1	2725.1	103.7	%		18:32:58
3	Al 396.153Radial†	-70.6	-6.0	-11.709	ug/L	-11.709 ppb	18:32:58
3	Ca 317.933Radial†	14.4	1.4	5.9621	ug/L	5.9621 ppb	18:32:58
3	Fe 238.204 Radial†	13732.8	13217.8	380430	ug/L	380430 ppb	18:32:38
3	K 766.490 Radial†	2149.7	44.0	21.512	ug/L	21.512 ppb	18:32:38
3	Mg 279.077 IEC†	4.6	2.7	-114.70	ug/L	-114.70 ppb	18:32:58
3	Na 589.592 Radial†	-662.4	94.6	29.917	ug/L	29.917 ppb	18:32:38
3	Sr 421.552†	68.9	31.7	0.3051	ug/L	0.3051 ppb	18:32:38
3	Sc 361.383	841109.2	841109.2	106.21	%		18:33:57
3	Y 371.029	716378.6	716378.6	105.72	%		18:33:57
3	Ag 328.068†	-23034.0	-21819.5	2.1337	ug/L	2.1337 ppb	18:33:57
3	As 188.979†	-162.8	-134.5	10.421	ug/L	10.421 ppb	18:34:17
3	B 249.677†	2188.5	2437.8	9.1149	ug/L	9.1149 ppb	18:33:57
3	Ba 233.527†	-1631.0	-1535.4	-3.5041	ug/L	-3.5041 ppb	18:33:57
3	Be 313.107†	-3561.7	188.4	0.0853	ug/L	0.0853 ppb	18:33:57
3	Cd 226.502†	2779.2	2773.1	3.0191	ug/L	3.0191 ppb	18:33:57
3	Co 228.616†	606.8	617.2	11.472	ug/L	11.472 ppb	18:34:17
3	Cr 267.716†	-471.5	-496.7	8.8447	ug/L	8.8447 ppb	18:34:17
3	Cu 324.752†	585.4	-5660.8	0.9844	ug/L	0.9844 ppb	18:33:57
3	Mn 257.610†	-30722.5	-29326.3	-2.9979	ug/L	-2.9979 ppb	18:33:57
3	Mo 202.031†	-282.8	-279.3	4.0238	ug/L	4.0238 ppb	18:33:57
3	Ni 231.604†	160.5	90.5	3.0161	ug/L	3.0161 ppb	18:34:17
3	P 214.914†	579.1	380.9	3.0828	ug/L	3.0828 ppb	18:34:17
3	Pb 220.353†	177.0	210.3	-19.684	ug/L	-19.684 ppb	18:34:17
3	S 181.975 Axial†	54.0	20.1	38.307	ug/L	38.307 ppb	18:34:17
3	Sb 206.836†	17.8	-6.0	-7.2923	ug/L	-7.2923 ppb	18:34:17
3	Se 196.026†	-1517.1	-1407.8	-153.23	ug/L	-153.23 ppb	18:34:17
3	Si 251.611†	-457.8	-907.1	-35.151	ug/L	-35.151 ppb	18:33:57
3	Sn 189.927†	-23.2	-29.6	-28.892	ug/L	-28.892 ppb	18:34:17
3	Ti 334.940†	-946.7	37.0	0.0200	ug/L	0.0200 ppb	18:33:57
3	Tl 190.801†	-38.7	-10.5	-4.6755	ug/L	-4.6755 ppb	18:34:17
3	U 409.014†	15.9	1987.1	17.001	ug/L	17.001 ppb	18:33:57
3	V 292.402†	5996.2	6838.2	0.3804	ug/L	0.3804 ppb	18:33:57
3	Zn 213.857†	4165.7	3410.9	-13.295	ug/L	-13.295 ppb	18:34:17
3	SiO2†	-432.1	-881.9	-73.397	ug/L	-73.397 ppb	18:34:33

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	837511.5	105.75	%	0.401				0.38%
Sc Radial	3313.8	103	%	0.4				0.43%
Y 371.029	713499.1	105.29	%	0.370				0.35%
Y RADIAL	2721.9	103.6	%	0.31				0.30%
Ag 328.068†	-21859.7	1.6332	ug/L	1.29693	1.6332	ppb	1.29693	79.41%
Al 396.153Radial†	-6.7	-13.172	ug/L	7.3997	-13.172	ppb	7.3997	56.18%
As 188.979†	-138.5	7.8245	ug/L	2.83239	7.8245	ppb	2.83239	36.20%
B 249.677†	2382.7	7.6614	ug/L	1.26893	7.6614	ppb	1.26893	16.56%
Ba 233.527†	-1473.5	-2.9181	ug/L	0.55859	-2.9181	ppb	0.55859	19.14%
Be 313.107†	200.9	0.0909	ug/L	0.00660	0.0909	ppb	0.00660	7.26%
Ca 317.933Radial†	2.5	10.359	ug/L	6.3804	10.359	ppb	6.3804	61.59%
Cd 226.502†	2766.4	3.0136	ug/L	0.45652	3.0136	ppb	0.45652	15.15%
Co 228.616†	615.3	11.429	ug/L	0.0487	11.429	ppb	0.0487	0.43%
Cr 267.716†	-492.7	8.8612	ug/L	0.11906	8.8612	ppb	0.11906	1.34%
Cu 324.752†	-5668.3	0.9084	ug/L	0.11850	0.9084	ppb	0.11850	13.05%
Fe 238.204 Radial†	13185.5	379500	ug/L	3797.6	379500	ppb	3797.6	1.00%
K 766.490 Radial†	67.9	33.209	ug/L	10.8547	33.209	ppb	10.8547	32.69%

Mg 279.077 IEC†	3.9	2.8938	ug/L	145.44150	2.8938	ppb	145.44150 >999.9%
Mn 257.610†	-29187.4	-2.9025	ug/L	0.16700	-2.9025	ppb	0.16700 5.75%
Mo 202.031†	-287.7	3.1882	ug/L	2.57779	3.1882	ppb	2.57779 80.86%
Na 589.592 Radial†	73.2	23.167	ug/L	7.8285	23.167	ppb	7.8285 33.79%
Ni 231.604†	84.7	2.8195	ug/L	0.19276	2.8195	ppb	0.19276 6.84%
P 214.914†	386.4	8.2642	ug/L	5.62290	8.2642	ppb	5.62290 68.04%
Pb 220.353†	228.8	-16.533	ug/L	3.0152	-16.533	ppb	3.0152 18.24%
S 181.975 Axial†	16.1	30.748	ug/L	6.5681	30.748	ppb	6.5681 21.36%
Sb 206.836†	-6.4	-7.4223	ug/L	0.25461	-7.4223	ppb	0.25461 3.43%
Se 196.026†	-1419.2	-165.58	ug/L	12.157	-165.58	ppb	12.157 7.34%
Si 251.611†	-884.4	-34.255	ug/L	0.8505	-34.255	ppb	0.8505 2.48%
Sn 189.927†	-20.9	-26.760	ug/L	1.8466	-26.760	ppb	1.8466 6.90%
Sr 421.552†	26.7	0.2573	ug/L	0.04189	0.2573	ppb	0.04189 16.28%
Ti 334.940†	7.3	-0.0435	ug/L	0.05601	-0.0435	ppb	0.05601 128.87%
Tl 190.801†	-2.7	-1.4920	ug/L	2.97604	-1.4920	ppb	2.97604 199.47%
U 409.014†	2073.5	19.734	ug/L	2.4178	19.734	ppb	2.4178 12.25%
V 292.402†	6906.3	1.0705	ug/L	1.07448	1.0705	ppb	1.07448 100.37%
Zn 213.857†	3444.2	-12.728	ug/L	0.6903	-12.728	ppb	0.6903 5.42%
SiO2†	-857.8	-71.355	ug/L	8.3784	-71.355	ppb	8.3784 11.74%

Sequence No.: 4
Sample ID: LR2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/10/2010 18:36:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3242.4	3242.4	101	%			18:38:57
1	Y RADIAL	2656.6	2656.6	101.1	%			18:38:57
1	Al 396.153Radial†	-66.3	-3.5	-7.6666	ug/L	-7.6666	ppb	18:38:57
1	Ca 317.933Radial†	17.8	5.1	21.446	ug/L	21.446	ppb	18:38:57
1	Fe 238.204 Radial†	6.8	-2.8	-79.692	ug/L	-79.692	ppb	18:38:57
1	K 766.490 Radial†	2131.8	80.2	39.196	ug/L	39.196	ppb	18:38:37
1	Mg 279.077 IEC†	1.2	-0.6	-58.351	ug/L	-58.351	ppb	18:38:57
1	Na 589.592 Radial†	-777.0	-35.3	-11.166	ug/L	-11.166	ppb	18:38:37
1	Sr 421.552†	30.4	-4.6	-0.0448	ug/L	-0.0448	ppb	18:38:37
1	Sc 361.383	828242.6	828242.6	104.58	%			18:39:54
1	Y 371.029	708739.1	708739.1	104.59	%			18:39:54
1	Ag 328.068†	211.6	71.0	0.3608	ug/L	0.3608	ppb	18:39:59
1	As 188.979†	-17.4	2.2	1.2486	ug/L	1.2486	ppb	18:40:19
1	B 249.677†	-141.7	241.7	7.0616	ug/L	7.0616	ppb	18:40:19
1	Ba 233.527†	1063128.1	1016562.8	10065	ug/L	10065	ppb	18:39:54
1	Be 313.107†	-3535.6	161.2	0.0729	ug/L	0.0729	ppb	18:39:59
1	Cd 226.502†	-126.1	35.7	0.5511	ug/L	0.5511	ppb	18:40:19
1	Co 228.616†	-230.6	-174.6	0.0297	ug/L	0.0297	ppb	18:40:19
1	Cr 267.716†	95.5	38.5	0.5292	ug/L	0.5292	ppb	18:40:19
1	Cu 324.752†	6413.7	-79.2	-0.2652	ug/L	-0.2652	ppb	18:39:59
1	Mn 257.610†	445.3	26.9	0.0318	ug/L	0.0318	ppb	18:40:19
1	Mo 202.031†	13.8	0.2	0.0124	ug/L	0.0124	ppb	18:40:19
1	Ni 231.604†	78.1	14.0	0.4719	ug/L	0.4719	ppb	18:40:19
1	P 214.914†	165.1	-6.4	-5.0322	ug/L	-5.0322	ppb	18:40:19
1	Pb 220.353†	-32.8	12.3	2.0266	ug/L	2.0266	ppb	18:40:19
1	S 181.975 Axial†	33.8	1.5	2.8828	ug/L	2.8828	ppb	18:40:19
1	Sb 206.836†	25.2	1.4	0.6293	ug/L	0.6293	ppb	18:40:19
1	Se 196.026†	-19.7	1.8	1.3421	ug/L	1.3421	ppb	18:40:19
1	Si 251.611†	497.6	-0.3	-0.0136	ug/L	-0.0136	ppb	18:40:19
1	Sn 189.927†	19.3	10.7	2.5510	ug/L	2.5510	ppb	18:40:19
1	Ti 334.940†	-966.1	4.6	0.0208	ug/L	0.0208	ppb	18:39:59
1	Tl 190.801†	-27.9	-0.7	-0.2854	ug/L	-0.2854	ppb	18:40:19
1	U 409.014†	-2458.2	-378.4	-11.486	ug/L	-11.486	ppb	18:39:59
1	V 292.402†	-1251.7	-4.6	-0.0490	ug/L	-0.0490	ppb	18:39:59
1	Zn 213.857†	596.7	59.2	0.7663	ug/L	0.7663	ppb	18:40:19
1	SiO2†	494.9	-1.8	-0.1495	ug/L	-0.1495	ppb	18:41:40
2	Sc Radial	3296.6	3296.6	103	%			18:39:22
2	Y RADIAL	2701.0	2701.0	102.8	%			18:39:22
2	Al 396.153Radial†	-64.4	-0.6	-1.1689	ug/L	-1.1689	ppb	18:39:22
2	Ca 317.933Radial†	22.9	9.8	40.927	ug/L	40.927	ppb	18:39:22
2	Fe 238.204 Radial†	8.6	-1.1	-31.939	ug/L	-31.939	ppb	18:39:22
2	K 766.490 Radial†	2168.7	81.4	39.766	ug/L	39.766	ppb	18:39:02
2	Mg 279.077 IEC†	1.1	-0.6	-63.060	ug/L	-63.060	ppb	18:39:22
2	Na 589.592 Radial†	-702.0	50.3	15.900	ug/L	15.900	ppb	18:39:02
2	Sr 421.552†	37.1	1.4	0.0135	ug/L	0.0135	ppb	18:39:02
2	Sc 361.383	834419.7	834419.7	105.36	%			18:40:24
2	Y 371.029	712949.5	712949.5	105.21	%			18:40:24
2	Ag 328.068†	144.2	5.5	0.0297	ug/L	0.0297	ppb	18:40:29
2	As 188.979†	-13.1	6.4	3.7219	ug/L	3.7219	ppb	18:40:49
2	B 249.677†	-139.0	245.3	7.1587	ug/L	7.1587	ppb	18:40:49
2	Ba 233.527†	1072584.0	1018012.1	10079	ug/L	10079	ppb	18:40:24
2	Be 313.107†	-3546.4	176.0	0.0799	ug/L	0.0799	ppb	18:40:29
2	Cd 226.502†	-117.7	44.5	0.6801	ug/L	0.6801	ppb	18:40:49
2	Co 228.616†	-240.6	-182.5	-0.1840	ug/L	-0.1840	ppb	18:40:49
2	Cr 267.716†	54.2	-1.4	-0.0154	ug/L	-0.0154	ppb	18:40:49
2	Cu 324.752†	6400.4	-137.2	-0.4579	ug/L	-0.4579	ppb	18:40:29
2	Mn 257.610†	456.6	34.5	0.0472	ug/L	0.0472	ppb	18:40:49
2	Mo 202.031†	5.8	-7.5	-0.6855	ug/L	-0.6855	ppb	18:40:49
2	Ni 231.604†	68.3	4.2	0.1432	ug/L	0.1432	ppb	18:40:49

2	P 214.914†	181.3	7.8	6.3466	ug/L	6.3466 ppb	18:40:49
2	Pb 220.353†	-14.3	30.1	4.9374	ug/L	4.9374 ppb	18:40:49
2	S 181.975 Axial†	28.9	-3.4	-6.4427	ug/L	-6.4427 ppb	18:40:49
2	Sb 206.836†	23.9	-0.0	-0.0322	ug/L	-0.0322 ppb	18:40:49
2	Se 196.026†	-16.7	4.8	4.0380	ug/L	4.0380 ppb	18:40:49
2	Si 251.611†	520.0	17.4	0.6898	ug/L	0.6898 ppb	18:40:49
2	Sn 189.927†	6.5	-1.6	-0.3726	ug/L	-0.3726 ppb	18:40:49
2	Ti 334.940†	-902.9	71.5	0.1445	ug/L	0.1445 ppb	18:40:29
2	Tl 190.801†	-25.5	1.8	0.7548	ug/L	0.7548 ppb	18:40:49
2	U 409.014†	-2528.3	-427.6	-12.985	ug/L	-12.985 ppb	18:40:29
2	V 292.402†	-1250.8	5.1	0.0104	ug/L	0.0104 ppb	18:40:29
2	Zn 213.857†	610.8	68.4	0.8790	ug/L	0.8790 ppb	18:40:49
2	SiO2†	520.9	19.4	1.6492	ug/L	1.6492 ppb	18:42:00
3	Sc Radial	3288.2	3288.2	103	%		18:39:47
3	Y RADIAL	2689.8	2689.8	102.4	%		18:39:47
3	Al 396.153Radial†	-69.7	-5.9	-12.849	ug/L	-12.849 ppb	18:39:47
3	Ca 317.933Radial†	20.4	7.4	31.106	ug/L	31.106 ppb	18:39:47
3	Fe 238.204 Radial†	10.1	0.3	9.5900	ug/L	9.5900 ppb	18:39:47
3	K 766.490 Radial†	2237.6	154.0	75.221	ug/L	75.221 ppb	18:39:27
3	Mg 279.077 IEC†	1.1	-0.7	-69.271	ug/L	-69.271 ppb	18:39:47
3	Na 589.592 Radial†	-727.5	23.7	7.4886	ug/L	7.4886 ppb	18:39:27
3	Sr 421.552†	55.4	19.4	0.1864	ug/L	0.1864 ppb	18:39:27
3	Sc 361.383	829105.7	829105.7	104.69	%		18:40:55
3	Y 371.029	709316.5	709316.5	104.67	%		18:40:55
3	Ag 328.068†	209.1	68.4	0.3708	ug/L	0.3708 ppb	18:41:00
3	As 188.979†	-8.9	10.3	6.0621	ug/L	6.0621 ppb	18:41:20
3	B 249.677†	-134.8	248.4	7.2427	ug/L	7.2427 ppb	18:41:20
3	Ba 233.527†	1062914.4	1015300.4	10052	ug/L	10052 ppb	18:40:55
3	Be 313.107†	-3605.2	98.2	0.0444	ug/L	0.0444 ppb	18:41:00
3	Cd 226.502†	-117.6	44.0	0.6683	ug/L	0.6683 ppb	18:41:20
3	Co 228.616†	-236.3	-179.9	-0.1211	ug/L	-0.1211 ppb	18:41:20
3	Cr 267.716†	76.5	20.2	0.2806	ug/L	0.2806 ppb	18:41:20
3	Cu 324.752†	6395.6	-102.9	-0.3421	ug/L	-0.3421 ppb	18:41:00
3	Mn 257.610†	425.8	7.9	0.0147	ug/L	0.0147 ppb	18:41:20
3	Mo 202.031†	21.3	7.3	0.6655	ug/L	0.6655 ppb	18:41:20
3	Ni 231.604†	78.2	14.1	0.4752	ug/L	0.4752 ppb	18:41:20
3	P 214.914†	173.2	1.1	0.9555	ug/L	0.9555 ppb	18:41:20
3	Pb 220.353†	-36.4	8.9	1.4644	ug/L	1.4644 ppb	18:41:20
3	S 181.975 Axial†	28.5	-3.6	-6.7800	ug/L	-6.7800 ppb	18:41:20
3	Sb 206.836†	25.9	2.0	0.8750	ug/L	0.8750 ppb	18:41:20
3	Se 196.026†	-14.4	6.9	5.9647	ug/L	5.9647 ppb	18:41:20
3	Si 251.611†	513.6	14.4	0.5567	ug/L	0.5567 ppb	18:41:20
3	Sn 189.927†	3.9	-4.0	-0.9570	ug/L	-0.9570 ppb	18:41:20
3	Ti 334.940†	-968.7	3.1	0.0191	ug/L	0.0191 ppb	18:41:00
3	Tl 190.801†	-17.0	9.7	4.0191	ug/L	4.0191 ppb	18:41:20
3	U 409.014†	-2366.2	-288.1	-8.7528	ug/L	-8.7528 ppb	18:41:00
3	V 292.402†	-1305.9	-55.2	-0.4623	ug/L	-0.4623 ppb	18:41:00
3	Zn 213.857†	589.6	51.8	0.6590	ug/L	0.6590 ppb	18:41:20
3	SiO2†	523.2	24.7	2.0583	ug/L	2.0583 ppb	18:42:20

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	830589.3	104.88	%	0.422				0.40%
Sc Radial	3275.8	102	%	0.9				0.89%
Y 371.029	710335.0	104.82	%	0.337				0.32%
Y RADIAL	2682.5	102.1	%	0.88				0.86%
Ag 328.068†	48.3	0.2538	ug/L	0.19409	0.2538	ppb	0.19409	76.48%
Al 396.153Radial†	-3.3	-7.2281	ug/L	5.85228	-7.2281	ppb	5.85228	80.97%
As 188.979†	6.3	3.6775	ug/L	2.40705	3.6775	ppb	2.40705	65.45%
B 249.677†	245.2	7.1543	ug/L	0.09062	7.1543	ppb	0.09062	1.27%
Ba 233.527†	1016625.1	10066	ug/L	13.4	10066	ppb	13.4	0.13%
Be 313.107†	145.1	0.0657	ug/L	0.01879	0.0657	ppb	0.01879	28.59%
Ca 317.933Radial†	7.5	31.159	ug/L	9.7405	31.159	ppb	9.7405	31.26%
Cd 226.502†	41.4	0.6332	ug/L	0.07131	0.6332	ppb	0.07131	11.26%
Co 228.616†	-179.0	-0.0918	ug/L	0.10986	-0.0918	ppb	0.10986	119.65%
Cr 267.716†	19.1	0.2648	ug/L	0.27266	0.2648	ppb	0.27266	102.97%
Cu 324.752†	-106.4	-0.3551	ug/L	0.09700	-0.3551	ppb	0.09700	27.32%
Fe 238.204 Radial†	-1.2	-34.014	ug/L	44.6773	-34.014	ppb	44.6773	131.35%
K 766.490 Radial†	105.2	51.394	ug/L	20.6365	51.394	ppb	20.6365	40.15%

Mg 279.077 IEC†	-0.6	-63.561	ug/L	5.4774	-63.561	ppb	5.4774 8.62%
Mn 257.610†	23.1	0.0312	ug/L	0.01626	0.0312	ppb	0.01626 52.05%
Mo 202.031†	-0.0	-0.0025	ug/L	0.67560	-0.0025	ppb	0.67560 >999.9%
Na 589.592 Radial†	12.9	4.0740	ug/L	13.85234	4.0740	ppb	13.85234 340.02%
Ni 231.604†	10.8	0.3634	ug/L	0.19072	0.3634	ppb	0.19072 52.48%
P 214.914†	0.8	0.7566	ug/L	5.69201	0.7566	ppb	5.69201 752.28%
Pb 220.353†	17.1	2.8094	ug/L	1.86415	2.8094	ppb	1.86415 66.35%
S 181.975 Axial†	-1.8	-3.4466	ug/L	5.48406	-3.4466	ppb	5.48406 159.11%
Sb 206.836†	1.1	0.4907	ug/L	0.46923	0.4907	ppb	0.46923 95.63%
Se 196.026†	4.5	3.7816	ug/L	2.32197	3.7816	ppb	2.32197 61.40%
Si 251.611†	10.5	0.4110	ug/L	0.37370	0.4110	ppb	0.37370 90.93%
Sn 189.927†	1.7	0.4071	ug/L	1.87949	0.4071	ppb	1.87949 461.67%
Sr 421.552†	5.4	0.0517	ug/L	0.12024	0.0517	ppb	0.12024 232.57%
Ti 334.940†	26.4	0.0615	ug/L	0.07193	0.0615	ppb	0.07193 117.02%
Tl 190.801†	3.6	1.4962	ug/L	2.24598	1.4962	ppb	2.24598 150.11%
U 409.014†	-364.7	-11.075	ug/L	2.1459	-11.075	ppb	2.1459 19.38%
V 292.402†	-18.2	-0.1670	ug/L	0.25750	-0.1670	ppb	0.25750 154.22%
Zn 213.857†	59.8	0.7681	ug/L	0.11004	0.7681	ppb	0.11004 14.33%
SiO2†	14.1	1.1860	ug/L	1.17452	1.1860	ppb	1.17452 99.03%

Sequence No.: 5
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/10/2010 18:44:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3350.1	3350.1	105	%			18:46:44
1	Y RADIAL	2718.9	2718.9	103.5	%			18:46:44
1	Al 396.153Radial†	2287.2	2249.8	4844.1	ug/L	4844.1	ppb	18:46:24
1	Ca 317.933Radial†	1282.4	1214.2	5073.0	ug/L	5073.0	ppb	18:46:44
1	Fe 238.204 Radial†	191.1	173.4	5004.5	ug/L	5004.5	ppb	18:46:44
1	K 766.490 Radial†	12852.7	10267.7	5010.3	ug/L	5010.3	ppb	18:46:24
1	Mg 279.077 IEC†	53.8	49.8	5149.5	ug/L	5149.5	ppb	18:46:44
1	Na 589.592 Radial†	29085.5	28554.6	9033.1	ug/L	9033.1	ppb	18:46:24
1	Sr 421.552†	51763.3	49479.9	476.46	ug/L	476.46	ppb	18:46:24
1	Sc 361.383	854038.2	854038.2	107.84	%			18:47:41
1	Y 371.029	721390.4	721390.4	106.46	%			18:47:41
1	Ag 328.068†	99828.1	92441.0	493.19	ug/L	493.19	ppb	18:47:46
1	As 188.979†	890.7	844.8	498.95	ug/L	498.95	ppb	18:48:06
1	B 249.677†	17758.3	16844.8	487.95	ug/L	487.95	ppb	18:47:46
1	Ba 233.527†	53731.1	49826.1	494.56	ug/L	494.56	ppb	18:47:46
1	Be 313.107†	1186547.3	1103848.8	500.34	ug/L	500.34	ppb	18:47:41
1	Cd 226.502†	34850.7	32474.0	495.27	ug/L	495.27	ppb	18:47:46
1	Co 228.616†	19674.9	18290.8	504.74	ug/L	504.74	ppb	18:47:46
1	Cr 267.716†	38753.8	35884.3	493.32	ug/L	493.32	ppb	18:47:46
1	Cu 324.752†	160965.0	143053.8	483.14	ug/L	483.14	ppb	18:47:46
1	Mn 257.610†	376361.4	348607.9	482.43	ug/L	482.43	ppb	18:47:46
1	Mo 202.031†	5853.0	5414.6	494.95	ug/L	494.95	ppb	18:48:06
1	Ni 231.604†	16308.4	15062.4	503.19	ug/L	503.19	ppb	18:47:46
1	P 214.914†	3478.1	3061.0	2363.0	ug/L	2363.0	ppb	18:48:06
1	Pb 220.353†	3213.6	3023.7	497.37	ug/L	497.37	ppb	18:48:06
1	S 181.975 Axial†	589.1	515.5	983.70	ug/L	983.70	ppb	18:48:06
1	Sb 206.836†	1252.9	1139.1	507.00	ug/L	507.00	ppb	18:48:06
1	Se 196.026†	604.8	581.5	513.67	ug/L	513.67	ppb	18:48:06
1	Si 251.611†	67590.6	62201.9	2425.8	ug/L	2425.8	ppb	18:47:46
1	Sn 189.927†	2229.6	2059.7	491.13	ug/L	491.13	ppb	18:48:06
1	Ti 334.940†	287702.2	267719.9	480.07	ug/L	480.07	ppb	18:47:46
1	Tl 190.801†	1273.8	1207.2	499.75	ug/L	499.75	ppb	18:48:06
1	U 409.014†	15593.5	16432.2	497.45	ug/L	497.45	ppb	18:47:46
1	V 292.402†	63086.1	59693.2	495.69	ug/L	495.69	ppb	18:47:46
1	Zn 213.857†	42173.7	38597.0	489.11	ug/L	489.11	ppb	18:47:46
1	SiO2†	68149.8	62721.5	5256.0	ug/L	5256.0	ppb	18:49:13
2	Sc Radial	3343.3	3343.3	104	%			18:47:09
2	Y RADIAL	2709.2	2709.2	103.1	%			18:47:09
2	Al 396.153Radial†	2226.2	2195.8	4727.1	ug/L	4727.1	ppb	18:46:49
2	Ca 317.933Radial†	1284.3	1218.5	5091.1	ug/L	5091.1	ppb	18:47:09
2	Fe 238.204 Radial†	190.7	173.3	5003.3	ug/L	5003.3	ppb	18:47:09
2	K 766.490 Radial†	12795.9	10238.2	4995.9	ug/L	4995.9	ppb	18:46:49
2	Mg 279.077 IEC†	56.5	52.4	5423.2	ug/L	5423.2	ppb	18:47:09
2	Na 589.592 Radial†	28914.7	28447.5	8999.3	ug/L	8999.3	ppb	18:46:49
2	Sr 421.552†	50981.7	48831.6	470.22	ug/L	470.22	ppb	18:46:49
2	Sc 361.383	852903.4	852903.4	107.69	%			18:48:12
2	Y 371.029	721415.0	721415.0	106.46	%			18:48:12
2	Ag 328.068†	102288.0	94848.4	505.99	ug/L	505.99	ppb	18:48:17
2	As 188.979†	889.6	844.9	499.11	ug/L	499.11	ppb	18:48:37
2	B 249.677†	18338.0	17405.0	504.23	ug/L	504.23	ppb	18:48:17
2	Ba 233.527†	54732.1	50821.9	504.44	ug/L	504.44	ppb	18:48:17
2	Be 313.107†	1186275.2	1105060.1	500.91	ug/L	500.91	ppb	18:48:12
2	Cd 226.502†	35335.7	32967.3	502.80	ug/L	502.80	ppb	18:48:17
2	Co 228.616†	19950.7	18571.2	512.46	ug/L	512.46	ppb	18:48:17
2	Cr 267.716†	39406.0	36537.7	502.30	ug/L	502.30	ppb	18:48:17
2	Cu 324.752†	165772.7	147716.6	498.87	ug/L	498.87	ppb	18:48:17
2	Mn 257.610†	383782.1	355962.8	492.59	ug/L	492.59	ppb	18:48:17
2	Mo 202.031†	5891.5	5457.5	498.87	ug/L	498.87	ppb	18:48:37
2	Ni 231.604†	16639.7	15390.2	514.15	ug/L	514.15	ppb	18:48:17

2	P 214.914†	3513.0	3097.7	2389.4 ug/L	2389.4 ppb	18:48:37
2	Pb 220.353†	3243.8	3055.7	502.60 ug/L	502.60 ppb	18:48:37
2	S 181.975 Axial†	596.4	523.0	998.11 ug/L	998.11 ppb	18:48:37
2	Sb 206.836†	1265.6	1152.5	512.94 ug/L	512.94 ppb	18:48:37
2	Se 196.026†	608.1	585.3	516.91 ug/L	516.91 ppb	18:48:37
2	Si 251.611†	69391.1	63957.2	2494.4 ug/L	2494.4 ppb	18:48:17
2	Sn 189.927†	2256.2	2087.2	497.67 ug/L	497.67 ppb	18:48:37
2	Ti 334.940†	294606.3	274485.7	492.18 ug/L	492.18 ppb	18:48:17
2	Tl 190.801†	1285.1	1219.2	504.79 ug/L	504.79 ppb	18:48:37
2	U 409.014†	16162.1	16979.4	514.05 ug/L	514.05 ppb	18:48:17
2	V 292.402†	64620.5	61195.8	508.08 ug/L	508.08 ppb	18:48:17
2	Zn 213.857†	42946.0	39366.2	498.86 ug/L	498.86 ppb	18:48:17
2	SiO2†	68267.0	62914.4	5272.1 ug/L	5272.1 ppb	18:49:18
3	Sc Radial	3319.3	3319.3	104 %		18:47:34
3	Y RADIAL	2691.1	2691.1	102.4 %		18:47:34
3	Al 396.153Radial†	2169.6	2156.6	4642.4 ug/L	4642.4 ppb	18:47:14
3	Ca 317.933Radial†	1285.4	1228.5	5132.9 ug/L	5132.9 ppb	18:47:34
3	Fe 238.204 Radial†	190.5	174.4	5035.5 ug/L	5035.5 ppb	18:47:34
3	K 766.490 Radial†	12764.1	10296.2	5024.3 ug/L	5024.3 ppb	18:47:14
3	Mg 279.077 IEC†	51.9	48.4	5008.7 ug/L	5008.7 ppb	18:47:34
3	Na 589.592 Radial†	28264.3	28019.8	8864.0 ug/L	8864.0 ppb	18:47:14
3	Sr 421.552†	49958.9	48197.2	464.11 ug/L	464.11 ppb	18:47:14
3	Sc 361.383	861715.1	861715.1	108.81 %		18:48:43
3	Y 371.029	728237.3	728237.3	107.47 %		18:48:43
3	Ag 328.068†	101432.6	93091.0	496.65 ug/L	496.65 ppb	18:48:48
3	As 188.979†	907.6	853.0	503.80 ug/L	503.80 ppb	18:49:08
3	B 249.677†	18093.9	17006.6	492.65 ug/L	492.65 ppb	18:48:48
3	Ba 233.527†	54561.8	50145.7	497.73 ug/L	497.73 ppb	18:48:48
3	Be 313.107†	1198306.2	1104853.3	500.80 ug/L	500.80 ppb	18:48:43
3	Cd 226.502†	35295.7	32595.0	497.11 ug/L	497.11 ppb	18:48:48
3	Co 228.616†	19930.8	18363.4	506.74 ug/L	506.74 ppb	18:48:48
3	Cr 267.716†	39249.2	36019.4	495.18 ug/L	495.18 ppb	18:48:48
3	Cu 324.752†	163898.9	144420.4	487.75 ug/L	487.75 ppb	18:48:48
3	Mn 257.610†	381838.1	350532.0	485.10 ug/L	485.10 ppb	18:48:48
3	Mo 202.031†	5904.3	5413.4	494.84 ug/L	494.84 ppb	18:49:08
3	Ni 231.604†	16569.0	15167.2	506.70 ug/L	506.70 ppb	18:48:48
3	P 214.914†	3527.7	3077.8	2375.5 ug/L	2375.5 ppb	18:49:08
3	Pb 220.353†	3259.9	3039.7	499.95 ug/L	499.95 ppb	18:49:08
3	S 181.975 Axial†	600.5	521.0	994.38 ug/L	994.38 ppb	18:49:08
3	Sb 206.836†	1260.6	1135.9	505.60 ug/L	505.60 ppb	18:49:08
3	Se 196.026†	616.8	587.5	518.85 ug/L	518.85 ppb	18:49:08
3	Si 251.611†	68815.0	62768.8	2448.0 ug/L	2448.0 ppb	18:48:48
3	Sn 189.927†	2247.6	2057.9	490.70 ug/L	490.70 ppb	18:49:08
3	Ti 334.940†	292041.6	269331.2	482.98 ug/L	482.98 ppb	18:48:48
3	Tl 190.801†	1292.6	1214.0	502.56 ug/L	502.56 ppb	18:49:08
3	U 409.014†	15881.9	16568.5	501.58 ug/L	501.58 ppb	18:48:48
3	V 292.402†	64122.1	60124.1	499.21 ug/L	499.21 ppb	18:48:48
3	Zn 213.857†	42813.6	38836.7	492.15 ug/L	492.15 ppb	18:48:48
3	SiO2†	69010.9	62949.9	5275.2 ug/L	5275.2 ppb	18:49:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856218.9	108.11	%	0.605				0.56%
Sc Radial	3337.6	104	%	0.5				0.48%
Y 371.029	723680.9	106.79	%	0.582				0.55%
Y RADIAL	2706.4	103.0	%	0.54				0.52%
Ag 328.068†	93460.2	498.61	ug/L	6.620	498.61	ppb	6.620	1.33%
QC value within limits for Ag 328.068 Recovery = 99.72%								
Al 396.153Radial†	2200.8	4737.9	ug/L	101.30	4737.9	ppb	101.30	2.14%
QC value within limits for Al 396.153Radial Recovery = 94.76%								
As 188.979†	847.5	500.62	ug/L	2.756	500.62	ppb	2.756	0.55%
QC value within limits for As 188.979 Recovery = 100.12%								
B 249.677†	17085.5	494.94	ug/L	8.380	494.94	ppb	8.380	1.69%
QC value within limits for B 249.677 Recovery = 98.99%								
Ba 233.527†	50264.6	498.91	ug/L	5.048	498.91	ppb	5.048	1.01%
QC value within limits for Ba 233.527 Recovery = 99.78%								
Be 313.107†	1104587.4	500.68	ug/L	0.305	500.68	ppb	0.305	0.06%
QC value within limits for Be 313.107 Recovery = 100.14%								
Ca 317.933Radial†	1220.4	5099.0	ug/L	30.75	5099.0	ppb	30.75	0.60%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.98%
Cd 226.502†            32678.8      498.40 ug/L         3.928      498.40 ppb          3.928   0.79%
   QC value within limits for Cd 226.502  Recovery = 99.68%
Co 228.616†            18408.5      507.98 ug/L         4.007      507.98 ppb          4.007   0.79%
   QC value within limits for Co 228.616  Recovery = 101.60%
Cr 267.716†            36147.1      496.93 ug/L         4.740      496.93 ppb          4.740   0.95%
   QC value within limits for Cr 267.716  Recovery = 99.39%
Cu 324.752†           145063.6      489.92 ug/L         8.091      489.92 ppb          8.091   1.65%
   QC value within limits for Cu 324.752  Recovery = 97.98%
Fe 238.204 Radial†       173.7      5014.5 ug/L        18.25      5014.5 ppb          18.25   0.36%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.29%
K 766.490 Radial†      10267.4      5010.2 ug/L        14.17      5010.2 ppb          14.17   0.28%
   QC value within limits for K 766.490 Radial  Recovery = 100.20%
Mg 279.077 IEC†           50.2      5193.8 ug/L       210.77      5193.8 ppb         210.77   4.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.88%
Mn 257.610†           351700.9      486.71 ug/L         5.268      486.71 ppb          5.268   1.08%
   QC value within limits for Mn 257.610  Recovery = 97.34%
Mo 202.031†             5428.5      496.22 ug/L         2.296      496.22 ppb          2.296   0.46%
   QC value within limits for Mo 202.031  Recovery = 99.24%
Na 589.592 Radial†     28340.6      8965.5 ug/L        89.51      8965.5 ppb          89.51   1.00%
   QC value less than the lower limit for Na 589.592 Radial  Recovery = 89.65%
Ni 231.604†            15206.6      508.01 ug/L         5.594      508.01 ppb          5.594   1.10%
   QC value within limits for Ni 231.604  Recovery = 101.60%
P 214.914†              3078.8      2376.0 ug/L        13.18      2376.0 ppb          13.18   0.55%
   QC value within limits for P 214.914  Recovery = 95.04%
Pb 220.353†             3039.7      499.98 ug/L         2.616      499.98 ppb          2.616   0.52%
   QC value within limits for Pb 220.353  Recovery = 100.00%
S 181.975 Axial†         519.8      992.06 ug/L         7.479      992.06 ppb          7.479   0.75%
   QC value within limits for S 181.975 Axial  Recovery = 99.21%
Sb 206.836†             1142.5      508.51 ug/L         3.893      508.51 ppb          3.893   0.77%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†              584.8      516.48 ug/L         2.618      516.48 ppb          2.618   0.51%
   QC value within limits for Se 196.026  Recovery = 103.30%
Si 251.611†            62975.9      2456.1 ug/L        35.00      2456.1 ppb          35.00   1.42%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             2068.3      493.17 ug/L         3.909      493.17 ppb          3.909   0.79%
   QC value within limits for Sn 189.927  Recovery = 98.63%
Sr 421.552†            48836.2      470.26 ug/L         6.177      470.26 ppb          6.177   1.31%
   QC value within limits for Sr 421.552  Recovery = 94.05%
Ti 334.940†           270512.3      485.08 ug/L         6.319      485.08 ppb          6.319   1.30%
   QC value within limits for Ti 334.940  Recovery = 97.02%
Tl 190.801†             1213.5      502.37 ug/L         2.529      502.37 ppb          2.529   0.50%
   QC value within limits for Tl 190.801  Recovery = 100.47%
U 409.014†             16660.0      504.36 ug/L         8.642      504.36 ppb          8.642   1.71%
   QC value within limits for U 409.014  Recovery = 100.87%
V 292.402†             60337.7      500.99 ug/L         6.382      500.99 ppb          6.382   1.27%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†            38933.3      493.37 ug/L         4.988      493.37 ppb          4.988   1.01%
   QC value within limits for Zn 213.857  Recovery = 98.67%
SiO2†                  62861.9      5267.8 ug/L        10.30      5267.8 ppb          10.30   0.20%
   QC value within limits for SiO2  Recovery = 98.51%
QC Failed.  Continue with analysis.
```

Sequence No.: 6
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/10/2010 18:51:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3255.4	3255.4	102	%			18:53:47
1	Y RADIAL	2664.0	2664.0	101.4	%			18:53:47
1	Al 396.153Radial†	-70.6	-7.5	-16.157	ug/L	-16.157	ppb	18:53:47
1	Ca 317.933Radial†	11.8	-0.9	-3.6232	ug/L	-3.6232	ppb	18:53:47
1	Fe 238.204 Radial†	10.4	0.7	20.775	ug/L	20.775	ppb	18:53:47
1	K 766.490 Radial†	2050.3	-8.4	-4.1152	ug/L	-4.1152	ppb	18:53:27
1	Mg 279.077 IEC†	0.2	-1.6	-161.39	ug/L	-161.39	ppb	18:53:47
1	Na 589.592 Radial†	-762.9	-18.3	-5.8028	ug/L	-5.8028	ppb	18:53:27
1	Sr 421.552†	9.2	-25.6	-0.2462	ug/L	-0.2462	ppb	18:53:27
1	Sc 361.383	804661.9	804661.9	101.60	%			18:54:43
1	Y 371.029	687615.5	687615.5	101.47	%			18:54:43
1	Ag 328.068†	122.8	-10.4	-0.0512	ug/L	-0.0512	ppb	18:54:43
1	As 188.979†	-12.7	6.3	3.7041	ug/L	3.7041	ppb	18:55:03
1	B 249.677†	-28.8	348.9	10.149	ug/L	10.149	ppb	18:55:03
1	Ba 233.527†	88.2	87.1	0.8624	ug/L	0.8624	ppb	18:55:03
1	Be 313.107†	-3481.2	115.6	0.0525	ug/L	0.0525	ppb	18:54:43
1	Cd 226.502†	-141.1	17.3	0.2627	ug/L	0.2627	ppb	18:55:03
1	Co 228.616†	-32.0	14.4	0.3970	ug/L	0.3970	ppb	18:55:03
1	Cr 267.716†	94.2	39.9	0.5479	ug/L	0.5479	ppb	18:55:03
1	Cu 324.752†	6202.3	-107.6	-0.3628	ug/L	-0.3628	ppb	18:54:43
1	Mn 257.610†	399.1	-6.1	0.0003	ug/L	0.0003	ppb	18:55:03
1	Mo 202.031†	16.0	2.7	0.2477	ug/L	0.2477	ppb	18:55:03
1	Ni 231.604†	63.3	1.7	0.0578	ug/L	0.0578	ppb	18:55:03
1	P 214.914†	168.1	1.2	1.0037	ug/L	1.0037	ppb	18:55:03
1	Pb 220.353†	-32.3	11.9	1.9432	ug/L	1.9432	ppb	18:55:03
1	S 181.975 Axial†	34.3	3.0	5.6515	ug/L	5.6515	ppb	18:55:03
1	Sb 206.836†	30.1	6.9	2.9872	ug/L	2.9872	ppb	18:55:03
1	Se 196.026†	-21.6	-0.6	-0.4415	ug/L	-0.4415	ppb	18:55:03
1	Si 251.611†	542.1	57.4	2.2414	ug/L	2.2414	ppb	18:55:03
1	Sn 189.927†	18.4	10.3	2.4536	ug/L	2.4536	ppb	18:55:03
1	Ti 334.940†	-889.7	52.8	0.1066	ug/L	0.1066	ppb	18:54:43
1	Tl 190.801†	-26.1	0.2	0.1002	ug/L	0.1002	ppb	18:55:03
1	U 409.014†	-1961.1	41.9	1.2688	ug/L	1.2688	ppb	18:54:43
1	V 292.402†	-1252.8	-40.7	-0.3343	ug/L	-0.3343	ppb	18:54:43
1	Zn 213.857†	537.6	17.7	0.2232	ug/L	0.2232	ppb	18:55:03
1	SiO2†	560.0	76.2	6.3920	ug/L	6.3920	ppb	18:56:14
2	Sc Radial	3243.2	3243.2	101	%			18:54:12
2	Y RADIAL	2642.9	2642.9	100.6	%			18:54:12
2	Al 396.153Radial†	-59.7	3.0	6.5363	ug/L	6.5363	ppb	18:54:12
2	Ca 317.933Radial†	10.7	-2.0	-8.1781	ug/L	-8.1781	ppb	18:54:12
2	Fe 238.204 Radial†	6.0	-3.5	-100.88	ug/L	-100.88	ppb	18:54:12
2	K 766.490 Radial†	2115.3	63.4	30.992	ug/L	30.992	ppb	18:53:52
2	Mg 279.077 IEC†	0.8	-0.9	-93.142	ug/L	-93.142	ppb	18:54:12
2	Na 589.592 Radial†	-752.9	-11.3	-3.5678	ug/L	-3.5678	ppb	18:53:52
2	Sr 421.552†	30.6	-4.4	-0.0423	ug/L	-0.0423	ppb	18:53:52
2	Sc 361.383	809783.5	809783.5	102.25	%			18:55:09
2	Y 371.029	693166.7	693166.7	102.29	%			18:55:09
2	Ag 328.068†	204.1	68.3	0.3340	ug/L	0.3340	ppb	18:55:09
2	As 188.979†	-15.2	4.0	2.3246	ug/L	2.3246	ppb	18:55:29
2	B 249.677†	-71.2	307.6	8.9681	ug/L	8.9681	ppb	18:55:29
2	Ba 233.527†	91.2	89.5	0.8842	ug/L	0.8842	ppb	18:55:29
2	Be 313.107†	-3477.9	140.5	0.0637	ug/L	0.0637	ppb	18:55:09
2	Cd 226.502†	-150.4	9.1	0.1495	ug/L	0.1495	ppb	18:55:29
2	Co 228.616†	-38.4	8.3	0.2285	ug/L	0.2285	ppb	18:55:29
2	Cr 267.716†	103.9	48.8	0.6669	ug/L	0.6669	ppb	18:55:29
2	Cu 324.752†	6318.6	-32.4	-0.1139	ug/L	-0.1139	ppb	18:55:09
2	Mn 257.610†	425.6	17.4	0.0179	ug/L	0.0179	ppb	18:55:29
2	Mo 202.031†	7.0	-6.2	-0.5755	ug/L	-0.5755	ppb	18:55:29
2	Ni 231.604†	75.4	13.1	0.4387	ug/L	0.4387	ppb	18:55:29

2	P 214.914†	168.2	0.1	0.2254 ug/L	0.2254 ppb	18:55:29
2	Pb 220.353†	-30.2	14.1	2.3326 ug/L	2.3326 ppb	18:55:29
2	S 181.975 Axial†	33.7	2.1	4.0931 ug/L	4.0931 ppb	18:55:29
2	Sb 206.836†	36.8	13.2	5.6861 ug/L	5.6861 ppb	18:55:29
2	Se 196.026†	-17.7	3.4	2.6157 ug/L	2.6157 ppb	18:55:29
2	Si 251.611†	554.2	65.9	2.5821 ug/L	2.5821 ppb	18:55:29
2	Sn 189.927†	12.8	4.7	1.1283 ug/L	1.1283 ppb	18:55:29
2	Ti 334.940†	-900.0	48.2	0.0935 ug/L	0.0935 ppb	18:55:09
2	Tl 190.801†	-26.8	-0.2	-0.0847 ug/L	-0.0847 ppb	18:55:29
2	U 409.014†	-2075.0	-57.2	-1.7285 ug/L	-1.7285 ppb	18:55:09
2	V 292.402†	-1167.6	50.4	0.4142 ug/L	0.4142 ppb	18:55:09
2	Zn 213.857†	534.7	11.6	0.1605 ug/L	0.1605 ppb	18:55:29
2	SiO2†	551.0	63.8	5.3771 ug/L	5.3771 ppb	18:56:34
3	Sc Radial	3223.1	3223.1	101 %		18:54:37
3	Y RADIAL	2625.3	2625.3	99.92 %		18:54:37
3	Al 396.153Radial†	-56.9	5.5	11.851 ug/L	11.851 ppb	18:54:37
3	Ca 317.933Radial†	10.6	-1.9	-7.9227 ug/L	-7.9227 ppb	18:54:37
3	Fe 238.204 Radial†	8.5	-1.0	-29.482 ug/L	-29.482 ppb	18:54:37
3	K 766.490 Radial†	2110.1	71.4	34.854 ug/L	34.854 ppb	18:54:17
3	Mg 279.077 IEC†	1.5	-0.2	-23.309 ug/L	-23.309 ppb	18:54:37
3	Na 589.592 Radial†	-683.3	53.3	16.856 ug/L	16.856 ppb	18:54:17
3	Sr 421.552†	17.7	-17.0	-0.1640 ug/L	-0.1640 ppb	18:54:17
3	Sc 361.383	811201.1	811201.1	102.43 %		18:55:34
3	Y 371.029	693644.8	693644.8	102.36 %		18:55:34
3	Ag 328.068†	184.4	48.7	0.2473 ug/L	0.2473 ppb	18:55:34
3	As 188.979†	-12.5	6.7	3.9014 ug/L	3.9014 ppb	18:55:54
3	B 249.677†	-65.8	313.0	9.1109 ug/L	9.1109 ppb	18:55:54
3	Ba 233.527†	97.6	95.5	0.9442 ug/L	0.9442 ppb	18:55:54
3	Be 313.107†	-3391.8	230.5	0.1046 ug/L	0.1046 ppb	18:55:34
3	Cd 226.502†	-118.9	40.2	0.6165 ug/L	0.6165 ppb	18:55:54
3	Co 228.616†	-22.2	24.2	0.6688 ug/L	0.6688 ppb	18:55:54
3	Cr 267.716†	141.0	84.8	1.1627 ug/L	1.1627 ppb	18:55:54
3	Cu 324.752†	6258.8	-101.6	-0.3451 ug/L	-0.3451 ppb	18:55:34
3	Mn 257.610†	729.0	312.8	0.4307 ug/L	0.4307 ppb	18:55:54
3	Mo 202.031†	16.5	3.1	0.2775 ug/L	0.2775 ppb	18:55:54
3	Ni 231.604†	60.7	-1.3	-0.0448 ug/L	-0.0448 ppb	18:55:54
3	P 214.914†	173.1	4.7	3.8571 ug/L	3.8571 ppb	18:55:54
3	Pb 220.353†	-36.1	8.4	1.3861 ug/L	1.3861 ppb	18:55:54
3	S 181.975 Axial†	35.9	4.3	8.1296 ug/L	8.1296 ppb	18:55:54
3	Sb 206.836†	29.8	6.3	2.7552 ug/L	2.7552 ppb	18:55:54
3	Se 196.026†	-15.7	5.3	4.4851 ug/L	4.4851 ppb	18:55:54
3	Si 251.611†	608.7	118.2	4.6174 ug/L	4.6174 ppb	18:55:54
3	Sn 189.927†	15.3	7.1	1.6972 ug/L	1.6972 ppb	18:55:54
3	Ti 334.940†	-853.7	94.9	0.1705 ug/L	0.1705 ppb	18:55:34
3	Tl 190.801†	-22.6	3.9	1.5911 ug/L	1.5911 ppb	18:55:54
3	U 409.014†	-2003.0	16.6	0.5051 ug/L	0.5051 ppb	18:55:34
3	V 292.402†	-1272.0	-49.5	-0.3976 ug/L	-0.3976 ppb	18:55:34
3	Zn 213.857†	584.3	59.0	0.7604 ug/L	0.7604 ppb	18:55:54
3	SiO2†	553.0	64.8	5.4379 ug/L	5.4379 ppb	18:56:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	808548.8	102.09	%	0.434				0.43%
Sc Radial	3240.6	101	%	0.5				0.50%
Y 371.029	691475.7	102.04	%	0.495				0.48%
Y RADIAL	2644.0	100.6	%	0.74				0.73%
Ag 328.068†	35.5	0.1767	ug/L	0.20207	0.1767	ppb	0.20207	114.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.3	0.7436	ug/L	14.87538	0.7436	ppb	14.87538	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.7	3.3101	ug/L	0.85908	3.3101	ppb	0.85908	25.95%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	323.2	9.4093	ug/L	0.64451	9.4093	ppb	0.64451	6.85%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	90.7	0.8970	ug/L	0.04237	0.8970	ppb	0.04237	4.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	162.2	0.0736	ug/L	0.02743	0.0736	ppb	0.02743	37.26%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.6	-6.5747	ug/L	2.55924	-6.5747	ppb	2.55924	38.93%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              22.2      0.3429 ug/L       0.24359      0.3429 ppb        0.24359  71.04%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              15.6      0.4314 ug/L       0.22215      0.4314 ppb        0.22215  51.49%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              57.8      0.7925 ug/L       0.32611      0.7925 ppb        0.32611  41.15%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -80.5     -0.2739 ug/L       0.13889     -0.2739 ppb        0.13889  50.70%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.3     -36.529 ug/L       61.1327     -36.529 ppb        61.1327 167.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        42.1      20.577 ug/L       21.4711      20.577 ppb        21.4711 104.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.9     -92.614 ug/L       69.0420     -92.614 ppb        69.0420  74.55%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†             108.1      0.1496 ug/L       0.24359      0.1496 ppb        0.24359 162.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.2     -0.0168 ug/L       0.48411     -0.0168 ppb        0.48411 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        7.9      2.4952 ug/L      12.48710      2.4952 ppb       12.48710 500.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               4.5      0.1505 ug/L       0.25474      0.1505 ppb        0.25474 169.21%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                2.0      1.6954 ug/L       1.91210      1.6954 ppb        1.91210 112.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              11.5      1.8873 ug/L       0.47570      1.8873 ppb        0.47570  25.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          3.1      5.9581 ug/L       2.03566      5.9581 ppb        2.03566  34.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.8      3.8095 ug/L       1.62933      3.8095 ppb        1.62933  42.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               2.7      2.2198 ug/L       2.48707      2.2198 ppb        2.48707 112.04%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              80.5      3.1470 ug/L       1.28481      3.1470 ppb        1.28481  40.83%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               7.4      1.7597 ug/L       0.66486      1.7597 ppb        0.66486  37.78%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -15.7     -0.1508 ug/L       0.10259     -0.1508 ppb        0.10259  68.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              65.3      0.1235 ug/L       0.04118      0.1235 ppb        0.04118  33.33%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.3      0.5355 ug/L       0.91879      0.5355 ppb        0.91879 171.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                0.4      0.0151 ug/L       1.55755      0.0151 ppb        1.55755 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -13.3     -0.1059 ug/L       0.45152     -0.1059 ppb        0.45152 426.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              29.4      0.3814 ug/L       0.32973      0.3814 ppb        0.32973  86.46%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    68.3      5.7357 ug/L       0.56922      5.7357 ppb        0.56922   9.92%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

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Analysis Begun

Start Time: 3/10/2010 19:06:40 **Plasma On Time: 3/8/2010 08:27:38**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif
Batch ID:
Results Data Set: 031010
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: CCV **Date Collected: 3/10/2010 19:06:42**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3379.3	3379.3	105	%			19:08:54
1	Y RADIAL	2765.9	2765.9	105.3	%			19:08:54
1	Al 396.153Radial†	2288.4	2232.1	4806.0	ug/L	4806.0	ppb	19:08:34
1	Ca 317.933Radial†	1288.5	1209.4	5053.3	ug/L	5053.3	ppb	19:08:54
1	Fe 238.204 Radial†	189.6	170.3	4916.9	ug/L	4916.9	ppb	19:08:54
1	K 766.490 Radial†	12550.7	9875.2	4818.4	ug/L	4818.4	ppb	19:08:34
1	Mg 279.077 IEC†	53.7	49.2	5088.6	ug/L	5088.6	ppb	19:08:54
1	Na 589.592 Radial†	30275.8	29443.2	9314.3	ug/L	9314.3	ppb	19:08:34
1	Sr 421.552†	52870.4	50102.4	482.46	ug/L	482.46	ppb	19:08:34
1	Sc 361.383	855221.9	855221.9	107.99	%			19:09:51
1	Y 371.029	722794.6	722794.6	106.66	%			19:09:51
1	Ag 328.068†	100423.7	92864.5	495.41	ug/L	495.41	ppb	19:09:56
1	As 188.979†	884.7	838.1	495.07	ug/L	495.07	ppb	19:10:16
1	B 249.677†	17826.3	16885.0	489.14	ug/L	489.14	ppb	19:09:56
1	Ba 233.527†	53766.1	49789.6	494.20	ug/L	494.20	ppb	19:09:56
1	Be 313.107†	1173886.2	1090601.2	494.35	ug/L	494.35	ppb	19:09:51
1	Cd 226.502†	34847.7	32426.5	494.55	ug/L	494.55	ppb	19:09:56
1	Co 228.616†	19691.7	18281.1	504.46	ug/L	504.46	ppb	19:09:56
1	Cr 267.716†	38808.1	35884.8	493.32	ug/L	493.32	ppb	19:09:56
1	Cu 324.752†	162420.8	144195.3	486.99	ug/L	486.99	ppb	19:09:56
1	Mn 257.610†	384187.1	355371.7	491.78	ug/L	491.78	ppb	19:09:51
1	Mo 202.031†	5817.0	5373.7	491.20	ug/L	491.20	ppb	19:10:16
1	Ni 231.604†	16371.0	15099.5	504.43	ug/L	504.43	ppb	19:09:56
1	P 214.914†	3481.6	3059.8	2361.3	ug/L	2361.3	ppb	19:10:16
1	Pb 220.353†	3213.2	3019.2	496.63	ug/L	496.63	ppb	19:10:16
1	S 181.975 Axial†	578.7	505.1	963.95	ug/L	963.95	ppb	19:10:16
1	Sb 206.836†	1241.8	1127.2	501.83	ug/L	501.83	ppb	19:10:16
1	Se 196.026†	605.0	581.0	512.96	ug/L	512.96	ppb	19:10:16
1	Si 251.611†	67993.4	62488.1	2437.0	ug/L	2437.0	ppb	19:09:56
1	Sn 189.927†	2232.7	2059.7	491.13	ug/L	491.13	ppb	19:10:16
1	Ti 334.940†	288850.4	268413.9	481.32	ug/L	481.32	ppb	19:09:56
1	Tl 190.801†	1266.4	1198.7	496.29	ug/L	496.29	ppb	19:10:16
1	U 409.014†	15500.7	16326.2	494.24	ug/L	494.24	ppb	19:09:56
1	V 292.402†	63314.0	59823.3	496.71	ug/L	496.71	ppb	19:09:56
1	Zn 213.857†	42280.1	38641.5	489.68	ug/L	489.68	ppb	19:09:56
1	SiO2†	68034.3	62527.1	5239.8	ug/L	5239.8	ppb	19:11:24
2	Sc Radial	3391.2	3391.2	106	%			19:09:19
2	Y RADIAL	2759.2	2759.2	105.0	%			19:09:19
2	Al 396.153Radial†	2297.3	2232.9	4807.5	ug/L	4807.5	ppb	19:08:59
2	Ca 317.933Radial†	1286.2	1203.0	5026.2	ug/L	5026.2	ppb	19:09:19
2	Fe 238.204 Radial†	191.6	171.6	4954.6	ug/L	4954.6	ppb	19:09:19
2	K 766.490 Radial†	12849.3	10115.5	4935.8	ug/L	4935.8	ppb	19:08:59
2	Mg 279.077 IEC†	54.9	50.2	5194.2	ug/L	5194.2	ppb	19:09:19
2	Na 589.592 Radial†	30174.1	29246.1	9251.9	ug/L	9251.9	ppb	19:08:59
2	Sr 421.552†	53134.7	50175.7	483.16	ug/L	483.16	ppb	19:08:59
2	Sc 361.383	853153.5	853153.5	107.73	%			19:10:22
2	Y 371.029	721473.1	721473.1	106.47	%			19:10:22

2	Ag 328.068†	100838.0	93474.5	498.66 ug/L	498.66 ppb	19:10:27
2	As 188.979†	901.2	855.4	505.23 ug/L	505.23 ppb	19:10:47
2	B 249.677†	17872.2	16967.7	491.53 ug/L	491.53 ppb	19:10:27
2	Ba 233.527†	54000.3	50127.7	497.55 ug/L	497.55 ppb	19:10:27
2	Be 313.107†	1171319.4	1090854.0	494.47 ug/L	494.47 ppb	19:10:22
2	Cd 226.502†	34827.4	32485.9	495.46 ug/L	495.46 ppb	19:10:27
2	Co 228.616†	19712.8	18344.8	506.22 ug/L	506.22 ppb	19:10:27
2	Cr 267.716†	39002.6	36152.5	497.00 ug/L	497.00 ppb	19:10:27
2	Cu 324.752†	163232.3	145313.3	490.76 ug/L	490.76 ppb	19:10:27
2	Mn 257.610†	383195.2	355313.5	491.70 ug/L	491.70 ppb	19:10:22
2	Mo 202.031†	5859.1	5425.9	495.97 ug/L	495.97 ppb	19:10:47
2	Ni 231.604†	16360.0	15126.1	505.32 ug/L	505.32 ppb	19:10:27
2	P 214.914†	3484.1	3069.9	2368.7 ug/L	2368.7 ppb	19:10:47
2	Pb 220.353†	3197.0	3011.4	495.35 ug/L	495.35 ppb	19:10:47
2	S 181.975 Axial†	584.6	511.9	976.82 ug/L	976.82 ppb	19:10:47
2	Sb 206.836†	1244.1	1132.2	504.07 ug/L	504.07 ppb	19:10:47
2	Se 196.026†	601.9	579.4	511.73 ug/L	511.73 ppb	19:10:47
2	Si 251.611†	68230.8	62861.2	2451.6 ug/L	2451.6 ppb	19:10:27
2	Sn 189.927†	2237.3	2069.0	493.34 ug/L	493.34 ppb	19:10:47
2	Ti 334.940†	290547.7	270638.0	485.29 ug/L	485.29 ppb	19:10:27
2	Tl 190.801†	1273.2	1207.8	500.08 ug/L	500.08 ppb	19:10:47
2	U 409.014†	15972.8	16799.3	508.59 ug/L	508.59 ppb	19:10:27
2	V 292.402†	63682.6	60307.5	500.76 ug/L	500.76 ppb	19:10:27
2	Zn 213.857†	42349.6	38800.9	491.70 ug/L	491.70 ppb	19:10:27
2	SiO2†	68042.4	62687.4	5253.1 ug/L	5253.1 ppb	19:11:29
3	Sc Radial	3379.2	3379.2	105 %		19:09:44
3	Y RADIAL	2766.0	2766.0	105.3 %		19:09:44
3	Al 396.153Radial†	2311.9	2254.5	4854.3 ug/L	4854.3 ppb	19:09:24
3	Ca 317.933Radial†	1294.5	1215.1	5076.9 ug/L	5076.9 ppb	19:09:44
3	Fe 238.204 Radial†	192.0	172.6	4982.9 ug/L	4982.9 ppb	19:09:44
3	K 766.490 Radial†	12780.1	10093.1	4924.8 ug/L	4924.8 ppb	19:09:24
3	Mg 279.077 IEC†	54.3	49.8	5149.4 ug/L	5149.4 ppb	19:09:44
3	Na 589.592 Radial†	30531.0	29686.0	9391.1 ug/L	9391.1 ppb	19:09:24
3	Sr 421.552†	53491.0	50692.4	488.14 ug/L	488.14 ppb	19:09:24
3	Sc 361.383	853984.2	853984.2	107.83 %		19:10:53
3	Y 371.029	722305.1	722305.1	106.59 %		19:10:53
3	Ag 328.068†	99304.8	91961.6	490.63 ug/L	490.63 ppb	19:10:58
3	As 188.979†	887.8	842.1	497.38 ug/L	497.38 ppb	19:11:18
3	B 249.677†	17580.0	16680.5	483.19 ug/L	483.19 ppb	19:10:58
3	Ba 233.527†	53254.1	49386.9	490.20 ug/L	490.20 ppb	19:10:58
3	Be 313.107†	1175232.4	1093425.2	495.62 ug/L	495.62 ppb	19:10:53
3	Cd 226.502†	34453.4	32107.5	489.68 ug/L	489.68 ppb	19:10:58
3	Co 228.616†	19485.1	18115.9	499.92 ug/L	499.92 ppb	19:10:58
3	Cr 267.716†	38472.4	35625.5	489.76 ug/L	489.76 ppb	19:10:58
3	Cu 324.752†	160103.3	142264.1	480.47 ug/L	480.47 ppb	19:10:58
3	Mn 257.610†	383229.7	354999.5	491.27 ug/L	491.27 ppb	19:10:53
3	Mo 202.031†	5836.2	5399.4	493.55 ug/L	493.55 ppb	19:11:18
3	Ni 231.604†	16187.1	14950.9	499.47 ug/L	499.47 ppb	19:10:58
3	P 214.914†	3467.3	3051.2	2355.7 ug/L	2355.7 ppb	19:11:18
3	Pb 220.353†	3203.0	3014.0	495.79 ug/L	495.79 ppb	19:11:18
3	S 181.975 Axial†	588.5	515.0	982.72 ug/L	982.72 ppb	19:11:18
3	Sb 206.836†	1242.2	1129.3	502.73 ug/L	502.73 ppb	19:11:18
3	Se 196.026†	608.2	584.7	516.36 ug/L	516.36 ppb	19:11:18
3	Si 251.611†	67239.2	61880.0	2413.2 ug/L	2413.2 ppb	19:10:58
3	Sn 189.927†	2223.3	2054.1	489.78 ug/L	489.78 ppb	19:11:18
3	Ti 334.940†	285781.6	265955.6	476.91 ug/L	476.91 ppb	19:10:58
3	Tl 190.801†	1265.4	1199.4	496.60 ug/L	496.60 ppb	19:11:18
3	U 409.014†	15535.9	16379.7	495.86 ug/L	495.86 ppb	19:10:58
3	V 292.402†	62642.2	59285.2	492.33 ug/L	492.33 ppb	19:10:58
3	Zn 213.857†	41748.8	38205.5	484.14 ug/L	484.14 ppb	19:10:58
3	SiO2†	68657.2	63196.1	5295.9 ug/L	5295.9 ppb	19:11:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	854119.9	107.85	%	0.131				0.12%
Sc Radial	3383.2	106	%	0.2				0.20%
Y 371.029	722190.9	106.57	%	0.099				0.09%
Y RADIAL	2763.7	105.2	%	0.15				0.14%
Ag 328.068†	92766.9	494.90	ug/L	4.043	494.90	ppb	4.043	0.82%

```
   QC value within limits for Ag 328.068  Recovery = 98.98%
Al 396.153Radial†       2239.8      4822.6 ug/L        27.46      4822.6 ppb        27.46   0.57%
   QC value within limits for Al 396.153Radial  Recovery = 96.45%
As 188.979†              845.2      499.23 ug/L        5.325      499.23 ppb        5.325   1.07%
   QC value within limits for As 188.979  Recovery = 99.85%
B 249.677†             16844.4      487.95 ug/L        4.295      487.95 ppb        4.295   0.88%
   QC value within limits for B 249.677  Recovery = 97.59%
Ba 233.527†            49768.0      493.98 ug/L        3.681      493.98 ppb        3.681   0.75%
   QC value within limits for Ba 233.527  Recovery = 98.80%
Be 313.107†          1091626.8      494.81 ug/L        0.699      494.81 ppb        0.699   0.14%
   QC value within limits for Be 313.107  Recovery = 98.96%
Ca 317.933Radial†       1209.2      5052.1 ug/L        25.35      5052.1 ppb        25.35   0.50%
   QC value within limits for Ca 317.933Radial  Recovery = 101.04%
Cd 226.502†            32339.9      493.23 ug/L        3.109      493.23 ppb        3.109   0.63%
   QC value within limits for Cd 226.502  Recovery = 98.65%
Co 228.616†            18247.3      503.53 ug/L        3.254      503.53 ppb        3.254   0.65%
   QC value within limits for Co 228.616  Recovery = 100.71%
Cr 267.716†            35887.6      493.36 ug/L        3.620      493.36 ppb        3.620   0.73%
   QC value within limits for Cr 267.716  Recovery = 98.67%
Cu 324.752†           143924.2      486.07 ug/L        5.206      486.07 ppb        5.206   1.07%
   QC value within limits for Cu 324.752  Recovery = 97.21%
Fe 238.204 Radial†       171.5      4951.5 ug/L        33.11      4951.5 ppb        33.11   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.03%
K 766.490 Radial†      10027.9      4893.0 ug/L        64.85      4893.0 ppb        64.85   1.33%
   QC value within limits for K 766.490 Radial  Recovery = 97.86%
Mg 279.077 IEC†           49.7      5144.1 ug/L        53.01      5144.1 ppb        53.01   1.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.88%
Mn 257.610†           355228.2      491.58 ug/L        0.274      491.58 ppb        0.274   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.32%
Mo 202.031†            5399.6      493.58 ug/L        2.384      493.58 ppb        2.384   0.48%
   QC value within limits for Mo 202.031  Recovery = 98.72%
Na 589.592 Radial†     29458.4      9319.1 ug/L        69.71      9319.1 ppb        69.71   0.75%
   QC value within limits for Na 589.592 Radial  Recovery = 93.19%
Ni 231.604†            15058.8      503.08 ug/L        3.154      503.08 ppb        3.154   0.63%
   QC value within limits for Ni 231.604  Recovery = 100.62%
P 214.914†              3060.3      2361.9 ug/L         6.52      2361.9 ppb         6.52   0.28%
   QC value within limits for P 214.914  Recovery = 94.48%
Pb 220.353†             3014.9      495.93 ug/L        0.649      495.93 ppb        0.649   0.13%
   QC value within limits for Pb 220.353  Recovery = 99.19%
S 181.975 Axial†         510.7      974.50 ug/L        9.597      974.50 ppb        9.597   0.98%
   QC value within limits for S 181.975 Axial  Recovery = 97.45%
Sb 206.836†             1129.6      502.88 ug/L        1.127      502.88 ppb        1.127   0.22%
   QC value within limits for Sb 206.836  Recovery = 100.58%
Se 196.026†              581.7      513.69 ug/L        2.395      513.69 ppb        2.395   0.47%
   QC value within limits for Se 196.026  Recovery = 102.74%
Si 251.611†            62409.8      2434.0 ug/L        19.35      2434.0 ppb        19.35   0.80%
   QC value within limits for Si 251.611  Recovery = 97.36%
Sn 189.927†             2060.9      491.42 ug/L        1.794      491.42 ppb        1.794   0.37%
   QC value within limits for Sn 189.927  Recovery = 98.28%
Sr 421.552†            50323.5      484.58 ug/L        3.096      484.58 ppb        3.096   0.64%
   QC value within limits for Sr 421.552  Recovery = 96.92%
Ti 334.940†           268335.8      481.18 ug/L        4.192      481.18 ppb        4.192   0.87%
   QC value within limits for Ti 334.940  Recovery = 96.24%
Tl 190.801†             1202.0      497.66 ug/L        2.103      497.66 ppb        2.103   0.42%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†             16501.7      499.57 ug/L        7.861      499.57 ppb        7.861   1.57%
   QC value within limits for U 409.014  Recovery = 99.91%
V 292.402†             59805.3      496.60 ug/L        4.215      496.60 ppb        4.215   0.85%
   QC value within limits for V 292.402  Recovery = 99.32%
Zn 213.857†            38549.3      488.51 ug/L        3.919      488.51 ppb        3.919   0.80%
   QC value within limits for Zn 213.857  Recovery = 97.70%
SiO2†                  62803.5      5262.9 ug/L        29.33      5262.9 ppb        29.33   0.56%
   QC value within limits for SiO2  Recovery = 98.42%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 19:13:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3280.2	3280.2	102	%			19:15:56
1	Y RADIAL	2683.2	2683.2	102.1	%			19:15:56
1	Al 396.153Radial†	-63.8	-0.3	-0.7001	ug/L	-0.7001	ppb	19:15:56
1	Ca 317.933Radial†	11.3	-1.5	-6.1998	ug/L	-6.1998	ppb	19:15:56
1	Fe 238.204 Radial†	8.2	-1.5	-42.221	ug/L	-42.221	ppb	19:15:56
1	K 766.490 Radial†	2066.9	-7.4	-3.6231	ug/L	-3.6231	ppb	19:15:36
1	Mg 279.077 IEC†	-0.3	-2.0	-209.17	ug/L	-209.17	ppb	19:15:56
1	Na 589.592 Radial†	-715.1	34.0	10.752	ug/L	10.752	ppb	19:15:36
1	Sr 421.552†	30.2	-5.2	-0.0498	ug/L	-0.0498	ppb	19:15:36
1	Sc 361.383	821830.6	821830.6	103.77	%			19:16:53
1	Y 371.029	702015.8	702015.8	103.60	%			19:16:53
1	Ag 328.068†	231.5	91.8	0.4734	ug/L	0.4734	ppb	19:16:58
1	As 188.979†	-26.1	-6.3	-3.6907	ug/L	-3.6907	ppb	19:17:18
1	B 249.677†	-141.1	241.3	7.0276	ug/L	7.0276	ppb	19:16:58
1	Ba 233.527†	66.7	64.6	0.6392	ug/L	0.6392	ppb	19:17:18
1	Be 313.107†	-3548.1	122.7	0.0557	ug/L	0.0557	ppb	19:16:58
1	Cd 226.502†	-132.1	29.0	0.4467	ug/L	0.4467	ppb	19:17:18
1	Co 228.616†	-44.4	3.1	0.0844	ug/L	0.0844	ppb	19:17:18
1	Cr 267.716†	80.0	24.2	0.3304	ug/L	0.3304	ppb	19:16:58
1	Cu 324.752†	6342.2	-100.2	-0.3419	ug/L	-0.3419	ppb	19:16:58
1	Mn 257.610†	423.8	9.5	0.0175	ug/L	0.0175	ppb	19:16:58
1	Mo 202.031†	11.9	-1.5	-0.1430	ug/L	-0.1430	ppb	19:17:18
1	Ni 231.604†	69.3	6.2	0.2076	ug/L	0.2076	ppb	19:17:18
1	P 214.914†	167.7	-2.7	-2.0685	ug/L	-2.0685	ppb	19:17:18
1	Pb 220.353†	-28.0	16.7	2.7437	ug/L	2.7437	ppb	19:17:18
1	S 181.975 Axial†	27.1	-4.7	-8.8984	ug/L	-8.8984	ppb	19:17:18
1	Sb 206.836†	23.2	-0.4	-0.1674	ug/L	-0.1674	ppb	19:17:18
1	Se 196.026†	-19.0	2.4	1.9033	ug/L	1.9033	ppb	19:17:18
1	Si 251.611†	479.6	-13.9	-0.5411	ug/L	-0.5411	ppb	19:17:18
1	Sn 189.927†	12.3	4.1	0.9704	ug/L	0.9704	ppb	19:17:18
1	Ti 334.940†	-906.7	54.7	0.1133	ug/L	0.1133	ppb	19:16:58
1	Tl 190.801†	-27.1	-0.2	-0.0658	ug/L	-0.0658	ppb	19:17:18
1	U 409.014†	-1970.5	73.2	2.2272	ug/L	2.2272	ppb	19:16:53
1	V 292.402†	-1186.8	48.6	0.4025	ug/L	0.4025	ppb	19:16:58
1	Zn 213.857†	605.8	72.3	0.9309	ug/L	0.9309	ppb	19:17:18
1	SiO2†	498.0	4.9	0.4150	ug/L	0.4150	ppb	19:18:38
2	Sc Radial	3261.4	3261.4	102	%			19:16:21
2	Y RADIAL	2677.5	2677.5	101.9	%			19:16:21
2	Al 396.153Radial†	-54.5	8.5	18.322	ug/L	18.322	ppb	19:16:21
2	Ca 317.933Radial†	14.9	2.1	8.8864	ug/L	8.8864	ppb	19:16:21
2	Fe 238.204 Radial†	9.2	-0.5	-13.802	ug/L	-13.802	ppb	19:16:21
2	K 766.490 Radial†	2113.9	50.4	24.615	ug/L	24.615	ppb	19:16:01
2	Mg 279.077 IEC†	2.6	0.9	92.726	ug/L	92.726	ppb	19:16:21
2	Na 589.592 Radial†	-757.2	-11.4	-3.6063	ug/L	-3.6063	ppb	19:16:01
2	Sr 421.552†	19.0	-15.9	-0.1537	ug/L	-0.1537	ppb	19:16:01
2	Sc 361.383	814780.0	814780.0	102.88	%			19:17:23
2	Y 371.029	697370.5	697370.5	102.91	%			19:17:23
2	Ag 328.068†	105.3	-28.9	-0.1609	ug/L	-0.1609	ppb	19:17:28
2	As 188.979†	-14.3	5.0	2.8995	ug/L	2.8995	ppb	19:17:48
2	B 249.677†	-160.7	221.0	6.4338	ug/L	6.4338	ppb	19:17:28
2	Ba 233.527†	43.5	42.6	0.4206	ug/L	0.4206	ppb	19:17:48
2	Be 313.107†	-3551.0	90.3	0.0411	ug/L	0.0411	ppb	19:17:28
2	Cd 226.502†	-137.9	22.2	0.3415	ug/L	0.3415	ppb	19:17:48
2	Co 228.616†	-42.9	4.2	0.1155	ug/L	0.1155	ppb	19:17:48
2	Cr 267.716†	95.1	39.6	0.5418	ug/L	0.5418	ppb	19:17:28
2	Cu 324.752†	6315.4	-73.4	-0.2499	ug/L	-0.2499	ppb	19:17:28
2	Mn 257.610†	411.6	1.2	-0.0035	ug/L	-0.0035	ppb	19:17:28
2	Mo 202.031†	12.5	-0.9	-0.0823	ug/L	-0.0823	ppb	19:17:48
2	Ni 231.604†	73.9	11.2	0.3735	ug/L	0.3735	ppb	19:17:48

2	P 214.914†	166.8	-2.2	-1.6926 ug/L	-1.6926 ppb	19:17:48
2	Pb 220.353†	-43.3	1.6	0.2700 ug/L	0.2700 ppb	19:17:48
2	S 181.975 Axial†	22.4	-9.0	-17.259 ug/L	-17.259 ppb	19:17:48
2	Sb 206.836†	29.0	5.4	2.3558 ug/L	2.3558 ppb	19:17:48
2	Se 196.026†	-6.5	14.4	12.277 ug/L	12.277 ppb	19:17:48
2	Si 251.611†	488.7	-1.1	-0.0432 ug/L	-0.0432 ppb	19:17:48
2	Sn 189.927†	13.1	4.9	1.1683 ug/L	1.1683 ppb	19:17:48
2	Ti 334.940†	-895.6	57.9	0.0964 ug/L	0.0964 ppb	19:17:28
2	Tl 190.801†	-23.8	2.8	1.1701 ug/L	1.1701 ppb	19:17:48
2	U 409.014†	-1954.4	72.3	2.1977 ug/L	2.1977 ppb	19:17:23
2	V 292.402†	-1264.7	-37.1	-0.2970 ug/L	-0.2970 ppb	19:17:28
2	Zn 213.857†	611.0	82.5	1.0549 ug/L	1.0549 ppb	19:17:48
2	SiO2†	508.6	19.3	1.6217 ug/L	1.6217 ppb	19:18:58
3	Sc Radial	3264.7	3264.7	102 %		19:16:46
3	Y RADIAL	2659.8	2659.8	101.2 %		19:16:46
3	Al 396.153Radial†	-63.6	-0.4	-0.9011 ug/L	-0.9011 ppb	19:16:46
3	Ca 317.933Radial†	15.1	2.3	9.6209 ug/L	9.6209 ppb	19:16:46
3	Fe 238.204 Radial†	7.5	-2.1	-60.503 ug/L	-60.503 ppb	19:16:46
3	K 766.490 Radial†	2045.3	-19.1	-9.3151 ug/L	-9.3151 ppb	19:16:26
3	Mg 279.077 IEC†	1.0	-0.7	-74.089 ug/L	-74.089 ppb	19:16:46
3	Na 589.592 Radial†	-733.7	12.5	3.9456 ug/L	3.9456 ppb	19:16:26
3	Sr 421.552†	30.5	-4.7	-0.0454 ug/L	-0.0454 ppb	19:16:26
3	Sc 361.383	812683.0	812683.0	102.62 %		19:17:53
3	Y 371.029	695196.8	695196.8	102.59 %		19:17:53
3	Ag 328.068†	189.1	53.0	0.2596 ug/L	0.2596 ppb	19:17:58
3	As 188.979†	-19.9	-0.6	-0.3366 ug/L	-0.3366 ppb	19:18:18
3	B 249.677†	-157.6	223.7	6.5184 ug/L	6.5184 ppb	19:17:58
3	Ba 233.527†	61.5	60.2	0.5928 ug/L	0.5928 ppb	19:18:18
3	Be 313.107†	-3612.9	21.1	0.0099 ug/L	0.0099 ppb	19:17:58
3	Cd 226.502†	-139.2	20.6	0.3203 ug/L	0.3203 ppb	19:18:18
3	Co 228.616†	-41.3	5.6	0.1562 ug/L	0.1562 ppb	19:18:18
3	Cr 267.716†	106.3	50.8	0.6935 ug/L	0.6935 ppb	19:17:58
3	Cu 324.752†	6396.6	21.6	0.0693 ug/L	0.0693 ppb	19:17:58
3	Mn 257.610†	412.1	2.7	0.0008 ug/L	0.0008 ppb	19:17:58
3	Mo 202.031†	16.5	3.0	0.2717 ug/L	0.2717 ppb	19:18:18
3	Ni 231.604†	70.7	8.3	0.2759 ug/L	0.2759 ppb	19:18:18
3	P 214.914†	170.2	1.6	1.3042 ug/L	1.3042 ppb	19:18:18
3	Pb 220.353†	-42.8	2.0	0.3317 ug/L	0.3317 ppb	19:18:18
3	S 181.975 Axial†	36.5	4.7	9.0457 ug/L	9.0457 ppb	19:18:18
3	Sb 206.836†	31.4	7.9	3.3919 ug/L	3.3919 ppb	19:18:18
3	Se 196.026†	-19.2	2.0	1.5173 ug/L	1.5173 ppb	19:18:18
3	Si 251.611†	481.5	-6.9	-0.2734 ug/L	-0.2734 ppb	19:18:18
3	Sn 189.927†	12.3	4.2	1.0121 ug/L	1.0121 ppb	19:18:18
3	Ti 334.940†	-857.1	93.2	0.1740 ug/L	0.1740 ppb	19:17:58
3	Tl 190.801†	-25.3	1.3	0.5448 ug/L	0.5448 ppb	19:18:18
3	U 409.014†	-2007.9	15.4	0.4719 ug/L	0.4719 ppb	19:17:53
3	V 292.402†	-1293.0	-67.7	-0.5433 ug/L	-0.5433 ppb	19:17:58
3	Zn 213.857†	608.5	81.6	1.0506 ug/L	1.0506 ppb	19:18:18
3	SiO2†	481.5	-5.8	-0.4948 ug/L	-0.4948 ppb	19:19:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	816431.2	103.09	%	0.605				0.59%
Sc Radial	3268.8	102	%	0.3				0.31%
Y 371.029	698194.3	103.03	%	0.514				0.50%
Y RADIAL	2673.5	101.8	%	0.46				0.46%
Ag 328.068†	38.6	0.1907	ug/L	0.32270	0.1907	ppb	0.32270	169.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.6	5.5736	ug/L	11.04094	5.5736	ppb	11.04094	198.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-0.3760	ug/L	3.29530	-0.3760	ppb	3.29530	876.51%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	228.6	6.6599	ug/L	0.32117	6.6599	ppb	0.32117	4.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	55.8	0.5509	ug/L	0.11515	0.5509	ppb	0.11515	20.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.0	0.0356	ug/L	0.02339	0.0356	ppb	0.02339	65.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	4.1025	ug/L	8.92962	4.1025	ppb	8.92962	217.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              23.9      0.3695 ug/L       0.06772      0.3695 ppb        0.06772  18.33%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               4.3      0.1187 ug/L       0.03604      0.1187 ppb        0.03604  30.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              38.2      0.5219 ug/L       0.18233      0.5219 ppb        0.18233  34.94%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -50.7     -0.1742 ug/L       0.21586     -0.1742 ppb        0.21586 123.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.3     -38.842 ug/L       23.5331     -38.842 ppb        23.5331  60.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         8.0      3.8923 ug/L      18.17073      3.8923 ppb       18.17073 466.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6     -63.511 ug/L      151.2254     -63.511 ppb       151.2254 238.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               4.5      0.0049 ug/L       0.01111      0.0049 ppb        0.01111 224.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.2      0.0155 ug/L       0.22396      0.0155 ppb        0.22396 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       11.7      3.6971 ug/L       7.18242      3.6971 ppb        7.18242 194.27%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.5      0.2857 ug/L       0.08341      0.2857 ppb        0.08341  29.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -1.1     -0.8190 ug/L       1.84830     -0.8190 ppb        1.84830 225.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.8      1.1151 ug/L       1.41072      1.1151 ppb        1.41072 126.51%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -3.0     -5.7040 ug/L      13.44017     -5.7040 ppb       13.44017 235.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.3      1.8601 ug/L       1.83073      1.8601 ppb        1.83073  98.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.2      5.2324 ug/L       6.10359      5.2324 ppb        6.10359 116.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -7.3     -0.2859 ug/L       0.24920     -0.2859 ppb        0.24920  87.16%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.4      1.0503 ug/L       0.10434      1.0503 ppb        0.10434   9.93%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -8.6     -0.0830 ug/L       0.06125     -0.0830 ppb        0.06125  73.81%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              68.6      0.1279 ug/L       0.04082      0.1279 ppb        0.04082  31.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.3      0.5497 ug/L       0.61793      0.5497 ppb        0.61793 112.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               53.6      1.6323 ug/L       1.00501      1.6323 ppb        1.00501  61.57%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.7     -0.1459 ug/L       0.49068     -0.1459 ppb        0.49068 336.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              78.8      1.0121 ug/L       0.07042      1.0121 ppb        0.07042   6.96%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     6.1      0.5140 ug/L       1.06167      0.5140 ppb        1.06167 206.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/10/2010 20:04:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3383.3	3383.3	106	%			20:07:05
1	Y RADIAL	2783.9	2783.9	106.0	%			20:07:05
1	Al 396.153Radial†	2327.3	2266.3	4880.1	ug/L	4880.1	ppb	20:06:45
1	Ca 317.933Radial†	1293.5	1212.7	5067.0	ug/L	5067.0	ppb	20:07:05
1	Fe 238.204 Radial†	200.0	180.0	5194.3	ug/L	5194.3	ppb	20:07:05
1	K 766.490 Radial†	12565.1	9874.8	4818.0	ug/L	4818.0	ppb	20:06:45
1	Mg 279.077 IEC†	54.5	50.0	5168.7	ug/L	5168.7	ppb	20:07:05
1	Na 589.592 Radial†	32144.4	31179.2	9863.4	ug/L	9863.4	ppb	20:06:45
1	Sr 421.552†	54792.1	51863.4	499.41	ug/L	499.41	ppb	20:06:45
1	Sc 361.383	865774.3	865774.3	109.32	%			20:08:02
1	Y 371.029	733265.8	733265.8	108.21	%			20:08:02
1	Ag 328.068†	99861.1	91216.4	486.73	ug/L	486.73	ppb	20:08:08
1	As 188.979†	891.9	834.7	493.04	ug/L	493.04	ppb	20:08:28
1	B 249.677†	17427.8	16319.3	472.66	ug/L	472.66	ppb	20:08:08
1	Ba 233.527†	53468.0	48910.1	485.48	ug/L	485.48	ppb	20:08:08
1	Be 313.107†	1186462.8	1088856.1	493.54	ug/L	493.54	ppb	20:08:02
1	Cd 226.502†	34559.7	31769.7	484.50	ug/L	484.50	ppb	20:08:08
1	Co 228.616†	19529.4	17910.4	494.24	ug/L	494.24	ppb	20:08:08
1	Cr 267.716†	38629.0	35282.9	485.06	ug/L	485.06	ppb	20:08:08
1	Cu 324.752†	161358.1	141390.0	477.53	ug/L	477.53	ppb	20:08:08
1	Mn 257.610†	386763.3	353392.0	489.07	ug/L	489.07	ppb	20:08:02
1	Mo 202.031†	5864.8	5351.8	489.23	ug/L	489.23	ppb	20:08:28
1	Ni 231.604†	16221.1	14777.6	493.68	ug/L	493.68	ppb	20:08:08
1	P 214.914†	3480.8	3019.8	2330.8	ug/L	2330.8	ppb	20:08:28
1	Pb 220.353†	3214.4	2984.0	490.84	ug/L	490.84	ppb	20:08:28
1	S 181.975 Axial†	586.2	505.4	964.49	ug/L	964.49	ppb	20:08:28
1	Sb 206.836†	1252.2	1122.7	499.74	ug/L	499.74	ppb	20:08:28
1	Se 196.026†	616.0	584.2	516.48	ug/L	516.48	ppb	20:08:28
1	Si 251.611†	67604.2	61364.7	2393.2	ug/L	2393.2	ppb	20:08:08
1	Sn 189.927†	2232.4	2034.3	485.07	ug/L	485.07	ppb	20:08:28
1	Ti 334.940†	287465.7	263887.1	473.20	ug/L	473.20	ppb	20:08:08
1	Tl 190.801†	1275.7	1192.9	493.90	ug/L	493.90	ppb	20:08:28
1	U 409.014†	15592.0	16234.8	491.45	ug/L	491.45	ppb	20:08:08
1	V 292.402†	63073.4	58888.6	488.99	ug/L	488.99	ppb	20:08:08
1	Zn 213.857†	42072.5	37974.3	481.19	ug/L	481.19	ppb	20:08:08
1	SiO2†	68330.2	62029.9	5198.1	ug/L	5198.1	ppb	20:09:35
2	Sc Radial	3412.8	3412.8	106	%			20:07:30
2	Y RADIAL	2788.6	2788.6	106.1	%			20:07:30
2	Al 396.153Radial†	2377.5	2294.5	4940.6	ug/L	4940.6	ppb	20:07:10
2	Ca 317.933Radial†	1293.8	1202.4	5023.7	ug/L	5023.7	ppb	20:07:30
2	Fe 238.204 Radial†	194.8	173.5	5007.7	ug/L	5007.7	ppb	20:07:30
2	K 766.490 Radial†	12547.4	9755.0	4759.5	ug/L	4759.5	ppb	20:07:10
2	Mg 279.077 IEC†	55.5	50.4	5215.9	ug/L	5215.9	ppb	20:07:30
2	Na 589.592 Radial†	32195.5	30963.3	9795.2	ug/L	9795.2	ppb	20:07:10
2	Sr 421.552†	55151.8	51751.5	498.34	ug/L	498.34	ppb	20:07:10
2	Sc 361.383	855383.6	855383.6	108.01	%			20:08:33
2	Y 371.029	723955.5	723955.5	106.83	%			20:08:33
2	Ag 328.068†	101998.3	94304.8	503.09	ug/L	503.09	ppb	20:08:39
2	As 188.979†	891.0	843.8	498.47	ug/L	498.47	ppb	20:08:59
2	B 249.677†	17966.6	17011.8	492.79	ug/L	492.79	ppb	20:08:39
2	Ba 233.527†	54452.5	50415.7	500.41	ug/L	500.41	ppb	20:08:39
2	Be 313.107†	1176405.1	1092727.8	495.33	ug/L	495.33	ppb	20:08:33
2	Cd 226.502†	35216.8	32762.1	499.67	ug/L	499.67	ppb	20:08:39
2	Co 228.616†	19970.0	18535.3	511.47	ug/L	511.47	ppb	20:08:39
2	Cr 267.716†	39323.6	36355.3	499.79	ug/L	499.79	ppb	20:08:39
2	Cu 324.752†	165142.3	146686.6	495.40	ug/L	495.40	ppb	20:08:39
2	Mn 257.610†	383963.7	355097.6	491.41	ug/L	491.41	ppb	20:08:33
2	Mo 202.031†	5870.3	5422.0	495.62	ug/L	495.62	ppb	20:08:59
2	Ni 231.604†	16538.0	15251.2	509.50	ug/L	509.50	ppb	20:08:39

2	P 214.914†	3496.0	3072.5	2369.8 ug/L	2369.8 ppb	20:08:59
2	Pb 220.353†	3216.2	3021.4	497.02 ug/L	497.02 ppb	20:08:59
2	S 181.975 Axial†	590.0	515.5	983.65 ug/L	983.65 ppb	20:08:59
2	Sb 206.836†	1251.2	1135.7	505.54 ug/L	505.54 ppb	20:08:59
2	Se 196.026†	613.4	588.6	519.76 ug/L	519.76 ppb	20:08:59
2	Si 251.611†	69025.9	63432.2	2473.9 ug/L	2473.9 ppb	20:08:39
2	Sn 189.927†	2229.9	2056.8	490.42 ug/L	490.42 ppb	20:08:59
2	Ti 334.940†	293143.8	272338.4	488.34 ug/L	488.34 ppb	20:08:39
2	Tl 190.801†	1262.0	1194.4	494.55 ug/L	494.55 ppb	20:08:59
2	U 409.014†	16012.1	16797.0	508.51 ug/L	508.51 ppb	20:08:39
2	V 292.402†	64270.6	60697.8	503.94 ug/L	503.94 ppb	20:08:39
2	Zn 213.857†	42843.9	39156.1	496.21 ug/L	496.21 ppb	20:08:39
2	SiO2†	67197.9	61740.8	5173.6 ug/L	5173.6 ppb	20:09:40
3	Sc Radial	3387.2	3387.2	106 %		20:07:55
3	Y RADIAL	2784.6	2784.6	106.0 %		20:07:55
3	Al 396.153Radial†	2322.3	2259.1	4864.5 ug/L	4864.5 ppb	20:07:35
3	Ca 317.933Radial†	1288.7	1206.7	5041.8 ug/L	5041.8 ppb	20:07:55
3	Fe 238.204 Radial†	192.4	172.5	4981.2 ug/L	4981.2 ppb	20:07:55
3	K 766.490 Radial†	12521.7	9820.0	4791.3 ug/L	4791.3 ppb	20:07:35
3	Mg 279.077 IEC†	54.6	49.9	5168.5 ug/L	5168.5 ppb	20:07:55
3	Na 589.592 Radial†	31785.7	30804.6	9744.9 ug/L	9744.9 ppb	20:07:35
3	Sr 421.552†	54565.8	51589.3	496.77 ug/L	496.77 ppb	20:07:35
3	Sc 361.383	860869.3	860869.3	108.70 %		20:09:05
3	Y 371.029	728841.3	728841.3	107.56 %		20:09:05
3	Ag 328.068†	100949.7	92738.3	494.76 ug/L	494.76 ppb	20:09:10
3	As 188.979†	881.4	829.7	490.16 ug/L	490.16 ppb	20:09:30
3	B 249.677†	17685.5	16647.2	482.22 ug/L	482.22 ppb	20:09:10
3	Ba 233.527†	53786.2	49481.4	491.15 ug/L	491.15 ppb	20:09:10
3	Be 313.107†	1177578.1	1086866.4	492.66 ug/L	492.66 ppb	20:09:05
3	Cd 226.502†	34879.8	32244.2	491.76 ug/L	491.76 ppb	20:09:10
3	Co 228.616†	19670.8	18142.2	500.63 ug/L	500.63 ppb	20:09:10
3	Cr 267.716†	38885.7	35720.5	491.07 ug/L	491.07 ppb	20:09:10
3	Cu 324.752†	163056.9	143793.8	485.63 ug/L	485.63 ppb	20:09:10
3	Mn 257.610†	384006.3	352871.5	488.33 ug/L	488.33 ppb	20:09:05
3	Mo 202.031†	5841.4	5360.8	490.04 ug/L	490.04 ppb	20:09:30
3	Ni 231.604†	16304.7	14939.1	499.07 ug/L	499.07 ppb	20:09:10
3	P 214.914†	3451.1	3010.6	2322.0 ug/L	2322.0 ppb	20:09:30
3	Pb 220.353†	3205.0	2992.1	492.19 ug/L	492.19 ppb	20:09:30
3	S 181.975 Axial†	593.3	515.0	982.87 ug/L	982.87 ppb	20:09:30
3	Sb 206.836†	1254.0	1130.9	503.29 ug/L	503.29 ppb	20:09:30
3	Se 196.026†	603.7	576.0	508.93 ug/L	508.93 ppb	20:09:30
3	Si 251.611†	68160.4	62228.7	2426.9 ug/L	2426.9 ppb	20:09:10
3	Sn 189.927†	2223.2	2037.4	485.81 ug/L	485.81 ppb	20:09:30
3	Ti 334.940†	289848.6	267577.5	479.81 ug/L	479.81 ppb	20:09:10
3	Tl 190.801†	1267.0	1191.6	493.36 ug/L	493.36 ppb	20:09:30
3	U 409.014†	15818.4	16524.3	500.25 ug/L	500.25 ppb	20:09:10
3	V 292.402†	63708.5	59801.5	496.52 ug/L	496.52 ppb	20:09:10
3	Zn 213.857†	42361.8	38459.8	487.38 ug/L	487.38 ppb	20:09:10
3	SiO2†	68326.4	62382.5	5227.7 ug/L	5227.7 ppb	20:09:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	860675.7	108.68	%	0.656				0.60%
Sc Radial	3394.4	106	%	0.5				0.47%
Y 371.029	728687.6	107.53	%	0.687				0.64%
Y RADIAL	2785.7	106.0	%	0.10				0.09%
Ag 328.068†	92753.2	494.86	ug/L	8.182	494.86	ppb	8.182	1.65%
QC value within limits for Ag 328.068 Recovery = 98.97%								
Al 396.153Radial†	2273.3	4895.1	ug/L	40.22	4895.1	ppb	40.22	0.82%
QC value within limits for Al 396.153Radial Recovery = 97.90%								
As 188.979†	836.1	493.89	ug/L	4.221	493.89	ppb	4.221	0.85%
QC value within limits for As 188.979 Recovery = 98.78%								
B 249.677†	16659.4	482.56	ug/L	10.072	482.56	ppb	10.072	2.09%
QC value within limits for B 249.677 Recovery = 96.51%								
Ba 233.527†	49602.4	492.35	ug/L	7.539	492.35	ppb	7.539	1.53%
QC value within limits for Ba 233.527 Recovery = 98.47%								
Be 313.107†	1089483.4	493.84	ug/L	1.360	493.84	ppb	1.360	0.28%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	1207.3	5044.2	ug/L	21.73	5044.2	ppb	21.73	0.43%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†            32258.7      491.98 ug/L         7.587      491.98 ppb          7.587   1.54%
   QC value within limits for Cd 226.502  Recovery = 98.40%
Co 228.616†            18195.9      502.11 ug/L         8.709      502.11 ppb          8.709   1.73%
   QC value within limits for Co 228.616  Recovery = 100.42%
Cr 267.716†            35786.2      491.98 ug/L         7.406      491.98 ppb          7.406   1.51%
   QC value within limits for Cr 267.716  Recovery = 98.40%
Cu 324.752†           143956.8      486.19 ug/L         8.948      486.19 ppb          8.948   1.84%
   QC value within limits for Cu 324.752  Recovery = 97.24%
Fe 238.204 Radial†       175.3      5061.1 ug/L        116.18      5061.1 ppb         116.18   2.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.22%
K 766.490 Radial†       9816.6      4789.6 ug/L         29.27      4789.6 ppb          29.27   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 95.79%
Mg 279.077 IEC†           50.1      5184.4 ug/L         27.30      5184.4 ppb          27.30   0.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.69%
Mn 257.610†           353787.0      489.60 ug/L         1.607      489.60 ppb          1.607   0.33%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†            5378.2      491.63 ug/L         3.482      491.63 ppb          3.482   0.71%
   QC value within limits for Mo 202.031  Recovery = 98.33%
Na 589.592 Radial†     30982.4      9801.2 ug/L         59.48      9801.2 ppb          59.48   0.61%
   QC value within limits for Na 589.592 Radial  Recovery = 98.01%
Ni 231.604†            14989.3      500.75 ug/L         8.043      500.75 ppb          8.043   1.61%
   QC value within limits for Ni 231.604  Recovery = 100.15%
P 214.914†              3034.3      2340.9 ug/L         25.43      2340.9 ppb          25.43   1.09%
   QC value within limits for P 214.914  Recovery = 93.64%
Pb 220.353†             2999.2      493.35 ug/L         3.252      493.35 ppb          3.252   0.66%
   QC value within limits for Pb 220.353  Recovery = 98.67%
S 181.975 Axial†         512.0      977.00 ug/L        10.844      977.00 ppb         10.844   1.11%
   QC value within limits for S 181.975 Axial  Recovery = 97.70%
Sb 206.836†             1129.8      502.86 ug/L         2.925      502.86 ppb          2.925   0.58%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†              582.9      515.06 ug/L         5.551      515.06 ppb          5.551   1.08%
   QC value within limits for Se 196.026  Recovery = 103.01%
Si 251.611†            62341.9      2431.3 ug/L         40.56      2431.3 ppb          40.56   1.67%
   QC value within limits for Si 251.611  Recovery = 97.25%
Sn 189.927†             2042.8      487.10 ug/L         2.900      487.10 ppb          2.900   0.60%
   QC value within limits for Sn 189.927  Recovery = 97.42%
Sr 421.552†            51734.7      498.17 ug/L         1.327      498.17 ppb          1.327   0.27%
   QC value within limits for Sr 421.552  Recovery = 99.63%
Ti 334.940†           267934.3      480.45 ug/L         7.589      480.45 ppb          7.589   1.58%
   QC value within limits for Ti 334.940  Recovery = 96.09%
Tl 190.801†             1193.0      493.94 ug/L         0.592      493.94 ppb          0.592   0.12%
   QC value within limits for Tl 190.801  Recovery = 98.79%
U 409.014†             16518.7      500.07 ug/L         8.533      500.07 ppb          8.533   1.71%
   QC value within limits for U 409.014  Recovery = 100.01%
V 292.402†             59796.0      496.48 ug/L         7.477      496.48 ppb          7.477   1.51%
   QC value within limits for V 292.402  Recovery = 99.30%
Zn 213.857†            38530.1      488.26 ug/L         7.548      488.26 ppb          7.548   1.55%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                  62051.0      5199.8 ug/L         27.07      5199.8 ppb          27.07   0.52%
   QC value within limits for SiO2  Recovery = 97.24%
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 20:11:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3314.5	3314.5	103	%			20:14:07
1	Y RADIAL	2707.0	2707.0	103.0	%			20:14:07
1	Al 396.153Radial†	-74.0	-9.6	-20.695	ug/L	-20.695	ppb	20:14:07
1	Ca 317.933Radial†	14.5	1.6	6.5896	ug/L	6.5896	ppb	20:14:07
1	Fe 238.204 Radial†	9.2	-0.6	-17.506	ug/L	-17.506	ppb	20:14:07
1	K 766.490 Radial†	1961.6	-130.1	-63.543	ug/L	-63.543	ppb	20:13:47
1	Mg 279.077 IEC†	2.5	0.7	69.887	ug/L	69.887	ppb	20:14:07
1	Na 589.592 Radial†	-766.1	-8.1	-2.5618	ug/L	-2.5618	ppb	20:13:47
1	Sr 421.552†	17.0	-18.2	-0.1755	ug/L	-0.1755	ppb	20:13:47
1	Sc 361.383	814835.6	814835.6	102.89	%			20:15:04
1	Y 371.029	697428.4	697428.4	102.92	%			20:15:04
1	Ag 328.068†	171.1	34.9	0.1774	ug/L	0.1774	ppb	20:15:04
1	As 188.979†	-19.5	-0.1	-0.0853	ug/L	-0.0853	ppb	20:15:24
1	B 249.677†	-227.3	156.4	4.5522	ug/L	4.5522	ppb	20:15:24
1	Ba 233.527†	59.4	58.0	0.5742	ug/L	0.5742	ppb	20:15:24
1	Be 313.107†	-3397.0	240.3	0.1088	ug/L	0.1088	ppb	20:15:04
1	Cd 226.502†	-136.0	24.0	0.3693	ug/L	0.3693	ppb	20:15:24
1	Co 228.616†	-34.3	12.6	0.3464	ug/L	0.3464	ppb	20:15:24
1	Cr 267.716†	76.4	21.4	0.2914	ug/L	0.2914	ppb	20:15:24
1	Cu 324.752†	6432.3	39.7	0.1310	ug/L	0.1310	ppb	20:15:04
1	Mn 257.610†	458.9	47.1	0.0606	ug/L	0.0606	ppb	20:15:24
1	Mo 202.031†	11.9	-1.5	-0.1388	ug/L	-0.1388	ppb	20:15:24
1	Ni 231.604†	69.4	6.8	0.2278	ug/L	0.2278	ppb	20:15:24
1	P 214.914†	168.7	-0.4	-0.3223	ug/L	-0.3223	ppb	20:15:24
1	Pb 220.353†	-33.2	11.4	1.8746	ug/L	1.8746	ppb	20:15:24
1	S 181.975 Axial†	26.8	-4.8	-9.1028	ug/L	-9.1028	ppb	20:15:24
1	Sb 206.836†	37.8	14.0	5.9756	ug/L	5.9756	ppb	20:15:24
1	Se 196.026†	-16.5	4.6	3.8904	ug/L	3.8904	ppb	20:15:24
1	Si 251.611†	489.3	-0.6	-0.0200	ug/L	-0.0200	ppb	20:15:24
1	Sn 189.927†	2.9	-5.0	-1.1887	ug/L	-1.1887	ppb	20:15:24
1	Ti 334.940†	-914.7	39.4	0.0639	ug/L	0.0639	ppb	20:15:04
1	Tl 190.801†	-21.7	4.8	1.9899	ug/L	1.9899	ppb	20:15:24
1	U 409.014†	-1890.7	134.4	4.0836	ug/L	4.0836	ppb	20:15:04
1	V 292.402†	-1198.7	27.2	0.2322	ug/L	0.2322	ppb	20:15:04
1	Zn 213.857†	613.1	84.5	1.0814	ug/L	1.0814	ppb	20:15:24
1	SiO2†	507.0	17.7	1.4947	ug/L	1.4947	ppb	20:16:35
2	Sc Radial	3273.6	3273.6	102	%			20:14:32
2	Y RADIAL	2686.0	2686.0	102.2	%			20:14:32
2	Al 396.153Radial†	-54.9	8.3	17.992	ug/L	17.992	ppb	20:14:32
2	Ca 317.933Radial†	11.9	-0.8	-3.4916	ug/L	-3.4916	ppb	20:14:32
2	Fe 238.204 Radial†	10.4	0.7	19.743	ug/L	19.743	ppb	20:14:32
2	K 766.490 Radial†	2109.0	37.8	18.487	ug/L	18.487	ppb	20:14:12
2	Mg 279.077 IEC†	1.8	0.1	7.7848	ug/L	7.7848	ppb	20:14:32
2	Na 589.592 Radial†	-743.6	4.7	1.4733	ug/L	1.4733	ppb	20:14:12
2	Sr 421.552†	41.3	5.8	0.0559	ug/L	0.0559	ppb	20:14:12
2	Sc 361.383	812107.2	812107.2	102.54	%			20:15:29
2	Y 371.029	694344.8	694344.8	102.47	%			20:15:29
2	Ag 328.068†	146.7	11.7	0.0647	ug/L	0.0647	ppb	20:15:29
2	As 188.979†	-17.2	2.1	1.2215	ug/L	1.2215	ppb	20:15:49
2	B 249.677†	-223.5	159.3	4.6315	ug/L	4.6315	ppb	20:15:49
2	Ba 233.527†	56.9	55.8	0.5536	ug/L	0.5536	ppb	20:15:49
2	Be 313.107†	-3509.4	119.6	0.0544	ug/L	0.0544	ppb	20:15:29
2	Cd 226.502†	-136.6	23.1	0.3511	ug/L	0.3511	ppb	20:15:49
2	Co 228.616†	-43.9	3.1	0.0834	ug/L	0.0834	ppb	20:15:49
2	Cr 267.716†	103.1	47.7	0.6539	ug/L	0.6539	ppb	20:15:49
2	Cu 324.752†	6376.3	6.2	0.0189	ug/L	0.0189	ppb	20:15:29
2	Mn 257.610†	475.6	65.0	0.0915	ug/L	0.0915	ppb	20:15:49
2	Mo 202.031†	7.5	-5.7	-0.5189	ug/L	-0.5189	ppb	20:15:49
2	Ni 231.604†	61.4	-0.7	-0.0231	ug/L	-0.0231	ppb	20:15:49

2	P 214.914†	177.7	9.0	7.2060 ug/L	7.2060 ppb	20:15:49
2	Pb 220.353†	-34.1	10.4	1.7112 ug/L	1.7112 ppb	20:15:49
2	S 181.975 Axial†	32.0	0.4	0.8163 ug/L	0.8163 ppb	20:15:49
2	Sb 206.836†	31.2	7.7	3.3230 ug/L	3.3230 ppb	20:15:49
2	Se 196.026†	-14.6	6.4	5.5469 ug/L	5.5469 ppb	20:15:49
2	Si 251.611†	476.7	-11.2	-0.4324 ug/L	-0.4324 ppb	20:15:49
2	Sn 189.927†	13.3	5.1	1.2238 ug/L	1.2238 ppb	20:15:49
2	Ti 334.940†	-879.3	70.9	0.1234 ug/L	0.1234 ppb	20:15:29
2	Tl 190.801†	-23.3	3.2	1.3221 ug/L	1.3221 ppb	20:15:49
2	U 409.014†	-1831.3	186.2	5.6509 ug/L	5.6509 ppb	20:15:29
2	V 292.402†	-1194.1	27.8	0.2283 ug/L	0.2283 ppb	20:15:29
2	Zn 213.857†	612.8	86.2	1.1002 ug/L	1.1002 ppb	20:15:49
2	SiO2†	500.4	12.9	1.0986 ug/L	1.0986 ppb	20:16:55
3	Sc Radial	3336.2	3336.2	104 %		20:14:57
3	Y RADIAL	2727.4	2727.4	103.8 %		20:14:57
3	Al 396.153Radial†	-55.7	8.5	18.395 ug/L	18.395 ppb	20:14:57
3	Ca 317.933Radial†	14.6	1.6	6.5142 ug/L	6.5142 ppb	20:14:57
3	Fe 238.204 Radial†	8.1	-1.7	-50.232 ug/L	-50.232 ppb	20:14:57
3	K 766.490 Radial†	2057.3	-50.5	-24.666 ug/L	-24.666 ppb	20:14:37
3	Mg 279.077 IEC†	0.5	-1.2	-124.81 ug/L	-124.81 ppb	20:14:57
3	Na 589.592 Radial†	-781.7	-18.2	-5.7612 ug/L	-5.7612 ppb	20:14:37
3	Sr 421.552†	28.2	-7.5	-0.0723 ug/L	-0.0723 ppb	20:14:37
3	Sc 361.383	805433.6	805433.6	101.70 %		20:15:54
3	Y 371.029	689940.8	689940.8	101.82 %		20:15:54
3	Ag 328.068†	200.2	65.5	0.3360 ug/L	0.3360 ppb	20:15:54
3	As 188.979†	-20.6	-1.4	-0.8379 ug/L	-0.8379 ppb	20:16:14
3	B 249.677†	-244.4	136.9	3.9912 ug/L	3.9912 ppb	20:16:14
3	Ba 233.527†	57.2	56.6	0.5596 ug/L	0.5596 ppb	20:16:14
3	Be 313.107†	-3450.7	148.9	0.0676 ug/L	0.0676 ppb	20:15:54
3	Cd 226.502†	-141.6	17.0	0.2638 ug/L	0.2638 ppb	20:16:14
3	Co 228.616†	-35.4	11.1	0.3064 ug/L	0.3064 ppb	20:16:14
3	Cr 267.716†	78.8	24.6	0.3376 ug/L	0.3376 ppb	20:16:14
3	Cu 324.752†	6204.8	-110.9	-0.3757 ug/L	-0.3757 ppb	20:15:54
3	Mn 257.610†	451.0	44.6	0.0618 ug/L	0.0618 ppb	20:16:14
3	Mo 202.031†	11.9	-1.3	-0.1261 ug/L	-0.1261 ppb	20:16:14
3	Ni 231.604†	67.3	5.5	0.1850 ug/L	0.1850 ppb	20:16:14
3	P 214.914†	163.0	-4.0	-3.1385 ug/L	-3.1385 ppb	20:16:14
3	Pb 220.353†	-43.8	0.6	0.1132 ug/L	0.1132 ppb	20:16:14
3	S 181.975 Axial†	32.8	1.4	2.7298 ug/L	2.7298 ppb	20:16:14
3	Sb 206.836†	20.8	-2.3	-1.0094 ug/L	-1.0094 ppb	20:16:14
3	Se 196.026†	-21.6	-0.6	-0.6287 ug/L	-0.6287 ppb	20:16:14
3	Si 251.611†	498.6	14.1	0.5540 ug/L	0.5540 ppb	20:16:14
3	Sn 189.927†	0.9	-6.9	-1.6358 ug/L	-1.6358 ppb	20:16:14
3	Ti 334.940†	-872.3	70.7	0.1390 ug/L	0.1390 ppb	20:15:54
3	Tl 190.801†	-21.1	5.2	2.1489 ug/L	2.1489 ppb	20:16:14
3	U 409.014†	-2100.3	-93.1	-2.8234 ug/L	-2.8234 ppb	20:15:54
3	V 292.402†	-1151.1	60.4	0.4925 ug/L	0.4925 ppb	20:15:54
3	Zn 213.857†	600.1	78.6	1.0127 ug/L	1.0127 ppb	20:16:14
3	SiO2†	498.7	15.4	1.2945 ug/L	1.2945 ppb	20:17:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	810792.2	102.38	%	0.611				0.60%
Sc Radial	3308.1	103	%	1.0				0.96%
Y 371.029	693904.7	102.40	%	0.555				0.54%
Y RADIAL	2706.8	103.0	%	0.79				0.76%
Ag 328.068†	37.4	0.1927	ug/L	0.13632	0.1927	ppb	0.13632	70.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.4	5.2308	ug/L	22.45296	5.2308	ppb	22.45296	429.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0994	ug/L	1.04207	0.0994	ppb	1.04207	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	150.8	4.3917	ug/L	0.34906	4.3917	ppb	0.34906	7.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	56.8	0.5625	ug/L	0.01055	0.5625	ppb	0.01055	1.88%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	169.6	0.0770	ug/L	0.02841	0.0770	ppb	0.02841	36.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.8	3.2041	ug/L	5.79876	3.2041	ppb	5.79876	180.98%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              21.4      0.3281 ug/L       0.05639      0.3281 ppb        0.05639  17.19%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.9      0.2454 ug/L       0.14174      0.2454 ppb        0.14174  57.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              31.2      0.4276 ug/L       0.19734      0.4276 ppb        0.19734  46.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -21.7     -0.0753 ug/L       0.26612     -0.0753 ppb        0.26612 353.55%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.6     -15.998 ug/L       35.0115     -15.998 ppb        35.0115 218.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -47.6     -23.241 ug/L       41.0338     -23.241 ppb        41.0338 176.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.2     -15.712 ug/L       99.4521     -15.712 ppb        99.4521 632.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              52.2      0.0713 ug/L       0.01752      0.0713 ppb        0.01752  24.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -2.8     -0.2613 ug/L       0.22323     -0.2613 ppb        0.22323  85.44%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -7.2     -2.2832 ug/L       3.62527     -2.2832 ppb        3.62527 158.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.9      0.1299 ug/L       0.13422      0.1299 ppb        0.13422 103.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                1.5      1.2484 ug/L       5.34811      1.2484 ppb        5.34811 428.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.5      1.2330 ug/L       0.97324      1.2330 ppb        0.97324  78.93%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.0     -1.8523 ug/L       6.35162     -1.8523 ppb        6.35162 342.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.5      2.7630 ug/L       3.52599      2.7630 ppb        3.52599 127.61%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.5      2.9362 ug/L       3.19648      2.9362 ppb        3.19648 108.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               0.8      0.0339 ug/L       0.49543      0.0339 ppb        0.49543 >999.9%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.2     -0.5336 ug/L       1.53824     -0.5336 ppb        1.53824 288.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -6.6     -0.0640 ug/L       0.11593     -0.0640 ppb        0.11593 181.21%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              60.3      0.1088 ug/L       0.03961      0.1088 ppb        0.03961  36.42%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.4      1.8203 ug/L       0.43870      1.8203 ppb        0.43870  24.10%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               75.8      2.3037 ug/L       4.50881      2.3037 ppb        4.50881 195.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               38.5      0.3177 ug/L       0.15144      0.3177 ppb        0.15144  47.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              83.1      1.0648 ug/L       0.04603      1.0648 ppb        0.04603   4.32%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    15.3      1.2959 ug/L       0.19805      1.2959 ppb        0.19805  15.28%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 16
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/10/2010 20:53:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3384.7	3384.7	106	%			20:55:49
1	Y RADIAL	2762.0	2762.0	105.1	%			20:55:49
1	Al 396.153Radial†	2291.7	2231.7	4805.0	ug/L	4805.0	ppb	20:55:28
1	Ca 317.933Radial†	1294.3	1212.9	5067.7	ug/L	5067.7	ppb	20:55:49
1	Fe 238.204 Radial†	192.6	172.9	4990.5	ug/L	4990.5	ppb	20:55:49
1	K 766.490 Radial†	12683.0	9981.3	4870.2	ug/L	4870.2	ppb	20:55:28
1	Mg 279.077 IEC†	54.6	50.0	5176.2	ug/L	5176.2	ppb	20:55:49
1	Na 589.592 Radial†	31130.1	30205.8	9555.5	ug/L	9555.5	ppb	20:55:28
1	Sr 421.552†	53889.0	50986.0	490.96	ug/L	490.96	ppb	20:55:28
1	Sc 361.383	855310.1	855310.1	108.00	%			20:56:46
1	Y 371.029	722593.2	722593.2	106.63	%			20:56:46
1	Ag 328.068†	99027.4	91562.0	488.51	ug/L	488.51	ppb	20:56:51
1	As 188.979†	890.3	843.2	498.01	ug/L	498.01	ppb	20:57:11
1	B 249.677†	17431.1	16517.3	478.45	ug/L	478.45	ppb	20:56:51
1	Ba 233.527†	53085.5	49154.2	487.89	ug/L	487.89	ppb	20:56:51
1	Be 313.107†	1171476.4	1088257.8	493.27	ug/L	493.27	ppb	20:56:46
1	Cd 226.502†	34461.9	32065.9	489.04	ug/L	489.04	ppb	20:56:51
1	Co 228.616†	19392.0	18001.7	496.77	ug/L	496.77	ppb	20:56:51
1	Cr 267.716†	38382.8	35487.3	487.86	ug/L	487.86	ppb	20:56:51
1	Cu 324.752†	159608.7	141576.0	478.15	ug/L	478.15	ppb	20:56:51
1	Mn 257.610†	383665.4	354852.0	491.07	ug/L	491.07	ppb	20:56:46
1	Mo 202.031†	5839.1	5393.7	493.03	ug/L	493.03	ppb	20:57:11
1	Ni 231.604†	16115.7	14861.6	496.49	ug/L	496.49	ppb	20:56:51
1	P 214.914†	3471.9	3050.5	2355.6	ug/L	2355.6	ppb	20:57:11
1	Pb 220.353†	3216.0	3021.4	497.00	ug/L	497.00	ppb	20:57:11
1	S 181.975 Axial†	580.0	506.3	966.11	ug/L	966.11	ppb	20:57:11
1	Sb 206.836†	1253.8	1138.2	506.58	ug/L	506.58	ppb	20:57:11
1	Se 196.026†	603.8	579.8	512.17	ug/L	512.17	ppb	20:57:11
1	Si 251.611†	67123.3	61676.0	2405.3	ug/L	2405.3	ppb	20:56:51
1	Sn 189.927†	2235.9	2062.5	491.78	ug/L	491.78	ppb	20:57:11
1	Ti 334.940†	284624.5	264473.4	474.25	ug/L	474.25	ppb	20:56:51
1	Tl 190.801†	1275.3	1206.8	499.63	ug/L	499.63	ppb	20:57:11
1	U 409.014†	15384.3	16217.0	490.92	ug/L	490.92	ppb	20:56:51
1	V 292.402†	62443.0	59010.6	490.07	ug/L	490.07	ppb	20:56:51
1	Zn 213.857†	41780.3	38174.7	483.76	ug/L	483.76	ppb	20:56:51
1	SiO2†	68131.5	62610.6	5246.7	ug/L	5246.7	ppb	20:58:19
2	Sc Radial	3374.8	3374.8	105	%			20:56:14
2	Y RADIAL	2766.3	2766.3	105.3	%			20:56:14
2	Al 396.153Radial†	2315.0	2260.2	4866.7	ug/L	4866.7	ppb	20:55:54
2	Ca 317.933Radial†	1284.4	1207.2	5043.7	ug/L	5043.7	ppb	20:56:14
2	Fe 238.204 Radial†	195.8	176.5	5094.2	ug/L	5094.2	ppb	20:56:14
2	K 766.490 Radial†	12485.9	9829.4	4796.0	ug/L	4796.0	ppb	20:55:54
2	Mg 279.077 IEC†	54.1	49.6	5135.2	ug/L	5135.2	ppb	20:56:14
2	Na 589.592 Radial†	30824.0	30001.5	9490.9	ug/L	9490.9	ppb	20:55:54
2	Sr 421.552†	53537.0	50801.5	489.19	ug/L	489.19	ppb	20:55:54
2	Sc 361.383	852315.2	852315.2	107.62	%			20:57:17
2	Y 371.029	721310.1	721310.1	106.44	%			20:57:17
2	Ag 328.068†	100212.2	92985.2	496.10	ug/L	496.10	ppb	20:57:22
2	As 188.979†	889.8	845.7	499.51	ug/L	499.51	ppb	20:57:42
2	B 249.677†	17662.2	16788.8	486.31	ug/L	486.31	ppb	20:57:22
2	Ba 233.527†	53482.8	49696.1	493.28	ug/L	493.28	ppb	20:57:22
2	Be 313.107†	1169609.7	1090334.8	494.23	ug/L	494.23	ppb	20:57:17
2	Cd 226.502†	34669.7	32371.1	493.69	ug/L	493.69	ppb	20:57:22
2	Co 228.616†	19561.2	18222.0	502.83	ug/L	502.83	ppb	20:57:22
2	Cr 267.716†	38687.5	35895.3	493.47	ug/L	493.47	ppb	20:57:22
2	Cu 324.752†	161953.3	144273.8	487.26	ug/L	487.26	ppb	20:57:22
2	Mn 257.610†	382262.4	354796.6	491.00	ug/L	491.00	ppb	20:57:17
2	Mo 202.031†	5816.8	5391.9	492.88	ug/L	492.88	ppb	20:57:42
2	Ni 231.604†	16230.7	15020.9	501.81	ug/L	501.81	ppb	20:57:22

2	P 214.914†	3437.3	3029.6	2336.9 ug/L	2336.9 ppb	20:57:42
2	Pb 220.353†	3200.1	3017.2	496.30 ug/L	496.30 ppb	20:57:42
2	S 181.975 Axial†	572.3	501.0	956.06 ug/L	956.06 ppb	20:57:42
2	Sb 206.836†	1253.9	1142.4	508.38 ug/L	508.38 ppb	20:57:42
2	Se 196.026†	604.7	582.6	514.83 ug/L	514.83 ppb	20:57:42
2	Si 251.611†	67757.5	62483.7	2436.9 ug/L	2436.9 ppb	20:57:22
2	Sn 189.927†	2227.5	2061.9	491.65 ug/L	491.65 ppb	20:57:42
2	Ti 334.940†	287712.8	268269.0	481.05 ug/L	481.05 ppb	20:57:22
2	Tl 190.801†	1266.2	1202.5	497.88 ug/L	497.88 ppb	20:57:42
2	U 409.014†	15722.1	16580.9	501.95 ug/L	501.95 ppb	20:57:22
2	V 292.402†	63147.5	59868.4	497.09 ug/L	497.09 ppb	20:57:22
2	Zn 213.857†	42160.7	38664.0	489.96 ug/L	489.96 ppb	20:57:22
2	SiO2†	68615.7	63282.2	5303.2 ug/L	5303.2 ppb	20:58:24
3	Sc Radial	3377.3	3377.3	105 %		20:56:39
3	Y RADIAL	2755.5	2755.5	104.9 %		20:56:39
3	Al 396.153Radial†	2296.4	2241.0	4825.1 ug/L	4825.1 ppb	20:56:19
3	Ca 317.933Radial†	1292.3	1213.7	5071.1 ug/L	5071.1 ppb	20:56:39
3	Fe 238.204 Radial†	192.0	172.7	4985.0 ug/L	4985.0 ppb	20:56:39
3	K 766.490 Radial†	12611.2	9939.3	4849.7 ug/L	4849.7 ppb	20:56:19
3	Mg 279.077 IEC†	56.5	51.9	5369.7 ug/L	5369.7 ppb	20:56:39
3	Na 589.592 Radial†	30800.9	29957.7	9477.0 ug/L	9477.0 ppb	20:56:19
3	Sr 421.552†	53399.1	50632.6	487.56 ug/L	487.56 ppb	20:56:19
3	Sc 361.383	854165.3	854165.3	107.85 %		20:57:48
3	Y 371.029	723249.1	723249.1	106.73 %		20:57:48
3	Ag 328.068†	100157.7	92732.9	494.73 ug/L	494.73 ppb	20:57:53
3	As 188.979†	891.3	845.2	499.25 ug/L	499.25 ppb	20:58:13
3	B 249.677†	17653.1	16744.9	485.05 ug/L	485.05 ppb	20:57:53
3	Ba 233.527†	53553.7	49654.2	492.86 ug/L	492.86 ppb	20:57:53
3	Be 313.107†	1171824.3	1090034.1	494.09 ug/L	494.09 ppb	20:57:48
3	Cd 226.502†	34718.5	32346.6	493.33 ug/L	493.33 ppb	20:57:53
3	Co 228.616†	19624.7	18241.6	503.37 ug/L	503.37 ppb	20:57:53
3	Cr 267.716†	38722.9	35850.3	492.85 ug/L	492.85 ppb	20:57:53
3	Cu 324.752†	161744.7	143754.5	485.50 ug/L	485.50 ppb	20:57:53
3	Mn 257.610†	382526.6	354272.2	490.26 ug/L	490.26 ppb	20:57:48
3	Mo 202.031†	5818.1	5381.4	491.91 ug/L	491.91 ppb	20:58:13
3	Ni 231.604†	16273.2	15027.6	502.03 ug/L	502.03 ppb	20:57:53
3	P 214.914†	3448.4	3032.9	2340.0 ug/L	2340.0 ppb	20:58:13
3	Pb 220.353†	3196.3	3007.3	494.67 ug/L	494.67 ppb	20:58:13
3	S 181.975 Axial†	582.0	508.8	971.04 ug/L	971.04 ppb	20:58:13
3	Sb 206.836†	1248.3	1134.6	504.98 ug/L	504.98 ppb	20:58:13
3	Se 196.026†	604.7	581.4	513.49 ug/L	513.49 ppb	20:58:13
3	Si 251.611†	67851.5	62434.5	2434.9 ug/L	2434.9 ppb	20:57:53
3	Sn 189.927†	2220.9	2051.4	489.15 ug/L	489.15 ppb	20:58:13
3	Ti 334.940†	287821.2	267790.5	480.18 ug/L	480.18 ppb	20:57:53
3	Tl 190.801†	1264.4	1198.3	496.15 ug/L	496.15 ppb	20:58:13
3	U 409.014†	15588.8	16425.6	497.25 ug/L	497.25 ppb	20:57:53
3	V 292.402†	63138.7	59733.2	495.98 ug/L	495.98 ppb	20:57:53
3	Zn 213.857†	42249.5	38661.5	489.95 ug/L	489.95 ppb	20:57:53
3	SiO2†	68401.6	62945.6	5274.9 ug/L	5274.9 ppb	20:58:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	853930.2	107.82	%	0.191				0.18%
Sc Radial	3379.0	105	%	0.2				0.15%
Y 371.029	722384.1	106.60	%	0.146				0.14%
Y RADIAL	2761.3	105.1	%	0.21				0.20%
Ag 328.068†	92426.7	493.11	ug/L	4.049	493.11	ppb	4.049	0.82%
QC value within limits for Ag 328.068 Recovery = 98.62%								
Al 396.153Radial†	2244.3	4832.3	ug/L	31.49	4832.3	ppb	31.49	0.65%
QC value within limits for Al 396.153Radial Recovery = 96.65%								
As 188.979†	844.7	498.92	ug/L	0.802	498.92	ppb	0.802	0.16%
QC value within limits for As 188.979 Recovery = 99.78%								
B 249.677†	16683.7	483.27	ug/L	4.225	483.27	ppb	4.225	0.87%
QC value within limits for B 249.677 Recovery = 96.65%								
Ba 233.527†	49501.5	491.34	ug/L	2.994	491.34	ppb	2.994	0.61%
QC value within limits for Ba 233.527 Recovery = 98.27%								
Be 313.107†	1089542.2	493.86	ug/L	0.516	493.86	ppb	0.516	0.10%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	1211.3	5060.8	ug/L	14.93	5060.8	ppb	14.93	0.30%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.22%
Cd 226.502†            32261.2      492.02 ug/L         2.587      492.02 ppb          2.587   0.53%
   QC value within limits for Cd 226.502  Recovery = 98.40%
Co 228.616†            18155.1      500.99 ug/L         3.667      500.99 ppb          3.667   0.73%
   QC value within limits for Co 228.616  Recovery = 100.20%
Cr 267.716†            35744.3      491.40 ug/L         3.076      491.40 ppb          3.076   0.63%
   QC value within limits for Cr 267.716  Recovery = 98.28%
Cu 324.752†           143201.4      483.64 ug/L         4.834      483.64 ppb          4.834   1.00%
   QC value within limits for Cu 324.752  Recovery = 96.73%
Fe 238.204 Radial†       174.0      5023.2 ug/L        61.55      5023.2 ppb         61.55   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.46%
K 766.490 Radial†       9916.7      4838.6 ug/L        38.31      4838.6 ppb         38.31   0.79%
   QC value within limits for K 766.490 Radial  Recovery = 96.77%
Mg 279.077 IEC†          50.5      5227.0 ug/L       125.24      5227.0 ppb        125.24   2.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.54%
Mn 257.610†           354640.3      490.77 ug/L         0.450      490.77 ppb          0.450   0.09%
   QC value within limits for Mn 257.610  Recovery = 98.15%
Mo 202.031†             5389.0      492.61 ug/L         0.610      492.61 ppb          0.610   0.12%
   QC value within limits for Mo 202.031  Recovery = 98.52%
Na 589.592 Radial†     30055.0      9507.8 ug/L        41.88      9507.8 ppb         41.88   0.44%
   QC value within limits for Na 589.592 Radial  Recovery = 95.08%
Ni 231.604†            14970.0      500.11 ug/L         3.138      500.11 ppb          3.138   0.63%
   QC value within limits for Ni 231.604  Recovery = 100.02%
P 214.914†              3037.7      2344.2 ug/L         9.99      2344.2 ppb          9.99   0.43%
   QC value within limits for P 214.914  Recovery = 93.77%
Pb 220.353†             3015.3      495.99 ug/L         1.195      495.99 ppb          1.195   0.24%
   QC value within limits for Pb 220.353  Recovery = 99.20%
S 181.975 Axial†         505.4      964.40 ug/L         7.631      964.40 ppb          7.631   0.79%
   QC value within limits for S 181.975 Axial  Recovery = 96.44%
Sb 206.836†             1138.4      506.65 ug/L         1.702      506.65 ppb          1.702   0.34%
   QC value within limits for Sb 206.836  Recovery = 101.33%
Se 196.026†              581.3      513.50 ug/L         1.328      513.50 ppb          1.328   0.26%
   QC value within limits for Se 196.026  Recovery = 102.70%
Si 251.611†            62198.0      2425.7 ug/L        17.71      2425.7 ppb         17.71   0.73%
   QC value within limits for Si 251.611  Recovery = 97.03%
Sn 189.927†             2058.6      490.86 ug/L         1.482      490.86 ppb          1.482   0.30%
   QC value within limits for Sn 189.927  Recovery = 98.17%
Sr 421.552†            50806.7      489.24 ug/L         1.702      489.24 ppb          1.702   0.35%
   QC value within limits for Sr 421.552  Recovery = 97.85%
Ti 334.940†           266844.3      478.50 ug/L         3.701      478.50 ppb          3.701   0.77%
   QC value within limits for Ti 334.940  Recovery = 95.70%
Tl 190.801†             1202.6      497.89 ug/L         1.742      497.89 ppb          1.742   0.35%
   QC value within limits for Tl 190.801  Recovery = 99.58%
U 409.014†             16407.8      496.71 ug/L         5.535      496.71 ppb          5.535   1.11%
   QC value within limits for U 409.014  Recovery = 99.34%
V 292.402†             59537.4      494.38 ug/L         3.775      494.38 ppb          3.775   0.76%
   QC value within limits for V 292.402  Recovery = 98.88%
Zn 213.857†            38500.1      487.89 ug/L         3.574      487.89 ppb          3.574   0.73%
   QC value within limits for Zn 213.857  Recovery = 97.58%
SiO2†                  62946.1      5274.9 ug/L        28.21      5274.9 ppb         28.21   0.53%
   QC value within limits for SiO2  Recovery = 98.64%
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 21:00:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3239.9	3239.9	101	%			21:02:50
1	Y RADIAL	2650.2	2650.2	100.9	%			21:02:50
1	Al 396.153Radial†	-57.7	5.0	10.754	ug/L	10.754	ppb	21:02:50
1	Ca 317.933Radial†	14.2	1.6	6.6290	ug/L	6.6290	ppb	21:02:50
1	Fe 238.204 Radial†	8.3	-1.3	-37.610	ug/L	-37.610	ppb	21:02:50
1	K 766.490 Radial†	2101.3	51.7	25.277	ug/L	25.277	ppb	21:02:30
1	Mg 279.077 IEC†	0.1	-1.7	-171.28	ug/L	-171.28	ppb	21:02:50
1	Na 589.592 Radial†	-755.7	-14.8	-4.6972	ug/L	-4.6972	ppb	21:02:30
1	Sr 421.552†	39.3	4.3	0.0410	ug/L	0.0410	ppb	21:02:30
1	Sc 361.383	795522.1	795522.1	100.45	%			21:03:47
1	Y 371.029	679550.9	679550.9	100.28	%			21:03:47
1	Ag 328.068†	38.8	-92.7	-0.4977	ug/L	-0.4977	ppb	21:03:47
1	As 188.979†	-22.4	-3.5	-2.0655	ug/L	-2.0655	ppb	21:04:07
1	B 249.677†	-172.2	205.8	5.9941	ug/L	5.9941	ppb	21:04:07
1	Ba 233.527†	41.1	41.2	0.4069	ug/L	0.4069	ppb	21:04:07
1	Be 313.107†	-3423.5	133.7	0.0605	ug/L	0.0605	ppb	21:03:47
1	Cd 226.502†	-139.8	17.1	0.2635	ug/L	0.2635	ppb	21:04:07
1	Co 228.616†	-39.0	7.1	0.1966	ug/L	0.1966	ppb	21:04:07
1	Cr 267.716†	57.8	4.7	0.0651	ug/L	0.0651	ppb	21:04:07
1	Cu 324.752†	6268.2	28.2	0.0962	ug/L	0.0962	ppb	21:03:47
1	Mn 257.610†	436.1	35.3	0.0521	ug/L	0.0521	ppb	21:04:07
1	Mo 202.031†	14.4	1.3	0.1132	ug/L	0.1132	ppb	21:04:07
1	Ni 231.604†	80.9	19.9	0.6644	ug/L	0.6644	ppb	21:04:07
1	P 214.914†	163.2	-1.8	-1.4536	ug/L	-1.4536	ppb	21:04:07
1	Pb 220.353†	-35.8	8.0	1.3208	ug/L	1.3208	ppb	21:04:07
1	S 181.975 Axial†	32.5	1.5	2.9067	ug/L	2.9067	ppb	21:04:07
1	Sb 206.836†	32.4	9.6	4.1260	ug/L	4.1260	ppb	21:04:07
1	Se 196.026†	-20.8	0.0	-0.0836	ug/L	-0.0836	ppb	21:04:07
1	Si 251.611†	497.6	19.3	0.7534	ug/L	0.7534	ppb	21:04:07
1	Sn 189.927†	11.8	3.9	0.9332	ug/L	0.9332	ppb	21:04:07
1	Ti 334.940†	-914.4	18.1	0.0497	ug/L	0.0497	ppb	21:03:47
1	Tl 190.801†	-16.1	10.0	4.1030	ug/L	4.1030	ppb	21:04:07
1	U 409.014†	-2165.4	-183.7	-5.5751	ug/L	-5.5751	ppb	21:03:47
1	V 292.402†	-1170.8	26.7	0.2116	ug/L	0.2116	ppb	21:03:47
1	Zn 213.857†	624.7	110.5	1.4143	ug/L	1.4143	ppb	21:04:07
1	SiO2†	498.6	21.4	1.7923	ug/L	1.7923	ppb	21:05:18
2	Sc Radial	3221.0	3221.0	101	%			21:03:15
2	Y RADIAL	2631.0	2631.0	100.1	%			21:03:15
2	Al 396.153Radial†	-54.7	7.6	16.373	ug/L	16.373	ppb	21:03:15
2	Ca 317.933Radial†	12.7	0.1	0.5551	ug/L	0.5551	ppb	21:03:15
2	Fe 238.204 Radial†	6.5	-3.0	-86.233	ug/L	-86.233	ppb	21:03:15
2	K 766.490 Radial†	2167.3	129.6	63.309	ug/L	63.309	ppb	21:02:55
2	Mg 279.077 IEC†	2.0	0.3	26.581	ug/L	26.581	ppb	21:03:15
2	Na 589.592 Radial†	-745.6	-9.1	-2.8890	ug/L	-2.8890	ppb	21:02:55
2	Sr 421.552†	13.0	-21.7	-0.2087	ug/L	-0.2087	ppb	21:02:55
2	Sc 361.383	809505.8	809505.8	102.21	%			21:04:12
2	Y 371.029	692070.0	692070.0	102.13	%			21:04:12
2	Ag 328.068†	217.6	81.6	0.3994	ug/L	0.3994	ppb	21:04:12
2	As 188.979†	-23.3	-4.0	-2.3629	ug/L	-2.3629	ppb	21:04:33
2	B 249.677†	-187.4	193.9	5.6551	ug/L	5.6551	ppb	21:04:33
2	Ba 233.527†	41.5	40.9	0.4012	ug/L	0.4012	ppb	21:04:33
2	Be 313.107†	-3473.2	144.0	0.0657	ug/L	0.0657	ppb	21:04:12
2	Cd 226.502†	-138.3	21.0	0.3300	ug/L	0.3300	ppb	21:04:33
2	Co 228.616†	-23.1	23.3	0.6422	ug/L	0.6422	ppb	21:04:33
2	Cr 267.716†	86.7	32.0	0.4326	ug/L	0.4326	ppb	21:04:33
2	Cu 324.752†	6371.5	21.5	0.0650	ug/L	0.0650	ppb	21:04:12
2	Mn 257.610†	473.4	64.3	0.0793	ug/L	0.0793	ppb	21:04:33
2	Mo 202.031†	10.9	-2.4	-0.2228	ug/L	-0.2228	ppb	21:04:33
2	Ni 231.604†	75.8	13.6	0.4532	ug/L	0.4532	ppb	21:04:33

2	P 214.914†	161.7	-6.2	-4.8699	ug/L	-4.8699 ppb	21:04:33
2	Pb 220.353†	-30.8	13.5	2.2310	ug/L	2.2310 ppb	21:04:33
2	S 181.975 Axial†	26.3	-5.1	-9.7597	ug/L	-9.7597 ppb	21:04:33
2	Sb 206.836†	31.4	8.0	3.4493	ug/L	3.4493 ppb	21:04:33
2	Se 196.026†	-17.2	3.9	3.0863	ug/L	3.0863 ppb	21:04:33
2	Si 251.611†	502.3	15.3	0.5996	ug/L	0.5996 ppb	21:04:33
2	Sn 189.927†	16.3	8.2	1.9474	ug/L	1.9474 ppb	21:04:33
2	Ti 334.940†	-812.3	133.7	0.2352	ug/L	0.2352 ppb	21:04:12
2	Tl 190.801†	-22.1	4.4	1.8009	ug/L	1.8009 ppb	21:04:33
2	U 409.014†	-1833.2	178.6	5.4338	ug/L	5.4338 ppb	21:04:12
2	V 292.402†	-1279.5	-59.5	-0.4678	ug/L	-0.4678 ppb	21:04:12
2	Zn 213.857†	600.4	76.0	0.9824	ug/L	0.9824 ppb	21:04:33
2	SiO2†	498.3	12.5	1.0531	ug/L	1.0531 ppb	21:05:38
3	Sc Radial	3210.5	3210.5	100	%		21:03:40
3	Y RADIAL	2632.6	2632.6	100.2	%		21:03:40
3	Al 396.153Radial†	-64.5	-2.3	-5.0316	ug/L	-5.0316 ppb	21:03:40
3	Ca 317.933Radial†	16.2	3.7	15.269	ug/L	15.269 ppb	21:03:40
3	Fe 238.204 Radial†	8.4	-1.1	-31.735	ug/L	-31.735 ppb	21:03:40
3	K 766.490 Radial†	2081.0	50.5	24.680	ug/L	24.680 ppb	21:03:20
3	Mg 279.077 IEC†	1.2	-0.5	-56.023	ug/L	-56.023 ppb	21:03:40
3	Na 589.592 Radial†	-773.8	-39.8	-12.592	ug/L	-12.592 ppb	21:03:20
3	Sr 421.552†	32.6	-2.1	-0.0201	ug/L	-0.0201 ppb	21:03:20
3	Sc 361.383	804868.9	804868.9	101.63	%		21:04:38
3	Y 371.029	688268.7	688268.7	101.57	%		21:04:38
3	Ag 328.068†	250.8	115.4	0.5978	ug/L	0.5978 ppb	21:04:38
3	As 188.979†	-19.9	-0.7	-0.4314	ug/L	-0.4314 ppb	21:04:58
3	B 249.677†	-195.1	185.3	5.3973	ug/L	5.3973 ppb	21:04:58
3	Ba 233.527†	69.1	68.3	0.6753	ug/L	0.6753 ppb	21:04:58
3	Be 313.107†	-3515.5	82.7	0.0377	ug/L	0.0377 ppb	21:04:38
3	Cd 226.502†	-141.2	17.3	0.2682	ug/L	0.2682 ppb	21:04:58
3	Co 228.616†	-31.7	14.7	0.4043	ug/L	0.4043 ppb	21:04:58
3	Cr 267.716†	89.6	35.4	0.4820	ug/L	0.4820 ppb	21:04:58
3	Cu 324.752†	6308.5	-4.6	-0.0200	ug/L	-0.0200 ppb	21:04:38
3	Mn 257.610†	479.0	72.5	0.0994	ug/L	0.0994 ppb	21:04:58
3	Mo 202.031†	5.0	-8.1	-0.7463	ug/L	-0.7463 ppb	21:04:58
3	Ni 231.604†	66.6	4.9	0.1635	ug/L	0.1635 ppb	21:04:58
3	P 214.914†	166.7	-0.3	-0.1871	ug/L	-0.1871 ppb	21:04:58
3	Pb 220.353†	-45.1	-0.7	-0.1169	ug/L	-0.1169 ppb	21:04:58
3	S 181.975 Axial†	32.0	0.7	1.2706	ug/L	1.2706 ppb	21:04:58
3	Sb 206.836†	26.0	2.8	1.1791	ug/L	1.1791 ppb	21:04:58
3	Se 196.026†	-19.4	1.6	1.2791	ug/L	1.2791 ppb	21:04:58
3	Si 251.611†	497.1	13.0	0.5167	ug/L	0.5167 ppb	21:04:58
3	Sn 189.927†	3.5	-4.4	-1.0330	ug/L	-1.0330 ppb	21:04:58
3	Ti 334.940†	-880.8	61.8	0.1150	ug/L	0.1150 ppb	21:04:38
3	Tl 190.801†	-21.7	4.6	1.9108	ug/L	1.9108 ppb	21:04:58
3	U 409.014†	-1835.6	165.9	5.0423	ug/L	5.0423 ppb	21:04:38
3	V 292.402†	-1214.4	-2.6	-0.0192	ug/L	-0.0192 ppb	21:04:38
3	Zn 213.857†	609.7	88.5	1.1362	ug/L	1.1362 ppb	21:04:58
3	SiO2†	484.0	1.2	0.1248	ug/L	0.1248 ppb	21:05:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	803298.9	101.43	%	0.899				0.89%
Sc Radial	3223.8	101	%	0.5				0.46%
Y 371.029	686629.9	101.33	%	0.947				0.93%
Y RADIAL	2638.0	100.4	%	0.41				0.40%
Ag 328.068†	34.8	0.1665	ug/L	0.58375	0.1665	ppb	0.58375	350.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.4	7.3653	ug/L	11.09762	7.3653	ppb	11.09762	150.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.7	-1.6200	ug/L	1.03998	-1.6200	ppb	1.03998	64.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	195.0	5.6821	ug/L	0.29932	5.6821	ppb	0.29932	5.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	50.1	0.4945	ug/L	0.15661	0.4945	ppb	0.15661	31.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.2	0.0546	ug/L	0.01491	0.0546	ppb	0.01491	27.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.8	7.4845	ug/L	7.39438	7.4845	ppb	7.39438	98.80%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              18.4      0.2872 ug/L       0.03710      0.2872 ppb        0.03710  12.92%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              15.0      0.4144 ug/L       0.22299      0.4144 ppb        0.22299  53.82%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              24.0      0.3265 ug/L       0.22776      0.3265 ppb        0.22776  69.75%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              15.0      0.0471 ug/L       0.06011      0.0471 ppb        0.06011 127.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.8     -51.859 ug/L      29.9126     -51.859 ppb       29.9126  57.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        77.3      37.755 ug/L      22.1324      37.755 ppb       22.1324  58.62%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6     -66.907 ug/L      99.3790     -66.907 ppb       99.3790 148.53%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              57.3      0.0769 ug/L       0.02371      0.0769 ppb        0.02371  30.82%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -3.1     -0.2853 ug/L       0.43314     -0.2853 ppb        0.43314 151.83%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -21.3     -6.7259 ug/L       5.15960     -6.7259 ppb        5.15960  76.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              12.8      0.4271 ug/L       0.25148      0.4271 ppb        0.25148  58.89%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -2.8     -2.1702 ug/L       2.42226     -2.1702 ppb        2.42226 111.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.9      1.1450 ug/L       1.18377      1.1450 ppb        1.18377 103.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.0     -1.8608 ug/L       6.88937     -1.8608 ppb        6.88937 370.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.8      2.9181 ug/L       1.54357      2.9181 ppb        1.54357  52.90%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.8      1.4273 ug/L       1.59011      1.4273 ppb        1.59011 111.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              15.9      0.6232 ug/L       0.12013      0.6232 ppb        0.12013  19.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.6      0.6159 ug/L       1.51532      0.6159 ppb        1.51532 246.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -6.5     -0.0626 ug/L       0.13012     -0.0626 ppb        0.13012 207.90%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              71.2      0.1333 ug/L       0.09407      0.1333 ppb        0.09407  70.57%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               6.3      2.6049 ug/L       1.29853      2.6049 ppb        1.29853  49.85%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               53.6      1.6337 ug/L       6.24600      1.6337 ppb        6.24600 382.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -11.8     -0.0918 ug/L       0.34544     -0.0918 ppb        0.34544 376.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              91.7      1.1776 ug/L       0.21890      1.1776 ppb        0.21890  18.59%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    11.7      0.9901 ug/L       0.83553      0.9901 ppb        0.83553  84.39%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 25
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/10/2010 21:56:54
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3365.7	3365.7	105	%			21:59:06
1	Y RADIAL	2730.3	2730.3	103.9	%			21:59:06
1	Al 396.153Radial†	2305.1	2256.7	4858.8	ug/L	4858.8	ppb	21:58:46
1	Ca 317.933Radial†	1285.0	1211.0	5059.8	ug/L	5059.8	ppb	21:59:06
1	Fe 238.204 Radial†	195.3	176.5	5094.4	ug/L	5094.4	ppb	21:59:06
1	K 766.490 Radial†	12608.3	9977.9	4868.5	ug/L	4868.5	ppb	21:58:46
1	Mg 279.077 IEC†	56.0	51.7	5344.8	ug/L	5344.8	ppb	21:59:06
1	Na 589.592 Radial†	31349.7	30581.0	9674.2	ug/L	9674.2	ppb	21:58:46
1	Sr 421.552†	53937.9	51320.2	494.18	ug/L	494.18	ppb	21:58:46
1	Sc 361.383	848765.5	848765.5	107.17	%			22:00:03
1	Y 371.029	717629.3	717629.3	105.90	%			22:00:03
1	Ag 328.068†	100851.2	93970.8	501.34	ug/L	501.34	ppb	22:00:08
1	As 188.979†	897.9	856.6	505.98	ug/L	505.98	ppb	22:00:28
1	B 249.677†	17826.4	17010.7	492.76	ug/L	492.76	ppb	22:00:08
1	Ba 233.527†	53870.1	50265.3	498.92	ug/L	498.92	ppb	22:00:08
1	Be 313.107†	1169749.9	1095010.7	496.36	ug/L	496.36	ppb	22:00:03
1	Cd 226.502†	34850.5	32674.5	498.32	ug/L	498.32	ppb	22:00:08
1	Co 228.616†	19684.1	18412.7	508.09	ug/L	508.09	ppb	22:00:08
1	Cr 267.716†	38851.3	36198.4	497.64	ug/L	497.64	ppb	22:00:08
1	Cu 324.752†	163471.1	146319.4	494.17	ug/L	494.17	ppb	22:00:08
1	Mn 257.610†	383033.2	357001.3	494.04	ug/L	494.04	ppb	22:00:03
1	Mo 202.031†	5843.6	5439.5	497.23	ug/L	497.23	ppb	22:00:28
1	Ni 231.604†	16354.0	15198.9	507.76	ug/L	507.76	ppb	22:00:08
1	P 214.914†	3483.8	3086.4	2381.1	ug/L	2381.1	ppb	22:00:28
1	Pb 220.353†	3223.1	3051.1	501.86	ug/L	501.86	ppb	22:00:28
1	S 181.975 Axial†	580.0	510.4	973.92	ug/L	973.92	ppb	22:00:28
1	Sb 206.836†	1256.3	1149.5	511.57	ug/L	511.57	ppb	22:00:28
1	Se 196.026†	599.0	579.6	512.27	ug/L	512.27	ppb	22:00:28
1	Si 251.611†	68375.7	63323.8	2469.6	ug/L	2469.6	ppb	22:00:08
1	Sn 189.927†	2230.6	2073.5	494.41	ug/L	494.41	ppb	22:00:28
1	Ti 334.940†	290053.6	271571.3	486.96	ug/L	486.96	ppb	22:00:08
1	Tl 190.801†	1272.9	1213.6	502.48	ug/L	502.48	ppb	22:00:28
1	U 409.014†	15772.8	16689.3	505.24	ug/L	505.24	ppb	22:00:08
1	V 292.402†	63512.6	60454.5	501.96	ug/L	501.96	ppb	22:00:08
1	Zn 213.857†	42423.0	39072.6	495.14	ug/L	495.14	ppb	22:00:08
1	SiO2†	68354.1	63304.7	5304.9	ug/L	5304.9	ppb	22:01:36
2	Sc Radial	3361.8	3361.8	105	%			21:59:31
2	Y RADIAL	2729.7	2729.7	103.9	%			21:59:31
2	Al 396.153Radial†	2291.6	2246.4	4836.9	ug/L	4836.9	ppb	21:59:11
2	Ca 317.933Radial†	1280.7	1208.3	5048.5	ug/L	5048.5	ppb	21:59:31
2	Fe 238.204 Radial†	191.4	173.0	4993.8	ug/L	4993.8	ppb	21:59:31
2	K 766.490 Radial†	12552.0	9938.4	4849.2	ug/L	4849.2	ppb	21:59:11
2	Mg 279.077 IEC†	54.1	49.9	5159.4	ug/L	5159.4	ppb	21:59:31
2	Na 589.592 Radial†	31352.3	30618.9	9686.2	ug/L	9686.2	ppb	21:59:11
2	Sr 421.552†	53982.4	51423.6	495.18	ug/L	495.18	ppb	21:59:11
2	Sc 361.383	856961.1	856961.1	108.21	%			22:00:34
2	Y 371.029	723477.8	723477.8	106.76	%			22:00:34
2	Ag 328.068†	100481.9	92729.6	494.71	ug/L	494.71	ppb	22:00:39
2	As 188.979†	892.1	843.3	498.08	ug/L	498.08	ppb	22:00:59
2	B 249.677†	17691.9	16727.4	484.54	ug/L	484.54	ppb	22:00:39
2	Ba 233.527†	53712.4	49638.9	492.70	ug/L	492.70	ppb	22:00:39
2	Be 313.107†	1176472.3	1090785.0	494.43	ug/L	494.43	ppb	22:00:34
2	Cd 226.502†	34837.0	32351.1	493.40	ug/L	493.40	ppb	22:00:39
2	Co 228.616†	19698.1	18250.0	503.60	ug/L	503.60	ppb	22:00:39
2	Cr 267.716†	38765.8	35772.8	491.78	ug/L	491.78	ppb	22:00:39
2	Cu 324.752†	162345.7	143820.7	485.72	ug/L	485.72	ppb	22:00:39
2	Mn 257.610†	386281.4	356585.2	493.46	ug/L	493.46	ppb	22:00:34
2	Mo 202.031†	5829.0	5373.9	491.23	ug/L	491.23	ppb	22:00:59
2	Ni 231.604†	16298.2	15001.4	501.16	ug/L	501.16	ppb	22:00:39

2	P 214.914†	3461.7	3034.8	2341.5 ug/L	2341.5 ppb	22:00:59
2	Pb 220.353†	3197.5	2998.6	493.25 ug/L	493.25 ppb	22:00:59
2	S 181.975 Axial†	586.8	511.5	976.10 ug/L	976.10 ppb	22:00:59
2	Sb 206.836†	1263.7	1145.1	509.52 ug/L	509.52 ppb	22:00:59
2	Se 196.026†	600.4	575.5	508.53 ug/L	508.53 ppb	22:00:59
2	Si 251.611†	68084.9	62444.9	2435.4 ug/L	2435.4 ppb	22:00:39
2	Sn 189.927†	2239.0	2061.4	491.53 ug/L	491.53 ppb	22:00:59
2	Ti 334.940†	289088.1	268090.7	480.73 ug/L	480.73 ppb	22:00:39
2	Tl 190.801†	1264.1	1194.2	494.46 ug/L	494.46 ppb	22:00:59
2	U 409.014†	15901.4	16667.4	504.60 ug/L	504.60 ppb	22:00:39
2	V 292.402†	63276.4	59669.5	495.46 ug/L	495.46 ppb	22:00:39
2	Zn 213.857†	42292.5	38573.5	488.82 ug/L	488.82 ppb	22:00:39
2	SiO2†	68130.5	62488.1	5236.5 ug/L	5236.5 ppb	22:01:41
3	Sc Radial	3367.3	3367.3	105 %		21:59:56
3	Y RADIAL	2755.8	2755.8	104.9 %		21:59:56
3	Al 396.153Radial†	2289.1	2240.5	4824.2 ug/L	4824.2 ppb	21:59:36
3	Ca 317.933Radial†	1287.6	1212.9	5067.6 ug/L	5067.6 ppb	21:59:56
3	Fe 238.204 Radial†	193.7	174.9	5048.0 ug/L	5048.0 ppb	21:59:56
3	K 766.490 Radial†	12629.6	9992.7	4875.7 ug/L	4875.7 ppb	21:59:36
3	Mg 279.077 IEC†	51.4	47.2	4885.0 ug/L	4885.0 ppb	21:59:56
3	Na 589.592 Radial†	30998.6	30233.4	9564.2 ug/L	9564.2 ppb	21:59:36
3	Sr 421.552†	53688.8	51059.9	491.68 ug/L	491.68 ppb	21:59:36
3	Sc 361.383	856130.0	856130.0	108.10 %		22:01:05
3	Y 371.029	724289.0	724289.0	106.88 %		22:01:05
3	Ag 328.068†	100475.4	92813.6	495.18 ug/L	495.18 ppb	22:01:10
3	As 188.979†	874.0	827.4	488.80 ug/L	488.80 ppb	22:01:30
3	B 249.677†	17684.0	16735.9	484.79 ug/L	484.79 ppb	22:01:10
3	Ba 233.527†	53560.9	49547.0	491.80 ug/L	491.80 ppb	22:01:10
3	Be 313.107†	1176233.3	1091619.3	494.81 ug/L	494.81 ppb	22:01:05
3	Cd 226.502†	34660.4	32219.0	491.37 ug/L	491.37 ppb	22:01:10
3	Co 228.616†	19577.2	18155.8	501.00 ug/L	501.00 ppb	22:01:10
3	Cr 267.716†	38620.4	35673.0	490.42 ug/L	490.42 ppb	22:01:10
3	Cu 324.752†	162639.8	144238.4	487.14 ug/L	487.14 ppb	22:01:10
3	Mn 257.610†	385475.9	356186.5	492.93 ug/L	492.93 ppb	22:01:05
3	Mo 202.031†	5789.1	5342.1	488.33 ug/L	488.33 ppb	22:01:30
3	Ni 231.604†	16264.2	14984.7	500.60 ug/L	500.60 ppb	22:01:10
3	P 214.914†	3456.5	3033.1	2339.7 ug/L	2339.7 ppb	22:01:30
3	Pb 220.353†	3196.8	3000.9	493.60 ug/L	493.60 ppb	22:01:30
3	S 181.975 Axial†	579.0	504.8	963.27 ug/L	963.27 ppb	22:01:30
3	Sb 206.836†	1240.8	1125.1	500.76 ug/L	500.76 ppb	22:01:30
3	Se 196.026†	600.0	575.7	508.85 ug/L	508.85 ppb	22:01:30
3	Si 251.611†	67899.9	62334.8	2431.1 ug/L	2431.1 ppb	22:01:10
3	Sn 189.927†	2212.5	2038.9	486.16 ug/L	486.16 ppb	22:01:30
3	Ti 334.940†	288681.2	267973.7	480.55 ug/L	480.55 ppb	22:01:10
3	Tl 190.801†	1264.4	1195.6	495.03 ug/L	495.03 ppb	22:01:30
3	U 409.014†	15750.6	16542.2	500.79 ug/L	500.79 ppb	22:01:10
3	V 292.402†	63290.2	59739.1	495.97 ug/L	495.97 ppb	22:01:10
3	Zn 213.857†	42150.8	38480.3	487.62 ug/L	487.62 ppb	22:01:10
3	SiO2†	67888.7	62325.6	5222.9 ug/L	5222.9 ppb	22:01:46

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	853952.2	107.83	%	0.570				0.53%
Sc Radial	3364.9	105	%	0.1				0.08%
Y 371.029	721798.7	106.52	%	0.536				0.50%
Y RADIAL	2738.6	104.2	%	0.57				0.54%
Ag 328.068†	93171.3	497.08	ug/L	3.705	497.08	ppb	3.705	0.75%
QC value within limits for Ag 328.068 Recovery = 99.42%								
Al 396.153Radial†	2247.9	4840.0	ug/L	17.50	4840.0	ppb	17.50	0.36%
QC value within limits for Al 396.153Radial Recovery = 96.80%								
As 188.979†	842.4	497.62	ug/L	8.597	497.62	ppb	8.597	1.73%
QC value within limits for As 188.979 Recovery = 99.52%								
B 249.677†	16824.7	487.36	ug/L	4.674	487.36	ppb	4.674	0.96%
QC value within limits for B 249.677 Recovery = 97.47%								
Ba 233.527†	49817.1	494.47	ug/L	3.879	494.47	ppb	3.879	0.78%
QC value within limits for Ba 233.527 Recovery = 98.89%								
Be 313.107†	1092471.7	495.20	ug/L	1.020	495.20	ppb	1.020	0.21%
QC value within limits for Be 313.107 Recovery = 99.04%								
Ca 317.933Radial†	1210.7	5058.6	ug/L	9.58	5058.6	ppb	9.58	0.19%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.17%
Cd 226.502†            32414.9      494.36 ug/L         3.575      494.36 ppb          3.575   0.72%
   QC value within limits for Cd 226.502  Recovery = 98.87%
Co 228.616†            18272.8      504.23 ug/L         3.589      504.23 ppb          3.589   0.71%
   QC value within limits for Co 228.616  Recovery = 100.85%
Cr 267.716†            35881.4      493.28 ug/L         3.836      493.28 ppb          3.836   0.78%
   QC value within limits for Cr 267.716  Recovery = 98.66%
Cu 324.752†           144792.8      489.01 ug/L         4.522      489.01 ppb          4.522   0.92%
   QC value within limits for Cu 324.752  Recovery = 97.80%
Fe 238.204 Radial†       174.8      5045.4 ug/L        50.35      5045.4 ppb         50.35   1.00%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.91%
K 766.490 Radial†       9969.7      4864.5 ug/L        13.73      4864.5 ppb         13.73   0.28%
   QC value within limits for K 766.490 Radial  Recovery = 97.29%
Mg 279.077 IEC†           49.6      5129.7 ug/L       231.31      5129.7 ppb        231.31   4.51%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.59%
Mn 257.610†           356591.0      493.48 ug/L         0.556      493.48 ppb          0.556   0.11%
   QC value within limits for Mn 257.610  Recovery = 98.70%
Mo 202.031†            5385.2      492.26 ug/L         4.538      492.26 ppb          4.538   0.92%
   QC value within limits for Mo 202.031  Recovery = 98.45%
Na 589.592 Radial†     30477.8      9641.5 ug/L        67.23      9641.5 ppb         67.23   0.70%
   QC value within limits for Na 589.592 Radial  Recovery = 96.42%
Ni 231.604†            15061.7      503.17 ug/L         3.982      503.17 ppb          3.982   0.79%
   QC value within limits for Ni 231.604  Recovery = 100.63%
P 214.914†              3051.4      2354.1 ug/L        23.41      2354.1 ppb         23.41   0.99%
   QC value within limits for P 214.914  Recovery = 94.16%
Pb 220.353†             3016.9      496.24 ug/L         4.869      496.24 ppb          4.869   0.98%
   QC value within limits for Pb 220.353  Recovery = 99.25%
S 181.975 Axial†         508.9      971.09 ug/L         6.864      971.09 ppb          6.864   0.71%
   QC value within limits for S 181.975 Axial  Recovery = 97.11%
Sb 206.836†             1139.9      507.28 ug/L         5.743      507.28 ppb          5.743   1.13%
   QC value within limits for Sb 206.836  Recovery = 101.46%
Se 196.026†              576.9      509.88 ug/L         2.073      509.88 ppb          2.073   0.41%
   QC value within limits for Se 196.026  Recovery = 101.98%
Si 251.611†            62701.2      2445.4 ug/L        21.14      2445.4 ppb         21.14   0.86%
   QC value within limits for Si 251.611  Recovery = 97.81%
Sn 189.927†             2057.9      490.70 ug/L         4.187      490.70 ppb          4.187   0.85%
   QC value within limits for Sn 189.927  Recovery = 98.14%
Sr 421.552†            51267.9      493.68 ug/L         1.805      493.68 ppb          1.805   0.37%
   QC value within limits for Sr 421.552  Recovery = 98.74%
Ti 334.940†           269211.9      482.75 ug/L         3.649      482.75 ppb          3.649   0.76%
   QC value within limits for Ti 334.940  Recovery = 96.55%
Tl 190.801†             1201.1      497.33 ug/L         4.477      497.33 ppb          4.477   0.90%
   QC value within limits for Tl 190.801  Recovery = 99.47%
U 409.014†             16633.0      503.54 ug/L         2.404      503.54 ppb          2.404   0.48%
   QC value within limits for U 409.014  Recovery = 100.71%
V 292.402†             59954.3      497.79 ug/L         3.614      497.79 ppb          3.614   0.73%
   QC value within limits for V 292.402  Recovery = 99.56%
Zn 213.857†            38708.8      490.53 ug/L         4.037      490.53 ppb          4.037   0.82%
   QC value within limits for Zn 213.857  Recovery = 98.11%
SiO2†                  62706.1      5254.8 ug/L        43.96      5254.8 ppb         43.96   0.84%
   QC value within limits for SiO2  Recovery = 98.27%
All analyte(s) passed QC.
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Sequence No.: 26
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 22:03:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3288.0	3288.0	103	%			22:06:08
1	Y RADIAL	2686.6	2686.6	102.3	%			22:06:08
1	Al 396.153Radial†	-61.4	2.2	4.7254	ug/L	4.7254	ppb	22:06:08
1	Ca 317.933Radial†	13.4	0.6	2.4974	ug/L	2.4974	ppb	22:06:08
1	Fe 238.204 Radial†	8.7	-1.0	-30.087	ug/L	-30.087	ppb	22:06:08
1	K 766.490 Radial†	1979.4	-97.5	-47.643	ug/L	-47.643	ppb	22:05:48
1	Mg 279.077 IEC†	2.3	0.5	50.894	ug/L	50.894	ppb	22:06:08
1	Na 589.592 Radial†	-726.3	24.7	7.8178	ug/L	7.8178	ppb	22:05:48
1	Sr 421.552†	19.7	-15.4	-0.1482	ug/L	-0.1482	ppb	22:05:48
1	Sc 361.383	801696.5	801696.5	101.23	%			22:07:05
1	Y 371.029	685759.9	685759.9	101.20	%			22:07:05
1	Ag 328.068†	106.7	-25.9	-0.1501	ug/L	-0.1501	ppb	22:07:05
1	As 188.979†	-21.7	-2.6	-1.5281	ug/L	-1.5281	ppb	22:07:25
1	B 249.677†	-166.9	212.3	6.1831	ug/L	6.1831	ppb	22:07:25
1	Ba 233.527†	52.8	52.5	0.5188	ug/L	0.5188	ppb	22:07:25
1	Be 313.107†	-3496.5	87.8	0.0397	ug/L	0.0397	ppb	22:07:05
1	Cd 226.502†	-126.0	31.8	0.4885	ug/L	0.4885	ppb	22:07:25
1	Co 228.616†	-30.6	15.7	0.4318	ug/L	0.4318	ppb	22:07:25
1	Cr 267.716†	91.7	37.7	0.5151	ug/L	0.5151	ppb	22:07:25
1	Cu 324.752†	6281.2	-7.1	-0.0279	ug/L	-0.0279	ppb	22:07:05
1	Mn 257.610†	471.9	67.3	0.0880	ug/L	0.0880	ppb	22:07:25
1	Mo 202.031†	9.4	-3.7	-0.3439	ug/L	-0.3439	ppb	22:07:25
1	Ni 231.604†	62.6	1.3	0.0415	ug/L	0.0415	ppb	22:07:25
1	P 214.914†	174.5	8.0	6.4936	ug/L	6.4936	ppb	22:07:25
1	Pb 220.353†	-28.2	15.8	2.5969	ug/L	2.5969	ppb	22:07:25
1	S 181.975 Axial†	31.2	-0.0	-0.0436	ug/L	-0.0436	ppb	22:07:25
1	Sb 206.836†	26.3	3.3	1.4226	ug/L	1.4226	ppb	22:07:25
1	Se 196.026†	-15.7	5.2	4.3674	ug/L	4.3674	ppb	22:07:25
1	Si 251.611†	485.2	3.2	0.1284	ug/L	0.1284	ppb	22:07:25
1	Sn 189.927†	12.8	4.8	1.1473	ug/L	1.1473	ppb	22:07:25
1	Ti 334.940†	-954.2	-14.2	-0.0315	ug/L	-0.0315	ppb	22:07:05
1	Tl 190.801†	-24.3	2.0	0.8162	ug/L	0.8162	ppb	22:07:25
1	U 409.014†	-1848.5	146.0	4.4368	ug/L	4.4368	ppb	22:07:05
1	V 292.402†	-1204.8	2.0	0.0256	ug/L	0.0256	ppb	22:07:05
1	Zn 213.857†	602.4	83.7	1.0747	ug/L	1.0747	ppb	22:07:25
1	SiO2†	511.6	30.4	2.5615	ug/L	2.5615	ppb	22:08:36
2	Sc Radial	3261.6	3261.6	102	%			22:06:33
2	Y RADIAL	2666.5	2666.5	101.5	%			22:06:33
2	Al 396.153Radial†	-56.3	6.7	14.406	ug/L	14.406	ppb	22:06:33
2	Ca 317.933Radial†	11.8	-0.9	-3.7557	ug/L	-3.7557	ppb	22:06:33
2	Fe 238.204 Radial†	9.2	-0.4	-12.811	ug/L	-12.811	ppb	22:06:33
2	K 766.490 Radial†	2089.0	25.8	12.595	ug/L	12.595	ppb	22:06:13
2	Mg 279.077 IEC†	-0.2	-1.9	-195.20	ug/L	-195.20	ppb	22:06:33
2	Na 589.592 Radial†	-721.3	24.0	7.5816	ug/L	7.5816	ppb	22:06:13
2	Sr 421.552†	14.4	-20.5	-0.1974	ug/L	-0.1974	ppb	22:06:13
2	Sc 361.383	805365.8	805365.8	101.69	%			22:07:30
2	Y 371.029	688244.3	688244.3	101.56	%			22:07:30
2	Ag 328.068†	222.9	87.9	0.4612	ug/L	0.4612	ppb	22:07:30
2	As 188.979†	-14.6	4.4	2.5965	ug/L	2.5965	ppb	22:07:50
2	B 249.677†	-198.6	181.9	5.2960	ug/L	5.2960	ppb	22:07:50
2	Ba 233.527†	44.2	43.8	0.4322	ug/L	0.4322	ppb	22:07:50
2	Be 313.107†	-3403.4	195.1	0.0883	ug/L	0.0883	ppb	22:07:30
2	Cd 226.502†	-133.4	25.1	0.3846	ug/L	0.3846	ppb	22:07:50
2	Co 228.616†	-43.0	3.6	0.0998	ug/L	0.0998	ppb	22:07:50
2	Cr 267.716†	67.4	13.5	0.1842	ug/L	0.1842	ppb	22:07:50
2	Cu 324.752†	6252.6	-63.4	-0.2145	ug/L	-0.2145	ppb	22:07:30
2	Mn 257.610†	469.9	63.2	0.0942	ug/L	0.0942	ppb	22:07:50
2	Mo 202.031†	19.4	6.0	0.5514	ug/L	0.5514	ppb	22:07:50
2	Ni 231.604†	70.3	8.5	0.2854	ug/L	0.2854	ppb	22:07:50

2	P 214.914†	172.6	5.4	4.3838	ug/L	4.3838 ppb	22:07:50
2	Pb 220.353†	-37.8	6.5	1.0694	ug/L	1.0694 ppb	22:07:50
2	S 181.975 Axial†	31.4	0.1	0.1322	ug/L	0.1322 ppb	22:07:50
2	Sb 206.836†	16.1	-6.9	-2.9264	ug/L	-2.9264 ppb	22:07:50
2	Se 196.026†	-7.3	13.5	11.511	ug/L	11.511 ppb	22:07:50
2	Si 251.611†	488.4	4.2	0.1568	ug/L	0.1568 ppb	22:07:50
2	Sn 189.927†	13.3	5.3	1.2552	ug/L	1.2552 ppb	22:07:50
2	Ti 334.940†	-925.6	18.2	0.0483	ug/L	0.0483 ppb	22:07:30
2	Tl 190.801†	-17.0	9.2	3.8027	ug/L	3.8027 ppb	22:07:50
2	U 409.014†	-2022.7	-17.0	-0.5139	ug/L	-0.5139 ppb	22:07:30
2	V 292.402†	-1252.0	-38.9	-0.3140	ug/L	-0.3140 ppb	22:07:30
2	Zn 213.857†	588.0	66.8	0.8547	ug/L	0.8547 ppb	22:07:50
2	SiO2†	528.9	45.0	3.7684	ug/L	3.7684 ppb	22:08:56
3	Sc Radial	3265.2	3265.2	102	%		22:06:58
3	Y RADIAL	2660.3	2660.3	101.2	%		22:06:58
3	Al 396.153Radial†	-61.1	2.0	4.4634	ug/L	4.4634 ppb	22:06:58
3	Ca 317.933Radial†	14.2	1.5	6.1132	ug/L	6.1132 ppb	22:06:58
3	Fe 238.204 Radial†	7.6	-2.0	-58.812	ug/L	-58.812 ppb	22:06:58
3	K 766.490 Radial†	1967.9	-95.3	-46.564	ug/L	-46.564 ppb	22:06:38
3	Mg 279.077 IEC†	1.0	-0.7	-72.102	ug/L	-72.102 ppb	22:06:58
3	Na 589.592 Radial†	-753.1	-6.5	-2.0615	ug/L	-2.0615 ppb	22:06:38
3	Sr 421.552†	23.5	-11.6	-0.1119	ug/L	-0.1119 ppb	22:06:38
3	Sc 361.383	812679.6	812679.6	102.62	%		22:07:55
3	Y 371.029	694705.0	694705.0	102.52	%		22:07:55
3	Ag 328.068†	178.2	42.4	0.2088	ug/L	0.2088 ppb	22:07:55
3	As 188.979†	-15.4	3.8	2.2059	ug/L	2.2059 ppb	22:08:15
3	B 249.677†	-179.9	201.9	5.8846	ug/L	5.8846 ppb	22:08:15
3	Ba 233.527†	42.5	41.7	0.4121	ug/L	0.4121 ppb	22:08:15
3	Be 313.107†	-3508.1	123.2	0.0558	ug/L	0.0558 ppb	22:07:55
3	Cd 226.502†	-140.4	19.4	0.3021	ug/L	0.3021 ppb	22:08:15
3	Co 228.616†	-40.6	6.3	0.1711	ug/L	0.1711 ppb	22:08:15
3	Cr 267.716†	61.6	7.2	0.0966	ug/L	0.0966 ppb	22:08:15
3	Cu 324.752†	6280.7	-91.4	-0.3117	ug/L	-0.3117 ppb	22:07:55
3	Mn 257.610†	468.6	57.8	0.0770	ug/L	0.0770 ppb	22:08:15
3	Mo 202.031†	-2.2	-15.1	-1.3869	ug/L	-1.3869 ppb	22:08:15
3	Ni 231.604†	63.3	1.1	0.0370	ug/L	0.0370 ppb	22:08:15
3	P 214.914†	170.8	2.1	1.7875	ug/L	1.7875 ppb	22:08:15
3	Pb 220.353†	-34.9	9.7	1.5893	ug/L	1.5893 ppb	22:08:15
3	S 181.975 Axial†	25.8	-5.7	-10.849	ug/L	-10.849 ppb	22:08:15
3	Sb 206.836†	26.9	3.5	1.4347	ug/L	1.4347 ppb	22:08:15
3	Se 196.026†	-17.0	4.1	3.3561	ug/L	3.3561 ppb	22:08:15
3	Si 251.611†	500.6	11.8	0.4769	ug/L	0.4769 ppb	22:08:15
3	Sn 189.927†	-1.5	-9.2	-2.1901	ug/L	-2.1901 ppb	22:08:15
3	Ti 334.940†	-935.2	17.1	0.0373	ug/L	0.0373 ppb	22:07:55
3	Tl 190.801†	-25.2	1.4	0.5837	ug/L	0.5837 ppb	22:08:15
3	U 409.014†	-2026.8	-3.1	-0.0863	ug/L	-0.0863 ppb	22:07:55
3	V 292.402†	-1151.0	70.6	0.5660	ug/L	0.5660 ppb	22:07:55
3	Zn 213.857†	602.7	75.9	0.9798	ug/L	0.9798 ppb	22:08:15
3	SiO2†	506.5	18.6	1.5982	ug/L	1.5982 ppb	22:09:16

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	806580.6	101.85	%	0.706				0.69%
Sc Radial	3271.6	102	%	0.4				0.44%
Y 371.029	689569.7	101.76	%	0.681				0.67%
Y RADIAL	2671.1	101.7	%	0.52				0.52%
Ag 328.068†	34.8	0.1733	ug/L	0.30721	0.1733	ppb	0.30721	177.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.6	7.8649	ug/L	5.66629	7.8649	ppb	5.66629	72.04%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	1.9	1.0914	ug/L	2.27698	1.0914	ppb	2.27698	208.63%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	198.7	5.7879	ug/L	0.45138	5.7879	ppb	0.45138	7.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	46.0	0.4544	ug/L	0.05673	0.4544	ppb	0.05673	12.48%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	135.4	0.0613	ug/L	0.02479	0.0613	ppb	0.02479	40.46%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.4	1.6183	ug/L	4.99281	1.6183	ppb	4.99281	308.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              25.4      0.3918 ug/L       0.09339      0.3918 ppb        0.09339  23.84%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.5      0.2343 ug/L       0.17477      0.2343 ppb        0.17477  74.61%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              19.5      0.2653 ug/L       0.22072      0.2653 ppb        0.22072  83.20%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -53.9     -0.1847 ug/L       0.14422     -0.1847 ppb        0.14422  78.08%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.2     -33.903 ug/L       23.2366     -33.903 ppb        23.2366  68.54%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -55.7     -27.204 ug/L       34.4711     -27.204 ppb        34.4711 126.71%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.7     -72.137 ug/L      123.0487     -72.137 ppb       123.0487 170.58%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              62.8      0.0864 ug/L       0.00868      0.0864 ppb        0.00868  10.05%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -4.3     -0.3931 ug/L       0.97010     -0.3931 ppb        0.97010 246.77%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       14.1      4.4460 ug/L       5.63689      4.4460 ppb        5.63689 126.79%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.6      0.1213 ug/L       0.14212      0.1213 ppb        0.14212 117.17%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                5.2      4.2216 ug/L       2.35720      4.2216 ppb        2.35720  55.84%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              10.6      1.7519 ug/L       0.77665      1.7519 ppb        0.77665  44.33%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.9     -3.5869 ug/L       6.28995     -3.5869 ppb        6.28995 175.36%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              -0.0     -0.0230 ug/L       2.51440     -0.0230 ppb        2.51440 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               7.6      6.4114 ug/L       4.44501      6.4114 ppb        4.44501  69.33%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               6.4      0.2541 ug/L       0.19354      0.2541 ppb        0.19354  76.18%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               0.3      0.0708 ug/L       1.95878      0.0708 ppb        1.95878 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -15.8     -0.1525 ug/L       0.04294     -0.1525 ppb        0.04294  28.16%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               7.0      0.0180 ug/L       0.04324      0.0180 ppb        0.04324 239.57%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.2      1.7342 ug/L       1.79512      1.7342 ppb        1.79512 103.51%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               42.0      1.2789 ug/L       2.74320      1.2789 ppb        2.74320 214.50%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               11.3      0.0925 ug/L       0.44376      0.0925 ppb        0.44376 479.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              75.5      0.9697 ug/L       0.11033      0.9697 ppb        0.11033  11.38%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    31.3      2.6427 ug/L       1.08736      2.6427 ppb        1.08736  41.15%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 34
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/10/2010 23:01:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3354.2	3354.2	105	%			23:03:37
1	Y RADIAL	2740.4	2740.4	104.3	%			23:03:37
1	Al 396.153Radial†	2309.7	2268.7	4885.0	ug/L	4885.0	ppb	23:03:17
1	Ca 317.933Radial†	1282.8	1213.1	5068.6	ug/L	5068.6	ppb	23:03:37
1	Fe 238.204 Radial†	190.8	172.8	4988.9	ug/L	4988.9	ppb	23:03:37
1	K 766.490 Radial†	12604.1	10015.1	4886.7	ug/L	4886.7	ppb	23:03:17
1	Mg 279.077 IEC†	51.2	47.2	4887.4	ug/L	4887.4	ppb	23:03:37
1	Na 589.592 Radial†	30412.4	29788.0	9423.3	ug/L	9423.3	ppb	23:03:17
1	Sr 421.552†	52928.0	50531.6	486.59	ug/L	486.59	ppb	23:03:17
1	Sc 361.383	854899.9	854899.9	107.95	%			23:04:35
1	Y 371.029	722247.7	722247.7	106.58	%			23:04:35
1	Ag 328.068†	98851.2	91442.8	487.87	ug/L	487.87	ppb	23:04:40
1	As 188.979†	882.7	836.6	494.10	ug/L	494.10	ppb	23:05:00
1	B 249.677†	17161.7	16275.6	471.41	ug/L	471.41	ppb	23:04:40
1	Ba 233.527†	52864.7	48973.3	486.10	ug/L	486.10	ppb	23:04:40
1	Be 313.107†	1174027.9	1091141.9	494.58	ug/L	494.58	ppb	23:04:35
1	Cd 226.502†	34162.6	31804.0	485.04	ug/L	485.04	ppb	23:04:40
1	Co 228.616†	19337.6	17959.9	495.62	ug/L	495.62	ppb	23:04:40
1	Cr 267.716†	38232.1	35364.8	486.18	ug/L	486.18	ppb	23:04:40
1	Cu 324.752†	159538.6	141581.9	478.17	ug/L	478.17	ppb	23:04:40
1	Mn 257.610†	385425.8	356653.2	493.57	ug/L	493.57	ppb	23:04:35
1	Mo 202.031†	5843.7	5400.4	493.65	ug/L	493.65	ppb	23:05:00
1	Ni 231.604†	16032.4	14791.6	494.15	ug/L	494.15	ppb	23:04:40
1	P 214.914†	3463.1	3043.8	2350.2	ug/L	2350.2	ppb	23:05:00
1	Pb 220.353†	3216.5	3023.3	497.33	ug/L	497.33	ppb	23:05:00
1	S 181.975 Axial†	578.3	504.9	963.50	ug/L	963.50	ppb	23:05:00
1	Sb 206.836†	1252.2	1137.3	506.22	ug/L	506.22	ppb	23:05:00
1	Se 196.026†	608.2	584.1	515.89	ug/L	515.89	ppb	23:05:00
1	Si 251.611†	66933.3	61529.8	2399.6	ug/L	2399.6	ppb	23:04:40
1	Sn 189.927†	2239.6	2066.9	492.84	ug/L	492.84	ppb	23:05:00
1	Ti 334.940†	284485.0	264470.6	474.27	ug/L	474.27	ppb	23:04:40
1	Tl 190.801†	1280.4	1212.1	501.83	ug/L	501.83	ppb	23:05:00
1	U 409.014†	15489.6	16321.3	494.10	ug/L	494.10	ppb	23:04:40
1	V 292.402†	62316.5	58921.3	489.35	ug/L	489.35	ppb	23:04:40
1	Zn 213.857†	41520.7	37952.7	480.94	ug/L	480.94	ppb	23:04:40
1	SiO2†	68390.2	62880.5	5269.4	ug/L	5269.4	ppb	23:06:07
2	Sc Radial	3378.5	3378.5	105	%			23:04:02
2	Y RADIAL	2749.6	2749.6	104.6	%			23:04:02
2	Al 396.153Radial†	2257.6	2203.4	4743.6	ug/L	4743.6	ppb	23:03:42
2	Ca 317.933Radial†	1292.7	1213.7	5071.0	ug/L	5071.0	ppb	23:04:02
2	Fe 238.204 Radial†	194.0	174.5	5037.4	ug/L	5037.4	ppb	23:04:02
2	K 766.490 Radial†	12568.6	9894.9	4828.1	ug/L	4828.1	ppb	23:03:42
2	Mg 279.077 IEC†	54.3	49.8	5155.3	ug/L	5155.3	ppb	23:04:02
2	Na 589.592 Radial†	30109.6	29292.1	9266.5	ug/L	9266.5	ppb	23:03:42
2	Sr 421.552†	52185.2	49463.9	476.31	ug/L	476.31	ppb	23:03:42
2	Sc 361.383	853817.7	853817.7	107.81	%			23:05:06
2	Y 371.029	721962.2	721962.2	106.54	%			23:05:06
2	Ag 328.068†	100502.5	93090.6	496.64	ug/L	496.64	ppb	23:05:11
2	As 188.979†	887.4	841.9	497.32	ug/L	497.32	ppb	23:05:31
2	B 249.677†	17552.6	16658.3	482.53	ug/L	482.53	ppb	23:05:11
2	Ba 233.527†	53481.0	49607.0	492.39	ug/L	492.39	ppb	23:05:11
2	Be 313.107†	1171217.8	1089913.9	494.04	ug/L	494.04	ppb	23:05:06
2	Cd 226.502†	34555.1	32208.1	491.21	ug/L	491.21	ppb	23:05:11
2	Co 228.616†	19565.6	18194.1	502.07	ug/L	502.07	ppb	23:05:11
2	Cr 267.716†	38630.0	35778.7	491.87	ug/L	491.87	ppb	23:05:11
2	Cu 324.752†	162450.0	144469.8	487.91	ug/L	487.91	ppb	23:05:11
2	Mn 257.610†	384104.5	355880.2	492.49	ug/L	492.49	ppb	23:05:06
2	Mo 202.031†	5860.8	5423.2	495.73	ug/L	495.73	ppb	23:05:31
2	Ni 231.604†	16160.4	14929.1	498.74	ug/L	498.74	ppb	23:05:11

2	P 214.914†	3502.2	3084.2	2380.6	ug/L	2380.6 ppb	23:05:31
2	Pb 220.353†	3242.5	3051.3	501.87	ug/L	501.87 ppb	23:05:31
2	S 181.975 Axial†	591.5	517.9	988.26	ug/L	988.26 ppb	23:05:31
2	Sb 206.836†	1249.5	1136.3	505.83	ug/L	505.83 ppb	23:05:31
2	Se 196.026†	607.1	583.8	515.67	ug/L	515.67 ppb	23:05:31
2	Si 251.611†	68025.0	62621.0	2442.2	ug/L	2442.2 ppb	23:05:11
2	Sn 189.927†	2241.5	2071.4	493.90	ug/L	493.90 ppb	23:05:31
2	Ti 334.940†	288893.9	268894.1	482.18	ug/L	482.18 ppb	23:05:11
2	Tl 190.801†	1271.5	1205.4	499.08	ug/L	499.08 ppb	23:05:31
2	U 409.014†	15911.7	16731.1	506.52	ug/L	506.52 ppb	23:05:11
2	V 292.402†	63146.4	59764.2	496.29	ug/L	496.29 ppb	23:05:11
2	Zn 213.857†	42022.2	38466.6	487.46	ug/L	487.46 ppb	23:05:11
2	SiO2†	68633.6	63186.6	5295.1	ug/L	5295.1 ppb	23:06:13
3	Sc Radial	3354.7	3354.7	105	%		23:04:28
3	Y RADIAL	2735.9	2735.9	104.1	%		23:04:28
3	Al 396.153Radial†	2263.2	2223.9	4787.8	ug/L	4787.8 ppb	23:04:08
3	Ca 317.933Radial†	1284.6	1214.6	5074.9	ug/L	5074.9 ppb	23:04:28
3	Fe 238.204 Radial†	192.6	174.5	5038.1	ug/L	5038.1 ppb	23:04:28
3	K 766.490 Radial†	12673.4	10079.4	4918.1	ug/L	4918.1 ppb	23:04:08
3	Mg 279.077 IEC†	54.8	50.6	5238.2	ug/L	5238.2 ppb	23:04:28
3	Na 589.592 Radial†	30390.9	29763.0	9415.4	ug/L	9415.4 ppb	23:04:08
3	Sr 421.552†	52771.5	50374.6	485.08	ug/L	485.08 ppb	23:04:08
3	Sc 361.383	849091.0	849091.0	107.21	%		23:05:37
3	Y 371.029	716870.9	716870.9	105.79	%		23:05:37
3	Ag 328.068†	101314.7	94367.0	503.44	ug/L	503.44 ppb	23:05:42
3	As 188.979†	878.2	838.0	495.09	ug/L	495.09 ppb	23:06:02
3	B 249.677†	17715.3	16900.7	489.55	ug/L	489.55 ppb	23:05:42
3	Ba 233.527†	54292.0	50639.5	502.63	ug/L	502.63 ppb	23:05:42
3	Be 313.107†	1173746.4	1098320.0	497.86	ug/L	497.86 ppb	23:05:37
3	Cd 226.502†	35201.9	32989.8	503.14	ug/L	503.14 ppb	23:05:42
3	Co 228.616†	19903.3	18610.1	513.53	ug/L	513.53 ppb	23:05:42
3	Cr 267.716†	39199.3	36509.1	501.91	ug/L	501.91 ppb	23:05:42
3	Cu 324.752†	163759.6	146530.0	494.87	ug/L	494.87 ppb	23:05:42
3	Mn 257.610†	386167.3	359787.5	497.89	ug/L	497.89 ppb	23:05:37
3	Mo 202.031†	5847.7	5441.3	497.39	ug/L	497.39 ppb	23:06:02
3	Ni 231.604†	16499.4	15328.7	512.09	ug/L	512.09 ppb	23:05:42
3	P 214.914†	3484.7	3086.0	2380.7	ug/L	2380.7 ppb	23:06:02
3	Pb 220.353†	3225.0	3051.7	501.96	ug/L	501.96 ppb	23:06:02
3	S 181.975 Axial†	588.7	518.3	989.03	ug/L	989.03 ppb	23:06:02
3	Sb 206.836†	1250.1	1143.3	508.93	ug/L	508.93 ppb	23:06:02
3	Se 196.026†	605.2	585.2	516.92	ug/L	516.92 ppb	23:06:02
3	Si 251.611†	68837.0	63729.6	2485.5	ug/L	2485.5 ppb	23:05:42
3	Sn 189.927†	2238.8	2080.4	496.05	ug/L	496.05 ppb	23:06:02
3	Ti 334.940†	292654.5	273893.4	491.13	ug/L	491.13 ppb	23:05:42
3	Tl 190.801†	1273.9	1214.2	502.73	ug/L	502.73 ppb	23:06:02
3	U 409.014†	16043.0	16935.7	512.72	ug/L	512.72 ppb	23:05:42
3	V 292.402†	63997.7	60884.3	505.49	ug/L	505.49 ppb	23:05:42
3	Zn 213.857†	42709.6	39324.7	498.34	ug/L	498.34 ppb	23:05:42
3	SiO2†	68809.8	63705.3	5338.6	ug/L	5338.6 ppb	23:06:18

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	852602.9	107.66	%	0.390				0.36%
Sc Radial	3362.5	105	%	0.4				0.41%
Y 371.029	720360.3	106.30	%	0.446				0.42%
Y RADIAL	2742.0	104.4	%	0.26				0.25%
Ag 328.068†	92966.8	495.98	ug/L	7.805	495.98	ppb	7.805	1.57%
QC value within limits for Ag 328.068 Recovery = 99.20%								
Al 396.153Radial†	2232.0	4805.5	ug/L	72.34	4805.5	ppb	72.34	1.51%
QC value within limits for Al 396.153Radial Recovery = 96.11%								
As 188.979†	838.8	495.51	ug/L	1.650	495.51	ppb	1.650	0.33%
QC value within limits for As 188.979 Recovery = 99.10%								
B 249.677†	16611.5	481.16	ug/L	9.142	481.16	ppb	9.142	1.90%
QC value within limits for B 249.677 Recovery = 96.23%								
Ba 233.527†	49739.9	493.71	ug/L	8.346	493.71	ppb	8.346	1.69%
QC value within limits for Ba 233.527 Recovery = 98.74%								
Be 313.107†	1093125.2	495.49	ug/L	2.069	495.49	ppb	2.069	0.42%
QC value within limits for Be 313.107 Recovery = 99.10%								
Ca 317.933Radial†	1213.8	5071.5	ug/L	3.18	5071.5	ppb	3.18	0.06%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.43%
Cd 226.502†            32334.0      493.13 ug/L         9.201      493.13 ppb          9.201   1.87%
   QC value within limits for Cd 226.502  Recovery = 98.63%
Co 228.616†            18254.7      503.74 ug/L         9.073      503.74 ppb          9.073   1.80%
   QC value within limits for Co 228.616  Recovery = 100.75%
Cr 267.716†            35884.2      493.32 ug/L         7.963      493.32 ppb          7.963   1.61%
   QC value within limits for Cr 267.716  Recovery = 98.66%
Cu 324.752†           144193.9      486.98 ug/L         8.391      486.98 ppb          8.391   1.72%
   QC value within limits for Cu 324.752  Recovery = 97.40%
Fe 238.204 Radial†       173.9      5021.5 ug/L        28.22      5021.5 ppb         28.22   0.56%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.43%
K 766.490 Radial†       9996.4      4877.6 ug/L        45.72      4877.6 ppb         45.72   0.94%
   QC value within limits for K 766.490 Radial  Recovery = 97.55%
Mg 279.077 IEC†           49.2      5093.6 ug/L       183.33      5093.6 ppb        183.33   3.60%
   QC value within limits for Mg 279.077 IEC  Recovery = 101.87%
Mn 257.610†           357440.3      494.65 ug/L         2.859      494.65 ppb          2.859   0.58%
   QC value within limits for Mn 257.610  Recovery = 98.93%
Mo 202.031†             5421.6      495.59 ug/L         1.870      495.59 ppb          1.870   0.38%
   QC value within limits for Mo 202.031  Recovery = 99.12%
Na 589.592 Radial†     29614.4      9368.4 ug/L        88.37      9368.4 ppb         88.37   0.94%
   QC value within limits for Na 589.592 Radial  Recovery = 93.68%
Ni 231.604†            15016.5      501.66 ug/L         9.321      501.66 ppb          9.321   1.86%
   QC value within limits for Ni 231.604  Recovery = 100.33%
P 214.914†              3071.3      2370.5 ug/L        17.58      2370.5 ppb         17.58   0.74%
   QC value within limits for P 214.914  Recovery = 94.82%
Pb 220.353†             3042.1      500.38 ug/L         2.647      500.38 ppb          2.647   0.53%
   QC value within limits for Pb 220.353  Recovery = 100.08%
S 181.975 Axial†         513.7      980.26 ug/L        14.522      980.26 ppb         14.522   1.48%
   QC value within limits for S 181.975 Axial  Recovery = 98.03%
Sb 206.836†             1139.0      506.99 ug/L         1.683      506.99 ppb          1.683   0.33%
   QC value within limits for Sb 206.836  Recovery = 101.40%
Se 196.026†              584.4      516.16 ug/L         0.666      516.16 ppb          0.666   0.13%
   QC value within limits for Se 196.026  Recovery = 103.23%
Si 251.611†            62626.8      2442.4 ug/L        42.98      2442.4 ppb         42.98   1.76%
   QC value within limits for Si 251.611  Recovery = 97.70%
Sn 189.927†             2072.9      494.26 ug/L         1.632      494.26 ppb          1.632   0.33%
   QC value within limits for Sn 189.927  Recovery = 98.85%
Sr 421.552†            50123.3      482.66 ug/L         5.552      482.66 ppb          5.552   1.15%
   QC value within limits for Sr 421.552  Recovery = 96.53%
Ti 334.940†           269086.0      482.53 ug/L         8.436      482.53 ppb          8.436   1.75%
   QC value within limits for Ti 334.940  Recovery = 96.51%
Tl 190.801†             1210.6      501.21 ug/L         1.898      501.21 ppb          1.898   0.38%
   QC value within limits for Tl 190.801  Recovery = 100.24%
U 409.014†             16662.7      504.45 ug/L         9.483      504.45 ppb          9.483   1.88%
   QC value within limits for U 409.014  Recovery = 100.89%
V 292.402†             59856.6      497.04 ug/L         8.100      497.04 ppb          8.100   1.63%
   QC value within limits for V 292.402  Recovery = 99.41%
Zn 213.857†            38581.3      488.91 ug/L         8.794      488.91 ppb          8.794   1.80%
   QC value within limits for Zn 213.857  Recovery = 97.78%
SiO2†                  63257.5      5301.0 ug/L        34.98      5301.0 ppb         34.98   0.66%
   QC value within limits for SiO2  Recovery = 99.13%
All analyte(s) passed QC.
```

Sequence No.: 35
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 23:08:27
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3246.3	3246.3	101	%			23:10:39
1	Y RADIAL	2654.8	2654.8	101.0	%			23:10:39
1	Al 396.153Radial†	-56.4	6.4	13.748	ug/L	13.748	ppb	23:10:39
1	Ca 317.933Radial†	10.7	-2.0	-8.1814	ug/L	-8.1814	ppb	23:10:39
1	Fe 238.204 Radial†	7.8	-1.8	-50.381	ug/L	-50.381	ppb	23:10:39
1	K 766.490 Radial†	2038.6	-14.3	-6.9721	ug/L	-6.9721	ppb	23:10:19
1	Mg 279.077 IEC†	2.4	0.7	73.338	ug/L	73.338	ppb	23:10:39
1	Na 589.592 Radial†	-720.3	21.6	6.8296	ug/L	6.8296	ppb	23:10:19
1	Sr 421.552†	27.1	-7.9	-0.0762	ug/L	-0.0762	ppb	23:10:19
1	Sc 361.383	807226.5	807226.5	101.93	%			23:11:36
1	Y 371.029	690552.3	690552.3	101.91	%			23:11:36
1	Ag 328.068†	165.7	31.3	0.1483	ug/L	0.1483	ppb	23:11:36
1	As 188.979†	-18.7	0.5	0.2870	ug/L	0.2870	ppb	23:11:56
1	B 249.677†	-245.9	136.0	3.9656	ug/L	3.9656	ppb	23:11:56
1	Ba 233.527†	4.3	4.5	0.0425	ug/L	0.0425	ppb	23:11:56
1	Be 313.107†	-3449.7	157.5	0.0714	ug/L	0.0714	ppb	23:11:36
1	Cd 226.502†	-139.4	19.5	0.3026	ug/L	0.3026	ppb	23:11:56
1	Co 228.616†	-45.8	0.9	0.0254	ug/L	0.0254	ppb	23:11:56
1	Cr 267.716†	80.6	26.2	0.3570	ug/L	0.3570	ppb	23:11:56
1	Cu 324.752†	6226.3	-103.4	-0.3521	ug/L	-0.3521	ppb	23:11:36
1	Mn 257.610†	412.3	5.6	-0.0002	ug/L	-0.0002	ppb	23:11:56
1	Mo 202.031†	13.1	-0.2	-0.0193	ug/L	-0.0193	ppb	23:11:56
1	Ni 231.604†	65.3	3.4	0.1149	ug/L	0.1149	ppb	23:11:56
1	P 214.914†	167.1	-0.4	-0.2275	ug/L	-0.2275	ppb	23:11:56
1	Pb 220.353†	-36.1	8.2	1.3609	ug/L	1.3609	ppb	23:11:56
1	S 181.975 Axial†	32.8	1.4	2.5772	ug/L	2.5772	ppb	23:11:56
1	Sb 206.836†	28.9	5.6	2.3782	ug/L	2.3782	ppb	23:11:56
1	Se 196.026†	-21.5	-0.4	-0.4518	ug/L	-0.4518	ppb	23:11:56
1	Si 251.611†	507.2	21.5	0.8396	ug/L	0.8396	ppb	23:11:56
1	Sn 189.927†	2.7	-5.1	-1.2163	ug/L	-1.2163	ppb	23:11:56
1	Ti 334.940†	-897.5	47.8	0.0783	ug/L	0.0783	ppb	23:11:36
1	Tl 190.801†	-22.8	3.6	1.4741	ug/L	1.4741	ppb	23:11:56
1	U 409.014†	-1987.1	22.5	0.6888	ug/L	0.6888	ppb	23:11:36
1	V 292.402†	-1260.4	-44.3	-0.3530	ug/L	-0.3530	ppb	23:11:36
1	Zn 213.857†	590.3	67.7	0.8738	ug/L	0.8738	ppb	23:11:56
1	SiO2†	518.3	33.5	2.8128	ug/L	2.8128	ppb	23:13:07
2	Sc Radial	3236.3	3236.3	101	%			23:11:04
2	Y RADIAL	2643.5	2643.5	100.6	%			23:11:04
2	Al 396.153Radial†	-63.5	-0.9	-1.9956	ug/L	-1.9956	ppb	23:11:04
2	Ca 317.933Radial†	10.9	-1.7	-7.0508	ug/L	-7.0508	ppb	23:11:04
2	Fe 238.204 Radial†	7.7	-1.8	-53.018	ug/L	-53.018	ppb	23:11:04
2	K 766.490 Radial†	2020.1	-26.3	-12.873	ug/L	-12.873	ppb	23:10:44
2	Mg 279.077 IEC†	1.4	-0.4	-37.648	ug/L	-37.648	ppb	23:11:04
2	Na 589.592 Radial†	-695.1	44.3	14.018	ug/L	14.018	ppb	23:10:44
2	Sr 421.552†	-7.0	-41.5	-0.3998	ug/L	-0.3998	ppb	23:10:44
2	Sc 361.383	812476.2	812476.2	102.59	%			23:12:01
2	Y 371.029	695134.5	695134.5	102.58	%			23:12:01
2	Ag 328.068†	147.0	12.0	0.0434	ug/L	0.0434	ppb	23:12:01
2	As 188.979†	-25.6	-6.1	-3.5848	ug/L	-3.5848	ppb	23:12:21
2	B 249.677†	-267.5	116.5	3.3989	ug/L	3.3989	ppb	23:12:21
2	Ba 233.527†	26.8	26.5	0.2608	ug/L	0.2608	ppb	23:12:21
2	Be 313.107†	-3498.8	131.4	0.0600	ug/L	0.0600	ppb	23:12:01
2	Cd 226.502†	-143.6	16.3	0.2550	ug/L	0.2550	ppb	23:12:21
2	Co 228.616†	-34.0	12.8	0.3535	ug/L	0.3535	ppb	23:12:21
2	Cr 267.716†	87.6	32.6	0.4434	ug/L	0.4434	ppb	23:12:21
2	Cu 324.752†	6330.1	-41.7	-0.1467	ug/L	-0.1467	ppb	23:12:01
2	Mn 257.610†	420.9	11.4	0.0121	ug/L	0.0121	ppb	23:12:21
2	Mo 202.031†	17.7	4.2	0.3820	ug/L	0.3820	ppb	23:12:21
2	Ni 231.604†	71.5	9.1	0.3040	ug/L	0.3040	ppb	23:12:21

2	P 214.914†	175.4	6.6	5.3847 ug/L	5.3847 ppb	23:12:21
2	Pb 220.353†	-44.4	0.4	0.0722 ug/L	0.0722 ppb	23:12:21
2	S 181.975 Axial†	28.7	-2.9	-5.4853 ug/L	-5.4853 ppb	23:12:21
2	Sb 206.836†	21.2	-2.0	-0.8590 ug/L	-0.8590 ppb	23:12:21
2	Se 196.026†	-16.7	4.4	3.6296 ug/L	3.6296 ppb	23:12:21
2	Si 251.611†	521.7	32.5	1.2646 ug/L	1.2646 ppb	23:12:21
2	Sn 189.927†	10.8	2.7	0.6538 ug/L	0.6538 ppb	23:12:21
2	Ti 334.940†	-807.8	141.0	0.2524 ug/L	0.2524 ppb	23:12:01
2	Tl 190.801†	-14.0	12.3	5.0706 ug/L	5.0706 ppb	23:12:21
2	U 409.014†	-1834.2	184.1	5.5984 ug/L	5.5984 ppb	23:12:01
2	V 292.402†	-1195.3	27.1	0.2451 ug/L	0.2451 ppb	23:12:01
2	Zn 213.857†	589.9	63.6	0.8202 ug/L	0.8202 ppb	23:12:21
2	SiO2†	515.2	27.2	2.2711 ug/L	2.2711 ppb	23:13:27
3	Sc Radial	3240.6	3240.6	101 %		23:11:29
3	Y RADIAL	2657.8	2657.8	101.2 %		23:11:29
3	Al 396.153Radial†	-64.0	-1.3	-2.8474 ug/L	-2.8474 ppb	23:11:29
3	Ca 317.933Radial†	14.5	1.9	7.7576 ug/L	7.7576 ppb	23:11:29
3	Fe 238.204 Radial†	7.2	-2.4	-67.967 ug/L	-67.967 ppb	23:11:29
3	K 766.490 Radial†	2146.3	95.8	46.798 ug/L	46.798 ppb	23:11:09
3	Mg 279.077 IEC†	1.8	0.1	8.4935 ug/L	8.4935 ppb	23:11:29
3	Na 589.592 Radial†	-709.6	30.9	9.7808 ug/L	9.7808 ppb	23:11:09
3	Sr 421.552†	8.9	-25.9	-0.2492 ug/L	-0.2492 ppb	23:11:09
3	Sc 361.383	805636.5	805636.5	101.73 %		23:12:27
3	Y 371.029	688991.9	688991.9	101.68 %		23:12:27
3	Ag 328.068†	64.2	-68.2	-0.3877 ug/L	-0.3877 ppb	23:12:27
3	As 188.979†	-16.1	3.0	1.7462 ug/L	1.7462 ppb	23:12:47
3	B 249.677†	-245.2	136.2	3.9754 ug/L	3.9754 ppb	23:12:47
3	Ba 233.527†	11.8	11.9	0.1152 ug/L	0.1152 ppb	23:12:47
3	Be 313.107†	-3537.8	64.1	0.0289 ug/L	0.0289 ppb	23:12:27
3	Cd 226.502†	-147.3	11.4	0.1822 ug/L	0.1822 ppb	23:12:47
3	Co 228.616†	-43.5	3.1	0.0874 ug/L	0.0874 ppb	23:12:47
3	Cr 267.716†	78.0	23.8	0.3220 ug/L	0.3220 ppb	23:12:47
3	Cu 324.752†	6274.4	-44.0	-0.1550 ug/L	-0.1550 ppb	23:12:27
3	Mn 257.610†	417.2	11.3	0.0086 ug/L	0.0086 ppb	23:12:47
3	Mo 202.031†	16.2	2.9	0.2593 ug/L	0.2593 ppb	23:12:47
3	Ni 231.604†	69.0	7.2	0.2399 ug/L	0.2399 ppb	23:12:47
3	P 214.914†	167.1	-0.1	0.0325 ug/L	0.0325 ppb	23:12:47
3	Pb 220.353†	-36.6	7.7	1.2653 ug/L	1.2653 ppb	23:12:47
3	S 181.975 Axial†	29.6	-1.7	-3.2178 ug/L	-3.2178 ppb	23:12:47
3	Sb 206.836†	42.8	19.4	8.3237 ug/L	8.3237 ppb	23:12:47
3	Se 196.026†	-15.0	6.0	4.9037 ug/L	4.9037 ppb	23:12:47
3	Si 251.611†	488.1	3.7	0.1434 ug/L	0.1434 ppb	23:12:47
3	Sn 189.927†	5.4	-2.5	-0.5877 ug/L	-0.5877 ppb	23:12:47
3	Ti 334.940†	-971.2	-26.3	-0.0492 ug/L	-0.0492 ppb	23:12:27
3	Tl 190.801†	-24.7	1.7	0.7010 ug/L	0.7010 ppb	23:12:47
3	U 409.014†	-1842.4	160.9	4.8945 ug/L	4.8945 ppb	23:12:27
3	V 292.402†	-1236.9	-23.7	-0.1709 ug/L	-0.1709 ppb	23:12:27
3	Zn 213.857†	598.9	77.3	0.9979 ug/L	0.9979 ppb	23:12:47
3	SiO2†	531.3	47.2	3.9596 ug/L	3.9596 ppb	23:13:47

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	808446.4	102.08	%	0.452				0.44%
Sc Radial	3241.1	101	%	0.2				0.15%
Y 371.029	691559.6	102.05	%	0.471				0.46%
Y RADIAL	2652.0	100.9	%	0.29				0.28%
Ag 328.068†	-8.3	-0.0653	ug/L	0.28405	-0.0653	ppb	0.28405	434.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.4	2.9684	ug/L	9.34521	2.9684	ppb	9.34521	314.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.9	-0.5172	ug/L	2.75497	-0.5172	ppb	2.75497	532.68%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	129.6	3.7800	ug/L	0.33008	3.7800	ppb	0.33008	8.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	14.3	0.1395	ug/L	0.11116	0.1395	ppb	0.11116	79.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	117.7	0.0534	ug/L	0.02201	0.0534	ppb	0.02201	41.18%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-0.6	-2.4915	ug/L	8.89396	-2.4915	ppb	8.89396	356.97%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.7      0.2466 ug/L       0.06063      0.2466 ppb        0.06063  24.59%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               5.6      0.1554 ug/L       0.17428      0.1554 ppb        0.17428 112.14%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              27.5      0.3741 ug/L       0.06245      0.3741 ppb        0.06245  16.69%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -63.0     -0.2180 ug/L       0.11626     -0.2180 ppb        0.11626  53.34%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -2.0     -57.122 ug/L        9.4841     -57.122 ppb         9.4841  16.60%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        18.4      8.9844 ug/L      32.88012      8.9844 ppb       32.88012 365.97%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.1      14.728 ug/L       55.7552      14.728 ppb        55.7552 378.57%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               9.4      0.0068 ug/L       0.00633      0.0068 ppb        0.00633  93.08%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               2.3      0.2074 ug/L       0.20563      0.2074 ppb        0.20563  99.16%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       32.3      10.210 ug/L        3.6133      10.210 ppb         3.6133  35.39%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               6.6      0.2196 ug/L       0.09619      0.2196 ppb        0.09619  43.80%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                2.0      1.7299 ug/L       3.16784      1.7299 ppb        3.16784 183.12%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               5.4      0.8994 ug/L       0.71803      0.8994 ppb        0.71803  79.83%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.1     -2.0420 ug/L       4.15791     -2.0420 ppb        4.15791 203.62%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               7.6      3.2810 ug/L       4.65746      3.2810 ppb        4.65746 141.95%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.3      2.6938 ug/L       2.79769      2.6938 ppb        2.79769 103.86%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              19.2      0.7492 ug/L       0.56608      0.7492 ppb        0.56608  75.56%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.6     -0.3834 ug/L       0.95165     -0.3834 ppb        0.95165 248.20%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -25.1     -0.2417 ug/L       0.16197     -0.2417 ppb        0.16197  67.00%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              54.2      0.0938 ug/L       0.15139      0.0938 ppb        0.15139 161.32%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               5.9      2.4152 ug/L       2.33189      2.4152 ppb        2.33189  96.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              122.5      3.7273 ug/L       2.65478      3.7273 ppb        2.65478  71.23%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -13.6     -0.0930 ug/L       0.30658     -0.0930 ppb        0.30658 329.77%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              69.6      0.8973 ug/L       0.09113      0.8973 ppb        0.09113  10.16%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    35.9      3.0145 ug/L       0.86216      3.0145 ppb        0.86216  28.60%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 43
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/11/2010 00:04:49
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3334.4	3334.4	104	%			00:07:02
1	Y RADIAL	2727.0	2727.0	103.8	%			00:07:02
1	Al 396.153Radial†	2377.2	2346.7	5053.5	ug/L	5053.5	ppb	00:06:42
1	Ca 317.933Radial†	1298.6	1235.6	5162.4	ug/L	5162.4	ppb	00:07:02
1	Fe 238.204 Radial†	195.8	178.7	5159.3	ug/L	5159.3	ppb	00:07:02
1	K 766.490 Radial†	12764.3	10240.8	4996.7	ug/L	4996.7	ppb	00:06:42
1	Mg 279.077 IEC†	53.0	49.2	5090.2	ug/L	5090.2	ppb	00:07:02
1	Na 589.592 Radial†	32287.7	31763.4	10048	ug/L	10048	ppb	00:06:42
1	Sr 421.552†	55599.2	53400.2	514.21	ug/L	514.21	ppb	00:06:42
1	Sc 361.383	859796.4	859796.4	108.56	%			00:07:59
1	Y 371.029	725359.4	725359.4	107.04	%			00:07:59
1	Ag 328.068†	102637.6	94408.9	503.70	ug/L	503.70	ppb	00:08:04
1	As 188.979†	896.1	844.2	498.77	ug/L	498.77	ppb	00:08:24
1	B 249.677†	17998.9	16956.1	491.14	ug/L	491.14	ppb	00:08:04
1	Ba 233.527†	55078.5	50733.5	503.57	ug/L	503.57	ppb	00:08:04
1	Be 313.107†	1199920.2	1108797.7	502.60	ug/L	502.60	ppb	00:07:59
1	Cd 226.502†	35694.4	33034.6	503.81	ug/L	503.81	ppb	00:08:04
1	Co 228.616†	20183.6	18637.2	514.28	ug/L	514.28	ppb	00:08:04
1	Cr 267.716†	39693.2	36508.9	501.91	ug/L	501.91	ppb	00:08:04
1	Cu 324.752†	165529.2	146258.2	493.96	ug/L	493.96	ppb	00:08:04
1	Mn 257.610†	394501.2	362979.3	502.33	ug/L	502.33	ppb	00:07:59
1	Mo 202.031†	5932.4	5451.3	498.31	ug/L	498.31	ppb	00:08:24
1	Ni 231.604†	16684.8	15307.9	511.40	ug/L	511.40	ppb	00:08:04
1	P 214.914†	3527.8	3085.2	2380.2	ug/L	2380.2	ppb	00:08:24
1	Pb 220.353†	3250.9	3038.1	499.76	ug/L	499.76	ppb	00:08:24
1	S 181.975 Axial†	835.0	738.3	1409.3	ug/L	1409.3	ppb	00:08:24
1	Sb 206.836†	1252.3	1130.7	503.53	ug/L	503.53	ppb	00:08:24
1	Se 196.026†	614.3	586.6	518.50	ug/L	518.50	ppb	00:08:24
1	Si 251.611†	69754.2	63775.0	2487.3	ug/L	2487.3	ppb	00:08:04
1	Sn 189.927†	2263.9	2077.5	495.37	ug/L	495.37	ppb	00:08:24
1	Ti 334.940†	296189.2	273750.5	490.90	ug/L	490.90	ppb	00:08:04
1	Tl 190.801†	1270.0	1195.7	495.16	ug/L	495.16	ppb	00:08:24
1	U 409.014†	16075.3	16779.1	507.95	ug/L	507.95	ppb	00:08:04
1	V 292.402†	64856.4	60932.0	505.87	ug/L	505.87	ppb	00:08:04
1	Zn 213.857†	43154.2	39238.3	497.23	ug/L	497.23	ppb	00:08:04
1	SiO2†	68921.3	63008.9	5280.1	ug/L	5280.1	ppb	00:09:32
2	Sc Radial	3373.7	3373.7	105	%			00:07:27
2	Y RADIAL	2776.1	2776.1	105.7	%			00:07:27
2	Al 396.153Radial†	2334.7	2279.7	4908.4	ug/L	4908.4	ppb	00:07:07
2	Ca 317.933Radial†	1316.7	1238.2	5173.3	ug/L	5173.3	ppb	00:07:27
2	Fe 238.204 Radial†	198.0	178.6	5155.5	ug/L	5155.5	ppb	00:07:27
2	K 766.490 Radial†	12743.1	10077.4	4917.0	ug/L	4917.0	ppb	00:07:07
2	Mg 279.077 IEC†	55.4	50.9	5268.6	ug/L	5268.6	ppb	00:07:27
2	Na 589.592 Radial†	32005.2	31133.0	9848.8	ug/L	9848.8	ppb	00:07:07
2	Sr 421.552†	55093.4	52296.2	503.58	ug/L	503.58	ppb	00:07:07
2	Sc 361.383	853671.4	853671.4	107.79	%			00:08:30
2	Y 371.029	721657.1	721657.1	106.50	%			00:08:30
2	Ag 328.068†	101846.0	94352.9	503.41	ug/L	503.41	ppb	00:08:35
2	As 188.979†	900.3	854.0	504.50	ug/L	504.50	ppb	00:08:55
2	B 249.677†	17806.9	16897.0	489.42	ug/L	489.42	ppb	00:08:35
2	Ba 233.527†	54551.6	50608.7	502.33	ug/L	502.33	ppb	00:08:35
2	Be 313.107†	1191271.5	1108704.2	502.56	ug/L	502.56	ppb	00:08:30
2	Cd 226.502†	35320.9	32924.0	502.13	ug/L	502.13	ppb	00:08:35
2	Co 228.616†	19973.6	18575.7	512.59	ug/L	512.59	ppb	00:08:35
2	Cr 267.716†	39476.2	36569.9	502.75	ug/L	502.75	ppb	00:08:35
2	Cu 324.752†	164128.1	146052.4	493.27	ug/L	493.27	ppb	00:08:35
2	Mn 257.610†	391247.9	362568.3	501.75	ug/L	501.75	ppb	00:08:30
2	Mo 202.031†	5924.4	5483.2	501.22	ug/L	501.22	ppb	00:08:55
2	Ni 231.604†	16551.2	15294.2	510.94	ug/L	510.94	ppb	00:08:35

2	P 214.914†	3516.8	3098.3	2390.9 ug/L	2390.9 ppb	00:08:55
2	Pb 220.353†	3242.9	3052.1	502.05 ug/L	502.05 ppb	00:08:55
2	S 181.975 Axial†	816.5	726.7	1387.1 ug/L	1387.1 ppb	00:08:55
2	Sb 206.836†	1253.3	1140.0	507.55 ug/L	507.55 ppb	00:08:55
2	Se 196.026†	621.4	597.2	527.53 ug/L	527.53 ppb	00:08:55
2	Si 251.611†	69005.7	63541.6	2478.1 ug/L	2478.1 ppb	00:08:35
2	Sn 189.927†	2240.2	2070.5	493.71 ug/L	493.71 ppb	00:08:55
2	Ti 334.940†	293501.3	273214.4	489.93 ug/L	489.93 ppb	00:08:35
2	Tl 190.801†	1278.1	1211.7	501.72 ug/L	501.72 ppb	00:08:55
2	U 409.014†	15924.6	16745.6	506.93 ug/L	506.93 ppb	00:08:35
2	V 292.402†	64487.9	61018.8	506.62 ug/L	506.62 ppb	00:08:35
2	Zn 213.857†	42724.8	39125.2	495.78 ug/L	495.78 ppb	00:08:35
2	SiO2†	69573.0	64069.0	5369.0 ug/L	5369.0 ppb	00:09:37
3	Sc Radial	3368.7	3368.7	105 %		00:07:52
3	Y RADIAL	2743.0	2743.0	104.4 %		00:07:52
3	Al 396.153Radial†	2345.4	2293.1	4937.3 ug/L	4937.3 ppb	00:07:32
3	Ca 317.933Radial†	1310.1	1233.8	5155.0 ug/L	5155.0 ppb	00:07:52
3	Fe 238.204 Radial†	195.9	176.9	5105.5 ug/L	5105.5 ppb	00:07:52
3	K 766.490 Radial†	12707.2	10061.3	4909.1 ug/L	4909.1 ppb	00:07:32
3	Mg 279.077 IEC†	53.8	49.4	5116.0 ug/L	5116.0 ppb	00:07:52
3	Na 589.592 Radial†	31783.2	30967.0	9796.3 ug/L	9796.3 ppb	00:07:32
3	Sr 421.552†	54520.4	51828.9	499.08 ug/L	499.08 ppb	00:07:32
3	Sc 361.383	859536.1	859536.1	108.53 %		00:09:01
3	Y 371.029	725911.2	725911.2	107.12 %		00:09:01
3	Ag 328.068†	100960.7	92892.6	495.62 ug/L	495.62 ppb	00:09:06
3	As 188.979†	899.3	847.5	500.57 ug/L	500.57 ppb	00:09:26
3	B 249.677†	17652.5	16642.1	482.03 ug/L	482.03 ppb	00:09:06
3	Ba 233.527†	54074.5	49823.8	494.54 ug/L	494.54 ppb	00:09:06
3	Be 313.107†	1200787.8	1109931.7	503.09 ug/L	503.09 ppb	00:09:01
3	Cd 226.502†	35014.5	32418.2	494.41 ug/L	494.41 ppb	00:09:06
3	Co 228.616†	19815.8	18303.9	505.11 ug/L	505.11 ppb	00:09:06
3	Cr 267.716†	39114.1	35986.4	494.73 ug/L	494.73 ppb	00:09:06
3	Cu 324.752†	162717.6	143713.8	485.37 ug/L	485.37 ppb	00:09:06
3	Mn 257.610†	394339.4	362940.2	502.27 ug/L	502.27 ppb	00:09:01
3	Mo 202.031†	5981.7	5498.4	502.61 ug/L	502.61 ppb	00:09:26
3	Ni 231.604†	16471.9	15116.3	505.00 ug/L	505.00 ppb	00:09:06
3	P 214.914†	3571.0	3126.0	2414.7 ug/L	2414.7 ppb	00:09:26
3	Pb 220.353†	3288.4	3073.5	505.58 ug/L	505.58 ppb	00:09:26
3	S 181.975 Axial†	811.8	717.1	1368.9 ug/L	1368.9 ppb	00:09:26
3	Sb 206.836†	1266.2	1143.9	509.31 ug/L	509.31 ppb	00:09:26
3	Se 196.026†	623.6	595.2	525.74 ug/L	525.74 ppb	00:09:26
3	Si 251.611†	68405.3	62551.6	2439.4 ug/L	2439.4 ppb	00:09:06
3	Sn 189.927†	2270.9	2084.6	497.06 ug/L	497.06 ppb	00:09:26
3	Ti 334.940†	290424.7	268521.9	481.52 ug/L	481.52 ppb	00:09:06
3	Tl 190.801†	1291.5	1215.9	503.45 ug/L	503.45 ppb	00:09:26
3	U 409.014†	15748.6	16482.6	498.96 ug/L	498.96 ppb	00:09:06
3	V 292.402†	63787.4	59965.1	498.01 ug/L	498.01 ppb	00:09:06
3	Zn 213.857†	42389.0	38545.3	488.42 ug/L	488.42 ppb	00:09:06
3	SiO2†	69168.3	63255.7	5300.7 ug/L	5300.7 ppb	00:09:42

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	857668.0	108.30	%	0.437				0.40%
Sc Radial	3358.9	105	%	0.7				0.64%
Y 371.029	724309.2	106.89	%	0.341				0.32%
Y RADIAL	2748.7	104.6	%	0.95				0.91%
Ag 328.068†	93884.8	500.91	ug/L	4.583	500.91	ppb	4.583	0.91%
QC value within limits for Ag 328.068 Recovery = 100.18%								
Al 396.153Radial†	2306.5	4966.4	ug/L	76.83	4966.4	ppb	76.83	1.55%
QC value within limits for Al 396.153Radial Recovery = 99.33%								
As 188.979†	848.6	501.28	ug/L	2.927	501.28	ppb	2.927	0.58%
QC value within limits for As 188.979 Recovery = 100.26%								
B 249.677†	16831.7	487.53	ug/L	4.838	487.53	ppb	4.838	0.99%
QC value within limits for B 249.677 Recovery = 97.51%								
Ba 233.527†	50388.7	500.15	ug/L	4.894	500.15	ppb	4.894	0.98%
QC value within limits for Ba 233.527 Recovery = 100.03%								
Be 313.107†	1109144.5	502.75	ug/L	0.297	502.75	ppb	0.297	0.06%
QC value within limits for Be 313.107 Recovery = 100.55%								
Ca 317.933Radial†	1235.8	5163.6	ug/L	9.21	5163.6	ppb	9.21	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 103.27%
Cd 226.502†            32792.3      500.12 ug/L         5.014      500.12 ppb          5.014   1.00%
   QC value within limits for Cd 226.502  Recovery = 100.02%
Co 228.616†            18505.6      510.66 ug/L         4.879      510.66 ppb          4.879   0.96%
   QC value within limits for Co 228.616  Recovery = 102.13%
Cr 267.716†            36355.1      499.80 ug/L         4.409      499.80 ppb          4.409   0.88%
   QC value within limits for Cr 267.716  Recovery = 99.96%
Cu 324.752†           145341.5      490.87 ug/L         4.772      490.87 ppb          4.772   0.97%
   QC value within limits for Cu 324.752  Recovery = 98.17%
Fe 238.204 Radial†       178.1      5140.1 ug/L         30.05      5140.1 ppb          30.05   0.58%
   QC value within limits for Fe 238.204 Radial  Recovery = 102.80%
K 766.490 Radial†      10126.5      4940.9 ug/L         48.46      4940.9 ppb          48.46   0.98%
   QC value within limits for K 766.490 Radial  Recovery = 98.82%
Mg 279.077 IEC†           49.8      5158.3 ug/L         96.41      5158.3 ppb          96.41   1.87%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.17%
Mn 257.610†           362829.3      502.11 ug/L         0.317      502.11 ppb          0.317   0.06%
   QC value within limits for Mn 257.610  Recovery = 100.42%
Mo 202.031†             5477.6      500.72 ug/L         2.193      500.72 ppb          2.193   0.44%
   QC value within limits for Mo 202.031  Recovery = 100.14%
Na 589.592 Radial†     31287.8      9897.8 ug/L        132.92      9897.8 ppb         132.92   1.34%
   QC value within limits for Na 589.592 Radial  Recovery = 98.98%
Ni 231.604†            15239.5      509.11 ug/L         3.569      509.11 ppb          3.569   0.70%
   QC value within limits for Ni 231.604  Recovery = 101.82%
P 214.914†              3103.2      2395.3 ug/L         17.68      2395.3 ppb          17.68   0.74%
   QC value within limits for P 214.914  Recovery = 95.81%
Pb 220.353†             3054.6      502.46 ug/L         2.929      502.46 ppb          2.929   0.58%
   QC value within limits for Pb 220.353  Recovery = 100.49%
S 181.975 Axial†         727.4      1388.4 ug/L         20.24      1388.4 ppb          20.24   1.46%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 138.84%
Sb 206.836†             1138.2      506.80 ug/L         2.963      506.80 ppb          2.963   0.58%
   QC value within limits for Sb 206.836  Recovery = 101.36%
Se 196.026†              593.0      523.92 ug/L         4.780      523.92 ppb          4.780   0.91%
   QC value within limits for Se 196.026  Recovery = 104.78%
Si 251.611†            63289.4      2468.3 ug/L         25.42      2468.3 ppb          25.42   1.03%
   QC value within limits for Si 251.611  Recovery = 98.73%
Sn 189.927†             2077.5      495.38 ug/L         1.676      495.38 ppb          1.676   0.34%
   QC value within limits for Sn 189.927  Recovery = 99.08%
Sr 421.552†            52508.4      505.62 ug/L         7.770      505.62 ppb          7.770   1.54%
   QC value within limits for Sr 421.552  Recovery = 101.12%
Ti 334.940†           271828.9      487.45 ug/L         5.155      487.45 ppb          5.155   1.06%
   QC value within limits for Ti 334.940  Recovery = 97.49%
Tl 190.801†             1207.8      500.11 ug/L         4.372      500.11 ppb          4.372   0.87%
   QC value within limits for Tl 190.801  Recovery = 100.02%
U 409.014†             16669.1      504.61 ug/L         4.919      504.61 ppb          4.919   0.97%
   QC value within limits for U 409.014  Recovery = 100.92%
V 292.402†             60638.6      503.50 ug/L         4.769      503.50 ppb          4.769   0.95%
   QC value within limits for V 292.402  Recovery = 100.70%
Zn 213.857†            38969.6      493.81 ug/L         4.722      493.81 ppb          4.722   0.96%
   QC value within limits for Zn 213.857  Recovery = 98.76%
SiO2†                  63444.5      5316.6 ug/L         46.58      5316.6 ppb          46.58   0.88%
   QC value within limits for SiO2  Recovery = 99.42%
QC Failed.  Continue with analysis.
```

Sequence No.: 44
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/11/2010 00:11:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3322.2	3322.2	104	%			00:14:04
1	Y RADIAL	2729.5	2729.5	103.9	%			00:14:04
1	Al 396.153Radial†	-62.1	2.1	4.4963	ug/L	4.4963	ppb	00:14:04
1	Ca 317.933Radial†	12.7	-0.2	-0.8776	ug/L	-0.8776	ppb	00:14:04
1	Fe 238.204 Radial†	8.3	-1.4	-41.558	ug/L	-41.558	ppb	00:14:04
1	K 766.490 Radial†	2079.5	-20.7	-10.135	ug/L	-10.135	ppb	00:13:44
1	Mg 279.077 IEC†	3.7	1.8	190.09	ug/L	190.09	ppb	00:14:04
1	Na 589.592 Radial†	-725.6	32.7	10.332	ug/L	10.332	ppb	00:13:44
1	Sr 421.552†	7.4	-27.5	-0.2645	ug/L	-0.2645	ppb	00:13:44
1	Sc 361.383	811602.5	811602.5	102.48	%			00:15:01
1	Y 371.029	693868.4	693868.4	102.39	%			00:15:01
1	Ag 328.068†	194.2	58.2	0.2940	ug/L	0.2940	ppb	00:15:01
1	As 188.979†	-21.1	-1.8	-1.0643	ug/L	-1.0643	ppb	00:15:21
1	B 249.677†	-190.7	191.2	5.5698	ug/L	5.5698	ppb	00:15:21
1	Ba 233.527†	15.0	14.9	0.1469	ug/L	0.1469	ppb	00:15:21
1	Be 313.107†	-3357.7	265.5	0.1206	ug/L	0.1206	ppb	00:15:01
1	Cd 226.502†	-132.9	26.6	0.4107	ug/L	0.4107	ppb	00:15:21
1	Co 228.616†	-48.5	-1.5	-0.0397	ug/L	-0.0397	ppb	00:15:21
1	Cr 267.716†	73.4	18.8	0.2551	ug/L	0.2551	ppb	00:15:21
1	Cu 324.752†	6228.9	-133.8	-0.4556	ug/L	-0.4556	ppb	00:15:01
1	Mn 257.610†	420.9	11.9	0.0046	ug/L	0.0046	ppb	00:15:21
1	Mo 202.031†	17.3	3.9	0.3505	ug/L	0.3505	ppb	00:15:21
1	Ni 231.604†	72.9	10.5	0.3508	ug/L	0.3508	ppb	00:15:21
1	P 214.914†	178.5	9.9	8.0810	ug/L	8.0810	ppb	00:15:21
1	Pb 220.353†	-35.5	9.0	1.4852	ug/L	1.4852	ppb	00:15:21
1	S 181.975 Axial†	179.9	144.7	276.47	ug/L	276.47	ppb	00:15:21
1	Sb 206.836†	38.2	14.5	6.2501	ug/L	6.2501	ppb	00:15:21
1	Se 196.026†	-11.9	9.1	7.6561	ug/L	7.6561	ppb	00:15:21
1	Si 251.611†	554.5	65.0	2.5377	ug/L	2.5377	ppb	00:15:21
1	Sn 189.927†	11.4	3.3	0.7986	ug/L	0.7986	ppb	00:15:21
1	Ti 334.940†	-815.1	133.0	0.2216	ug/L	0.2216	ppb	00:15:01
1	Tl 190.801†	-22.1	4.4	1.8156	ug/L	1.8156	ppb	00:15:21
1	U 409.014†	-1925.0	93.6	2.8471	ug/L	2.8471	ppb	00:15:01
1	V 292.402†	-1194.5	26.7	0.2384	ug/L	0.2384	ppb	00:15:01
1	Zn 213.857†	532.4	8.1	0.1087	ug/L	0.1087	ppb	00:15:21
1	SiO2†	542.9	54.8	4.5912	ug/L	4.5912	ppb	00:16:32
2	Sc Radial	3314.4	3314.4	103	%			00:14:29
2	Y RADIAL	2709.1	2709.1	103.1	%			00:14:29
2	Al 396.153Radial†	-60.6	3.5	7.4720	ug/L	7.4720	ppb	00:14:29
2	Ca 317.933Radial†	7.4	-5.3	-22.332	ug/L	-22.332	ppb	00:14:29
2	Fe 238.204 Radial†	7.8	-1.9	-55.126	ug/L	-55.126	ppb	00:14:29
2	K 766.490 Radial†	2116.4	19.6	9.5718	ug/L	9.5718	ppb	00:14:09
2	Mg 279.077 IEC†	0.2	-1.5	-153.21	ug/L	-153.21	ppb	00:14:29
2	Na 589.592 Radial†	-697.1	58.6	18.536	ug/L	18.536	ppb	00:14:09
2	Sr 421.552†	19.5	-15.8	-0.1516	ug/L	-0.1516	ppb	00:14:09
2	Sc 361.383	811480.8	811480.8	102.46	%			00:15:26
2	Y 371.029	694488.5	694488.5	102.49	%			00:15:26
2	Ag 328.068†	147.0	12.2	0.0458	ug/L	0.0458	ppb	00:15:26
2	As 188.979†	-28.6	-9.1	-5.3403	ug/L	-5.3403	ppb	00:15:46
2	B 249.677†	-224.1	158.5	4.6226	ug/L	4.6226	ppb	00:15:46
2	Ba 233.527†	5.8	6.0	0.0580	ug/L	0.0580	ppb	00:15:46
2	Be 313.107†	-3475.4	150.1	0.0682	ug/L	0.0682	ppb	00:15:26
2	Cd 226.502†	-142.4	17.3	0.2697	ug/L	0.2697	ppb	00:15:46
2	Co 228.616†	-53.6	-6.4	-0.1755	ug/L	-0.1755	ppb	00:15:46
2	Cr 267.716†	68.8	14.3	0.1927	ug/L	0.1927	ppb	00:15:46
2	Cu 324.752†	6117.5	-241.6	-0.8207	ug/L	-0.8207	ppb	00:15:26
2	Mn 257.610†	428.1	19.0	0.0271	ug/L	0.0271	ppb	00:15:46
2	Mo 202.031†	17.7	4.3	0.3860	ug/L	0.3860	ppb	00:15:46
2	Ni 231.604†	61.1	-1.0	-0.0319	ug/L	-0.0319	ppb	00:15:46

2	P 214.914†	167.7	-0.7	-0.3211 ug/L	-0.3211 ppb	00:15:46
2	Pb 220.353†	-27.2	17.1	2.8186 ug/L	2.8186 ppb	00:15:46
2	S 181.975 Axial†	177.4	142.3	271.79 ug/L	271.79 ppb	00:15:46
2	Sb 206.836†	38.2	14.6	6.2816 ug/L	6.2816 ppb	00:15:46
2	Se 196.026†	-10.4	10.5	8.8509 ug/L	8.8509 ppb	00:15:46
2	Si 251.611†	553.6	64.2	2.5064 ug/L	2.5064 ppb	00:15:46
2	Sn 189.927†	12.0	3.9	0.9202 ug/L	0.9202 ppb	00:15:46
2	Ti 334.940†	-883.1	66.6	0.1274 ug/L	0.1274 ppb	00:15:26
2	Tl 190.801†	-14.5	11.8	4.8723 ug/L	4.8723 ppb	00:15:46
2	U 409.014†	-1907.4	110.5	3.3626 ug/L	3.3626 ppb	00:15:26
2	V 292.402†	-1197.7	23.4	0.2084 ug/L	0.2084 ppb	00:15:26
2	Zn 213.857†	526.0	2.0	0.0351 ug/L	0.0351 ppb	00:15:46
2	SiO2†	552.7	64.4	5.3961 ug/L	5.3961 ppb	00:16:52
3	Sc Radial	3280.5	3280.5	102 %		00:14:54
3	Y RADIAL	2695.4	2695.4	102.6 %		00:14:54
3	Al 396.153Radial†	-57.5	5.8	12.656 ug/L	12.656 ppb	00:14:54
3	Ca 317.933Radial†	11.1	-1.7	-6.9806 ug/L	-6.9806 ppb	00:14:54
3	Fe 238.204 Radial†	9.9	0.2	5.0675 ug/L	5.0675 ppb	00:14:54
3	K 766.490 Radial†	1923.4	-147.8	-72.199 ug/L	-72.199 ppb	00:14:34
3	Mg 279.077 IEC†	0.1	-1.7	-170.89 ug/L	-170.89 ppb	00:14:54
3	Na 589.592 Radial†	-728.8	20.7	6.5423 ug/L	6.5423 ppb	00:14:34
3	Sr 421.552†	6.5	-28.3	-0.2720 ug/L	-0.2720 ppb	00:14:34
3	Sc 361.383	813786.9	813786.9	102.76 %		00:15:52
3	Y 371.029	696482.5	696482.5	102.78 %		00:15:52
3	Ag 328.068†	122.4	-12.2	-0.0678 ug/L	-0.0678 ppb	00:15:52
3	As 188.979†	-22.6	-3.2	-1.8568 ug/L	-1.8568 ppb	00:16:12
3	B 249.677†	-196.5	186.0	5.4109 ug/L	5.4109 ppb	00:16:12
3	Ba 233.527†	-4.6	-4.2	-0.0417 ug/L	-0.0417 ppb	00:16:12
3	Be 313.107†	-3428.2	205.6	0.0928 ug/L	0.0928 ppb	00:15:52
3	Cd 226.502†	-163.9	-3.3	-0.0494 ug/L	-0.0494 ppb	00:16:12
3	Co 228.616†	-39.0	8.0	0.2190 ug/L	0.2190 ppb	00:16:12
3	Cr 267.716†	75.3	20.4	0.2785 ug/L	0.2785 ppb	00:16:12
3	Cu 324.752†	6154.1	-222.9	-0.7558 ug/L	-0.7558 ppb	00:15:52
3	Mn 257.610†	415.4	5.4	0.0150 ug/L	0.0150 ppb	00:16:12
3	Mo 202.031†	10.8	-2.6	-0.2342 ug/L	-0.2342 ppb	00:16:12
3	Ni 231.604†	58.9	-3.3	-0.1109 ug/L	-0.1109 ppb	00:16:12
3	P 214.914†	179.6	10.5	8.5479 ug/L	8.5479 ppb	00:16:12
3	Pb 220.353†	-40.4	4.3	0.7095 ug/L	0.7095 ppb	00:16:12
3	S 181.975 Axial†	172.9	137.5	262.63 ug/L	262.63 ppb	00:16:12
3	Sb 206.836†	30.4	6.8	2.9418 ug/L	2.9418 ppb	00:16:12
3	Se 196.026†	-13.1	8.0	6.8192 ug/L	6.8192 ppb	00:16:12
3	Si 251.611†	546.6	55.8	2.1846 ug/L	2.1846 ppb	00:16:12
3	Sn 189.927†	10.2	2.1	0.5068 ug/L	0.5068 ppb	00:16:12
3	Ti 334.940†	-998.8	-43.6	-0.0679 ug/L	-0.0679 ppb	00:15:52
3	Tl 190.801†	-17.7	8.7	3.5908 ug/L	3.5908 ppb	00:16:12
3	U 409.014†	-1825.9	195.1	5.9259 ug/L	5.9259 ppb	00:15:52
3	V 292.402†	-1223.3	1.8	0.0186 ug/L	0.0186 ppb	00:15:52
3	Zn 213.857†	527.1	1.6	0.0215 ug/L	0.0215 ppb	00:16:12
3	SiO2†	555.5	65.6	5.5189 ug/L	5.5189 ppb	00:17:12

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	812290.0	102.57	%	0.164				0.16%
Sc Radial	3305.7	103	%	0.7				0.67%
Y 371.029	694946.5	102.55	%	0.202				0.20%
Y RADIAL	2711.4	103.2	%	0.65				0.63%
Ag 328.068†	19.4	0.0907	ug/L	0.18506	0.0907	ppb	0.18506	204.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.8	8.2080	ug/L	4.12919	8.2080	ppb	4.12919	50.31%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-4.7	-2.7538	ug/L	2.27478	-2.7538	ppb	2.27478	82.60%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	178.6	5.2011	ug/L	0.50730	5.2011	ppb	0.50730	9.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	5.6	0.0544	ug/L	0.09434	0.0544	ppb	0.09434	173.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	207.1	0.0939	ug/L	0.02624	0.0939	ppb	0.02624	27.96%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-10.064	ug/L	11.0547	-10.064	ppb	11.0547	109.85%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                13.5      0.2103 ug/L       0.23574      0.2103 ppb        0.23574 112.08%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 0.0      0.0013 ug/L       0.20045      0.0013 ppb        0.20045 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                17.8      0.2421 ug/L       0.04435      0.2421 ppb        0.04435  18.31%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†              -199.4     -0.6774 ug/L       0.19477     -0.6774 ppb        0.19477  28.75%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.1     -30.539 ug/L       31.5733     -30.539 ppb        31.5733 103.39%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         -49.6     -24.254 ug/L       42.6747     -24.254 ppb        42.6747 175.95%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.4     -44.670 ug/L      203.4958     -44.670 ppb       203.4958 455.56%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                12.1      0.0155 ug/L       0.01126      0.0155 ppb        0.01126  72.43%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.9      0.1674 ug/L       0.34824      0.1674 ppb        0.34824 208.01%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†         37.3      11.803 ug/L        6.1309      11.803 ppb         6.1309  51.94%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.1      0.0693 ug/L       0.24691      0.0693 ppb        0.24691 356.19%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  6.6      5.4359 ug/L       4.99122      5.4359 ppb        4.99122  91.82%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                10.1      1.6711 ug/L       1.06678      1.6711 ppb        1.06678  63.84%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          141.5      270.29 ug/L         7.042      270.29 ppb          7.042   2.61%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                12.0      5.1578 ug/L       1.91920      5.1578 ppb        1.91920  37.21%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 9.2      7.7754 ug/L       1.02107      7.7754 ppb        1.02107  13.13%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                61.7      2.4096 ug/L       0.19547      2.4096 ppb        0.19547   8.11%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 3.1      0.7419 ug/L       0.21247      0.7419 ppb        0.21247  28.64%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -23.8     -0.2294 ug/L       0.06742     -0.2294 ppb        0.06742  29.39%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                52.0      0.0937 ug/L       0.14768      0.0937 ppb        0.14768 157.64%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 8.3      3.4262 ug/L       1.53499      3.4262 ppb        1.53499  44.80%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                133.1      4.0452 ug/L       1.64902      4.0452 ppb        1.64902  40.76%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 17.3      0.1551 ug/L       0.11916      0.1551 ppb        0.11916  76.82%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                 3.9      0.0551 ug/L       0.04690      0.0551 ppb        0.04690  85.13%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      61.6      5.1687 ug/L       0.50389      5.1687 ppb        0.50389   9.75%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 52
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/11/2010 01:08:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3280.9	3280.9	102	%			01:10:16
1	Y RADIAL	2684.7	2684.7	102.2	%			01:10:16
1	Al 396.153Radial†	2380.1	2386.8	5138.4	ug/L	5138.4	ppb	01:09:56
1	Ca 317.933Radial†	1390.4	1345.6	5622.1	ug/L	5622.1	ppb	01:10:16
1	Fe 238.204 Radial†	202.3	188.1	5430.7	ug/L	5430.7	ppb	01:10:16
1	K 766.490 Radial†	13567.4	11225.2	5477.5	ug/L	5477.5	ppb	01:09:56
1	Mg 279.077 IEC†	60.0	56.9	5885.4	ug/L	5885.4	ppb	01:10:16
1	Na 589.592 Radial†	31419.5	31421.3	9940.0	ug/L	9940.0	ppb	01:09:56
1	Sr 421.552†	52824.8	51561.6	496.50	ug/L	496.50	ppb	01:09:56
1	Sc 361.383	890518.7	890518.7	112.44	%			01:11:13
1	Y 371.029	749562.0	749562.0	110.61	%			01:11:13
1	Ag 328.068†	109326.5	97096.0	518.16	ug/L	518.16	ppb	01:11:19
1	As 188.979†	1060.2	961.7	567.66	ug/L	567.66	ppb	01:11:39
1	B 249.677†	19588.9	17798.2	515.45	ug/L	515.45	ppb	01:11:19
1	Ba 233.527†	61736.4	54904.3	544.93	ug/L	544.93	ppb	01:11:19
1	Be 313.107†	1318387.2	1176023.4	533.04	ug/L	533.04	ppb	01:11:13
1	Cd 226.502†	42099.6	37596.7	573.41	ug/L	573.41	ppb	01:11:19
1	Co 228.616†	23087.1	20577.9	567.89	ug/L	567.89	ppb	01:11:19
1	Cr 267.716†	44675.7	39678.6	545.48	ug/L	545.48	ppb	01:11:19
1	Cu 324.752†	171760.6	146539.9	494.94	ug/L	494.94	ppb	01:11:19
1	Mn 257.610†	433295.6	384944.0	532.70	ug/L	532.70	ppb	01:11:13
1	Mo 202.031†	6629.0	5882.3	537.70	ug/L	537.70	ppb	01:11:39
1	Ni 231.604†	19226.3	17037.9	569.19	ug/L	569.19	ppb	01:11:19
1	P 214.914†	4208.2	3578.1	2776.2	ug/L	2776.2	ppb	01:11:39
1	Pb 220.353†	3846.2	3464.2	569.74	ug/L	569.74	ppb	01:11:39
1	S 181.975 Axial†	856.4	730.9	1395.0	ug/L	1395.0	ppb	01:11:39
1	Sb 206.836†	1433.2	1251.8	557.57	ug/L	557.57	ppb	01:11:39
1	Se 196.026†	719.5	660.6	582.64	ug/L	582.64	ppb	01:11:39
1	Si 251.611†	76897.1	67910.8	2648.5	ug/L	2648.5	ppb	01:11:19
1	Sn 189.927†	2694.2	2388.2	569.43	ug/L	569.43	ppb	01:11:39
1	Ti 334.940†	314983.5	281052.8	503.99	ug/L	503.99	ppb	01:11:19
1	Tl 190.801†	1471.0	1334.2	552.09	ug/L	552.09	ppb	01:11:39
1	U 409.014†	15515.5	15770.5	477.18	ug/L	477.18	ppb	01:11:19
1	V 292.402†	70775.1	64134.7	532.55	ug/L	532.55	ppb	01:11:19
1	Zn 213.857†	48874.9	42954.5	544.35	ug/L	544.35	ppb	01:11:19
1	SiO2†	76107.2	67209.4	5631.9	ug/L	5631.9	ppb	01:12:46
2	Sc Radial	3297.0	3297.0	103	%			01:10:41
2	Y RADIAL	2713.9	2713.9	103.3	%			01:10:41
2	Al 396.153Radial†	2340.5	2336.9	5030.5	ug/L	5030.5	ppb	01:10:21
2	Ca 317.933Radial†	1401.2	1349.5	5638.3	ug/L	5638.3	ppb	01:10:41
2	Fe 238.204 Radial†	203.5	188.3	5436.7	ug/L	5436.7	ppb	01:10:41
2	K 766.490 Radial†	13705.6	11294.6	5511.4	ug/L	5511.4	ppb	01:10:21
2	Mg 279.077 IEC†	61.3	57.8	5984.7	ug/L	5984.7	ppb	01:10:41
2	Na 589.592 Radial†	30941.1	30805.9	9745.3	ug/L	9745.3	ppb	01:10:21
2	Sr 421.552†	52085.1	50589.6	487.14	ug/L	487.14	ppb	01:10:21
2	Sc 361.383	893361.4	893361.4	112.80	%			01:11:44
2	Y 371.029	752600.4	752600.4	111.06	%			01:11:44
2	Ag 328.068†	107864.5	95490.6	509.62	ug/L	509.62	ppb	01:11:50
2	As 188.979†	1064.7	962.7	568.18	ug/L	568.18	ppb	01:12:10
2	B 249.677†	19233.0	17427.3	504.68	ug/L	504.68	ppb	01:11:50
2	Ba 233.527†	60989.7	54067.7	536.63	ug/L	536.63	ppb	01:11:50
2	Be 313.107†	1326637.0	1179605.9	534.64	ug/L	534.64	ppb	01:11:44
2	Cd 226.502†	41673.4	37099.8	565.82	ug/L	565.82	ppb	01:11:50
2	Co 228.616†	22824.9	20280.2	559.69	ug/L	559.69	ppb	01:11:50
2	Cr 267.716†	44216.5	39145.1	538.15	ug/L	538.15	ppb	01:11:50
2	Cu 324.752†	168826.0	143452.3	484.52	ug/L	484.52	ppb	01:11:50
2	Mn 257.610†	436249.7	386336.6	534.62	ug/L	534.62	ppb	01:11:44
2	Mo 202.031†	6635.7	5869.5	536.54	ug/L	536.54	ppb	01:12:10
2	Ni 231.604†	19085.8	16858.9	563.21	ug/L	563.21	ppb	01:11:50

2	P 214.914†	4185.6	3546.2	2752.6	ug/L	2752.6 ppb	01:12:10
2	Pb 220.353†	3823.0	3432.8	564.57	ug/L	564.57 ppb	01:12:10
2	S 181.975 Axial†	849.9	722.6	1379.3	ug/L	1379.3 ppb	01:12:10
2	Sb 206.836†	1432.3	1247.0	555.47	ug/L	555.47 ppb	01:12:10
2	Se 196.026†	707.8	648.2	572.03	ug/L	572.03 ppb	01:12:10
2	Si 251.611†	75767.9	66692.2	2600.9	ug/L	2600.9 ppb	01:11:50
2	Sn 189.927†	2703.4	2388.7	569.56	ug/L	569.56 ppb	01:12:10
2	Ti 334.940†	310582.3	276259.7	495.40	ug/L	495.40 ppb	01:11:50
2	Tl 190.801†	1475.6	1334.1	552.04	ug/L	552.04 ppb	01:12:10
2	U 409.014†	15190.4	15438.4	467.11	ug/L	467.11 ppb	01:11:50
2	V 292.402†	69914.6	63171.6	524.64	ug/L	524.64 ppb	01:11:50
2	Zn 213.857†	48436.3	42427.4	537.66	ug/L	537.66 ppb	01:11:50
2	SiO2†	76087.1	66976.2	5612.3	ug/L	5612.3 ppb	01:12:51
3	Sc Radial	3286.8	3286.8	103	%		01:11:06
3	Y RADIAL	2692.9	2692.9	102.5	%		01:11:06
3	Al 396.153Radial†	2351.3	2354.5	5068.6	ug/L	5068.6 ppb	01:10:46
3	Ca 317.933Radial†	1396.2	1348.7	5635.3	ug/L	5635.3 ppb	01:11:06
3	Fe 238.204 Radial†	203.2	188.6	5446.5	ug/L	5446.5 ppb	01:11:06
3	K 766.490 Radial†	13592.4	11225.6	5477.8	ug/L	5477.8 ppb	01:10:46
3	Mg 279.077 IEC†	65.2	61.8	6396.4	ug/L	6396.4 ppb	01:11:06
3	Na 589.592 Radial†	30685.6	30650.2	9696.1	ug/L	9696.1 ppb	01:10:46
3	Sr 421.552†	51948.7	50613.9	487.38	ug/L	487.38 ppb	01:10:46
3	Sc 361.383	899392.0	899392.0	113.56	%		01:12:15
3	Y 371.029	757693.7	757693.7	111.81	%		01:12:15
3	Ag 328.068†	109480.2	96272.1	513.78	ug/L	513.78 ppb	01:12:21
3	As 188.979†	1068.8	959.9	566.60	ug/L	566.60 ppb	01:12:41
3	B 249.677†	19841.1	17848.5	516.92	ug/L	516.92 ppb	01:12:21
3	Ba 233.527†	61707.6	54337.3	539.31	ug/L	539.31 ppb	01:12:21
3	Be 313.107†	1333359.8	1177640.0	533.76	ug/L	533.76 ppb	01:12:15
3	Cd 226.502†	42190.2	37307.1	568.98	ug/L	568.98 ppb	01:12:21
3	Co 228.616†	23106.6	20392.6	562.77	ug/L	562.77 ppb	01:12:21
3	Cr 267.716†	44753.2	39354.9	541.04	ug/L	541.04 ppb	01:12:21
3	Cu 324.752†	172067.9	145303.5	490.77	ug/L	490.77 ppb	01:12:21
3	Mn 257.610†	437766.0	385078.7	532.87	ug/L	532.87 ppb	01:12:15
3	Mo 202.031†	6656.4	5848.3	534.60	ug/L	534.60 ppb	01:12:41
3	Ni 231.604†	19376.8	17001.8	567.99	ug/L	567.99 ppb	01:12:21
3	P 214.914†	4194.2	3528.9	2737.5	ug/L	2737.5 ppb	01:12:41
3	Pb 220.353†	3856.6	3439.6	565.69	ug/L	565.69 ppb	01:12:41
3	S 181.975 Axial†	862.3	728.5	1390.6	ug/L	1390.6 ppb	01:12:41
3	Sb 206.836†	1432.0	1238.3	551.62	ug/L	551.62 ppb	01:12:41
3	Se 196.026†	721.1	655.7	578.47	ug/L	578.47 ppb	01:12:41
3	Si 251.611†	77092.5	67408.2	2628.9	ug/L	2628.9 ppb	01:12:21
3	Sn 189.927†	2702.2	2371.6	565.48	ug/L	565.48 ppb	01:12:41
3	Ti 334.940†	315220.7	278497.9	499.37	ug/L	499.37 ppb	01:12:21
3	Tl 190.801†	1473.6	1323.6	547.71	ug/L	547.71 ppb	01:12:41
3	U 409.014†	15494.2	15615.6	472.49	ug/L	472.49 ppb	01:12:21
3	V 292.402†	70968.8	63684.3	528.82	ug/L	528.82 ppb	01:12:21
3	Zn 213.857†	49025.2	42658.1	540.57	ug/L	540.57 ppb	01:12:21
3	SiO2†	75941.2	66395.5	5563.6	ug/L	5563.6 ppb	01:12:56

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	894424.0	112.94	%	0.572				0.51%
Sc Radial	3288.2	103	%	0.3				0.25%
Y 371.029	753285.4	111.16	%	0.606				0.55%
Y RADIAL	2697.2	102.7	%	0.57				0.56%
Ag 328.068†	96286.2	513.85	ug/L	4.268	513.85	ppb	4.268	0.83%
QC value within limits for Ag 328.068 Recovery = 102.77%								
Al 396.153Radial†	2359.4	5079.2	ug/L	54.74	5079.2	ppb	54.74	1.08%
QC value within limits for Al 396.153Radial Recovery = 101.58%								
As 188.979†	961.5	567.48	ug/L	0.809	567.48	ppb	0.809	0.14%
QC value greater than the upper limit for As 188.979 Recovery = 113.50%								
B 249.677†	17691.3	512.35	ug/L	6.685	512.35	ppb	6.685	1.30%
QC value within limits for B 249.677 Recovery = 102.47%								
Ba 233.527†	54436.4	540.29	ug/L	4.236	540.29	ppb	4.236	0.78%
QC value within limits for Ba 233.527 Recovery = 108.06%								
Be 313.107†	1177756.5	533.81	ug/L	0.802	533.81	ppb	0.802	0.15%
QC value within limits for Be 313.107 Recovery = 106.76%								
Ca 317.933Radial†	1347.9	5631.9	ug/L	8.58	5631.9	ppb	8.58	0.15%

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   QC value greater than the upper limit for Ca 317.933Radial  Recovery = 112.64%
Cd 226.502†            37334.5      569.40 ug/L         3.810      569.40 ppb          3.810   0.67%
   QC value greater than the upper limit for Cd 226.502  Recovery = 113.88%
Co 228.616†            20416.9      563.45 ug/L         4.142      563.45 ppb          4.142   0.74%
   QC value greater than the upper limit for Co 228.616  Recovery = 112.69%
Cr 267.716†            39392.9      541.56 ug/L         3.693      541.56 ppb          3.693   0.68%
   QC value within limits for Cr 267.716  Recovery = 108.31%
Cu 324.752†           145098.6      490.08 ug/L         5.246      490.08 ppb          5.246   1.07%
   QC value within limits for Cu 324.752  Recovery = 98.02%
Fe 238.204 Radial†       188.4      5438.0 ug/L          7.95      5438.0 ppb           7.95   0.15%
   QC value within limits for Fe 238.204 Radial  Recovery = 108.76%
K 766.490 Radial†      11248.5      5488.9 ug/L         19.53      5488.9 ppb          19.53   0.36%
   QC value within limits for K 766.490 Radial  Recovery = 109.78%
Mg 279.077 IEC†           58.8      6088.8 ug/L        270.97      6088.8 ppb         270.97   4.45%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 121.78%
Mn 257.610†           385453.1      533.40 ug/L         1.065      533.40 ppb          1.065   0.20%
   QC value within limits for Mn 257.610  Recovery = 106.68%
Mo 202.031†             5866.7      536.28 ug/L         1.570      536.28 ppb          1.570   0.29%
   QC value within limits for Mo 202.031  Recovery = 107.26%
Na 589.592 Radial†     30959.2      9793.8 ug/L        129.00      9793.8 ppb         129.00   1.32%
   QC value within limits for Na 589.592 Radial  Recovery = 97.94%
Ni 231.604†            16966.2      566.80 ug/L         3.161      566.80 ppb          3.161   0.56%
   QC value greater than the upper limit for Ni 231.604  Recovery = 113.36%
P 214.914†              3551.1      2755.5 ug/L         19.53      2755.5 ppb          19.53   0.71%
   QC value greater than the upper limit for P 214.914  Recovery = 110.22%
Pb 220.353†             3445.5      566.67 ug/L         2.722      566.67 ppb          2.722   0.48%
   QC value greater than the upper limit for Pb 220.353  Recovery = 113.33%
S 181.975 Axial†         727.3      1388.3 ug/L          8.12      1388.3 ppb           8.12   0.59%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 138.83%
Sb 206.836†             1245.7      554.89 ug/L         3.020      554.89 ppb          3.020   0.54%
   QC value greater than the upper limit for Sb 206.836  Recovery = 110.98%
Se 196.026†              654.8      577.71 ug/L         5.342      577.71 ppb          5.342   0.92%
   QC value greater than the upper limit for Se 196.026  Recovery = 115.54%
Si 251.611†            67337.0      2626.1 ug/L         23.94      2626.1 ppb          23.94   0.91%
   QC value within limits for Si 251.611  Recovery = 105.04%
Sn 189.927†             2382.9      568.16 ug/L         2.318      568.16 ppb          2.318   0.41%
   QC value greater than the upper limit for Sn 189.927  Recovery = 113.63%
Sr 421.552†            50921.7      490.34 ug/L         5.338      490.34 ppb          5.338   1.09%
   QC value within limits for Sr 421.552  Recovery = 98.07%
Ti 334.940†           278603.5      499.59 ug/L         4.302      499.59 ppb          4.302   0.86%
   QC value within limits for Ti 334.940  Recovery = 99.92%
Tl 190.801†             1330.6      550.61 ug/L         2.513      550.61 ppb          2.513   0.46%
   QC value greater than the upper limit for Tl 190.801  Recovery = 110.12%
U 409.014†             15608.1      472.26 ug/L         5.040      472.26 ppb          5.040   1.07%
   QC value within limits for U 409.014  Recovery = 94.45%
V 292.402†             63663.5      528.67 ug/L         3.959      528.67 ppb          3.959   0.75%
   QC value within limits for V 292.402  Recovery = 105.73%
Zn 213.857†            42680.0      540.86 ug/L         3.355      540.86 ppb          3.355   0.62%
   QC value within limits for Zn 213.857  Recovery = 108.17%
SiO2†                  66860.4      5602.6 ug/L         35.17      5602.6 ppb          35.17   0.63%
   QC value within limits for SiO2  Recovery = 104.77%
QC Failed.  Continue with analysis.
```

Sequence No.: 53
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/11/2010 01:15:06
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3213.3	3213.3	100	%			01:17:19
1	Y RADIAL	2639.5	2639.5	100.5	%			01:17:19
1	Al 396.153Radial†	-74.4	-12.2	-26.358	ug/L	-26.358	ppb	01:17:19
1	Ca 317.933Radial†	14.2	1.7	7.0720	ug/L	7.0720	ppb	01:17:19
1	Fe 238.204 Radial†	9.2	-0.3	-8.0415	ug/L	-8.0415	ppb	01:17:19
1	K 766.490 Radial†	2443.8	410.6	200.61	ug/L	200.61	ppb	01:16:59
1	Mg 279.077 IEC†	2.9	1.2	120.82	ug/L	120.82	ppb	01:17:19
1	Na 589.592 Radial†	-951.3	-216.1	-68.349	ug/L	-68.349	ppb	01:16:59
1	Sr 421.552†	40.8	6.0	0.0579	ug/L	0.0579	ppb	01:16:59
1	Sc 361.383	871795.8	871795.8	110.08	%			01:18:16
1	Y 371.029	745122.3	745122.3	109.96	%			01:18:16
1	Ag 328.068†	180.3	32.4	0.1747	ug/L	0.1747	ppb	01:18:16
1	As 188.979†	-16.1	4.2	2.4423	ug/L	2.4423	ppb	01:18:36
1	B 249.677†	-443.8	-25.9	-0.7528	ug/L	-0.7528	ppb	01:18:36
1	Ba 233.527†	0.6	0.8	0.0044	ug/L	0.0044	ppb	01:18:36
1	Be 313.107†	-3599.3	272.2	0.1223	ug/L	0.1223	ppb	01:18:16
1	Cd 226.502†	-161.7	9.4	0.1409	ug/L	0.1409	ppb	01:18:36
1	Co 228.616†	-54.3	-3.4	-0.0937	ug/L	-0.0937	ppb	01:18:36
1	Cr 267.716†	73.4	13.8	0.1929	ug/L	0.1929	ppb	01:18:36
1	Cu 324.752†	6453.4	-349.5	-1.1731	ug/L	-1.1731	ppb	01:18:16
1	Mn 257.610†	436.3	-2.5	-0.0092	ug/L	-0.0092	ppb	01:18:36
1	Mo 202.031†	12.8	-1.4	-0.1280	ug/L	-0.1280	ppb	01:18:36
1	Ni 231.604†	44.9	-19.8	-0.6616	ug/L	-0.6616	ppb	01:18:36
1	P 214.914†	190.6	8.9	7.3613	ug/L	7.3613	ppb	01:18:36
1	Pb 220.353†	-59.1	-10.0	-1.6484	ug/L	-1.6484	ppb	01:18:36
1	S 181.975 Axial†	163.2	117.5	224.41	ug/L	224.41	ppb	01:18:36
1	Sb 206.836†	37.7	11.5	4.9895	ug/L	4.9895	ppb	01:18:36
1	Se 196.026†	-27.8	-4.5	-3.9182	ug/L	-3.9182	ppb	01:18:36
1	Si 251.611†	640.4	105.6	4.1308	ug/L	4.1308	ppb	01:18:36
1	Sn 189.927†	19.1	9.6	2.2867	ug/L	2.2867	ppb	01:18:36
1	Ti 334.940†	-1228.4	-187.5	-0.3392	ug/L	-0.3392	ppb	01:18:16
1	Tl 190.801†	-28.0	0.5	0.2204	ug/L	0.2204	ppb	01:18:36
1	U 409.014†	-2674.5	-457.6	-13.898	ug/L	-13.898	ppb	01:18:16
1	V 292.402†	-1512.5	-181.8	-1.5138	ug/L	-1.5138	ppb	01:18:16
1	Zn 213.857†	567.3	4.0	0.0578	ug/L	0.0578	ppb	01:18:36
1	SiO2†	666.3	130.3	10.950	ug/L	10.950	ppb	01:19:32
2	Sc Radial	3200.6	3200.6	99.9	%			01:17:44
2	Y RADIAL	2651.4	2651.4	100.9	%			01:17:44
2	Al 396.153Radial†	-68.3	-6.4	-13.874	ug/L	-13.874	ppb	01:17:44
2	Ca 317.933Radial†	9.7	-2.8	-11.616	ug/L	-11.616	ppb	01:17:44
2	Fe 238.204 Radial†	9.5	0.1	2.2615	ug/L	2.2615	ppb	01:17:44
2	K 766.490 Radial†	2373.4	349.6	170.83	ug/L	170.83	ppb	01:17:24
2	Mg 279.077 IEC†	4.2	2.5	261.10	ug/L	261.10	ppb	01:17:44
2	Na 589.592 Radial†	-930.0	-198.5	-62.787	ug/L	-62.787	ppb	01:17:24
2	Sr 421.552†	31.4	-3.2	-0.0303	ug/L	-0.0303	ppb	01:17:24
2	Sc 361.383	862122.9	862122.9	108.86	%			01:18:41
2	Y 371.029	736572.6	736572.6	108.70	%			01:18:41
2	Ag 328.068†	199.4	51.9	0.2898	ug/L	0.2898	ppb	01:18:41
2	As 188.979†	-25.1	-4.3	-2.5021	ug/L	-2.5021	ppb	01:19:01
2	B 249.677†	-405.5	4.8	0.1383	ug/L	0.1383	ppb	01:19:01
2	Ba 233.527†	-13.2	-11.8	-0.1182	ug/L	-0.1182	ppb	01:19:01
2	Be 313.107†	-3549.2	281.6	0.1261	ug/L	0.1261	ppb	01:18:41
2	Cd 226.502†	-159.0	10.2	0.1509	ug/L	0.1509	ppb	01:19:01
2	Co 228.616†	-51.2	-1.1	-0.0287	ug/L	-0.0287	ppb	01:19:01
2	Cr 267.716†	76.9	17.8	0.2521	ug/L	0.2521	ppb	01:19:01
2	Cu 324.752†	6330.1	-397.0	-1.3297	ug/L	-1.3297	ppb	01:18:41
2	Mn 257.610†	437.4	2.9	-0.0064	ug/L	-0.0064	ppb	01:19:01
2	Mo 202.031†	21.3	6.5	0.5957	ug/L	0.5957	ppb	01:19:01
2	Ni 231.604†	66.7	0.7	0.0229	ug/L	0.0229	ppb	01:19:01

2	P 214.914†	185.4	6.0	5.0562	ug/L	5.0562 ppb	01:19:01
2	Pb 220.353†	-32.4	13.9	2.2810	ug/L	2.2810 ppb	01:19:01
2	S 181.975 Axial†	159.4	115.6	220.84	ug/L	220.84 ppb	01:19:01
2	Sb 206.836†	44.4	18.0	7.7515	ug/L	7.7515 ppb	01:19:01
2	Se 196.026†	-17.2	4.9	4.2034	ug/L	4.2034 ppb	01:19:01
2	Si 251.611†	637.1	109.2	4.2616	ug/L	4.2616 ppb	01:19:01
2	Sn 189.927†	6.7	-1.6	-0.3832	ug/L	-0.3832 ppb	01:19:01
2	Ti 334.940†	-1336.0	-298.9	-0.5503	ug/L	-0.5503 ppb	01:18:41
2	Tl 190.801†	-31.3	-2.7	-1.1326	ug/L	-1.1326 ppb	01:19:01
2	U 409.014†	-2864.1	-659.0	-20.017	ug/L	-20.017 ppb	01:18:41
2	V 292.402†	-1382.1	-77.3	-0.6584	ug/L	-0.6584 ppb	01:18:41
2	Zn 213.857†	567.1	9.5	0.1234	ug/L	0.1234 ppb	01:19:01
2	SiO2†	657.9	129.4	10.851	ug/L	10.851 ppb	01:19:37
3	Sc Radial	3235.1	3235.1	101	%		01:18:09
3	Y RADIAL	2666.1	2666.1	101.5	%		01:18:09
3	Al 396.153Radial†	-65.6	-3.0	-6.4885	ug/L	-6.4885 ppb	01:18:09
3	Ca 317.933Radial†	10.2	-2.4	-9.9975	ug/L	-9.9975 ppb	01:18:09
3	Fe 238.204 Radial†	7.7	-1.8	-53.051	ug/L	-53.051 ppb	01:18:09
3	K 766.490 Radial†	2446.9	397.2	194.08	ug/L	194.08 ppb	01:17:49
3	Mg 279.077 IEC†	2.1	0.4	42.039	ug/L	42.039 ppb	01:18:09
3	Na 589.592 Radial†	-930.4	-189.0	-59.786	ug/L	-59.786 ppb	01:17:49
3	Sr 421.552†	21.3	-13.5	-0.1304	ug/L	-0.1304 ppb	01:17:49
3	Sc 361.383	871540.9	871540.9	110.05	%		01:19:06
3	Y 371.029	744648.5	744648.5	109.89	%		01:19:06
3	Ag 328.068†	224.4	72.6	0.3800	ug/L	0.3800 ppb	01:19:06
3	As 188.979†	-22.9	-2.0	-1.1947	ug/L	-1.1947 ppb	01:19:26
3	B 249.677†	-408.6	5.9	0.1822	ug/L	0.1822 ppb	01:19:26
3	Ba 233.527†	-4.4	-3.7	-0.0398	ug/L	-0.0398 ppb	01:19:26
3	Be 313.107†	-3585.1	284.1	0.1272	ug/L	0.1272 ppb	01:19:06
3	Cd 226.502†	-170.4	1.4	0.0238	ug/L	0.0238 ppb	01:19:26
3	Co 228.616†	-65.5	-13.6	-0.3729	ug/L	-0.3729 ppb	01:19:26
3	Cr 267.716†	91.2	30.1	0.4166	ug/L	0.4166 ppb	01:19:26
3	Cu 324.752†	6326.7	-463.0	-1.5574	ug/L	-1.5574 ppb	01:19:06
3	Mn 257.610†	421.5	-15.9	-0.0289	ug/L	-0.0289 ppb	01:19:26
3	Mo 202.031†	20.8	5.8	0.5285	ug/L	0.5285 ppb	01:19:26
3	Ni 231.604†	80.1	12.2	0.4071	ug/L	0.4071 ppb	01:19:26
3	P 214.914†	185.8	4.6	4.0199	ug/L	4.0199 ppb	01:19:26
3	Pb 220.353†	-61.7	-12.4	-2.0208	ug/L	-2.0208 ppb	01:19:26
3	S 181.975 Axial†	158.9	113.5	216.88	ug/L	216.88 ppb	01:19:26
3	Sb 206.836†	45.8	18.9	8.1323	ug/L	8.1323 ppb	01:19:26
3	Se 196.026†	-19.0	3.4	2.7685	ug/L	2.7685 ppb	01:19:26
3	Si 251.611†	625.0	91.8	3.5840	ug/L	3.5840 ppb	01:19:26
3	Sn 189.927†	14.8	5.6	1.3402	ug/L	1.3402 ppb	01:19:26
3	Ti 334.940†	-1367.2	-314.0	-0.5609	ug/L	-0.5609 ppb	01:19:06
3	Tl 190.801†	-26.9	1.5	0.6288	ug/L	0.6288 ppb	01:19:26
3	U 409.014†	-2762.4	-538.1	-16.339	ug/L	-16.339 ppb	01:19:06
3	V 292.402†	-1378.7	-60.5	-0.5105	ug/L	-0.5105 ppb	01:19:06
3	Zn 213.857†	576.2	12.2	0.1639	ug/L	0.1639 ppb	01:19:26
3	SiO2†	674.6	138.0	11.577	ug/L	11.577 ppb	01:19:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868486.6	109.66	%	0.696				0.63%
Sc Radial	3216.3	100	%	0.5				0.54%
Y 371.029	742114.5	109.51	%	0.709				0.65%
Y RADIAL	2652.3	100.9	%	0.51				0.50%
Ag 328.068†	52.3	0.2815	ug/L	0.10294	0.2815	ppb	0.10294	36.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-7.2	-15.573	ug/L	10.0430	-15.573	ppb	10.0430	64.49%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.7	-0.4181	ug/L	2.56203	-0.4181	ppb	2.56203	612.71%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	-5.1	-0.1441	ug/L	0.52759	-0.1441	ppb	0.52759	366.13%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.0512	ug/L	0.06211	-0.0512	ppb	0.06211	121.38%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	279.3	0.1252	ug/L	0.00257	0.1252	ppb	0.00257	2.05%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.2	-4.8470	ug/L	10.35383	-4.8470	ppb	10.35383	213.61%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                7.0      0.1052 ug/L       0.07065      0.1052 ppb        0.07065  67.15%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               -6.1     -0.1651 ug/L       0.18286     -0.1651 ppb        0.18286 110.75%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               20.6      0.2872 ug/L       0.11590      0.2872 ppb        0.11590  40.35%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -403.2     -1.3534 ug/L       0.19320     -1.3534 ppb        0.19320  14.28%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -0.7     -19.610 ug/L       29.4148     -19.610 ppb        29.4148 150.00%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        385.8      188.51 ug/L        15.648      188.51 ppb         15.648   8.30%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           1.4      141.32 ug/L       110.960      141.32 ppb        110.960  78.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               -5.1     -0.0148 ug/L       0.01226     -0.0148 ppb        0.01226  82.65%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               3.7      0.3321 ug/L       0.39987      0.3321 ppb        0.39987 120.42%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -201.2     -63.641 ug/L        4.3452     -63.641 ppb         4.3452   6.83%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               -2.3     -0.0772 ug/L       0.54135     -0.0772 ppb        0.54135 701.10%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                6.5      5.4791 ug/L       1.71042      5.4791 ppb        1.71042  31.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               -2.8     -0.4627 ug/L       2.38340     -0.4627 ppb        2.38340 515.08%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         115.5      220.71 ug/L         3.768      220.71 ppb          3.768   1.71%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               16.1      6.9578 ug/L       1.71516      6.9578 ppb        1.71516  24.65%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.3      1.0179 ug/L       4.33455      1.0179 ppb        4.33455 425.83%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              102.2      3.9921 ug/L       0.35943      3.9921 ppb        0.35943   9.00%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.5      1.0813 ug/L       1.35366      1.0813 ppb        1.35366 125.19%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -3.6     -0.0343 ug/L       0.09421     -0.0343 ppb        0.09421 275.03%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -266.8     -0.4835 ug/L       0.12504     -0.4835 ppb        0.12504  25.86%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.2     -0.0944 ug/L       0.92194     -0.0944 ppb        0.92194 976.14%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -551.5     -16.751 ug/L        3.0804     -16.751 ppb         3.0804  18.39%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -106.5     -0.8943 ug/L       0.54163     -0.8943 ppb        0.54163  60.57%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               8.6      0.1150 ug/L       0.05354      0.1150 ppb        0.05354  46.55%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    132.5      11.126 ug/L        0.3940      11.126 ppb         0.3940   3.54%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 54
Sample ID: 1202046575|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 77
Date Collected: 3/11/2010 01:21:52
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046575|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3248.1	3248.1	101	%			01:24:05
1	Y RADIAL	2677.0	2677.0	101.9	%			01:24:05
1	Al 396.153Radial†	-71.6	-8.6	-18.670	ug/L	-18.670	ppb	01:24:05
1	Ca 317.933Radial†	17.5	4.8	20.195	ug/L	20.195	ppb	01:24:05
1	Fe 238.204 Radial†	11.7	2.1	59.418	ug/L	59.418	ppb	01:24:05
1	K 766.490 Radial†	2315.8	258.1	126.10	ug/L	126.10	ppb	01:23:45
1	Mg 279.077 IEC†	1.9	0.1	12.822	ug/L	12.822	ppb	01:24:05
1	Na 589.592 Radial†	-822.7	-79.0	-25.004	ug/L	-25.004	ppb	01:23:45
1	Sr 421.552†	8.0	-26.8	-0.2581	ug/L	-0.2581	ppb	01:23:45
1	Sc 361.383	874288.2	874288.2	110.39	%			01:25:02
1	Y 371.029	746502.3	746502.3	110.16	%			01:25:02
1	Ag 328.068†	114.1	-28.0	-0.1214	ug/L	-0.1214	ppb	01:25:02
1	As 188.979†	-14.9	5.3	3.1465	ug/L	3.1465	ppb	01:25:22
1	B 249.677†	-456.1	-35.9	-1.0534	ug/L	-1.0534	ppb	01:25:22
1	Ba 233.527†	-0.6	-0.3	-0.0010	ug/L	-0.0010	ppb	01:25:22
1	Be 313.107†	-3619.9	262.9	0.1188	ug/L	0.1188	ppb	01:25:02
1	Cd 226.502†	-169.7	2.6	0.0307	ug/L	0.0307	ppb	01:25:22
1	Co 228.616†	-54.2	-3.3	-0.0915	ug/L	-0.0915	ppb	01:25:22
1	Cr 267.716†	102.8	40.3	0.5596	ug/L	0.5596	ppb	01:25:22
1	Cu 324.752†	6443.5	-375.2	-1.2578	ug/L	-1.2578	ppb	01:25:02
1	Mn 257.610†	788.1	315.0	0.4411	ug/L	0.4411	ppb	01:25:22
1	Mo 202.031†	11.3	-2.8	-0.2487	ug/L	-0.2487	ppb	01:25:22
1	Ni 231.604†	68.7	1.6	0.0544	ug/L	0.0544	ppb	01:25:22
1	P 214.914†	187.4	5.4	4.6376	ug/L	4.6376	ppb	01:25:22
1	Pb 220.353†	-46.0	2.0	0.3209	ug/L	0.3209	ppb	01:25:22
1	S 181.975 Axial†	149.9	105.0	200.55	ug/L	200.55	ppb	01:25:22
1	Sb 206.836†	46.1	19.0	8.2799	ug/L	8.2799	ppb	01:25:22
1	Se 196.026†	-22.5	0.3	0.4457	ug/L	0.4457	ppb	01:25:22
1	Si 251.611†	1140.2	556.7	21.770	ug/L	21.770	ppb	01:25:22
1	Sn 189.927†	42.3	30.5	7.2632	ug/L	7.2632	ppb	01:25:22
1	Ti 334.940†	-1057.7	-29.7	-0.0469	ug/L	-0.0469	ppb	01:25:02
1	Tl 190.801†	-22.2	5.8	2.4029	ug/L	2.4029	ppb	01:25:22
1	U 409.014†	-2588.0	-372.3	-11.315	ug/L	-11.315	ppb	01:25:02
1	V 292.402†	-1325.3	-8.2	-0.1014	ug/L	-0.1014	ppb	01:25:02
1	Zn 213.857†	1998.3	1298.8	16.606	ug/L	16.606	ppb	01:25:22
1	SiO2†	1222.4	632.2	53.124	ug/L	53.124	ppb	01:26:18
2	Sc Radial	3279.7	3279.7	102	%			01:24:30
2	Y RADIAL	2691.0	2691.0	102.4	%			01:24:30
2	Al 396.153Radial†	-71.2	-7.5	-16.262	ug/L	-16.262	ppb	01:24:30
2	Ca 317.933Radial†	21.3	8.3	34.850	ug/L	34.850	ppb	01:24:30
2	Fe 238.204 Radial†	9.9	0.2	5.6988	ug/L	5.6988	ppb	01:24:30
2	K 766.490 Radial†	2414.1	332.1	162.27	ug/L	162.27	ppb	01:24:10
2	Mg 279.077 IEC†	1.1	-0.7	-68.385	ug/L	-68.385	ppb	01:24:30
2	Na 589.592 Radial†	-881.2	-128.4	-40.617	ug/L	-40.617	ppb	01:24:10
2	Sr 421.552†	13.2	-21.7	-0.2093	ug/L	-0.2093	ppb	01:24:10
2	Sc 361.383	883729.2	883729.2	111.59	%			01:25:27
2	Y 371.029	752989.2	752989.2	111.12	%			01:25:27
2	Ag 328.068†	191.2	40.1	0.2195	ug/L	0.2195	ppb	01:25:27
2	As 188.979†	-22.2	-1.1	-0.6406	ug/L	-0.6406	ppb	01:25:47
2	B 249.677†	-463.5	-38.1	-1.1094	ug/L	-1.1094	ppb	01:25:47
2	Ba 233.527†	9.7	9.0	0.0878	ug/L	0.0878	ppb	01:25:47
2	Be 313.107†	-3638.8	280.9	0.1267	ug/L	0.1267	ppb	01:25:27
2	Cd 226.502†	-164.3	9.0	0.1351	ug/L	0.1351	ppb	01:25:47
2	Co 228.616†	-46.3	4.4	0.1208	ug/L	0.1208	ppb	01:25:47
2	Cr 267.716†	128.8	62.6	0.8623	ug/L	0.8623	ppb	01:25:47
2	Cu 324.752†	6443.0	-438.0	-1.4731	ug/L	-1.4731	ppb	01:25:27
2	Mn 257.610†	806.8	324.2	0.4517	ug/L	0.4517	ppb	01:25:47
2	Mo 202.031†	12.6	-1.8	-0.1598	ug/L	-0.1598	ppb	01:25:47
2	Ni 231.604†	74.8	6.5	0.2158	ug/L	0.2158	ppb	01:25:47

2	P 214.914†	181.2	-1.9	-1.1945	ug/L	-1.1945 ppb	01:25:47
2	Pb 220.353†	-53.4	-4.2	-0.6876	ug/L	-0.6876 ppb	01:25:47
2	S 181.975 Axial†	148.9	102.6	195.96	ug/L	195.96 ppb	01:25:47
2	Sb 206.836†	48.7	20.9	9.0713	ug/L	9.0713 ppb	01:25:47
2	Se 196.026†	-28.1	-4.5	-3.8089	ug/L	-3.8089 ppb	01:25:47
2	Si 251.611†	1139.9	545.5	21.327	ug/L	21.327 ppb	01:25:47
2	Sn 189.927†	35.3	23.9	5.6879	ug/L	5.6879 ppb	01:25:47
2	Ti 334.940†	-1124.9	-79.7	-0.1283	ug/L	-0.1283 ppb	01:25:27
2	Tl 190.801†	-23.9	4.5	1.8583	ug/L	1.8583 ppb	01:25:47
2	U 409.014†	-2591.1	-350.0	-10.633	ug/L	-10.633 ppb	01:25:27
2	V 292.402†	-1426.5	-86.1	-0.7305	ug/L	-0.7305 ppb	01:25:27
2	Zn 213.857†	1998.0	1279.1	16.362	ug/L	16.362 ppb	01:25:47
2	SiO2†	1183.7	585.8	49.219	ug/L	49.219 ppb	01:26:23
3	Sc Radial	3239.6	3239.6	101	%		01:24:55
3	Y RADIAL	2666.8	2666.8	101.5	%		01:24:55
3	Al 396.153Radial†	-64.2	-1.5	-3.1255	ug/L	-3.1255 ppb	01:24:55
3	Ca 317.933Radial†	16.7	4.0	16.905	ug/L	16.905 ppb	01:24:55
3	Fe 238.204 Radial†	11.6	2.0	56.456	ug/L	56.456 ppb	01:24:55
3	K 766.490 Radial†	2339.4	287.4	140.44	ug/L	140.44 ppb	01:24:35
3	Mg 279.077 IEC†	0.1	-1.6	-168.65	ug/L	-168.65 ppb	01:24:55
3	Na 589.592 Radial†	-887.7	-145.5	-46.027	ug/L	-46.027 ppb	01:24:35
3	Sr 421.552†	15.8	-19.0	-0.1833	ug/L	-0.1833 ppb	01:24:35
3	Sc 361.383	874381.5	874381.5	110.41	%		01:25:52
3	Y 371.029	746267.1	746267.1	110.13	%		01:25:52
3	Ag 328.068†	243.9	89.6	0.5008	ug/L	0.5008 ppb	01:25:52
3	As 188.979†	-19.0	1.6	0.9464	ug/L	0.9464 ppb	01:26:13
3	B 249.677†	-470.6	-49.0	-1.4342	ug/L	-1.4342 ppb	01:26:13
3	Ba 233.527†	-3.3	-2.7	-0.0278	ug/L	-0.0278 ppb	01:26:13
3	Be 313.107†	-3654.5	231.8	0.1048	ug/L	0.1048 ppb	01:25:52
3	Cd 226.502†	-168.0	4.1	0.0541	ug/L	0.0541 ppb	01:26:13
3	Co 228.616†	-52.5	-1.7	-0.0492	ug/L	-0.0492 ppb	01:26:13
3	Cr 267.716†	100.2	37.9	0.5271	ug/L	0.5271 ppb	01:26:13
3	Cu 324.752†	6504.3	-320.8	-1.0717	ug/L	-1.0717 ppb	01:25:52
3	Mn 257.610†	785.6	312.7	0.4449	ug/L	0.4449 ppb	01:26:13
3	Mo 202.031†	7.6	-6.1	-0.5554	ug/L	-0.5554 ppb	01:26:13
3	Ni 231.604†	63.0	-3.5	-0.1173	ug/L	-0.1173 ppb	01:26:13
3	P 214.914†	177.5	-3.6	-2.6536	ug/L	-2.6536 ppb	01:26:13
3	Pb 220.353†	-59.1	-9.9	-1.6316	ug/L	-1.6316 ppb	01:26:13
3	S 181.975 Axial†	141.7	97.5	186.32	ug/L	186.32 ppb	01:26:13
3	Sb 206.836†	31.0	5.4	2.3988	ug/L	2.3988 ppb	01:26:13
3	Se 196.026†	-31.9	-8.2	-6.8771	ug/L	-6.8771 ppb	01:26:13
3	Si 251.611†	1141.2	557.5	21.803	ug/L	21.803 ppb	01:26:13
3	Sn 189.927†	38.9	27.4	6.5362	ug/L	6.5362 ppb	01:26:13
3	Ti 334.940†	-1040.8	-14.3	-0.0027	ug/L	-0.0027 ppb	01:25:52
3	Tl 190.801†	-22.7	5.4	2.2293	ug/L	2.2293 ppb	01:26:13
3	U 409.014†	-2756.7	-524.8	-15.948	ug/L	-15.948 ppb	01:25:52
3	V 292.402†	-1469.7	-138.9	-1.1882	ug/L	-1.1882 ppb	01:25:52
3	Zn 213.857†	1995.7	1296.2	16.574	ug/L	16.574 ppb	01:26:13
3	SiO2†	1169.4	584.2	49.094	ug/L	49.094 ppb	01:26:28

Mean Data: 1202046575|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	877466.3	110.80	%	0.685				0.62%
Sc Radial	3255.8	102	%	0.7				0.65%
Y 371.029	748586.2	110.47	%	0.563				0.51%
Y RADIAL	2678.3	101.9	%	0.46				0.45%
Ag 328.068†	33.9	0.1997	ug/L	0.31155	0.1997	ppb	0.31155	156.04%
Al 396.153Radial†	-5.9	-12.686	ug/L	8.3667	-12.686	ppb	8.3667	65.95%
As 188.979†	1.9	1.1507	ug/L	1.90183	1.1507	ppb	1.90183	165.27%
B 249.677†	-41.0	-1.1990	ug/L	0.20561	-1.1990	ppb	0.20561	17.15%
Ba 233.527†	2.0	0.0197	ug/L	0.06049	0.0197	ppb	0.06049	307.14%
Be 313.107†	258.6	0.1168	ug/L	0.01111	0.1168	ppb	0.01111	9.51%
Ca 317.933Radial†	5.7	23.983	ug/L	9.5535	23.983	ppb	9.5535	39.83%
Cd 226.502†	5.2	0.0733	ug/L	0.05475	0.0733	ppb	0.05475	74.69%
Co 228.616†	-0.2	-0.0066	ug/L	0.11233	-0.0066	ppb	0.11233	>999.9%
Cr 267.716†	46.9	0.6497	ug/L	0.18487	0.6497	ppb	0.18487	28.46%
Cu 324.752†	-378.0	-1.2675	ug/L	0.20088	-1.2675	ppb	0.20088	15.85%
Fe 238.204 Radial†	1.4	40.525	ug/L	30.1963	40.525	ppb	30.1963	74.51%
K 766.490 Radial†	292.6	142.94	ug/L	18.212	142.94	ppb	18.212	12.74%

Mg 279.077 IEC†	-0.7	-74.739	ug/L	90.9047	-74.739	ppb	90.9047 121.63%
Mn 257.610†	317.3	0.4459	ug/L	0.00540	0.4459	ppb	0.00540 1.21%
Mo 202.031†	-3.6	-0.3213	ug/L	0.20757	-0.3213	ppb	0.20757 64.60%
Na 589.592 Radial†	-117.6	-37.216	ug/L	10.9161	-37.216	ppb	10.9161 29.33%
Ni 231.604†	1.5	0.0510	ug/L	0.16661	0.0510	ppb	0.16661 326.91%
P 214.914†	-0.0	0.2632	ug/L	3.85797	0.2632	ppb	3.85797 >999.9%
Pb 220.353†	-4.0	-0.6661	ug/L	0.97644	-0.6661	ppb	0.97644 146.59%
S 181.975 Axial†	101.7	194.27	ug/L	7.263	194.27	ppb	7.263 3.74%
Sb 206.836†	15.1	6.5834	ug/L	3.64544	6.5834	ppb	3.64544 55.37%
Se 196.026†	-4.1	-3.4134	ug/L	3.67739	-3.4134	ppb	3.67739 107.73%
Si 251.611†	553.2	21.633	ug/L	0.2655	21.633	ppb	0.2655 1.23%
Sn 189.927†	27.3	6.4958	ug/L	0.78841	6.4958	ppb	0.78841 12.14%
Sr 421.552†	-22.5	-0.2169	ug/L	0.03797	-0.2169	ppb	0.03797 17.50%
Ti 334.940†	-41.2	-0.0593	ug/L	0.06370	-0.0593	ppb	0.06370 107.41%
Tl 190.801†	5.3	2.1635	ug/L	0.27821	2.1635	ppb	0.27821 12.86%
U 409.014†	-415.7	-12.632	ug/L	2.8920	-12.632	ppb	2.8920 22.89%
V 292.402†	-77.8	-0.6733	ug/L	0.54565	-0.6733	ppb	0.54565 81.04%
Zn 213.857†	1291.4	16.514	ug/L	0.1325	16.514	ppb	0.1325 0.80%
SiO2†	600.7	50.479	ug/L	2.2915	50.479	ppb	2.2915 4.54%

Sequence No.: 55
Sample ID: 1202046580|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 78
Date Collected: 3/11/2010 01:28:40
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046580|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3433.0	3433.0	107	%			01:30:53
1	Y RADIAL	3059.4	3059.4	116.4	%			01:30:53
1	Al 396.153Radial†	45214.6	42267.6	91432	ug/L	91432	ppb	01:30:33
1	Ca 317.933Radial†	27712.1	25855.4	108030	ug/L	108030	ppb	01:30:33
1	Fe 238.204 Radial†	6986.3	6511.9	187460	ug/L	187460	ppb	01:30:53
1	K 766.490 Radial†	102584.9	93731.4	45750	ug/L	45750	ppb	01:30:33
1	Mg 279.077 IEC†	467.2	434.4	44762	ug/L	44762	ppb	01:30:53
1	Na 589.592 Radial†	31398.0	30041.2	9503.4	ug/L	9503.4	ppb	01:30:33
1	Sr 421.552†	238571.9	222660.7	2143.4	ug/L	2143.4	ppb	01:30:33
1	Sc 361.383	905220.8	905220.8	114.30	%			01:31:54
1	Y 371.029	823179.8	823179.8	121.48	%			01:31:54
1	Ag 328.068†	54910.4	47909.1	315.86	ug/L	315.86	ppb	01:31:54
1	As 188.979†	2160.9	1909.4	1211.6	ug/L	1211.6	ppb	01:31:59
1	B 249.677†	62862.8	55375.0	1578.1	ug/L	1578.1	ppb	01:31:54
1	Ba 233.527†	239502.4	209537.6	2083.2	ug/L	2083.2	ppb	01:31:54
1	Be 313.107†	2106643.0	1846614.6	848.43	ug/L	848.43	ppb	01:31:54
1	Cd 226.502†	50901.5	44689.3	663.25	ug/L	663.25	ppb	01:31:59
1	Co 228.616†	42525.5	37250.9	1013.9	ug/L	1013.9	ppb	01:31:59
1	Cr 267.716†	211043.7	184586.4	2543.6	ug/L	2543.6	ppb	01:31:54
1	Cu 324.752†	624718.3	540345.4	1834.9	ug/L	1834.9	ppb	01:31:54
1	Mn 257.610†	4714378.5	4124145.4	5720.7	ug/L	5720.7	ppb	01:31:54
1	Mo 202.031†	6552.9	5720.0	538.23	ug/L	538.23	ppb	01:31:59
1	Ni 231.604†	50394.3	44028.6	1471.1	ug/L	1471.1	ppb	01:31:59
1	P 214.914†	12830.5	11060.9	8398.9	ug/L	8398.9	ppb	01:31:59
1	Pb 220.353†	6236.1	5499.5	897.43	ug/L	897.43	ppb	01:31:59
1	S 181.975 Axial†	2669.8	2305.0	4385.6	ug/L	4385.6	ppb	01:31:59
1	Sb 206.836†	3672.4	3190.2	1379.3	ug/L	1379.3	ppb	01:31:59
1	Se 196.026†	3749.5	3301.1	3366.1	ug/L	3366.1	ppb	01:31:59
1	Si 251.611†	1213356.7	1061072.8	41478	ug/L	41478	ppb	01:31:54
1	Sn 189.927†	5381.5	4700.4	1127.8	ug/L	1127.8	ppb	01:31:59
1	Ti 334.940†	3715121.7	3251236.8	5841.7	ug/L	5841.7	ppb	01:31:54
1	Tl 190.801†	3407.1	3006.8	1305.6	ug/L	1305.6	ppb	01:31:59
1	U 409.014†	-7120.6	-4257.6	-156.36	ug/L	-156.36	ppb	01:31:54
1	V 292.402†	179234.4	158002.0	1268.1	ug/L	1268.1	ppb	01:31:54
1	Zn 213.857†	572644.2	500487.1	6362.2	ug/L	6362.2	ppb	01:31:54
1	SiO2†	1214751.2	1062293.9	89233	ug/L	89233	ppb	01:32:34
2	Sc Radial	3437.1	3437.1	107	%			01:31:18
2	Y RADIAL	3055.4	3055.4	116.3	%			01:31:18
2	Al 396.153Radial†	45568.0	42546.5	92035	ug/L	92035	ppb	01:30:58
2	Ca 317.933Radial†	27879.7	25980.7	108550	ug/L	108550	ppb	01:30:58
2	Fe 238.204 Radial†	6959.9	6479.4	186520	ug/L	186520	ppb	01:31:18
2	K 766.490 Radial†	102866.1	93878.8	45822	ug/L	45822	ppb	01:30:58
2	Mg 279.077 IEC†	465.9	432.7	44584	ug/L	44584	ppb	01:31:18
2	Na 589.592 Radial†	31537.8	30136.4	9533.5	ug/L	9533.5	ppb	01:30:58
2	Sr 421.552†	239936.4	223665.9	2153.1	ug/L	2153.1	ppb	01:30:58
2	Sc 361.383	903394.1	903394.1	114.07	%			01:32:08
2	Y 371.029	821507.9	821507.9	121.23	%			01:32:08
2	Ag 328.068†	54817.4	47924.7	315.65	ug/L	315.65	ppb	01:32:08
2	As 188.979†	2191.4	1940.0	1229.3	ug/L	1229.3	ppb	01:32:13
2	B 249.677†	62642.8	55293.4	1575.9	ug/L	1575.9	ppb	01:32:08
2	Ba 233.527†	239270.6	209758.1	2085.3	ug/L	2085.3	ppb	01:32:08
2	Be 313.107†	2101585.6	1845907.9	848.11	ug/L	848.11	ppb	01:32:08
2	Cd 226.502†	51367.2	45187.6	670.96	ug/L	670.96	ppb	01:32:13
2	Co 228.616†	42774.1	37544.0	1022.0	ug/L	1022.0	ppb	01:32:13
2	Cr 267.716†	210805.2	184750.7	2545.8	ug/L	2545.8	ppb	01:32:08
2	Cu 324.752†	622518.7	539522.3	1832.1	ug/L	1832.1	ppb	01:32:08
2	Mn 257.610†	4709360.5	4128086.5	5726.0	ug/L	5726.0	ppb	01:32:08
2	Mo 202.031†	6549.9	5728.9	538.98	ug/L	538.98	ppb	01:32:13
2	Ni 231.604†	50737.9	44419.0	1484.2	ug/L	1484.2	ppb	01:32:13

2	P 214.914†	12959.5	11196.7	8509.5	ug/L	8509.5 ppb	01:32:13
2	Pb 220.353†	6252.9	5525.3	901.94	ug/L	901.94 ppb	01:32:13
2	S 181.975 Axial†	2678.3	2317.2	4408.8	ug/L	4408.8 ppb	01:32:13
2	Sb 206.836†	3720.2	3238.6	1400.4	ug/L	1400.4 ppb	01:32:13
2	Se 196.026†	3802.0	3353.7	3408.7	ug/L	3408.7 ppb	01:32:13
2	Si 251.611†	1211138.4	1061274.7	41486	ug/L	41486 ppb	01:32:08
2	Sn 189.927†	5459.5	4778.3	1146.5	ug/L	1146.5 ppb	01:32:13
2	Ti 334.940†	3709612.9	3252979.9	5844.9	ug/L	5844.9 ppb	01:32:08
2	Tl 190.801†	3408.3	3013.9	1308.5	ug/L	1308.5 ppb	01:32:13
2	U 409.014†	-7137.4	-4284.9	-157.09	ug/L	-157.09 ppb	01:32:08
2	V 292.402†	178998.9	158112.6	1269.1	ug/L	1269.1 ppb	01:32:08
2	Zn 213.857†	571986.8	500923.9	6367.8	ug/L	6367.8 ppb	01:32:08
2	SiO2†	1206204.5	1056950.4	88784	ug/L	88784 ppb	01:32:40
3	Sc Radial	3452.6	3452.6	108	%		01:31:43
3	Y RADIAL	3078.3	3078.3	117.2	%		01:31:43
3	Al 396.153Radial†	45349.1	42152.7	91183	ug/L	91183 ppb	01:31:23
3	Ca 317.933Radial†	27733.4	25728.3	107500	ug/L	107500 ppb	01:31:23
3	Fe 238.204 Radial†	6988.5	6476.9	186450	ug/L	186450 ppb	01:31:43
3	K 766.490 Radial†	102826.2	93411.4	45594	ug/L	45594 ppb	01:31:23
3	Mg 279.077 IEC†	469.8	434.3	44757	ug/L	44757 ppb	01:31:43
3	Na 589.592 Radial†	31252.6	29739.7	9408.0	ug/L	9408.0 ppb	01:31:23
3	Sr 421.552†	238432.7	221266.5	2130.0	ug/L	2130.0 ppb	01:31:23
3	Sc 361.383	902867.7	902867.7	114.00	%		01:32:23
3	Y 371.029	820638.8	820638.8	121.10	%		01:32:23
3	Ag 328.068†	54701.3	47850.8	315.24	ug/L	315.24 ppb	01:32:23
3	As 188.979†	2173.8	1925.7	1220.9	ug/L	1220.9 ppb	01:32:28
3	B 249.677†	62673.2	55352.1	1577.6	ug/L	1577.6 ppb	01:32:23
3	Ba 233.527†	239232.9	209847.3	2086.2	ug/L	2086.2 ppb	01:32:23
3	Be 313.107†	2098242.7	1844049.6	847.27	ug/L	847.27 ppb	01:32:23
3	Cd 226.502†	51202.3	45069.2	669.16	ug/L	669.16 ppb	01:32:28
3	Co 228.616†	42711.6	37511.0	1021.1	ug/L	1021.1 ppb	01:32:28
3	Cr 267.716†	210498.4	184589.3	2543.6	ug/L	2543.6 ppb	01:32:23
3	Cu 324.752†	621999.5	539385.0	1831.7	ug/L	1831.7 ppb	01:32:23
3	Mn 257.610†	4703077.4	4124981.9	5721.7	ug/L	5721.7 ppb	01:32:23
3	Mo 202.031†	6576.3	5755.5	541.38	ug/L	541.38 ppb	01:32:28
3	Ni 231.604†	50673.8	44388.7	1483.2	ug/L	1483.2 ppb	01:32:28
3	P 214.914†	12929.6	11177.1	8493.7	ug/L	8493.7 ppb	01:32:28
3	Pb 220.353†	6209.6	5490.5	896.04	ug/L	896.04 ppb	01:32:28
3	S 181.975 Axial†	2668.9	2310.3	4395.8	ug/L	4395.8 ppb	01:32:28
3	Sb 206.836†	3691.6	3215.4	1390.4	ug/L	1390.4 ppb	01:32:28
3	Se 196.026†	3802.8	3356.4	3410.5	ug/L	3410.5 ppb	01:32:28
3	Si 251.611†	1209487.8	1060445.7	41454	ug/L	41454 ppb	01:32:23
3	Sn 189.927†	5427.3	4752.9	1140.3	ug/L	1140.3 ppb	01:32:28
3	Ti 334.940†	3706401.2	3252058.5	5843.1	ug/L	5843.1 ppb	01:32:23
3	Tl 190.801†	3439.0	3042.5	1320.3	ug/L	1320.3 ppb	01:32:28
3	U 409.014†	-7129.8	-4282.0	-156.98	ug/L	-156.98 ppb	01:32:23
3	V 292.402†	178742.9	157979.5	1268.1	ug/L	1268.1 ppb	01:32:23
3	Zn 213.857†	570989.2	500341.1	6360.4	ug/L	6360.4 ppb	01:32:23
3	SiO2†	1199232.3	1051451.1	88322	ug/L	88322 ppb	01:32:46

Mean Data: 1202046580|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	903827.5	114.12	%	0.156				0.14%
Sc Radial	3440.9	107	%	0.3				0.30%
Y 371.029	821775.5	121.27	%	0.191				0.16%
Y RADIAL	3064.4	116.6	%	0.46				0.40%
Ag 328.068†	47894.8	315.58	ug/L	0.312	315.58	ppb	0.312	0.10%
Al 396.153Radial†	42322.3	91550	ug/L	438.2	91550	ppb	438.2	0.48%
As 188.979†	1925.0	1220.6	ug/L	8.86	1220.6	ppb	8.86	0.73%
B 249.677†	55340.2	1577.2	ug/L	1.17	1577.2	ppb	1.17	0.07%
Ba 233.527†	209714.3	2084.9	ug/L	1.56	2084.9	ppb	1.56	0.07%
Be 313.107†	1845524.0	847.94	ug/L	0.598	847.94	ppb	0.598	0.07%
Ca 317.933Radial†	25854.8	108030	ug/L	527.3	108030	ppb	527.3	0.49%
Cd 226.502†	44982.0	667.79	ug/L	4.031	667.79	ppb	4.031	0.60%
Co 228.616†	37435.3	1019.0	ug/L	4.44	1019.0	ppb	4.44	0.44%
Cr 267.716†	184642.1	2544.3	ug/L	1.28	2544.3	ppb	1.28	0.05%
Cu 324.752†	539750.9	1832.9	ug/L	1.78	1832.9	ppb	1.78	0.10%
Fe 238.204 Radial†	6489.4	186810	ug/L	562.1	186810	ppb	562.1	0.30%
K 766.490 Radial†	93673.8	45722	ug/L	116.5	45722	ppb	116.5	0.25%

Mg 279.077 IEC†	433.8	44701	ug/L	101.2	44701	ppb	101.2	0.23%
Mn 257.610†	4125737.9	5722.8	ug/L	2.84	5722.8	ppb	2.84	0.05%
Mo 202.031†	5734.8	539.53	ug/L	1.649	539.53	ppb	1.649	0.31%
Na 589.592 Radial†	29972.4	9481.7	ug/L	65.52	9481.7	ppb	65.52	0.69%
Ni 231.604†	44278.8	1479.5	ug/L	7.26	1479.5	ppb	7.26	0.49%
P 214.914†	11144.9	8467.3	ug/L	59.83	8467.3	ppb	59.83	0.71%
Pb 220.353†	5505.1	898.47	ug/L	3.087	898.47	ppb	3.087	0.34%
S 181.975 Axial†	2310.8	4396.7	ug/L	11.61	4396.7	ppb	11.61	0.26%
Sb 206.836†	3214.7	1390.0	ug/L	10.55	1390.0	ppb	10.55	0.76%
Se 196.026†	3337.1	3395.1	ug/L	25.12	3395.1	ppb	25.12	0.74%
Si 251.611†	1060931.1	41473	ug/L	16.9	41473	ppb	16.9	0.04%
Sn 189.927†	4743.9	1138.2	ug/L	9.52	1138.2	ppb	9.52	0.84%
Sr 421.552†	222531.0	2142.2	ug/L	11.60	2142.2	ppb	11.60	0.54%
Ti 334.940†	3252091.7	5843.3	ug/L	1.61	5843.3	ppb	1.61	0.03%
Tl 190.801†	3021.1	1311.5	ug/L	7.77	1311.5	ppb	7.77	0.59%
U 409.014†	-4274.8	-156.81	ug/L	0.394	-156.81	ppb	0.394	0.25%
V 292.402†	158031.4	1268.4	ug/L	0.60	1268.4	ppb	0.60	0.05%
Zn 213.857†	500584.0	6363.5	ug/L	3.88	6363.5	ppb	3.88	0.06%
SiO2†	1056898.5	88780	ug/L	455.5	88780	ppb	455.5	0.51%

Sequence No.: 56
Sample ID: 247178001|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 79
Date Collected: 3/11/2010 01:34:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178001|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3504.3	3504.3	109	%			01:37:09
1	Y RADIAL	3786.7	3786.7	144.1	%			01:37:09
1	Al 396.153Radial†	32044.5	29365.7	63540	ug/L	63540	ppb	01:36:49
1	Ca 317.933Radial†	3481.7	3171.4	13251	ug/L	13251	ppb	01:37:09
1	Fe 238.204 Radial†	4802.6	4382.4	126130	ug/L	126130	ppb	01:36:49
1	K 766.490 Radial†	19055.3	15398.8	7517.6	ug/L	7517.6	ppb	01:36:49
1	Mg 279.077 IEC†	124.7	112.3	11494	ug/L	11494	ppb	01:37:09
1	Na 589.592 Radial†	1463.6	2071.0	655.15	ug/L	655.15	ppb	01:36:49
1	Sr 421.552†	11653.4	10622.0	102.19	ug/L	102.19	ppb	01:36:49
1	Sc 361.383	934598.4	934598.4	118.01	%			01:38:07
1	Y 371.029	1037457.1	1037457.1	153.10	%			01:38:07
1	Ag 328.068†	-7853.8	-6786.5	3.5913	ug/L	3.5913	ppb	01:38:12
1	As 188.979†	-21.0	1.0	53.192	ug/L	53.192	ppb	01:38:32
1	B 249.677†	1282.9	1464.4	22.079	ug/L	22.079	ppb	01:38:12
1	Ba 233.527†	92802.6	78639.8	782.75	ug/L	782.75	ppb	01:38:12
1	Be 313.107†	10174.2	12163.4	11.544	ug/L	11.544	ppb	01:38:12
1	Cd 226.502†	863.0	887.5	0.5504	ug/L	0.5504	ppb	01:38:32
1	Co 228.616†	742.9	675.4	11.503	ug/L	11.503	ppb	01:38:32
1	Cr 267.716†	20865.8	17628.6	247.47	ug/L	247.47	ppb	01:38:12
1	Cu 324.752†	26936.6	16613.7	62.925	ug/L	62.925	ppb	01:38:12
1	Mn 257.610†	1850008.8	1567271.7	2179.6	ug/L	2179.6	ppb	01:38:07
1	Mo 202.031†	9.6	-4.9	9.5007	ug/L	9.5007	ppb	01:38:32
1	Ni 231.604†	5032.3	4203.6	140.51	ug/L	140.51	ppb	01:38:32
1	P 214.914†	1125.1	789.0	536.38	ug/L	536.38	ppb	01:38:32
1	Pb 220.353†	382.6	367.9	56.611	ug/L	56.611	ppb	01:38:32
1	S 181.975 Axial†	308.8	230.9	429.04	ug/L	429.04	ppb	01:38:32
1	Sb 206.836†	66.4	33.5	2.7686	ug/L	2.7686	ppb	01:38:32
1	Se 196.026†	-535.7	-433.2	-4.2916	ug/L	-4.2916	ppb	01:38:32
1	Si 251.611†	1204935.9	1020569.1	39901	ug/L	39901	ppb	01:38:07
1	Sn 189.927†	-52.5	-52.3	-17.345	ug/L	-17.345	ppb	01:38:32
1	Ti 334.940†	1750104.8	1483941.8	2662.6	ug/L	2662.6	ppb	01:38:07
1	Tl 190.801†	-139.8	-92.5	-5.9469	ug/L	-5.9469	ppb	01:38:32
1	U 409.014†	-12037.2	-8228.1	-264.84	ug/L	-264.84	ppb	01:38:07
1	V 292.402†	17990.9	16437.5	113.13	ug/L	113.13	ppb	01:38:12
1	Zn 213.857†	49155.3	41142.1	506.43	ug/L	506.43	ppb	01:38:12
1	SiO2†	1202809.5	1018768.3	85591	ug/L	85591	ppb	01:39:41
2	Sc Radial	3471.6	3471.6	108	%			01:37:35
2	Y RADIAL	3741.4	3741.4	142.4	%			01:37:35
2	Al 396.153Radial†	32337.5	29912.1	64723	ug/L	64723	ppb	01:37:15
2	Ca 317.933Radial†	3463.5	3184.6	13306	ug/L	13306	ppb	01:37:35
2	Fe 238.204 Radial†	4843.8	4461.8	128420	ug/L	128420	ppb	01:37:15
2	K 766.490 Radial†	19273.0	15763.9	7695.9	ug/L	7695.9	ppb	01:37:15
2	Mg 279.077 IEC†	122.0	110.9	11347	ug/L	11347	ppb	01:37:35
2	Na 589.592 Radial†	1454.9	2075.6	656.62	ug/L	656.62	ppb	01:37:15
2	Sr 421.552†	11744.6	10806.5	103.97	ug/L	103.97	ppb	01:37:15
2	Sc 361.383	929755.2	929755.2	117.40	%			01:38:38
2	Y 371.029	1033225.1	1033225.1	152.47	%			01:38:38
2	Ag 328.068†	-7785.1	-6762.6	4.4193	ug/L	4.4193	ppb	01:38:43
2	As 188.979†	-38.5	-14.0	44.943	ug/L	44.943	ppb	01:39:03
2	B 249.677†	1242.6	1435.7	20.873	ug/L	20.873	ppb	01:38:43
2	Ba 233.527†	92238.2	78568.7	782.11	ug/L	782.11	ppb	01:38:43
2	Be 313.107†	10127.8	12168.8	11.545	ug/L	11.545	ppb	01:38:43
2	Cd 226.502†	863.4	891.7	0.3793	ug/L	0.3793	ppb	01:39:03
2	Co 228.616†	742.5	678.4	11.553	ug/L	11.553	ppb	01:39:03
2	Cr 267.716†	20775.8	17644.0	247.77	ug/L	247.77	ppb	01:38:43
2	Cu 324.752†	26691.9	16524.2	62.743	ug/L	62.743	ppb	01:38:43
2	Mn 257.610†	1841961.2	1568583.0	2181.7	ug/L	2181.7	ppb	01:38:38
2	Mo 202.031†	16.7	1.2	10.239	ug/L	10.239	ppb	01:39:03
2	Ni 231.604†	5012.7	4209.2	140.69	ug/L	140.69	ppb	01:39:03

2	P 214.914†	1147.2	812.9	554.02	ug/L	554.02 ppb	01:39:03
2	Pb 220.353†	388.4	374.5	57.640	ug/L	57.640 ppb	01:39:03
2	S 181.975 Axial†	296.2	221.5	410.97	ug/L	410.97 ppb	01:39:03
2	Sb 206.836†	63.2	31.1	1.6948	ug/L	1.6948 ppb	01:39:03
2	Se 196.026†	-526.3	-427.6	7.1478	ug/L	7.1478 ppb	01:39:03
2	Si 251.611†	1199476.0	1021237.1	39927	ug/L	39927 ppb	01:38:38
2	Sn 189.927†	-49.1	-49.7	-16.833	ug/L	-16.833 ppb	01:39:03
2	Ti 334.940†	1740681.8	1483640.6	2662.1	ug/L	2662.1 ppb	01:38:38
2	Tl 190.801†	-142.3	-95.2	-7.0604	ug/L	-7.0604 ppb	01:39:03
2	U 409.014†	-11888.1	-8154.2	-262.86	ug/L	-262.86 ppb	01:38:38
2	V 292.402†	17797.5	16352.2	112.11	ug/L	112.11 ppb	01:38:43
2	Zn 213.857†	48812.2	41066.8	505.12	ug/L	505.12 ppb	01:38:43
2	SiO2†	1197847.1	1019850.7	85682	ug/L	85682 ppb	01:39:47
3	Sc Radial	3473.7	3473.7	108	%		01:38:00
3	Y RADIAL	3746.5	3746.5	142.6	%		01:38:00
3	Al 396.153Radial†	32216.5	29782.7	64443	ug/L	64443 ppb	01:37:40
3	Ca 317.933Radial†	3458.2	3177.8	13277	ug/L	13277 ppb	01:38:00
3	Fe 238.204 Radial†	4827.5	4444.1	127910	ug/L	127910 ppb	01:37:40
3	K 766.490 Radial†	19122.4	15614.3	7622.8	ug/L	7622.8 ppb	01:37:40
3	Mg 279.077 IEC†	126.4	114.9	11752	ug/L	11752 ppb	01:38:00
3	Na 589.592 Radial†	1528.0	2142.2	677.69	ug/L	677.69 ppb	01:37:40
3	Sr 421.552†	11763.1	10817.2	104.07	ug/L	104.07 ppb	01:37:40
3	Sc 361.383	928588.9	928588.9	117.25	%		01:39:09
3	Y 371.029	1031150.8	1031150.8	152.17	%		01:39:09
3	Ag 328.068†	-7856.0	-6831.4	3.8976	ug/L	3.8976 ppb	01:39:14
3	As 188.979†	-42.1	-17.1	43.040	ug/L	43.040 ppb	01:39:34
3	B 249.677†	1224.2	1421.3	20.537	ug/L	20.537 ppb	01:39:14
3	Ba 233.527†	92887.1	79220.8	788.55	ug/L	788.55 ppb	01:39:14
3	Be 313.107†	10428.7	12436.2	11.674	ug/L	11.674 ppb	01:39:14
3	Cd 226.502†	864.9	893.9	0.4659	ug/L	0.4659 ppb	01:39:34
3	Co 228.616†	752.8	688.0	11.822	ug/L	11.822 ppb	01:39:34
3	Cr 267.716†	20895.2	17768.0	249.46	ug/L	249.46 ppb	01:39:14
3	Cu 324.752†	26895.3	16726.2	63.396	ug/L	63.396 ppb	01:39:14
3	Mn 257.610†	1841129.6	1569844.3	2183.4	ug/L	2183.4 ppb	01:39:09
3	Mo 202.031†	23.0	6.6	10.688	ug/L	10.688 ppb	01:39:34
3	Ni 231.604†	4995.8	4200.2	140.39	ug/L	140.39 ppb	01:39:34
3	P 214.914†	1144.0	811.4	553.06	ug/L	553.06 ppb	01:39:34
3	Pb 220.353†	386.9	373.6	57.502	ug/L	57.502 ppb	01:39:34
3	S 181.975 Axial†	299.3	224.5	416.70	ug/L	416.70 ppb	01:39:34
3	Sb 206.836†	54.8	24.0	-1.3206	ug/L	-1.3206 ppb	01:39:34
3	Se 196.026†	-523.9	-426.2	6.9159	ug/L	6.9159 ppb	01:39:34
3	Si 251.611†	1198849.4	1021985.9	39956	ug/L	39956 ppb	01:39:09
3	Sn 189.927†	-45.9	-46.9	-16.155	ug/L	-16.155 ppb	01:39:34
3	Ti 334.940†	1740695.9	1485514.7	2665.4	ug/L	2665.4 ppb	01:39:09
3	Tl 190.801†	-144.3	-97.1	-7.7965	ug/L	-7.7965 ppb	01:39:34
3	U 409.014†	-11699.1	-8005.8	-258.30	ug/L	-258.30 ppb	01:39:09
3	V 292.402†	17920.5	16476.1	113.22	ug/L	113.22 ppb	01:39:14
3	Zn 213.857†	49172.6	41426.4	509.80	ug/L	509.80 ppb	01:39:14
3	SiO2†	1206293.6	1028335.9	86394	ug/L	86394 ppb	01:39:53

Mean Data: 247178001|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	930980.8	117.55	%	0.402				0.34%
Sc Radial	3483.2	109	%	0.6				0.53%
Y 371.029	1033944.3	152.58	%	0.474				0.31%
Internal Standard Check greater than the upper limit for Y 371.029. Recovery = 152.6%								
Y RADIAL	3758.2	143.0	%	0.95				0.66%
Ag 328.068†	-6793.5	3.9694	ug/L	0.41862	3.9694	ppb	0.41862	10.55%
Al 396.153Radial†	29686.8	64235	ug/L	617.8	64235	ppb	617.8	0.96%
As 188.979†	-10.0	47.058	ug/L	5.3968	47.058	ppb	5.3968	11.47%
B 249.677†	1440.5	21.163	ug/L	0.8110	21.163	ppb	0.8110	3.83%
Ba 233.527†	78809.8	784.47	ug/L	3.551	784.47	ppb	3.551	0.45%
Be 313.107†	12256.1	11.588	ug/L	0.0746	11.588	ppb	0.0746	0.64%
Ca 317.933Radial†	3178.0	13278	ug/L	27.6	13278	ppb	27.6	0.21%
Cd 226.502†	891.1	0.4652	ug/L	0.08558	0.4652	ppb	0.08558	18.40%
Co 228.616†	680.6	11.626	ug/L	0.1716	11.626	ppb	0.1716	1.48%
Cr 267.716†	17680.2	248.23	ug/L	1.069	248.23	ppb	1.069	0.43%
Cu 324.752†	16621.3	63.021	ug/L	0.3367	63.021	ppb	0.3367	0.53%
Fe 238.204 Radial†	4429.4	127490	ug/L	1199.6	127490	ppb	1199.6	0.94%

K 766.490 Radial†	15592.3	7612.1	ug/L	89.65	7612.1	ppb	89.65	1.18%
Mg 279.077 IEC†	112.7	11531	ug/L	205.3	11531	ppb	205.3	1.78%
Mn 257.610†	1568566.3	2181.6	ug/L	1.86	2181.6	ppb	1.86	0.09%
Mo 202.031†	1.0	10.143	ug/L	0.5997	10.143	ppb	0.5997	5.91%
Na 589.592 Radial†	2096.3	663.15	ug/L	12.609	663.15	ppb	12.609	1.90%
Ni 231.604†	4204.3	140.53	ug/L	0.152	140.53	ppb	0.152	0.11%
P 214.914†	804.4	547.82	ug/L	9.921	547.82	ppb	9.921	1.81%
Pb 220.353†	372.0	57.251	ug/L	0.5585	57.251	ppb	0.5585	0.98%
S 181.975 Axial†	225.6	418.90	ug/L	9.235	418.90	ppb	9.235	2.20%
Sb 206.836†	29.5	1.0476	ug/L	2.12001	1.0476	ppb	2.12001	202.37%
Se 196.026†	-429.0	3.2573	ug/L	6.53862	3.2573	ppb	6.53862	200.74%
Si 251.611†	1021264.0	39928	ug/L	27.7	39928	ppb	27.7	0.07%
Sn 189.927†	-49.6	-16.777	ug/L	0.5970	-16.777	ppb	0.5970	3.56%
Sr 421.552†	10748.6	103.41	ug/L	1.057	103.41	ppb	1.057	1.02%
Ti 334.940†	1484365.7	2663.4	ug/L	1.79	2663.4	ppb	1.79	0.07%
Tl 190.801†	-95.0	-6.9346	ug/L	0.93116	-6.9346	ppb	0.93116	13.43%
U 409.014†	-8129.4	-262.00	ug/L	3.357	-262.00	ppb	3.357	1.28%
V 292.402†	16421.9	112.82	ug/L	0.616	112.82	ppb	0.616	0.55%
Zn 213.857†	41211.8	507.12	ug/L	2.413	507.12	ppb	2.413	0.48%
SiO2†	1022318.3	85889	ug/L	440.2	85889	ppb	440.2	0.51%

Internal Standard Check failed. Continue with analysis.

Sequence No.: 57
Sample ID: 1202046576|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 80
Date Collected: 3/11/2010 01:42:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046576|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3459.3	3459.3	108	%			01:44:17
1	Y RADIAL	3734.9	3734.9	142.1	%			01:44:17
1	Al 396.153Radial†	29415.1	27311.3	59095	ug/L	59095	ppb	01:43:57
1	Ca 317.933Radial†	3373.3	3112.5	13005	ug/L	13005	ppb	01:44:17
1	Fe 238.204 Radial†	4306.0	3979.5	114540	ug/L	114540	ppb	01:43:57
1	K 766.490 Radial†	18002.3	14650.2	7151.9	ug/L	7151.9	ppb	01:43:57
1	Mg 279.077 IEC†	120.1	109.6	11217	ug/L	11217	ppb	01:44:17
1	Na 589.592 Radial†	1304.3	1940.9	614.00	ug/L	614.00	ppb	01:43:57
1	Sr 421.552†	10810.0	9979.4	96.006	ug/L	96.006	ppb	01:43:57
1	Sc 361.383	931464.6	931464.6	117.61	%			01:45:14
1	Y 371.029	1039669.7	1039669.7	153.42	%			01:45:14
1	Ag 328.068†	-7115.9	-6181.5	3.2009	ug/L	3.2009	ppb	01:45:20
1	As 188.979†	-30.4	-7.1	44.048	ug/L	44.048	ppb	01:45:40
1	B 249.677†	869.8	1116.8	13.850	ug/L	13.850	ppb	01:45:20
1	Ba 233.527†	90317.3	76791.3	764.07	ug/L	764.07	ppb	01:45:20
1	Be 313.107†	9446.6	11573.8	10.830	ug/L	10.830	ppb	01:45:20
1	Cd 226.502†	769.5	810.5	0.5547	ug/L	0.5547	ppb	01:45:40
1	Co 228.616†	693.1	635.2	10.981	ug/L	10.981	ppb	01:45:40
1	Cr 267.716†	18127.4	15359.7	215.85	ug/L	215.85	ppb	01:45:20
1	Cu 324.752†	26540.3	16353.5	61.453	ug/L	61.453	ppb	01:45:20
1	Mn 257.610†	1821399.8	1548221.5	2152.1	ug/L	2152.1	ppb	01:45:14
1	Mo 202.031†	25.6	8.8	9.8463	ug/L	9.8463	ppb	01:45:40
1	Ni 231.604†	4387.3	3669.6	122.66	ug/L	122.66	ppb	01:45:40
1	P 214.914†	1098.8	770.0	529.46	ug/L	529.46	ppb	01:45:40
1	Pb 220.353†	395.9	380.3	59.313	ug/L	59.313	ppb	01:45:40
1	S 181.975 Axial†	292.4	217.8	404.90	ug/L	404.90	ppb	01:45:40
1	Sb 206.836†	43.3	14.1	-4.7104	ug/L	-4.7104	ppb	01:45:40
1	Se 196.026†	-485.5	-392.1	-2.3904	ug/L	-2.3904	ppb	01:45:40
1	Si 251.611†	1190486.3	1011718.6	39555	ug/L	39555	ppb	01:45:14
1	Sn 189.927†	-55.0	-54.5	-17.252	ug/L	-17.252	ppb	01:45:40
1	Ti 334.940†	1615031.0	1374086.5	2465.6	ug/L	2465.6	ppb	01:45:14
1	Tl 190.801†	-134.7	-88.5	-6.0478	ug/L	-6.0478	ppb	01:45:40
1	U 409.014†	-13385.9	-9409.1	-299.33	ug/L	-299.33	ppb	01:45:14
1	V 292.402†	16335.1	15081.0	103.87	ug/L	103.87	ppb	01:45:20
1	Zn 213.857†	45134.5	37863.6	466.34	ug/L	466.34	ppb	01:45:20
1	SiO2†	1193301.0	1014112.9	85199	ug/L	85199	ppb	01:46:48
2	Sc Radial	3456.7	3456.7	108	%			01:44:42
2	Y RADIAL	3731.3	3731.3	142.0	%			01:44:42
2	Al 396.153Radial†	29243.0	27171.9	58793	ug/L	58793	ppb	01:44:22
2	Ca 317.933Radial†	3369.1	3110.8	12998	ug/L	12998	ppb	01:44:42
2	Fe 238.204 Radial†	4256.3	3936.3	113300	ug/L	113300	ppb	01:44:22
2	K 766.490 Radial†	17992.6	14653.5	7153.6	ug/L	7153.6	ppb	01:44:22
2	Mg 279.077 IEC†	117.9	107.6	11012	ug/L	11012	ppb	01:44:42
2	Na 589.592 Radial†	1201.3	1846.3	584.07	ug/L	584.07	ppb	01:44:22
2	Sr 421.552†	10710.9	9895.0	95.193	ug/L	95.193	ppb	01:44:22
2	Sc 361.383	929335.2	929335.2	117.35	%			01:45:45
2	Y 371.029	1037359.4	1037359.4	153.08	%			01:45:45
2	Ag 328.068†	-7153.2	-6227.2	2.5844	ug/L	2.5844	ppb	01:45:51
2	As 188.979†	-28.1	-5.1	44.945	ug/L	44.945	ppb	01:46:11
2	B 249.677†	913.1	1155.3	15.174	ug/L	15.174	ppb	01:45:51
2	Ba 233.527†	90511.6	77132.9	767.41	ug/L	767.41	ppb	01:45:51
2	Be 313.107†	9448.6	11593.9	10.849	ug/L	10.849	ppb	01:45:51
2	Cd 226.502†	780.8	821.7	0.8533	ug/L	0.8533	ppb	01:46:11
2	Co 228.616†	682.2	627.2	10.768	ug/L	10.768	ppb	01:46:11
2	Cr 267.716†	18079.7	15354.4	215.73	ug/L	215.73	ppb	01:45:51
2	Cu 324.752†	26640.3	16490.4	61.853	ug/L	61.853	ppb	01:45:51
2	Mn 257.610†	1820291.9	1550825.8	2155.6	ug/L	2155.6	ppb	01:45:45
2	Mo 202.031†	0.3	-12.7	7.7854	ug/L	7.7854	ppb	01:46:11
2	Ni 231.604†	4428.6	3713.4	124.12	ug/L	124.12	ppb	01:46:11

2	P 214.914†	1107.6	779.6	538.02 ug/L	538.02 ppb	01:46:11
2	Pb 220.353†	398.1	382.9	59.848 ug/L	59.848 ppb	01:46:11
2	S 181.975 Axial†	289.9	216.2	401.95 ug/L	401.95 ppb	01:46:11
2	Sb 206.836†	61.1	29.3	1.8599 ug/L	1.8599 ppb	01:46:11
2	Se 196.026†	-480.7	-388.9	-3.2002 ug/L	-3.2002 ppb	01:46:11
2	Si 251.611†	1191249.9	1014688.7	39671 ug/L	39671 ppb	01:45:45
2	Sn 189.927†	-42.8	-44.3	-14.748 ug/L	-14.748 ppb	01:46:11
2	Ti 334.940†	1614260.5	1376576.3	2470.1 ug/L	2470.1 ppb	01:45:45
2	Tl 190.801†	-142.4	-95.4	-8.7982 ug/L	-8.7982 ppb	01:46:11
2	U 409.014†	-13585.0	-9604.8	-305.13 ug/L	-305.13 ppb	01:45:45
2	V 292.402†	16471.2	15228.8	105.21 ug/L	105.21 ppb	01:45:51
2	Zn 213.857†	45170.2	37981.9	468.03 ug/L	468.03 ppb	01:45:51
2	SiO2†	1185659.7	1009925.9	84848 ug/L	84848 ppb	01:46:54
3	Sc Radial	3470.4	3470.4	108 %		01:45:07
3	Y RADIAL	3758.1	3758.1	143.0 %		01:45:07
3	Al 396.153Radial†	29802.7	27581.7	59680 ug/L	59680 ppb	01:44:47
3	Ca 317.933Radial†	3382.3	3110.8	12997 ug/L	12997 ppb	01:45:07
3	Fe 238.204 Radial†	4352.2	4009.3	115400 ug/L	115400 ppb	01:44:47
3	K 766.490 Radial†	18184.5	14764.9	7208.0 ug/L	7208.0 ppb	01:44:47
3	Mg 279.077 IEC†	119.7	108.8	11140 ug/L	11140 ppb	01:45:07
3	Na 589.592 Radial†	1236.9	1874.8	593.09 ug/L	593.09 ppb	01:44:47
3	Sr 421.552†	10992.9	10116.2	97.323 ug/L	97.323 ppb	01:44:47
3	Sc 361.383	935496.8	935496.8	118.12 %		01:46:17
3	Y 371.029	1044321.3	1044321.3	154.11 %		01:46:17
3	Ag 328.068†	-7112.2	-6152.3	3.6314 ug/L	3.6314 ppb	01:46:22
3	As 188.979†	-32.9	-9.0	43.128 ug/L	43.128 ppb	01:46:42
3	B 249.677†	914.6	1151.6	14.722 ug/L	14.722 ppb	01:46:22
3	Ba 233.527†	90766.0	76840.2	764.58 ug/L	764.58 ppb	01:46:22
3	Be 313.107†	9577.0	11649.5	10.875 ug/L	10.875 ppb	01:46:22
3	Cd 226.502†	798.9	832.6	0.8025 ug/L	0.8025 ppb	01:46:42
3	Co 228.616†	701.7	639.9	11.087 ug/L	11.087 ppb	01:46:42
3	Cr 267.716†	18234.7	15384.1	216.22 ug/L	216.22 ppb	01:46:22
3	Cu 324.752†	26758.0	16440.5	61.797 ug/L	61.797 ppb	01:46:22
3	Mn 257.610†	1832441.4	1550894.1	2155.9 ug/L	2155.9 ppb	01:46:17
3	Mo 202.031†	15.3	-0.1	9.1042 ug/L	9.1042 ppb	01:46:42
3	Ni 231.604†	4460.5	3715.5	124.19 ug/L	124.19 ppb	01:46:42
3	P 214.914†	1100.7	767.5	526.91 ug/L	526.91 ppb	01:46:42
3	Pb 220.353†	401.4	383.5	59.842 ug/L	59.842 ppb	01:46:42
3	S 181.975 Axial†	295.8	219.6	408.31 ug/L	408.31 ppb	01:46:42
3	Sb 206.836†	57.9	26.3	0.4938 ug/L	0.4938 ppb	01:46:42
3	Se 196.026†	-489.7	-393.9	-1.3446 ug/L	-1.3446 ppb	01:46:42
3	Si 251.611†	1198397.1	1014052.9	39646 ug/L	39646 ppb	01:46:17
3	Sn 189.927†	-49.8	-49.9	-16.205 ug/L	-16.205 ppb	01:46:42
3	Ti 334.940†	1625224.8	1376797.7	2470.4 ug/L	2470.4 ppb	01:46:17
3	Tl 190.801†	-143.1	-95.2	-8.7196 ug/L	-8.7196 ppb	01:46:42
3	U 409.014†	-13766.9	-9682.6	-307.73 ug/L	-307.73 ppb	01:46:17
3	V 292.402†	16517.9	15175.8	104.49 ug/L	104.49 ppb	01:46:22
3	Zn 213.857†	45395.8	37919.4	466.92 ug/L	466.92 ppb	01:46:22
3	SiO2†	1197502.2	1013296.4	85131 ug/L	85131 ppb	01:47:00

Mean Data: 1202046576|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	932098.9	117.69	%	0.395				0.34%
Sc Radial	3462.1	108	%	0.2				0.21%
Y 371.029	1040450.1	153.54	%	0.523				0.34%
Internal Standard Check greater than the upper limit for Y 371.029. Recovery = 153.5%								
Y RADIAL	3741.4	142.4	%	0.55				0.39%
Ag 328.068†	-6187.0	3.1389	ug/L	0.52623	3.1389	ppb	0.52623	16.76%
Al 396.153Radial†	27355.0	59190	ug/L	450.9	59190	ppb	450.9	0.76%
As 188.979†	-7.1	44.040	ug/L	0.9083	44.040	ppb	0.9083	2.06%
B 249.677†	1141.2	14.582	ug/L	0.6730	14.582	ppb	0.6730	4.62%
Ba 233.527†	76921.5	765.35	ug/L	1.803	765.35	ppb	1.803	0.24%
Be 313.107†	11605.7	10.852	ug/L	0.0227	10.852	ppb	0.0227	0.21%
Ca 317.933Radial†	3111.4	13000	ug/L	4.1	13000	ppb	4.1	0.03%
Cd 226.502†	821.6	0.7368	ug/L	0.15977	0.7368	ppb	0.15977	21.68%
Co 228.616†	634.1	10.945	ug/L	0.1628	10.945	ppb	0.1628	1.49%
Cr 267.716†	15366.1	215.93	ug/L	0.258	215.93	ppb	0.258	0.12%
Cu 324.752†	16428.2	61.701	ug/L	0.2166	61.701	ppb	0.2166	0.35%
Fe 238.204 Radial†	3975.0	114410	ug/L	1056.4	114410	ppb	1056.4	0.92%

K 766.490 Radial†	14689.5	7171.2	ug/L	31.90	7171.2	ppb	31.90	0.44%
Mg 279.077 IEC†	108.6	11123	ug/L	103.6	11123	ppb	103.6	0.93%
Mn 257.610†	1549980.5	2154.6	ug/L	2.10	2154.6	ppb	2.10	0.10%
Mo 202.031†	-1.4	8.9120	ug/L	1.04384	8.9120	ppb	1.04384	11.71%
Na 589.592 Radial†	1887.3	597.05	ug/L	15.355	597.05	ppb	15.355	2.57%
Ni 231.604†	3699.5	123.65	ug/L	0.866	123.65	ppb	0.866	0.70%
P 214.914†	772.3	531.47	ug/L	5.821	531.47	ppb	5.821	1.10%
Pb 220.353†	382.2	59.668	ug/L	0.3072	59.668	ppb	0.3072	0.51%
S 181.975 Axial†	217.9	405.05	ug/L	3.184	405.05	ppb	3.184	0.79%
Sb 206.836†	23.2	-0.7856	ug/L	3.46698	-0.7856	ppb	3.46698	441.34%
Se 196.026†	-391.6	-2.3117	ug/L	0.93030	-2.3117	ppb	0.93030	40.24%
Si 251.611†	1013486.7	39624	ug/L	61.2	39624	ppb	61.2	0.15%
Sn 189.927†	-49.6	-16.068	ug/L	1.2577	-16.068	ppb	1.2577	7.83%
Sr 421.552†	9996.9	96.174	ug/L	1.0752	96.174	ppb	1.0752	1.12%
Ti 334.940†	1375820.2	2468.7	ug/L	2.71	2468.7	ppb	2.71	0.11%
Tl 190.801†	-93.0	-7.8552	ug/L	1.56572	-7.8552	ppb	1.56572	19.93%
U 409.014†	-9565.5	-304.06	ug/L	4.303	-304.06	ppb	4.303	1.42%
V 292.402†	15161.9	104.52	ug/L	0.673	104.52	ppb	0.673	0.64%
Zn 213.857†	37921.6	467.10	ug/L	0.859	467.10	ppb	0.859	0.18%
SiO2†	1012445.1	85059	ug/L	186.4	85059	ppb	186.4	0.22%

Internal Standard Check failed. Continue with analysis.

Sequence No.: 58
Sample ID: 1202046578|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 81
Date Collected: 3/11/2010 01:49:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046578|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3411.7	3411.7	106	%			01:51:24
1	Y RADIAL	3515.9	3515.9	133.8	%			01:51:24
1	Al 396.153Radial†	46101.4	43364.8	93808	ug/L	93808	ppb	01:51:04
1	Ca 317.933Radial†	3752.6	3512.3	14675	ug/L	14675	ppb	01:51:24
1	Fe 238.204 Radial†	4438.6	4159.7	119740	ug/L	119740	ppb	01:51:04
1	K 766.490 Radial†	33840.4	29759.5	14530	ug/L	14530	ppb	01:51:04
1	Mg 279.077 IEC†	190.7	177.4	18242	ug/L	18242	ppb	01:51:24
1	Na 589.592 Radial†	16935.7	16640.2	5264.1	ug/L	5264.1	ppb	01:51:04
1	Sr 421.552†	60812.3	57086.1	549.64	ug/L	549.64	ppb	01:51:04
1	Sc 361.383	924584.8	924584.8	116.75	%			01:52:23
1	Y 371.029	1002845.5	1002845.5	147.99	%			01:52:23
1	Ag 328.068†	101680.3	86964.2	500.23	ug/L	500.23	ppb	01:52:23
1	As 188.979†	1017.9	890.8	579.32	ug/L	579.32	ppb	01:52:43
1	B 249.677†	21105.2	18455.2	516.11	ug/L	516.11	ppb	01:52:23
1	Ba 233.527†	121329.4	103926.5	1034.0	ug/L	1034.0	ppb	01:52:23
1	Be 313.107†	1365016.5	1172764.5	538.46	ug/L	538.46	ppb	01:52:23
1	Cd 226.502†	40711.6	35028.3	522.41	ug/L	522.41	ppb	01:52:43
1	Co 228.616†	22433.1	19261.3	523.59	ug/L	523.59	ppb	01:52:43
1	Cr 267.716†	59638.4	51031.2	706.25	ug/L	706.25	ppb	01:52:23
1	Cu 324.752†	196680.6	162257.4	554.21	ug/L	554.21	ppb	01:52:23
1	Mn 257.610†	2308625.1	1977084.0	2745.5	ug/L	2745.5	ppb	01:52:23
1	Mo 202.031†	6191.7	5290.5	492.64	ug/L	492.64	ppb	01:52:43
1	Ni 231.604†	22017.7	18799.0	628.08	ug/L	628.08	ppb	01:52:43
1	P 214.914†	1936.8	1494.6	1022.7	ug/L	1022.7	ppb	01:52:43
1	Pb 220.353†	4097.0	3553.0	587.64	ug/L	587.64	ppb	01:52:43
1	S 181.975 Axial†	3502.9	2969.6	5654.8	ug/L	5654.8	ppb	01:52:43
1	Sb 206.836†	1225.7	1027.2	445.70	ug/L	445.70	ppb	01:52:43
1	Se 196.026†	249.3	234.3	558.54	ug/L	558.54	ppb	01:52:43
1	Si 251.611†	1148654.0	983418.4	38443	ug/L	38443	ppb	01:52:23
1	Sn 189.927†	2517.6	2148.7	507.43	ug/L	507.43	ppb	01:52:43
1	Ti 334.940†	2303371.1	1973910.9	3540.7	ug/L	3540.7	ppb	01:52:23
1	Tl 190.801†	1281.2	1123.4	501.07	ug/L	501.07	ppb	01:52:43
1	U 409.014†	6953.8	7928.4	225.60	ug/L	225.60	ppb	01:52:23
1	V 292.402†	86624.4	75391.6	603.88	ug/L	603.88	ppb	01:52:23
1	Zn 213.857†	90780.1	77247.4	965.46	ug/L	965.46	ppb	01:52:23
1	SiO2†	1141959.6	977685.3	82126	ug/L	82126	ppb	01:53:44
2	Sc Radial	3416.3	3416.3	107	%			01:51:49
2	Y RADIAL	3527.0	3527.0	134.2	%			01:51:49
2	Al 396.153Radial†	46811.7	43972.8	95123	ug/L	95123	ppb	01:51:29
2	Ca 317.933Radial†	3762.5	3516.9	14694	ug/L	14694	ppb	01:51:49
2	Fe 238.204 Radial†	4497.3	4209.1	121160	ug/L	121160	ppb	01:51:29
2	K 766.490 Radial†	34340.8	30186.1	14739	ug/L	14739	ppb	01:51:29
2	Mg 279.077 IEC†	192.3	178.6	18365	ug/L	18365	ppb	01:51:49
2	Na 589.592 Radial†	17172.3	16840.8	5327.5	ug/L	5327.5	ppb	01:51:29
2	Sr 421.552†	61806.7	57942.0	557.88	ug/L	557.88	ppb	01:51:29
2	Sc 361.383	916146.6	916146.6	115.68	%			01:52:51
2	Y 371.029	992908.1	992908.1	146.52	%			01:52:51
2	Ag 328.068†	100853.8	87052.0	501.13	ug/L	501.13	ppb	01:52:51
2	As 188.979†	1016.0	897.2	583.38	ug/L	583.38	ppb	01:53:11
2	B 249.677†	20949.7	18487.3	516.80	ug/L	516.80	ppb	01:52:51
2	Ba 233.527†	120270.2	103968.1	1034.4	ug/L	1034.4	ppb	01:52:51
2	Be 313.107†	1350621.7	1171090.0	537.69	ug/L	537.69	ppb	01:52:51
2	Cd 226.502†	40489.5	35157.5	524.24	ug/L	524.24	ppb	01:53:11
2	Co 228.616†	22368.3	19382.2	526.91	ug/L	526.91	ppb	01:53:11
2	Cr 267.716†	59204.3	51126.5	707.61	ug/L	707.61	ppb	01:52:51
2	Cu 324.752†	194462.7	161891.7	553.05	ug/L	553.05	ppb	01:52:51
2	Mn 257.610†	2289705.0	1978942.0	2748.2	ug/L	2748.2	ppb	01:52:51
2	Mo 202.031†	6163.0	5314.6	494.94	ug/L	494.94	ppb	01:53:11
2	Ni 231.604†	21932.1	18898.6	631.41	ug/L	631.41	ppb	01:53:11

2	P 214.914†	1907.7	1484.8	1014.3	ug/L	1014.3 ppb	01:53:11
2	Pb 220.353†	4065.3	3558.0	588.54	ug/L	588.54 ppb	01:53:11
2	S 181.975 Axial†	3489.6	2985.8	5685.3	ug/L	5685.3 ppb	01:53:11
2	Sb 206.836†	1222.3	1033.9	448.64	ug/L	448.64 ppb	01:53:11
2	Se 196.026†	242.3	230.1	559.29	ug/L	559.29 ppb	01:53:11
2	Si 251.611†	1138798.4	983960.9	38464	ug/L	38464 ppb	01:52:51
2	Sn 189.927†	2510.0	2162.0	510.53	ug/L	510.53 ppb	01:53:11
2	Ti 334.940†	2281227.7	1972941.0	3539.0	ug/L	3539.0 ppb	01:52:51
2	Tl 190.801†	1289.3	1140.5	508.09	ug/L	508.09 ppb	01:53:11
2	U 409.014†	6875.2	7915.3	225.04	ug/L	225.04 ppb	01:52:51
2	V 292.402†	85767.2	75333.9	603.23	ug/L	603.23 ppb	01:52:51
2	Zn 213.857†	90036.0	77320.4	966.16	ug/L	966.16 ppb	01:52:51
2	SiO2†	1128977.6	975472.3	81940	ug/L	81940 ppb	01:53:50
3	Sc Radial	3445.2	3445.2	108	%		01:52:15
3	Y RADIAL	3535.4	3535.4	134.6	%		01:52:15
3	Al 396.153Radial†	46829.4	43621.0	94362	ug/L	94362 ppb	01:51:55
3	Ca 317.933Radial†	3791.4	3514.1	14683	ug/L	14683 ppb	01:52:15
3	Fe 238.204 Radial†	4501.1	4177.3	120250	ug/L	120250 ppb	01:51:55
3	K 766.490 Radial†	34368.7	29941.9	14620	ug/L	14620 ppb	01:51:55
3	Mg 279.077 IEC†	193.6	178.4	18337	ug/L	18337 ppb	01:52:15
3	Na 589.592 Radial†	17104.6	16642.7	5264.9	ug/L	5264.9 ppb	01:51:55
3	Sr 421.552†	61664.2	57323.2	551.92	ug/L	551.92 ppb	01:51:55
3	Sc 361.383	910045.1	910045.1	114.91	%		01:53:18
3	Y 371.029	985172.3	985172.3	145.38	%		01:53:18
3	Ag 328.068†	99979.3	86875.5	499.92	ug/L	499.92 ppb	01:53:18
3	As 188.979†	1019.5	906.1	588.36	ug/L	588.36 ppb	01:53:38
3	B 249.677†	20660.2	18356.7	513.14	ug/L	513.14 ppb	01:53:18
3	Ba 233.527†	119199.2	103733.2	1032.1	ug/L	1032.1 ppb	01:53:18
3	Be 313.107†	1338348.1	1168237.0	536.40	ug/L	536.40 ppb	01:53:18
3	Cd 226.502†	40513.8	35413.3	528.24	ug/L	528.24 ppb	01:53:38
3	Co 228.616†	22386.3	19527.5	530.95	ug/L	530.95 ppb	01:53:38
3	Cr 267.716†	58638.0	50976.8	705.52	ug/L	705.52 ppb	01:53:18
3	Cu 324.752†	193015.0	161758.9	552.56	ug/L	552.56 ppb	01:53:18
3	Mn 257.610†	2270247.7	1975280.1	2743.1	ug/L	2743.1 ppb	01:53:18
3	Mo 202.031†	6170.9	5357.2	498.77	ug/L	498.77 ppb	01:53:38
3	Ni 231.604†	21967.5	19056.6	636.69	ug/L	636.69 ppb	01:53:38
3	P 214.914†	1910.4	1498.2	1025.7	ug/L	1025.7 ppb	01:53:38
3	Pb 220.353†	4101.3	3612.8	597.52	ug/L	597.52 ppb	01:53:38
3	S 181.975 Axial†	3489.6	3006.0	5724.2	ug/L	5724.2 ppb	01:53:38
3	Sb 206.836†	1219.8	1038.8	450.91	ug/L	450.91 ppb	01:53:38
3	Se 196.026†	250.3	238.5	563.73	ug/L	563.73 ppb	01:53:38
3	Si 251.611†	1129586.3	982544.4	38408	ug/L	38408 ppb	01:53:18
3	Sn 189.927†	2506.7	2173.7	513.36	ug/L	513.36 ppb	01:53:38
3	Ti 334.940†	2264400.4	1971518.8	3536.4	ug/L	3536.4 ppb	01:53:18
3	Tl 190.801†	1293.8	1151.9	512.72	ug/L	512.72 ppb	01:53:38
3	U 409.014†	6628.1	7740.1	219.83	ug/L	219.83 ppb	01:53:18
3	V 292.402†	85228.6	75362.3	603.64	ug/L	603.64 ppb	01:53:18
3	Zn 213.857†	89145.1	77067.0	963.03	ug/L	963.03 ppb	01:53:18
3	SiO2†	1140241.7	991818.2	83313	ug/L	83313 ppb	01:53:56

Mean Data: 1202046578|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916925.5	115.78	%	0.922				0.80%
Sc Radial	3424.4	107	%	0.6				0.53%
Y 371.029	993642.0	146.63	%	1.307				0.89%
Y RADIAL	3526.1	134.2	%	0.37				0.28%
Ag 328.068†	86963.9	500.43	ug/L	0.630	500.43	ppb	0.630	0.13%
Al 396.153Radial†	43652.9	94431	ug/L	660.4	94431	ppb	660.4	0.70%
As 188.979†	898.0	583.69	ug/L	4.530	583.69	ppb	4.530	0.78%
B 249.677†	18433.1	515.35	ug/L	1.945	515.35	ppb	1.945	0.38%
Ba 233.527†	103875.9	1033.5	ug/L	1.25	1033.5	ppb	1.25	0.12%
Be 313.107†	1170697.2	537.52	ug/L	1.040	537.52	ppb	1.040	0.19%
Ca 317.933Radial†	3514.4	14684	ug/L	9.6	14684	ppb	9.6	0.07%
Cd 226.502†	35199.7	524.96	ug/L	2.979	524.96	ppb	2.979	0.57%
Co 228.616†	19390.3	527.15	ug/L	3.686	527.15	ppb	3.686	0.70%
Cr 267.716†	51044.8	706.46	ug/L	1.062	706.46	ppb	1.062	0.15%
Cu 324.752†	161969.3	553.27	ug/L	0.849	553.27	ppb	0.849	0.15%
Fe 238.204 Radial†	4182.0	120380	ug/L	720.7	120380	ppb	720.7	0.60%
K 766.490 Radial†	29962.5	14630	ug/L	104.6	14630	ppb	104.6	0.71%

Mg 279.077 IEC†	178.2	18315	ug/L	64.2	18315	ppb	64.2	0.35%
Mn 257.610†	1977102.1	2745.6	ug/L	2.58	2745.6	ppb	2.58	0.09%
Mo 202.031†	5320.8	495.45	ug/L	3.095	495.45	ppb	3.095	0.62%
Na 589.592 Radial†	16707.9	5285.5	ug/L	36.40	5285.5	ppb	36.40	0.69%
Ni 231.604†	18918.1	632.06	ug/L	4.340	632.06	ppb	4.340	0.69%
P 214.914†	1492.5	1020.9	ug/L	5.90	1020.9	ppb	5.90	0.58%
Pb 220.353†	3574.6	591.23	ug/L	5.461	591.23	ppb	5.461	0.92%
S 181.975 Axial†	2987.2	5688.1	ug/L	34.78	5688.1	ppb	34.78	0.61%
Sb 206.836†	1033.3	448.41	ug/L	2.609	448.41	ppb	2.609	0.58%
Se 196.026†	234.3	560.52	ug/L	2.808	560.52	ppb	2.808	0.50%
Si 251.611†	983307.9	38438	ug/L	28.0	38438	ppb	28.0	0.07%
Sn 189.927†	2161.4	510.44	ug/L	2.965	510.44	ppb	2.965	0.58%
Sr 421.552†	57450.4	553.15	ug/L	4.256	553.15	ppb	4.256	0.77%
Ti 334.940†	1972790.2	3538.7	ug/L	2.16	3538.7	ppb	2.16	0.06%
Tl 190.801†	1138.6	507.29	ug/L	5.866	507.29	ppb	5.866	1.16%
U 409.014†	7861.3	223.49	ug/L	3.184	223.49	ppb	3.184	1.42%
V 292.402†	75362.6	603.58	ug/L	0.327	603.58	ppb	0.327	0.05%
Zn 213.857†	77211.6	964.88	ug/L	1.647	964.88	ppb	1.647	0.17%
SiO2†	981658.6	82460	ug/L	744.9	82460	ppb	744.9	0.90%

Sequence No.: 59
Sample ID: 1202046579|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 82
Date Collected: 3/11/2010 01:56:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046579|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3502.9	3502.9	109	%			01:58:20
1	Y RADIAL	4081.0	4081.0	155.3	%			01:58:00
1	Al 396.153Radial†	62676.8	57399.8	124180	ug/L	124180	ppb	01:58:00
1	Ca 317.933Radial†	5080.2	4635.0	19366	ug/L	19366	ppb	01:58:00
1	Fe 238.204 Radial†	5707.7	5212.0	150030	ug/L	150030	ppb	01:58:00
1	K 766.490 Radial†	41423.6	35868.4	17513	ug/L	17513	ppb	01:58:00
1	Mg 279.077 IEC†	244.6	222.1	22827	ug/L	22827	ppb	01:58:20
1	Na 589.592 Radial†	17190.4	16458.7	5206.6	ug/L	5206.6	ppb	01:58:00
1	Sr 421.552†	67797.6	61987.7	596.81	ug/L	596.81	ppb	01:58:00
1	Sc 361.383	932811.4	932811.4	117.78	%			01:59:19
1	Y 371.029	1092213.3	1092213.3	161.18	%			01:59:19
1	Ag 328.068†	100487.8	85183.7	500.48	ug/L	500.48	ppb	01:59:19
1	As 188.979†	1037.9	900.1	596.06	ug/L	596.06	ppb	01:59:40
1	B 249.677†	21656.6	18763.9	520.15	ug/L	520.15	ppb	01:59:19
1	Ba 233.527†	349432.5	296671.6	2943.4	ug/L	2943.4	ppb	01:59:19
1	Be 313.107†	1386950.0	1181074.8	543.31	ug/L	543.31	ppb	01:59:19
1	Cd 226.502†	42389.4	36145.2	536.32	ug/L	536.32	ppb	01:59:19
1	Co 228.616†	22994.1	19568.1	531.46	ug/L	531.46	ppb	01:59:40
1	Cr 267.716†	69469.4	58927.3	816.05	ug/L	816.05	ppb	01:59:19
1	Cu 324.752†	208165.5	170522.4	583.84	ug/L	583.84	ppb	01:59:19
1	Mn 257.610†	2944014.9	2499095.8	3470.3	ug/L	3470.3	ppb	01:59:19
1	Mo 202.031†	6225.0	5272.1	493.36	ug/L	493.36	ppb	01:59:40
1	Ni 231.604†	24312.3	20580.7	687.64	ug/L	687.64	ppb	01:59:40
1	P 214.914†	2181.5	1687.8	1155.4	ug/L	1155.4	ppb	01:59:40
1	Pb 220.353†	4337.0	3725.8	618.44	ug/L	618.44	ppb	01:59:40
1	S 181.975 Axial†	3922.1	3299.1	6278.3	ug/L	6278.3	ppb	01:59:40
1	Sb 206.836†	1112.0	921.4	397.71	ug/L	397.71	ppb	01:59:40
1	Se 196.026†	129.1	130.3	561.83	ug/L	561.83	ppb	01:59:40
1	Si 251.611†	1256925.7	1066665.0	41697	ug/L	41697	ppb	01:59:19
1	Sn 189.927†	2549.4	2156.7	508.43	ug/L	508.43	ppb	01:59:40
1	Ti 334.940†	2642220.7	2244197.2	4025.8	ug/L	4025.8	ppb	01:59:19
1	Tl 190.801†	1262.9	1098.1	498.02	ug/L	498.02	ppb	01:59:40
1	U 409.014†	-951.6	1164.2	16.450	ug/L	16.450	ppb	01:59:19
1	V 292.402†	95181.2	82001.9	652.74	ug/L	652.74	ppb	01:59:19
1	Zn 213.857†	104790.5	88456.7	1103.9	ug/L	1103.9	ppb	01:59:19
1	SiO2†	1258507.0	1068008.5	89714	ug/L	89714	ppb	02:00:41
2	Sc Radial	3509.4	3509.4	110	%			01:58:46
2	Y RADIAL	4118.2	4118.2	156.7	%			01:58:25
2	Al 396.153Radial†	63489.4	58037.2	125560	ug/L	125560	ppb	01:58:25
2	Ca 317.933Radial†	5158.1	4697.6	19627	ug/L	19627	ppb	01:58:25
2	Fe 238.204 Radial†	5757.1	5247.6	151050	ug/L	151050	ppb	01:58:25
2	K 766.490 Radial†	41768.0	36113.7	17633	ug/L	17633	ppb	01:58:25
2	Mg 279.077 IEC†	247.4	224.2	23045	ug/L	23045	ppb	01:58:46
2	Na 589.592 Radial†	17419.8	16639.4	5263.8	ug/L	5263.8	ppb	01:58:25
2	Sr 421.552†	68896.1	62877.7	605.37	ug/L	605.37	ppb	01:58:25
2	Sc 361.383	931996.6	931996.6	117.68	%			01:59:47
2	Y 371.029	1089522.3	1089522.3	160.78	%			01:59:47
2	Ag 328.068†	100602.8	85356.0	501.70	ug/L	501.70	ppb	01:59:47
2	As 188.979†	1035.5	898.8	595.56	ug/L	595.56	ppb	02:00:07
2	B 249.677†	21737.0	18848.3	522.44	ug/L	522.44	ppb	01:59:47
2	Ba 233.527†	349127.9	296672.1	2943.4	ug/L	2943.4	ppb	01:59:47
2	Be 313.107†	1383430.9	1179113.7	542.43	ug/L	542.43	ppb	01:59:47
2	Cd 226.502†	42195.8	36012.2	534.18	ug/L	534.18	ppb	01:59:47
2	Co 228.616†	22994.4	19585.4	531.92	ug/L	531.92	ppb	02:00:07
2	Cr 267.716†	69227.9	58773.6	813.98	ug/L	813.98	ppb	01:59:47
2	Cu 324.752†	208457.9	170925.4	585.25	ug/L	585.25	ppb	01:59:47
2	Mn 257.610†	2940641.0	2498413.9	3469.5	ug/L	3469.5	ppb	01:59:47
2	Mo 202.031†	6216.7	5269.6	493.21	ug/L	493.21	ppb	02:00:07
2	Ni 231.604†	24258.4	20553.0	686.71	ug/L	686.71	ppb	02:00:07

2	P 214.914†	2170.6	1680.1	1148.5 ug/L	1148.5 ppb	02:00:07
2	Pb 220.353†	4324.4	3718.3	617.37 ug/L	617.37 ppb	02:00:07
2	S 181.975 Axial†	3930.3	3308.9	6296.9 ug/L	6296.9 ppb	02:00:07
2	Sb 206.836†	1110.5	920.9	397.45 ug/L	397.45 ppb	02:00:07
2	Se 196.026†	128.4	129.8	564.58 ug/L	564.58 ppb	02:00:07
2	Si 251.611†	1256832.7	1067518.8	41731 ug/L	41731 ppb	01:59:47
2	Sn 189.927†	2549.2	2158.4	508.84 ug/L	508.84 ppb	02:00:07
2	Ti 334.940†	2640732.2	2244893.4	4027.1 ug/L	4027.1 ppb	01:59:47
2	Tl 190.801†	1264.5	1100.4	498.97 ug/L	498.97 ppb	02:00:07
2	U 409.014†	-800.1	1292.2	20.226 ug/L	20.226 ppb	01:59:47
2	V 292.402†	95017.5	81933.5	652.04 ug/L	652.04 ppb	01:59:47
2	Zn 213.857†	104631.3	88399.2	1103.0 ug/L	1103.0 ppb	01:59:47
2	SiO2†	1256389.1	1067142.9	89642 ug/L	89642 ppb	02:00:47
3	Sc Radial	3493.5	3493.5	109 %		01:59:11
3	Y RADIAL	4019.0	4019.0	153.0 %		01:58:51
3	Al 396.153Radial†	62258.1	57170.6	123680 ug/L	123680 ppb	01:58:51
3	Ca 317.933Radial†	5048.9	4618.8	19298 ug/L	19298 ppb	01:58:51
3	Fe 238.204 Radial†	5645.2	5168.8	148780 ug/L	148780 ppb	01:58:51
3	K 766.490 Radial†	40986.2	35569.5	17367 ug/L	17367 ppb	01:58:51
3	Mg 279.077 IEC†	245.8	223.8	23006 ug/L	23006 ppb	01:59:11
3	Na 589.592 Radial†	16689.6	16041.8	5074.8 ug/L	5074.8 ppb	01:58:51
3	Sr 421.552†	67141.4	61553.4	592.62 ug/L	592.62 ppb	01:58:51
3	Sc 361.383	923839.2	923839.2	116.65 %		02:00:14
3	Y 371.029	1080732.3	1080732.3	159.48 %		02:00:14
3	Ag 328.068†	99685.7	85324.7	500.84 ug/L	500.84 ppb	02:00:14
3	As 188.979†	1028.5	900.5	596.08 ug/L	596.08 ppb	02:00:34
3	B 249.677†	21467.8	18780.6	520.83 ug/L	520.83 ppb	02:00:14
3	Ba 233.527†	347318.0	297740.1	2953.9 ug/L	2953.9 ppb	02:00:14
3	Be 313.107†	1372194.3	1179861.3	542.78 ug/L	542.78 ppb	02:00:14
3	Cd 226.502†	41939.5	36109.1	535.90 ug/L	535.90 ppb	02:00:14
3	Co 228.616†	22902.2	19678.9	534.54 ug/L	534.54 ppb	02:00:34
3	Cr 267.716†	68968.5	59070.7	817.96 ug/L	817.96 ppb	02:00:14
3	Cu 324.752†	206092.0	170461.3	583.57 ug/L	583.57 ppb	02:00:14
3	Mn 257.610†	2922240.6	2504704.4	3477.9 ug/L	3477.9 ppb	02:00:14
3	Mo 202.031†	6194.7	5297.4	495.57 ug/L	495.57 ppb	02:00:34
3	Ni 231.604†	24170.4	20659.6	690.27 ug/L	690.27 ppb	02:00:34
3	P 214.914†	2175.0	1700.2	1166.4 ug/L	1166.4 ppb	02:00:34
3	Pb 220.353†	4312.2	3740.4	620.89 ug/L	620.89 ppb	02:00:34
3	S 181.975 Axial†	3889.9	3303.9	6287.6 ug/L	6287.6 ppb	02:00:34
3	Sb 206.836†	1104.3	923.9	398.88 ug/L	398.88 ppb	02:00:34
3	Se 196.026†	116.1	120.2	549.63 ug/L	549.63 ppb	02:00:34
3	Si 251.611†	1246438.2	1068038.4	41751 ug/L	41751 ppb	02:00:14
3	Sn 189.927†	2532.9	2163.5	510.12 ug/L	510.12 ppb	02:00:34
3	Ti 334.940†	2620937.1	2247738.0	4032.2 ug/L	4032.2 ppb	02:00:14
3	Tl 190.801†	1274.0	1118.1	506.31 ug/L	506.31 ppb	02:00:34
3	U 409.014†	-923.2	1180.7	17.087 ug/L	17.087 ppb	02:00:14
3	V 292.402†	94303.3	82034.2	653.22 ug/L	653.22 ppb	02:00:14
3	Zn 213.857†	103825.4	88493.4	1104.5 ug/L	1104.5 ppb	02:00:14
3	SiO2†	1245309.5	1067071.9	89636 ug/L	89636 ppb	02:00:53

Mean Data: 1202046579|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	929549.1	117.37	%	0.626				0.53%
Sc Radial	3501.9	109	%	0.2				0.23%
Y 371.029	1087489.3	160.48	%	0.886				0.55%
Internal Standard Check greater than the upper limit for Y 371.029. Recovery = 160.5%								
Y RADIAL	4072.7	155.0	%	1.91				1.23%
Ag 328.068†	85288.1	501.01	ug/L	0.627	501.01	ppb	0.627	0.13%
Al 396.153Radial†	57535.9	124470	ug/L	971.6	124470	ppb	971.6	0.78%
As 188.979†	899.8	595.90	ug/L	0.293	595.90	ppb	0.293	0.05%
B 249.677†	18797.6	521.14	ug/L	1.175	521.14	ppb	1.175	0.23%
Ba 233.527†	297027.9	2946.9	ug/L	6.08	2946.9	ppb	6.08	0.21%
Be 313.107†	1180016.6	542.84	ug/L	0.445	542.84	ppb	0.445	0.08%
Ca 317.933Radial†	4650.4	19430	ug/L	173.9	19430	ppb	173.9	0.90%
Cd 226.502†	36088.8	535.47	ug/L	1.131	535.47	ppb	1.131	0.21%
Co 228.616†	19610.8	532.64	ug/L	1.656	532.64	ppb	1.656	0.31%
Cr 267.716†	58923.9	816.00	ug/L	1.994	816.00	ppb	1.994	0.24%
Cu 324.752†	170636.4	584.22	ug/L	0.905	584.22	ppb	0.905	0.15%
Fe 238.204 Radial†	5209.5	149950	ug/L	1136.8	149950	ppb	1136.8	0.76%

K 766.490 Radial†	35850.5	17504	ug/L	133.1	17504	ppb	133.1	0.76%
Mg 279.077 IEC†	223.3	22959	ug/L	116.2	22959	ppb	116.2	0.51%
Mn 257.610†	2500738.0	3472.6	ug/L	4.67	3472.6	ppb	4.67	0.13%
Mo 202.031†	5279.7	494.05	ug/L	1.322	494.05	ppb	1.322	0.27%
Na 589.592 Radial†	16380.0	5181.7	ug/L	96.96	5181.7	ppb	96.96	1.87%
Ni 231.604†	20597.8	688.21	ug/L	1.847	688.21	ppb	1.847	0.27%
P 214.914†	1689.4	1156.8	ug/L	8.99	1156.8	ppb	8.99	0.78%
Pb 220.353†	3728.2	618.90	ug/L	1.805	618.90	ppb	1.805	0.29%
S 181.975 Axial†	3304.0	6287.6	ug/L	9.30	6287.6	ppb	9.30	0.15%
Sb 206.836†	922.1	398.01	ug/L	0.761	398.01	ppb	0.761	0.19%
Se 196.026†	126.8	558.68	ug/L	7.956	558.68	ppb	7.956	1.42%
Si 251.611†	1067407.4	41726	ug/L	27.1	41726	ppb	27.1	0.06%
Sn 189.927†	2159.5	509.13	ug/L	0.884	509.13	ppb	0.884	0.17%
Sr 421.552†	62139.6	598.27	ug/L	6.500	598.27	ppb	6.500	1.09%
Ti 334.940†	2245609.5	4028.4	ug/L	3.35	4028.4	ppb	3.35	0.08%
Tl 190.801†	1105.6	501.10	ug/L	4.538	501.10	ppb	4.538	0.91%
U 409.014†	1212.3	17.921	ug/L	2.0214	17.921	ppb	2.0214	11.28%
V 292.402†	81989.9	652.67	ug/L	0.592	652.67	ppb	0.592	0.09%
Zn 213.857†	88449.7	1103.8	ug/L	0.77	1103.8	ppb	0.77	0.07%
SiO2†	1067407.8	89664	ug/L	43.8	89664	ppb	43.8	0.05%

Internal Standard Check failed. Continue with analysis.

Sequence No.: 60
Sample ID: 1202046577|954672|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 83
Date Collected: 3/11/2010 02:03:03
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046577|954672|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3365.9	3365.9	105	%			02:05:16
1	Y RADIAL	2945.9	2945.9	112.1	%			02:05:16
1	Al 396.153Radial†	6167.6	5933.9	12839	ug/L	12839	ppb	02:04:56
1	Ca 317.933Radial†	707.9	661.5	2763.7	ug/L	2763.7	ppb	02:05:16
1	Fe 238.204 Radial†	976.4	920.1	26482	ug/L	26482	ppb	02:05:16
1	K 766.490 Radial†	5659.0	3361.0	1640.9	ug/L	1640.9	ppb	02:04:56
1	Mg 279.077 IEC†	23.7	20.9	2133.1	ug/L	2133.1	ppb	02:05:16
1	Na 589.592 Radial†	-465.8	289.1	91.463	ug/L	91.463	ppb	02:04:56
1	Sr 421.552†	2265.2	2121.9	20.414	ug/L	20.414	ppb	02:04:56
1	Sc 361.383	903294.3	903294.3	114.06	%			02:06:13
1	Y 371.029	806387.8	806387.8	119.00	%			02:06:13
1	Ag 328.068†	-1420.4	-1376.7	1.0119	ug/L	1.0119	ppb	02:06:13
1	As 188.979†	-19.8	1.5	11.847	ug/L	11.847	ppb	02:06:34
1	B 249.677†	1.8	378.8	6.7112	ug/L	6.7112	ppb	02:06:13
1	Ba 233.527†	18802.2	16485.1	164.08	ug/L	164.08	ppb	02:06:13
1	Be 313.107†	-1023.3	2644.8	2.4446	ug/L	2.4446	ppb	02:06:13
1	Cd 226.502†	42.1	193.2	0.2181	ug/L	0.2181	ppb	02:06:34
1	Co 228.616†	121.7	152.6	2.7318	ug/L	2.7318	ppb	02:06:34
1	Cr 267.716†	4319.0	3733.9	52.408	ug/L	52.408	ppb	02:06:13
1	Cu 324.752†	10500.0	2993.9	11.548	ug/L	11.548	ppb	02:06:13
1	Mn 257.610†	379319.4	332170.2	461.94	ug/L	461.94	ppb	02:06:13
1	Mo 202.031†	12.4	-2.2	1.8919	ug/L	1.8919	ppb	02:06:34
1	Ni 231.604†	1068.7	876.3	29.291	ug/L	29.291	ppb	02:06:34
1	P 214.914†	381.2	169.9	116.21	ug/L	116.21	ppb	02:06:34
1	Pb 220.353†	44.3	82.5	12.638	ug/L	12.638	ppb	02:06:34
1	S 181.975 Axial†	121.3	75.6	141.92	ug/L	141.92	ppb	02:06:34
1	Sb 206.836†	39.6	12.0	2.7266	ug/L	2.7266	ppb	02:06:34
1	Se 196.026†	-126.8	-90.5	-0.6082	ug/L	-0.6082	ppb	02:06:34
1	Si 251.611†	241787.4	211511.5	8269.4	ug/L	8269.4	ppb	02:06:13
1	Sn 189.927†	-9.2	-15.9	-4.8141	ug/L	-4.8141	ppb	02:06:34
1	Ti 334.940†	348616.7	306578.8	550.12	ug/L	550.12	ppb	02:06:13
1	Tl 190.801†	-49.7	-17.6	-0.5629	ug/L	-0.5629	ppb	02:06:34
1	U 409.014†	-4586.5	-2049.1	-65.375	ug/L	-65.375	ppb	02:06:13
1	V 292.402†	2387.2	3285.2	22.377	ug/L	22.377	ppb	02:06:13
1	Zn 213.857†	10367.7	8578.5	105.57	ug/L	105.57	ppb	02:06:13
1	SiO2†	241152.7	210956.1	17723	ug/L	17723	ppb	02:07:30
2	Sc Radial	3390.5	3390.5	106	%			02:05:41
2	Y RADIAL	2971.6	2971.6	113.1	%			02:05:41
2	Al 396.153Radial†	6078.4	5807.0	12565	ug/L	12565	ppb	02:05:21
2	Ca 317.933Radial†	710.8	659.3	2754.6	ug/L	2754.6	ppb	02:05:41
2	Fe 238.204 Radial†	984.5	921.0	26508	ug/L	26508	ppb	02:05:41
2	K 766.490 Radial†	5653.1	3316.3	1619.1	ug/L	1619.1	ppb	02:05:21
2	Mg 279.077 IEC†	24.5	21.4	2188.3	ug/L	2188.3	ppb	02:05:41
2	Na 589.592 Radial†	-438.9	317.8	100.54	ug/L	100.54	ppb	02:05:21
2	Sr 421.552†	2236.8	2079.5	20.005	ug/L	20.005	ppb	02:05:21
2	Sc 361.383	900670.5	900670.5	113.73	%			02:06:39
2	Y 371.029	804085.8	804085.8	118.66	%			02:06:39
2	Ag 328.068†	-1427.2	-1386.2	0.9699	ug/L	0.9699	ppb	02:06:39
2	As 188.979†	-20.2	1.1	11.627	ug/L	11.627	ppb	02:06:59
2	B 249.677†	-42.9	339.5	5.5630	ug/L	5.5630	ppb	02:06:39
2	Ba 233.527†	18830.3	16557.9	164.81	ug/L	164.81	ppb	02:06:39
2	Be 313.107†	-1040.2	2627.3	2.4372	ug/L	2.4372	ppb	02:06:39
2	Cd 226.502†	47.5	198.0	0.2899	ug/L	0.2899	ppb	02:06:59
2	Co 228.616†	120.0	151.4	2.6964	ug/L	2.6964	ppb	02:06:59
2	Cr 267.716†	4261.9	3694.7	51.870	ug/L	51.870	ppb	02:06:39
2	Cu 324.752†	10565.6	3078.5	11.832	ug/L	11.832	ppb	02:06:39
2	Mn 257.610†	378198.1	332153.0	461.92	ug/L	461.92	ppb	02:06:39
2	Mo 202.031†	10.8	-3.6	1.7654	ug/L	1.7654	ppb	02:06:59
2	Ni 231.604†	1085.2	893.6	29.869	ug/L	29.869	ppb	02:06:59

2	P 214.914†	376.4	166.7	113.49 ug/L	113.49 ppb	02:06:59
2	Pb 220.353†	23.7	64.5	9.6291 ug/L	9.6291 ppb	02:06:59
2	S 181.975 Axial†	118.0	72.9	136.92 ug/L	136.92 ppb	02:06:59
2	Sb 206.836†	30.9	4.5	-0.4614 ug/L	-0.4614 ppb	02:06:59
2	Se 196.026†	-122.9	-87.4	2.0132 ug/L	2.0132 ppb	02:06:59
2	Si 251.611†	241083.8	211510.3	8269.4 ug/L	8269.4 ppb	02:06:39
2	Sn 189.927†	0.6	-7.3	-2.7642 ug/L	-2.7642 ppb	02:06:59
2	Ti 334.940†	347728.1	306687.8	550.30 ug/L	550.30 ppb	02:06:39
2	Tl 190.801†	-51.3	-19.1	-1.1824 ug/L	-1.1824 ppb	02:06:59
2	U 409.014†	-4408.2	-1904.1	-60.972 ug/L	-60.972 ppb	02:06:39
2	V 292.402†	2516.2	3404.8	23.361 ug/L	23.361 ppb	02:06:39
2	Zn 213.857†	10347.4	8587.1	105.67 ug/L	105.67 ppb	02:06:39
2	SiO2†	239198.0	209853.2	17631 ug/L	17631 ppb	02:07:35
3	Sc Radial	3393.1	3393.1	106 %		02:06:07
3	Y RADIAL	2959.3	2959.3	112.6 %		02:06:07
3	Al 396.153Radial†	6240.5	5955.8	12887 ug/L	12887 ppb	02:05:47
3	Ca 317.933Radial†	712.8	660.7	2760.4 ug/L	2760.4 ppb	02:06:07
3	Fe 238.204 Radial†	978.1	914.3	26315 ug/L	26315 ppb	02:06:07
3	K 766.490 Radial†	5651.3	3310.7	1616.3 ug/L	1616.3 ppb	02:05:47
3	Mg 279.077 IEC†	26.1	22.9	2345.4 ug/L	2345.4 ppb	02:06:07
3	Na 589.592 Radial†	-512.3	248.8	78.706 ug/L	78.706 ppb	02:05:47
3	Sr 421.552†	2297.0	2134.7	20.537 ug/L	20.537 ppb	02:05:47
3	Sc 361.383	904521.2	904521.2	114.21 %		02:07:05
3	Y 371.029	806208.0	806208.0	118.97 %		02:07:05
3	Ag 328.068†	-1431.2	-1384.4	0.9141 ug/L	0.9141 ppb	02:07:05
3	As 188.979†	-14.1	6.5	14.711 ug/L	14.711 ppb	02:07:25
3	B 249.677†	-78.8	308.2	4.6855 ug/L	4.6855 ppb	02:07:05
3	Ba 233.527†	18804.1	16464.5	163.87 ug/L	163.87 ppb	02:07:05
3	Be 313.107†	-938.0	2720.6	2.4784 ug/L	2.4784 ppb	02:07:05
3	Cd 226.502†	48.9	199.1	0.3271 ug/L	0.3271 ppb	02:07:25
3	Co 228.616†	109.1	141.4	2.4243 ug/L	2.4243 ppb	02:07:25
3	Cr 267.716†	4261.4	3678.3	51.636 ug/L	51.636 ppb	02:07:05
3	Cu 324.752†	10542.8	3018.9	11.619 ug/L	11.619 ppb	02:07:05
3	Mn 257.610†	379200.2	331614.7	461.15 ug/L	461.15 ppb	02:07:05
3	Mo 202.031†	10.5	-3.8	1.7252 ug/L	1.7252 ppb	02:07:25
3	Ni 231.604†	1082.5	887.2	29.654 ug/L	29.654 ppb	02:07:25
3	P 214.914†	366.9	156.9	105.91 ug/L	105.91 ppb	02:07:25
3	Pb 220.353†	17.2	58.7	8.7662 ug/L	8.7662 ppb	02:07:25
3	S 181.975 Axial†	114.6	69.5	130.41 ug/L	130.41 ppb	02:07:25
3	Sb 206.836†	28.4	2.1	-1.5447 ug/L	-1.5447 ppb	02:07:25
3	Se 196.026†	-127.6	-91.0	-1.5619 ug/L	-1.5619 ppb	02:07:25
3	Si 251.611†	241334.7	210827.6	8242.7 ug/L	8242.7 ppb	02:07:05
3	Sn 189.927†	-16.8	-22.5	-6.3707 ug/L	-6.3707 ppb	02:07:25
3	Ti 334.940†	348947.8	306454.1	549.87 ug/L	549.87 ppb	02:07:05
3	Tl 190.801†	-40.2	-9.3	2.8787 ug/L	2.8787 ppb	02:07:25
3	U 409.014†	-4335.2	-1823.7	-58.506 ug/L	-58.506 ppb	02:07:05
3	V 292.402†	2399.3	3293.0	22.481 ug/L	22.481 ppb	02:07:05
3	Zn 213.857†	10351.4	8551.9	105.25 ug/L	105.25 ppb	02:07:05
3	SiO2†	242359.6	211726.1	17788 ug/L	17788 ppb	02:07:41

Mean Data: 1202046577|954672|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	902828.7	114.00	%	0.248				0.22%
Sc Radial	3383.2	106	%	0.5				0.44%
Y 371.029	805560.5	118.88	%	0.189				0.16%
Y RADIAL	2958.9	112.6	%	0.49				0.43%
Ag 328.068†	-1382.5	0.9653	ug/L	0.04907	0.9653	ppb	0.04907	5.08%
Al 396.153Radial†	5898.9	12764	ug/L	173.8	12764	ppb	173.8	1.36%
As 188.979†	3.0	12.728	ug/L	1.7205	12.728	ppb	1.7205	13.52%
B 249.677†	342.2	5.6532	ug/L	1.01589	5.6532	ppb	1.01589	17.97%
Ba 233.527†	16502.5	164.26	ug/L	0.490	164.26	ppb	0.490	0.30%
Be 313.107†	2664.2	2.4534	ug/L	0.02199	2.4534	ppb	0.02199	0.90%
Ca 317.933Radial†	660.5	2759.6	ug/L	4.58	2759.6	ppb	4.58	0.17%
Cd 226.502†	196.8	0.2784	ug/L	0.05545	0.2784	ppb	0.05545	19.92%
Co 228.616†	148.5	2.6175	ug/L	0.16827	2.6175	ppb	0.16827	6.43%
Cr 267.716†	3702.3	51.972	ug/L	0.3959	51.972	ppb	0.3959	0.76%
Cu 324.752†	3030.4	11.666	ug/L	0.1479	11.666	ppb	0.1479	1.27%
Fe 238.204 Radial†	918.4	26435	ug/L	104.5	26435	ppb	104.5	0.40%
K 766.490 Radial†	3329.3	1625.4	ug/L	13.46	1625.4	ppb	13.46	0.83%

Mg 279.077 IEC†	21.7	2222.3	ug/L	110.11	2222.3	ppb	110.11	4.96%
Mn 257.610†	331979.3	461.67	ug/L	0.451	461.67	ppb	0.451	0.10%
Mo 202.031†	-3.2	1.7942	ug/L	0.08699	1.7942	ppb	0.08699	4.85%
Na 589.592 Radial†	285.2	90.235	ug/L	10.9667	90.235	ppb	10.9667	12.15%
Ni 231.604†	885.7	29.605	ug/L	0.2918	29.605	ppb	0.2918	0.99%
P 214.914†	164.5	111.87	ug/L	5.339	111.87	ppb	5.339	4.77%
Pb 220.353†	68.6	10.344	ug/L	2.0326	10.344	ppb	2.0326	19.65%
S 181.975 Axial†	72.7	136.42	ug/L	5.773	136.42	ppb	5.773	4.23%
Sb 206.836†	6.2	0.2402	ug/L	2.22040	0.2402	ppb	2.22040	924.52%
Se 196.026†	-89.6	-0.0523	ug/L	1.85123	-0.0523	ppb	1.85123	>999.9%
Si 251.611†	211283.1	8260.5	ug/L	15.42	8260.5	ppb	15.42	0.19%
Sn 189.927†	-15.2	-4.6497	ug/L	1.80883	-4.6497	ppb	1.80883	38.90%
Sr 421.552†	2112.0	20.319	ug/L	0.2785	20.319	ppb	0.2785	1.37%
Ti 334.940†	306573.6	550.10	ug/L	0.217	550.10	ppb	0.217	0.04%
Tl 190.801†	-15.3	0.3778	ug/L	2.18784	0.3778	ppb	2.18784	579.10%
U 409.014†	-1925.6	-61.617	ug/L	3.4798	-61.617	ppb	3.4798	5.65%
V 292.402†	3327.7	22.740	ug/L	0.5406	22.740	ppb	0.5406	2.38%
Zn 213.857†	8572.5	105.50	ug/L	0.219	105.50	ppb	0.219	0.21%
SiO2†	210845.1	17714	ug/L	79.1	17714	ppb	79.1	0.45%

Sequence No.: 61
Sample ID: 247178002|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 84
Date Collected: 3/11/2010 02:09:51
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178002|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3471.0	3471.0	108	%			02:12:05
1	Y RADIAL	3713.4	3713.4	141.3	%			02:12:05
1	Al 396.153Radial†	26685.6	24698.9	53443	ug/L	53443	ppb	02:11:45
1	Ca 317.933Radial†	3563.7	3277.6	13695	ug/L	13695	ppb	02:12:05
1	Fe 238.204 Radial†	5189.3	4781.4	137620	ug/L	137620	ppb	02:11:45
1	K 766.490 Radial†	20998.3	17359.6	8474.6	ug/L	8474.6	ppb	02:11:45
1	Mg 279.077 IEC†	112.7	102.4	10448	ug/L	10448	ppb	02:12:05
1	Na 589.592 Radial†	1702.1	2304.0	728.86	ug/L	728.86	ppb	02:11:45
1	Sr 421.552†	11369.2	10461.8	100.65	ug/L	100.65	ppb	02:11:45
1	Sc 361.383	923579.6	923579.6	116.62	%			02:13:02
1	Y 371.029	1021112.4	1021112.4	150.69	%			02:13:02
1	Ag 328.068†	-8652.9	-7551.1	3.2630	ug/L	3.2630	ppb	02:13:07
1	As 188.979†	-49.7	-23.8	52.115	ug/L	52.115	ppb	02:13:27
1	B 249.677†	1121.2	1338.7	16.508	ug/L	16.508	ppb	02:13:07
1	Ba 233.527†	76436.2	65544.0	653.52	ug/L	653.52	ppb	02:13:07
1	Be 313.107†	-5464.8	-1144.1	8.3458	ug/L	8.3458	ppb	02:13:07
1	Cd 226.502†	1000.6	1014.3	1.2400	ug/L	1.2400	ppb	02:13:27
1	Co 228.616†	1426.9	1269.4	25.145	ug/L	25.145	ppb	02:13:27
1	Cr 267.716†	4913.2	4160.2	63.114	ug/L	63.114	ppb	02:13:27
1	Cu 324.752†	25420.8	15586.2	60.083	ug/L	60.083	ppb	02:13:07
1	Mn 257.610†	3434769.2	2944899.5	4086.2	ug/L	4086.2	ppb	02:13:02
1	Mo 202.031†	18.9	3.2	11.136	ug/L	11.136	ppb	02:13:27
1	Ni 231.604†	2169.2	1799.5	60.132	ug/L	60.132	ppb	02:13:27
1	P 214.914†	1422.6	1055.5	739.24	ug/L	739.24	ppb	02:13:27
1	Pb 220.353†	820.0	746.8	114.92	ug/L	114.92	ppb	02:13:27
1	S 181.975 Axial†	421.6	330.8	621.76	ug/L	621.76	ppb	02:13:27
1	Sb 206.836†	58.2	27.2	-3.8407	ug/L	-3.8407	ppb	02:13:27
1	Se 196.026†	-577.6	-474.6	-10.795	ug/L	-10.795	ppb	02:13:27
1	Si 251.611†	1052201.8	901781.9	35257	ug/L	35257	ppb	02:13:02
1	Sn 189.927†	-51.1	-51.7	-17.769	ug/L	-17.769	ppb	02:13:27
1	Ti 334.940†	2537157.6	2176529.1	3905.1	ug/L	3905.1	ppb	02:13:02
1	Tl 190.801†	-193.2	-139.7	-6.0840	ug/L	-6.0840	ppb	02:13:27
1	U 409.014†	-13292.6	-9426.3	-302.13	ug/L	-302.13	ppb	02:13:02
1	V 292.402†	23066.2	20971.4	147.28	ug/L	147.28	ppb	02:13:07
1	Zn 213.857†	52846.1	44803.9	552.07	ug/L	552.07	ppb	02:13:07
1	SiO2†	1035585.0	887534.2	74565	ug/L	74565	ppb	02:14:36
2	Sc Radial	3477.7	3477.7	109	%			02:12:30
2	Y RADIAL	3725.6	3725.6	141.8	%			02:12:30
2	Al 396.153Radial†	26950.9	24896.2	53869	ug/L	53869	ppb	02:12:10
2	Ca 317.933Radial†	3558.4	3266.4	13648	ug/L	13648	ppb	02:12:30
2	Fe 238.204 Radial†	5219.5	4800.1	138160	ug/L	138160	ppb	02:12:10
2	K 766.490 Radial†	21291.3	17592.5	8588.4	ug/L	8588.4	ppb	02:12:10
2	Mg 279.077 IEC†	113.3	102.7	10481	ug/L	10481	ppb	02:12:30
2	Na 589.592 Radial†	1705.5	2304.2	728.93	ug/L	728.93	ppb	02:12:10
2	Sr 421.552†	11507.4	10568.9	101.68	ug/L	101.68	ppb	02:12:10
2	Sc 361.383	915305.8	915305.8	115.57	%			02:13:33
2	Y 371.029	1011283.2	1011283.2	149.24	%			02:13:33
2	Ag 328.068†	-8522.2	-7505.1	3.6758	ug/L	3.6758	ppb	02:13:39
2	As 188.979†	-49.7	-24.2	51.930	ug/L	51.930	ppb	02:13:59
2	B 249.677†	1145.4	1368.3	17.282	ug/L	17.282	ppb	02:13:39
2	Ba 233.527†	75763.8	65554.6	653.64	ug/L	653.64	ppb	02:13:39
2	Be 313.107†	-5178.2	-938.5	8.4151	ug/L	8.4151	ppb	02:13:39
2	Cd 226.502†	1018.8	1037.8	1.5418	ug/L	1.5418	ppb	02:13:59
2	Co 228.616†	1437.5	1289.7	25.719	ug/L	25.719	ppb	02:13:59
2	Cr 267.716†	4901.3	4188.0	63.518	ug/L	63.518	ppb	02:13:59
2	Cu 324.752†	25361.9	15732.3	60.607	ug/L	60.607	ppb	02:13:39
2	Mn 257.610†	3402794.2	2943856.8	4084.8	ug/L	4084.8	ppb	02:13:33
2	Mo 202.031†	27.0	10.3	11.829	ug/L	11.829	ppb	02:13:59
2	Ni 231.604†	2133.4	1785.3	59.658	ug/L	59.658	ppb	02:13:59

2	P 214.914†	1445.0	1085.9	763.20 ug/L	763.20 ppb	02:13:59
2	Pb 220.353†	827.5	759.7	117.04 ug/L	117.04 ppb	02:13:59
2	S 181.975 Axial†	421.8	334.2	628.18 ug/L	628.18 ppb	02:13:59
2	Sb 206.836†	55.3	25.1	-4.7241 ug/L	-4.7241 ppb	02:13:59
2	Se 196.026†	-575.8	-477.5	-11.671 ug/L	-11.671 ppb	02:13:59
2	Si 251.611†	1041149.6	900374.9	35202 ug/L	35202 ppb	02:13:33
2	Sn 189.927†	-52.6	-53.3	-18.206 ug/L	-18.206 ppb	02:13:59
2	Ti 334.940†	2507704.4	2170710.8	3894.7 ug/L	3894.7 ppb	02:13:33
2	Tl 190.801†	-205.8	-152.1	-11.264 ug/L	-11.264 ppb	02:13:59
2	U 409.014†	-13293.0	-9529.7	-305.34 ug/L	-305.34 ppb	02:13:33
2	V 292.402†	22827.1	20943.4	146.98 ug/L	146.98 ppb	02:13:39
2	Zn 213.857†	52371.2	44802.6	551.97 ug/L	551.97 ppb	02:13:39
2	SiO2†	1045232.1	903908.3	75941 ug/L	75941 ppb	02:14:42
3	Sc Radial	3438.0	3438.0	107 %		02:12:55
3	Y RADIAL	3711.1	3711.1	141.2 %		02:12:55
3	Al 396.153Radial†	27243.6	25455.8	55080 ug/L	55080 ppb	02:12:35
3	Ca 317.933Radial†	3582.0	3326.3	13898 ug/L	13898 ppb	02:12:55
3	Fe 238.204 Radial†	5269.3	4902.1	141090 ug/L	141090 ppb	02:12:35
3	K 766.490 Radial†	21556.8	18066.4	8819.8 ug/L	8819.8 ppb	02:12:35
3	Mg 279.077 IEC†	109.9	100.7	10275 ug/L	10275 ppb	02:12:55
3	Na 589.592 Radial†	1718.0	2334.0	738.35 ug/L	738.35 ppb	02:12:35
3	Sr 421.552†	11616.2	10792.8	103.83 ug/L	103.83 ppb	02:12:35
3	Sc 361.383	926488.9	926488.9	116.99 %		02:14:04
3	Y 371.029	1022872.9	1022872.9	150.95 %		02:14:04
3	Ag 328.068†	-8563.9	-7451.8	4.8539 ug/L	4.8539 ppb	02:14:10
3	As 188.979†	-42.1	-17.1	56.545 ug/L	56.545 ppb	02:14:30
3	B 249.677†	1144.1	1355.2	16.427 ug/L	16.427 ppb	02:14:10
3	Ba 233.527†	76168.1	65109.0	649.31 ug/L	649.31 ppb	02:14:10
3	Be 313.107†	-5440.3	-1108.5	8.2882 ug/L	8.2882 ppb	02:14:10
3	Cd 226.502†	1004.7	1015.1	0.8927 ug/L	0.8927 ppb	02:14:30
3	Co 228.616†	1407.3	1248.8	24.595 ug/L	24.595 ppb	02:14:30
3	Cr 267.716†	4897.5	4133.5	62.888 ug/L	62.888 ppb	02:14:30
3	Cu 324.752†	25449.1	15542.0	60.116 ug/L	60.116 ppb	02:14:10
3	Mn 257.610†	3416646.5	2920159.4	4052.3 ug/L	4052.3 ppb	02:14:04
3	Mo 202.031†	32.9	15.1	12.499 ug/L	12.499 ppb	02:14:30
3	Ni 231.604†	2143.6	1771.7	59.204 ug/L	59.204 ppb	02:14:30
3	P 214.914†	1414.6	1044.9	728.36 ug/L	728.36 ppb	02:14:30
3	Pb 220.353†	818.5	743.3	114.21 ug/L	114.21 ppb	02:14:30
3	S 181.975 Axial†	420.1	328.3	616.71 ug/L	616.71 ppb	02:14:30
3	Sb 206.836†	66.9	34.4	-0.6604 ug/L	-0.6604 ppb	02:14:30
3	Se 196.026†	-575.9	-471.6	1.8255 ug/L	1.8255 ppb	02:14:30
3	Si 251.611†	1047563.7	894984.1	34991 ug/L	34991 ppb	02:14:04
3	Sn 189.927†	-42.6	-44.2	-16.150 ug/L	-16.150 ppb	02:14:30
3	Ti 334.940†	2523963.7	2158419.1	3872.7 ug/L	3872.7 ppb	02:14:04
3	Tl 190.801†	-202.1	-146.8	-9.4277 ug/L	-9.4277 ppb	02:14:30
3	U 409.014†	-13195.9	-9307.9	-298.93 ug/L	-298.93 ppb	02:14:04
3	V 292.402†	23001.6	20854.1	145.86 ug/L	145.86 ppb	02:14:10
3	Zn 213.857†	52561.5	44418.3	546.62 ug/L	546.62 ppb	02:14:10
3	SiO2†	1040276.6	888756.1	74668 ug/L	74668 ppb	02:14:48

Mean Data: 247178002|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	921791.4	116.39	%	0.733				0.63%
Sc Radial	3462.2	108	%	0.7				0.61%
Y 371.029	1018422.8	150.29	%	0.922				0.61%
Internal Standard Check greater than the upper limit for Y 371.029. Recovery = 150.3%								
Y RADIAL	3716.7	141.5	%	0.30				0.21%
Ag 328.068†	-7502.7	3.9309	ug/L	0.82557	3.9309	ppb	0.82557	21.00%
Al 396.153Radial†	25017.0	54131	ug/L	849.5	54131	ppb	849.5	1.57%
As 188.979†	-21.7	53.530	ug/L	2.6126	53.530	ppb	2.6126	4.88%
B 249.677†	1354.1	16.739	ug/L	0.4720	16.739	ppb	0.4720	2.82%
Ba 233.527†	65402.5	652.16	ug/L	2.463	652.16	ppb	2.463	0.38%
Be 313.107†	-1063.7	8.3497	ug/L	0.06355	8.3497	ppb	0.06355	0.76%
Ca 317.933Radial†	3290.1	13747	ug/L	132.9	13747	ppb	132.9	0.97%
Cd 226.502†	1022.4	1.2248	ug/L	0.32480	1.2248	ppb	0.32480	26.52%
Co 228.616†	1269.3	25.153	ug/L	0.5620	25.153	ppb	0.5620	2.23%
Cr 267.716†	4160.6	63.173	ug/L	0.3194	63.173	ppb	0.3194	0.51%
Cu 324.752†	15620.2	60.269	ug/L	0.2935	60.269	ppb	0.2935	0.49%
Fe 238.204 Radial†	4827.9	138960	ug/L	1868.9	138960	ppb	1868.9	1.34%

K 766.490 Radial†	17672.8	8627.6	ug/L	175.94	8627.6	ppb	175.94	2.04%
Mg 279.077 IEC†	101.9	10402	ug/L	110.9	10402	ppb	110.9	1.07%
Mn 257.610†	2936305.2	4074.4	ug/L	19.16	4074.4	ppb	19.16	0.47%
Mo 202.031†	9.5	11.821	ug/L	0.6817	11.821	ppb	0.6817	5.77%
Na 589.592 Radial†	2314.1	732.05	ug/L	5.459	732.05	ppb	5.459	0.75%
Ni 231.604†	1785.5	59.665	ug/L	0.4638	59.665	ppb	0.4638	0.78%
P 214.914†	1062.1	743.60	ug/L	17.829	743.60	ppb	17.829	2.40%
Pb 220.353†	749.9	115.39	ug/L	1.475	115.39	ppb	1.475	1.28%
S 181.975 Axial†	331.1	622.22	ug/L	5.746	622.22	ppb	5.746	0.92%
Sb 206.836†	28.9	-3.0751	ug/L	2.13728	-3.0751	ppb	2.13728	69.50%
Se 196.026†	-474.6	-6.8805	ug/L	7.55230	-6.8805	ppb	7.55230	109.76%
Si 251.611†	899047.0	35150	ug/L	140.3	35150	ppb	140.3	0.40%
Sn 189.927†	-49.7	-17.375	ug/L	1.0834	-17.375	ppb	1.0834	6.24%
Sr 421.552†	10607.8	102.05	ug/L	1.626	102.05	ppb	1.626	1.59%
Ti 334.940†	2168553.0	3890.8	ug/L	16.56	3890.8	ppb	16.56	0.43%
Tl 190.801†	-146.2	-8.9253	ug/L	2.62638	-8.9253	ppb	2.62638	29.43%
U 409.014†	-9421.3	-302.13	ug/L	3.202	-302.13	ppb	3.202	1.06%
V 292.402†	20922.9	146.71	ug/L	0.746	146.71	ppb	0.746	0.51%
Zn 213.857†	44674.9	550.22	ug/L	3.117	550.22	ppb	3.117	0.57%
SiO2†	893399.5	75058	ug/L	766.3	75058	ppb	766.3	1.02%

Internal Standard Check failed. Continue with analysis.

Sequence No.: 62
Sample ID: 247178003|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 85
Date Collected: 3/11/2010 02:16:59
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178003|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3444.5	3444.5	107	%			02:19:13
1	Y RADIAL	3519.3	3519.3	133.9	%			02:19:13
1	Al 396.153Radial†	26131.3	24373.2	52738	ug/L	52738	ppb	02:18:52
1	Ca 317.933Radial†	4067.6	3771.8	15759	ug/L	15759	ppb	02:19:13
1	Fe 238.204 Radial†	4000.7	3712.5	106850	ug/L	106850	ppb	02:19:13
1	K 766.490 Radial†	24537.9	20802.1	10156	ug/L	10156	ppb	02:18:52
1	Mg 279.077 IEC†	146.3	134.4	13792	ug/L	13792	ppb	02:19:13
1	Na 589.592 Radial†	2373.6	2940.9	930.33	ug/L	930.33	ppb	02:18:52
1	Sr 421.552†	12217.8	11332.1	109.01	ug/L	109.01	ppb	02:18:52
1	Sc 361.383	917669.6	917669.6	115.87	%			02:20:10
1	Y 371.029	985389.9	985389.9	145.41	%			02:20:10
1	Ag 328.068†	-6609.3	-5835.3	2.5975	ug/L	2.5975	ppb	02:20:15
1	As 188.979†	-29.8	-6.9	41.181	ug/L	41.181	ppb	02:20:35
1	B 249.677†	953.9	1200.4	17.511	ug/L	17.511	ppb	02:20:15
1	Ba 233.527†	57079.3	49260.7	491.25	ug/L	491.25	ppb	02:20:15
1	Be 313.107†	2470.6	5674.1	7.8505	ug/L	7.8505	ppb	02:20:15
1	Cd 226.502†	738.7	793.8	1.0865	ug/L	1.0865	ppb	02:20:35
1	Co 228.616†	983.9	895.0	18.436	ug/L	18.436	ppb	02:20:35
1	Cr 267.716†	12996.5	11163.4	157.91	ug/L	157.91	ppb	02:20:15
1	Cu 324.752†	24684.8	15091.4	56.766	ug/L	56.766	ppb	02:20:15
1	Mn 257.610†	1931511.5	1666529.7	2314.9	ug/L	2314.9	ppb	02:20:10
1	Mo 202.031†	-10.1	-21.7	6.4994	ug/L	6.4994	ppb	02:20:35
1	Ni 231.604†	3603.0	3048.8	101.90	ug/L	101.90	ppb	02:20:35
1	P 214.914†	901.7	613.9	409.65	ug/L	409.65	ppb	02:20:35
1	Pb 220.353†	439.5	422.9	66.031	ug/L	66.031	ppb	02:20:35
1	S 181.975 Axial†	226.9	165.1	305.38	ug/L	305.38	ppb	02:20:35
1	Sb 206.836†	51.7	21.9	-0.6727	ug/L	-0.6727	ppb	02:20:35
1	Se 196.026†	-454.0	-371.1	-7.4289	ug/L	-7.4289	ppb	02:20:35
1	Si 251.611†	1124966.2	970389.6	37939	ug/L	37939	ppb	02:20:10
1	Sn 189.927†	-44.9	-46.6	-14.429	ug/L	-14.429	ppb	02:20:35
1	Ti 334.940†	1502527.7	1297636.4	2328.6	ug/L	2328.6	ppb	02:20:10
1	Tl 190.801†	-139.3	-94.2	-8.7738	ug/L	-8.7738	ppb	02:20:35
1	U 409.014†	-11946.7	-8338.1	-265.79	ug/L	-265.79	ppb	02:20:10
1	V 292.402†	16123.1	15106.8	105.44	ug/L	105.44	ppb	02:20:15
1	Zn 213.857†	39819.8	33853.8	416.34	ug/L	416.34	ppb	02:20:15
1	SiO2†	1132488.4	976882.5	82072	ug/L	82072	ppb	02:21:44
2	Sc Radial	3509.3	3509.3	110	%			02:19:38
2	Y RADIAL	3547.2	3547.2	135.0	%			02:19:38
2	Al 396.153Radial†	25915.1	23726.4	51338	ug/L	51338	ppb	02:19:18
2	Ca 317.933Radial†	4129.8	3758.6	15704	ug/L	15704	ppb	02:19:38
2	Fe 238.204 Radial†	4055.0	3693.3	106300	ug/L	106300	ppb	02:19:38
2	K 766.490 Radial†	24342.3	20201.6	9863.0	ug/L	9863.0	ppb	02:19:18
2	Mg 279.077 IEC†	145.7	131.3	13480	ug/L	13480	ppb	02:19:38
2	Na 589.592 Radial†	2321.6	2852.6	902.42	ug/L	902.42	ppb	02:19:18
2	Sr 421.552†	12044.1	10963.5	105.46	ug/L	105.46	ppb	02:19:18
2	Sc 361.383	923792.4	923792.4	116.65	%			02:20:41
2	Y 371.029	990303.7	990303.7	146.14	%			02:20:41
2	Ag 328.068†	-6597.1	-5787.0	2.6867	ug/L	2.6867	ppb	02:20:46
2	As 188.979†	-39.4	-15.0	36.066	ug/L	36.066	ppb	02:21:06
2	B 249.677†	917.6	1163.9	16.539	ug/L	16.539	ppb	02:20:46
2	Ba 233.527†	57608.8	49388.2	492.50	ug/L	492.50	ppb	02:20:46
2	Be 313.107†	2508.1	5692.1	7.7972	ug/L	7.7972	ppb	02:20:46
2	Cd 226.502†	739.5	790.2	1.0884	ug/L	1.0884	ppb	02:21:06
2	Co 228.616†	963.3	871.7	17.858	ug/L	17.858	ppb	02:21:06
2	Cr 267.716†	12999.8	11091.9	156.91	ug/L	156.91	ppb	02:20:46
2	Cu 324.752†	25051.0	15264.1	57.319	ug/L	57.319	ppb	02:20:46
2	Mn 257.610†	1917338.2	1643330.8	2282.8	ug/L	2282.8	ppb	02:20:41
2	Mo 202.031†	-15.3	-26.1	6.0512	ug/L	6.0512	ppb	02:21:06
2	Ni 231.604†	3567.3	2997.6	100.19	ug/L	100.19	ppb	02:21:06

2	P 214.914†	881.3	591.2	391.37	ug/L	391.37 ppb	02:21:06
2	Pb 220.353†	472.3	448.5	69.996	ug/L	69.996 ppb	02:21:06
2	S 181.975 Axial†	225.4	162.5	300.68	ug/L	300.68 ppb	02:21:06
2	Sb 206.836†	49.2	19.4	-1.6508	ug/L	-1.6508 ppb	02:21:06
2	Se 196.026†	-455.6	-369.9	-8.3377	ug/L	-8.3377 ppb	02:21:06
2	Si 251.611†	1119150.6	958969.1	37493	ug/L	37493 ppb	02:20:41
2	Sn 189.927†	-58.5	-57.9	-17.111	ug/L	-17.111 ppb	02:21:06
2	Ti 334.940†	1494938.9	1282536.1	2301.5	ug/L	2301.5 ppb	02:20:41
2	Tl 190.801†	-128.5	-84.2	-5.0231	ug/L	-5.0231 ppb	02:21:06
2	U 409.014†	-11978.6	-8297.2	-264.48	ug/L	-264.48 ppb	02:20:41
2	V 292.402†	16378.8	15233.8	106.58	ug/L	106.58 ppb	02:20:46
2	Zn 213.857†	40067.7	33838.6	416.24	ug/L	416.24 ppb	02:20:46
2	SiO2†	1136685.6	974002.9	81830	ug/L	81830 ppb	02:21:50
3	Sc Radial	3507.2	3507.2	109	%		02:20:03
3	Y RADIAL	3537.9	3537.9	134.6	%		02:20:03
3	Al 396.153Radial†	26190.7	23992.9	51915	ug/L	51915 ppb	02:19:43
3	Ca 317.933Radial†	4104.7	3738.1	15618	ug/L	15618 ppb	02:20:03
3	Fe 238.204 Radial†	4027.1	3670.2	105640	ug/L	105640 ppb	02:20:03
3	K 766.490 Radial†	24935.7	20757.5	10135	ug/L	10135 ppb	02:19:43
3	Mg 279.077 IEC†	145.3	131.1	13456	ug/L	13456 ppb	02:20:03
3	Na 589.592 Radial†	2353.1	2882.7	911.92	ug/L	911.92 ppb	02:19:43
3	Sr 421.552†	12172.9	11087.9	106.66	ug/L	106.66 ppb	02:19:43
3	Sc 361.383	920114.9	920114.9	116.18	%		02:21:12
3	Y 371.029	989040.3	989040.3	145.95	%		02:21:12
3	Ag 328.068†	-6468.7	-5699.1	2.9390	ug/L	2.9390 ppb	02:21:17
3	As 188.979†	-38.0	-13.9	36.630	ug/L	36.630 ppb	02:21:37
3	B 249.677†	917.9	1167.4	16.747	ug/L	16.747 ppb	02:21:17
3	Ba 233.527†	56719.3	48819.9	486.85	ug/L	486.85 ppb	02:21:17
3	Be 313.107†	2155.1	5396.9	7.6827	ug/L	7.6827 ppb	02:21:17
3	Cd 226.502†	725.6	780.8	1.0136	ug/L	1.0136 ppb	02:21:37
3	Co 228.616†	972.2	882.7	18.150	ug/L	18.150 ppb	02:21:37
3	Cr 267.716†	12833.6	10993.4	155.53	ug/L	155.53 ppb	02:21:17
3	Cu 324.752†	24515.7	14889.2	56.019	ug/L	56.019 ppb	02:21:17
3	Mn 257.610†	1916755.5	1649398.8	2291.1	ug/L	2291.1 ppb	02:21:12
3	Mo 202.031†	-15.6	-26.5	5.9688	ug/L	5.9688 ppb	02:21:37
3	Ni 231.604†	3562.8	3006.0	100.47	ug/L	100.47 ppb	02:21:37
3	P 214.914†	896.8	607.5	405.46	ug/L	405.46 ppb	02:21:37
3	Pb 220.353†	432.5	415.9	64.865	ug/L	64.865 ppb	02:21:37
3	S 181.975 Axial†	221.2	159.6	295.12	ug/L	295.12 ppb	02:21:37
3	Sb 206.836†	49.8	20.2	-1.3420	ug/L	-1.3420 ppb	02:21:37
3	Se 196.026†	-462.4	-377.3	-16.336	ug/L	-16.336 ppb	02:21:37
3	Si 251.611†	1117665.5	961525.5	37593	ug/L	37593 ppb	02:21:12
3	Sn 189.927†	-46.6	-47.9	-14.692	ug/L	-14.692 ppb	02:21:37
3	Ti 334.940†	1494426.3	1287217.2	2309.9	ug/L	2309.9 ppb	02:21:12
3	Tl 190.801†	-119.1	-76.5	-1.7525	ug/L	-1.7525 ppb	02:21:37
3	U 409.014†	-12017.6	-8371.8	-266.67	ug/L	-266.67 ppb	02:21:12
3	V 292.402†	15934.5	14907.5	103.99	ug/L	103.99 ppb	02:21:17
3	Zn 213.857†	39460.3	33453.0	411.40	ug/L	411.40 ppb	02:21:17
3	SiO2†	1121794.2	965080.3	81080	ug/L	81080 ppb	02:21:56

Mean Data: 247178003|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	920525.7	116.23	%	0.389				0.33%
Sc Radial	3487.0	109	%	1.1				1.06%
Y 371.029	988244.6	145.84	%	0.377				0.26%
Y RADIAL	3534.8	134.5	%	0.54				0.40%
Ag 328.068†	-5773.8	2.7411	ug/L	0.17712	2.7411	ppb	0.17712	6.46%
Al 396.153Radial†	24030.8	51997	ug/L	703.3	51997	ppb	703.3	1.35%
As 188.979†	-11.9	37.959	ug/L	2.8042	37.959	ppb	2.8042	7.39%
B 249.677†	1177.2	16.933	ug/L	0.5120	16.933	ppb	0.5120	3.02%
Ba 233.527†	49156.3	490.20	ug/L	2.970	490.20	ppb	2.970	0.61%
Be 313.107†	5587.7	7.7768	ug/L	0.08573	7.7768	ppb	0.08573	1.10%
Ca 317.933Radial†	3756.2	15694	ug/L	71.0	15694	ppb	71.0	0.45%
Cd 226.502†	788.3	1.0628	ug/L	0.04266	1.0628	ppb	0.04266	4.01%
Co 228.616†	883.1	18.148	ug/L	0.2891	18.148	ppb	0.2891	1.59%
Cr 267.716†	11082.9	156.78	ug/L	1.198	156.78	ppb	1.198	0.76%
Cu 324.752†	15081.6	56.701	ug/L	0.6525	56.701	ppb	0.6525	1.15%
Fe 238.204 Radial†	3692.0	106260	ug/L	610.3	106260	ppb	610.3	0.57%
K 766.490 Radial†	20587.1	10051	ug/L	163.4	10051	ppb	163.4	1.63%

Mg 279.077 IEC†	132.3	13576	ug/L	187.5	13576	ppb	187.5	1.38%
Mn 257.610†	1653086.4	2296.3	ug/L	16.67	2296.3	ppb	16.67	0.73%
Mo 202.031†	-24.8	6.1731	ug/L	0.28555	6.1731	ppb	0.28555	4.63%
Na 589.592 Radial†	2892.0	914.89	ug/L	14.191	914.89	ppb	14.191	1.55%
Ni 231.604†	3017.5	100.85	ug/L	0.918	100.85	ppb	0.918	0.91%
P 214.914†	604.2	402.16	ug/L	9.575	402.16	ppb	9.575	2.38%
Pb 220.353†	429.1	66.964	ug/L	2.6897	66.964	ppb	2.6897	4.02%
S 181.975 Axial†	162.4	300.40	ug/L	5.137	300.40	ppb	5.137	1.71%
Sb 206.836†	20.5	-1.2218	ug/L	0.50003	-1.2218	ppb	0.50003	40.92%
Se 196.026†	-372.8	-10.701	ug/L	4.9015	-10.701	ppb	4.9015	45.80%
Si 251.611†	963628.1	37675	ug/L	234.3	37675	ppb	234.3	0.62%
Sn 189.927†	-50.8	-15.411	ug/L	1.4783	-15.411	ppb	1.4783	9.59%
Sr 421.552†	11127.8	107.05	ug/L	1.806	107.05	ppb	1.806	1.69%
Ti 334.940†	1289129.9	2313.4	ug/L	13.86	2313.4	ppb	13.86	0.60%
Tl 190.801†	-85.0	-5.1831	ug/L	3.51336	-5.1831	ppb	3.51336	67.78%
U 409.014†	-8335.7	-265.65	ug/L	1.100	-265.65	ppb	1.100	0.41%
V 292.402†	15082.7	105.34	ug/L	1.298	105.34	ppb	1.298	1.23%
Zn 213.857†	33715.1	414.66	ug/L	2.820	414.66	ppb	2.820	0.68%
SiO2†	971988.6	81661	ug/L	517.0	81661	ppb	517.0	0.63%

Sequence No.: 63
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/11/2010 02:24:07
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3331.5	3331.5	104	%			02:26:20
1	Y RADIAL	2728.5	2728.5	103.8	%			02:26:20
1	Al 396.153Radial†	2377.5	2348.9	5056.1	ug/L	5056.1	ppb	02:26:00
1	Ca 317.933Radial†	1418.7	1352.2	5649.6	ug/L	5649.6	ppb	02:26:20
1	Fe 238.204 Radial†	208.9	191.4	5526.6	ug/L	5526.6	ppb	02:26:20
1	K 766.490 Radial†	13861.5	11306.8	5517.4	ug/L	5517.4	ppb	02:26:00
1	Mg 279.077 IEC†	61.9	57.9	5987.6	ug/L	5987.6	ppb	02:26:20
1	Na 589.592 Radial†	31059.6	30609.0	9683.1	ug/L	9683.1	ppb	02:26:00
1	Sr 421.552†	52570.9	50533.7	486.60	ug/L	486.60	ppb	02:26:00
1	Sc 361.383	892438.9	892438.9	112.69	%			02:27:17
1	Y 371.029	752024.8	752024.8	110.98	%			02:27:17
1	Ag 328.068†	111171.4	98524.0	525.78	ug/L	525.78	ppb	02:27:22
1	As 188.979†	1075.5	973.3	574.50	ug/L	574.50	ppb	02:27:42
1	B 249.677†	20208.2	18310.3	530.32	ug/L	530.32	ppb	02:27:22
1	Ba 233.527†	62699.5	55640.9	552.24	ug/L	552.24	ppb	02:27:22
1	Be 313.107†	1326981.6	1181127.4	535.36	ug/L	535.36	ppb	02:27:17
1	Cd 226.502†	42723.9	38070.2	580.63	ug/L	580.63	ppb	02:27:22
1	Co 228.616†	23395.9	20807.8	574.23	ug/L	574.23	ppb	02:27:22
1	Cr 267.716†	45206.0	40063.7	550.78	ug/L	550.78	ppb	02:27:22
1	Cu 324.752†	175207.0	149269.6	504.16	ug/L	504.16	ppb	02:27:22
1	Mn 257.610†	435776.0	386316.0	534.60	ug/L	534.60	ppb	02:27:17
1	Mo 202.031†	6723.5	5953.5	544.22	ug/L	544.22	ppb	02:27:42
1	Ni 231.604†	19594.6	17328.0	578.89	ug/L	578.89	ppb	02:27:22
1	P 214.914†	4245.5	3603.2	2794.5	ug/L	2794.5	ppb	02:27:42
1	Pb 220.353†	3871.4	3479.2	572.18	ug/L	572.18	ppb	02:27:42
1	S 181.975 Axial†	744.2	629.6	1201.7	ug/L	1201.7	ppb	02:27:42
1	Sb 206.836†	1447.3	1261.6	561.93	ug/L	561.93	ppb	02:27:42
1	Se 196.026†	740.7	678.0	597.76	ug/L	597.76	ppb	02:27:42
1	Si 251.611†	78280.7	68991.5	2690.7	ug/L	2690.7	ppb	02:27:22
1	Sn 189.927†	2700.5	2388.7	569.55	ug/L	569.55	ppb	02:27:42
1	Ti 334.940†	320157.8	285041.7	511.14	ug/L	511.14	ppb	02:27:22
1	Tl 190.801†	1500.6	1357.6	561.73	ug/L	561.73	ppb	02:27:42
1	U 409.014†	15879.1	16063.5	486.06	ug/L	486.06	ppb	02:27:22
1	V 292.402†	71978.0	65066.7	540.27	ug/L	540.27	ppb	02:27:22
1	Zn 213.857†	49876.1	43749.5	554.43	ug/L	554.43	ppb	02:27:22
1	SiO2†	77678.2	68457.9	5736.6	ug/L	5736.6	ppb	02:28:50
2	Sc Radial	3356.0	3356.0	105	%			02:26:45
2	Y RADIAL	2747.4	2747.4	104.6	%			02:26:45
2	Al 396.153Radial†	2338.9	2295.3	4940.5	ug/L	4940.5	ppb	02:26:25
2	Ca 317.933Radial†	1431.1	1354.0	5657.2	ug/L	5657.2	ppb	02:26:45
2	Fe 238.204 Radial†	207.7	188.9	5452.5	ug/L	5452.5	ppb	02:26:45
2	K 766.490 Radial†	13668.7	11025.0	5379.9	ug/L	5379.9	ppb	02:26:25
2	Mg 279.077 IEC†	58.5	54.1	5602.5	ug/L	5602.5	ppb	02:26:45
2	Na 589.592 Radial†	30550.4	29904.0	9460.0	ug/L	9460.0	ppb	02:26:25
2	Sr 421.552†	52096.5	49710.4	478.67	ug/L	478.67	ppb	02:26:25
2	Sc 361.383	908179.7	908179.7	114.67	%			02:27:48
2	Y 371.029	764078.2	764078.2	112.76	%			02:27:48
2	Ag 328.068†	111705.9	97280.2	519.14	ug/L	519.14	ppb	02:27:53
2	As 188.979†	1078.8	959.6	566.42	ug/L	566.42	ppb	02:28:13
2	B 249.677†	20216.0	18006.3	521.50	ug/L	521.50	ppb	02:27:53
2	Ba 233.527†	62972.8	54914.8	545.04	ug/L	545.04	ppb	02:27:53
2	Be 313.107†	1350656.2	1181362.3	535.45	ug/L	535.45	ppb	02:27:48
2	Cd 226.502†	42926.0	37589.3	573.29	ug/L	573.29	ppb	02:27:53
2	Co 228.616†	23474.4	20516.4	566.19	ug/L	566.19	ppb	02:27:53
2	Cr 267.716†	45529.6	39650.6	545.10	ug/L	545.10	ppb	02:27:53
2	Cu 324.752†	175591.5	146910.0	496.19	ug/L	496.19	ppb	02:27:53
2	Mn 257.610†	443014.6	385925.7	534.07	ug/L	534.07	ppb	02:27:48
2	Mo 202.031†	6758.2	5880.3	537.53	ug/L	537.53	ppb	02:28:13
2	Ni 231.604†	19605.5	17036.1	569.13	ug/L	569.13	ppb	02:27:53

2	P 214.914†	4263.8	3553.9	2756.4 ug/L	2756.4 ppb	02:28:13
2	Pb 220.353†	3924.2	3465.7	569.94 ug/L	569.94 ppb	02:28:13
2	S 181.975 Axial†	754.1	626.8	1196.4 ug/L	1196.4 ppb	02:28:13
2	Sb 206.836†	1454.4	1245.5	554.78 ug/L	554.78 ppb	02:28:13
2	Se 196.026†	737.6	663.9	585.49 ug/L	585.49 ppb	02:28:13
2	Si 251.611†	78536.7	68010.7	2652.4 ug/L	2652.4 ppb	02:27:53
2	Sn 189.927†	2722.4	2366.2	564.20 ug/L	564.20 ppb	02:28:13
2	Ti 334.940†	321716.6	281476.8	504.78 ug/L	504.78 ppb	02:27:53
2	Tl 190.801†	1494.8	1329.5	550.16 ug/L	550.16 ppb	02:28:13
2	U 409.014†	15975.2	15903.0	481.21 ug/L	481.21 ppb	02:27:53
2	V 292.402†	72353.6	64287.2	533.80 ug/L	533.80 ppb	02:27:53
2	Zn 213.857†	49984.1	43076.5	545.91 ug/L	545.91 ppb	02:27:53
2	SiO2†	77658.9	67246.3	5635.0 ug/L	5635.0 ppb	02:28:55
3	Sc Radial	3311.0	3311.0	103 %		02:27:10
3	Y RADIAL	2707.7	2707.7	103.1 %		02:27:10
3	Al 396.153Radial†	2363.3	2349.3	5057.4 ug/L	5057.4 ppb	02:26:50
3	Ca 317.933Radial†	1412.2	1354.3	5658.5 ug/L	5658.5 ppb	02:27:10
3	Fe 238.204 Radial†	207.0	190.9	5510.3 ug/L	5510.3 ppb	02:27:10
3	K 766.490 Radial†	13667.2	11201.3	5465.9 ug/L	5465.9 ppb	02:26:50
3	Mg 279.077 IEC†	63.4	59.6	6170.0 ug/L	6170.0 ppb	02:27:10
3	Na 589.592 Radial†	30518.1	30269.9	9575.8 ug/L	9575.8 ppb	02:26:50
3	Sr 421.552†	51751.0	50053.2	481.98 ug/L	481.98 ppb	02:26:50
3	Sc 361.383	909158.9	909158.9	114.80 %		02:28:19
3	Y 371.029	766592.0	766592.0	113.13 %		02:28:19
3	Ag 328.068†	111253.7	96781.4	516.50 ug/L	516.50 ppb	02:28:24
3	As 188.979†	1080.9	960.4	566.89 ug/L	566.89 ppb	02:28:44
3	B 249.677†	20131.2	17913.5	518.81 ug/L	518.81 ppb	02:28:24
3	Ba 233.527†	62567.4	54502.6	540.95 ug/L	540.95 ppb	02:28:24
3	Be 313.107†	1353711.5	1182755.2	536.07 ug/L	536.07 ppb	02:28:19
3	Cd 226.502†	42643.1	37302.5	568.91 ug/L	568.91 ppb	02:28:24
3	Co 228.616†	23283.3	20327.9	560.99 ug/L	560.99 ppb	02:28:24
3	Cr 267.716†	45328.0	39432.2	542.10 ug/L	542.10 ppb	02:28:24
3	Cu 324.752†	174802.1	146057.5	493.32 ug/L	493.32 ppb	02:28:24
3	Mn 257.610†	443257.0	385720.7	533.77 ug/L	533.77 ppb	02:28:19
3	Mo 202.031†	6731.0	5850.3	534.78 ug/L	534.78 ppb	02:28:44
3	Ni 231.604†	19545.1	16965.0	566.76 ug/L	566.76 ppb	02:28:24
3	P 214.914†	4236.7	3526.2	2734.8 ug/L	2734.8 ppb	02:28:44
3	Pb 220.353†	3896.1	3437.5	565.33 ug/L	565.33 ppb	02:28:44
3	S 181.975 Axial†	753.1	625.2	1193.3 ug/L	1193.3 ppb	02:28:44
3	Sb 206.836†	1455.2	1244.8	554.42 ug/L	554.42 ppb	02:28:44
3	Se 196.026†	736.7	662.5	584.44 ug/L	584.44 ppb	02:28:44
3	Si 251.611†	78151.4	67601.3	2636.4 ug/L	2636.4 ppb	02:28:24
3	Sn 189.927†	2721.3	2362.7	563.36 ug/L	563.36 ppb	02:28:44
3	Ti 334.940†	319402.8	279159.1	500.58 ug/L	500.58 ppb	02:28:24
3	Tl 190.801†	1492.7	1326.3	548.84 ug/L	548.84 ppb	02:28:44
3	U 409.014†	15994.0	15904.4	481.25 ug/L	481.25 ppb	02:28:24
3	V 292.402†	72113.2	64009.8	531.49 ug/L	531.49 ppb	02:28:24
3	Zn 213.857†	49723.6	42802.6	542.42 ug/L	542.42 ppb	02:28:24
3	SiO2†	77270.1	66834.7	5600.5 ug/L	5600.5 ppb	02:29:00

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	903259.2	114.05	%	1.185				1.04%
Sc Radial	3332.8	104	%	0.7				0.68%
Y 371.029	760898.3	112.29	%	1.149				1.02%
Y RADIAL	2727.9	103.8	%	0.76				0.73%
Ag 328.068†	97528.5	520.48	ug/L	4.780	520.48	ppb	4.780	0.92%
QC value within limits for Ag 328.068 Recovery = 104.10%								
Al 396.153Radial†	2331.2	5018.0	ug/L	67.14	5018.0	ppb	67.14	1.34%
QC value within limits for Al 396.153Radial Recovery = 100.36%								
As 188.979†	964.4	569.27	ug/L	4.533	569.27	ppb	4.533	0.80%
QC value greater than the upper limit for As 188.979 Recovery = 113.85%								
B 249.677†	18076.7	523.54	ug/L	6.019	523.54	ppb	6.019	1.15%
QC value within limits for B 249.677 Recovery = 104.71%								
Ba 233.527†	55019.4	546.08	ug/L	5.717	546.08	ppb	5.717	1.05%
QC value within limits for Ba 233.527 Recovery = 109.22%								
Be 313.107†	1181748.3	535.63	ug/L	0.387	535.63	ppb	0.387	0.07%
QC value within limits for Be 313.107 Recovery = 107.13%								
Ca 317.933Radial†	1353.5	5655.1	ug/L	4.81	5655.1	ppb	4.81	0.09%

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   QC value greater than the upper limit for Ca 317.933Radial  Recovery = 113.10%
Cd 226.502†            37654.0      574.28 ug/L         5.921      574.28 ppb          5.921   1.03%
   QC value greater than the upper limit for Cd 226.502  Recovery = 114.86%
Co 228.616†            20550.7      567.13 ug/L         6.672      567.13 ppb          6.672   1.18%
   QC value greater than the upper limit for Co 228.616  Recovery = 113.43%
Cr 267.716†            39715.5      546.00 ug/L         4.409      546.00 ppb          4.409   0.81%
   QC value within limits for Cr 267.716  Recovery = 109.20%
Cu 324.752†           147412.4      497.89 ug/L         5.619      497.89 ppb          5.619   1.13%
   QC value within limits for Cu 324.752  Recovery = 99.58%
Fe 238.204 Radial†       190.4      5496.4 ug/L        38.92      5496.4 ppb          38.92   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 109.93%
K 766.490 Radial†      11177.7      5454.4 ug/L        69.51      5454.4 ppb          69.51   1.27%
   QC value within limits for K 766.490 Radial  Recovery = 109.09%
Mg 279.077 IEC†           57.2      5920.0 ug/L       289.72      5920.0 ppb         289.72   4.89%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 118.40%
Mn 257.610†           385987.5      534.15 ug/L         0.421      534.15 ppb          0.421   0.08%
   QC value within limits for Mn 257.610  Recovery = 106.83%
Mo 202.031†            5894.7      538.84 ug/L         4.852      538.84 ppb          4.852   0.90%
   QC value within limits for Mo 202.031  Recovery = 107.77%
Na 589.592 Radial†     30261.0      9573.0 ug/L       111.54      9573.0 ppb         111.54   1.17%
   QC value within limits for Na 589.592 Radial  Recovery = 95.73%
Ni 231.604†            17109.7      571.59 ug/L         6.427      571.59 ppb          6.427   1.12%
   QC value greater than the upper limit for Ni 231.604  Recovery = 114.32%
P 214.914†              3561.1      2761.9 ug/L        30.22      2761.9 ppb          30.22   1.09%
   QC value greater than the upper limit for P 214.914  Recovery = 110.48%
Pb 220.353†             3460.8      569.15 ug/L         3.492      569.15 ppb          3.492   0.61%
   QC value greater than the upper limit for Pb 220.353  Recovery = 113.83%
S 181.975 Axial†         627.2      1197.1 ug/L          4.25      1197.1 ppb           4.25   0.36%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 119.71%
Sb 206.836†             1250.7      557.05 ug/L         4.232      557.05 ppb          4.232   0.76%
   QC value greater than the upper limit for Sb 206.836  Recovery = 111.41%
Se 196.026†              668.1      589.23 ug/L         7.406      589.23 ppb          7.406   1.26%
   QC value greater than the upper limit for Se 196.026  Recovery = 117.85%
Si 251.611†            68201.2      2659.8 ug/L        27.87      2659.8 ppb          27.87   1.05%
   QC value within limits for Si 251.611  Recovery = 106.39%
Sn 189.927†             2372.6      565.71 ug/L         3.355      565.71 ppb          3.355   0.59%
   QC value greater than the upper limit for Sn 189.927  Recovery = 113.14%
Sr 421.552†            50099.1      482.42 ug/L         3.983      482.42 ppb          3.983   0.83%
   QC value within limits for Sr 421.552  Recovery = 96.48%
Ti 334.940†           281892.5      505.50 ug/L         5.317      505.50 ppb          5.317   1.05%
   QC value within limits for Ti 334.940  Recovery = 101.10%
Tl 190.801†             1337.8      553.58 ug/L         7.093      553.58 ppb          7.093   1.28%
   QC value greater than the upper limit for Tl 190.801  Recovery = 110.72%
U 409.014†             15956.9      482.84 ug/L         2.790      482.84 ppb          2.790   0.58%
   QC value within limits for U 409.014  Recovery = 96.57%
V 292.402†             64454.6      535.19 ug/L         4.553      535.19 ppb          4.553   0.85%
   QC value within limits for V 292.402  Recovery = 107.04%
Zn 213.857†            43209.6      547.59 ug/L         6.182      547.59 ppb          6.182   1.13%
   QC value within limits for Zn 213.857  Recovery = 109.52%
SiO2†                  67512.9      5657.4 ug/L        70.76      5657.4 ppb          70.76   1.25%
   QC value within limits for SiO2  Recovery = 105.79%
QC Failed.  Continue with analysis.
```

Sequence No.: 64
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/11/2010 02:31:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3227.6	3227.6	101	%			02:33:23
1	Y RADIAL	2660.2	2660.2	101.2	%			02:33:23
1	Al 396.153Radial†	-69.9	-7.4	-15.918	ug/L	-15.918	ppb	02:33:23
1	Ca 317.933Radial†	8.9	-3.6	-15.161	ug/L	-15.161	ppb	02:33:23
1	Fe 238.204 Radial†	8.8	-0.8	-21.918	ug/L	-21.918	ppb	02:33:23
1	K 766.490 Radial†	2463.4	419.2	204.82	ug/L	204.82	ppb	02:33:03
1	Mg 279.077 IEC†	0.8	-0.9	-91.252	ug/L	-91.252	ppb	02:33:23
1	Na 589.592 Radial†	-979.0	-239.4	-75.728	ug/L	-75.728	ppb	02:33:03
1	Sr 421.552†	6.8	-27.9	-0.2684	ug/L	-0.2684	ppb	02:33:03
1	Sc 361.383	871485.2	871485.2	110.04	%			02:34:20
1	Y 371.029	743453.8	743453.8	109.71	%			02:34:20
1	Ag 328.068†	111.3	-30.1	-0.1564	ug/L	-0.1564	ppb	02:34:20
1	As 188.979†	-28.9	-7.4	-4.3509	ug/L	-4.3509	ppb	02:34:40
1	B 249.677†	-310.6	95.0	2.7679	ug/L	2.7679	ppb	02:34:40
1	Ba 233.527†	-2.0	-1.6	-0.0176	ug/L	-0.0176	ppb	02:34:40
1	Be 313.107†	-3639.6	234.4	0.1050	ug/L	0.1050	ppb	02:34:20
1	Cd 226.502†	-157.1	13.5	0.2050	ug/L	0.2050	ppb	02:34:40
1	Co 228.616†	-40.8	8.8	0.2410	ug/L	0.2410	ppb	02:34:40
1	Cr 267.716†	86.3	25.6	0.3556	ug/L	0.3556	ppb	02:34:40
1	Cu 324.752†	6562.9	-247.9	-0.8296	ug/L	-0.8296	ppb	02:34:20
1	Mn 257.610†	494.5	50.5	0.0714	ug/L	0.0714	ppb	02:34:40
1	Mo 202.031†	-0.5	-13.5	-1.2373	ug/L	-1.2373	ppb	02:34:40
1	Ni 231.604†	50.9	-14.4	-0.4808	ug/L	-0.4808	ppb	02:34:40
1	P 214.914†	190.0	8.3	6.8523	ug/L	6.8523	ppb	02:34:40
1	Pb 220.353†	-65.3	-15.7	-2.5737	ug/L	-2.5737	ppb	02:34:40
1	S 181.975 Axial†	71.1	33.8	64.648	ug/L	64.648	ppb	02:34:40
1	Sb 206.836†	35.7	9.7	4.1614	ug/L	4.1614	ppb	02:34:40
1	Se 196.026†	-32.4	-8.7	-7.5309	ug/L	-7.5309	ppb	02:34:40
1	Si 251.611†	629.8	96.3	3.7785	ug/L	3.7785	ppb	02:34:40
1	Sn 189.927†	10.5	1.7	0.4061	ug/L	0.4061	ppb	02:34:40
1	Ti 334.940†	-1285.3	-239.6	-0.4175	ug/L	-0.4175	ppb	02:34:20
1	Tl 190.801†	-34.3	-5.2	-2.1291	ug/L	-2.1291	ppb	02:34:40
1	U 409.014†	-2742.1	-519.8	-15.787	ug/L	-15.787	ppb	02:34:20
1	V 292.402†	-1407.9	-87.2	-0.7604	ug/L	-0.7604	ppb	02:34:20
1	Zn 213.857†	588.2	23.1	0.3034	ug/L	0.3034	ppb	02:34:40
1	SiO2†	681.5	144.3	12.153	ug/L	12.153	ppb	02:35:36
2	Sc Radial	3238.2	3238.2	101	%			02:33:48
2	Y RADIAL	2662.3	2662.3	101.3	%			02:33:48
2	Al 396.153Radial†	-82.1	-19.3	-41.642	ug/L	-41.642	ppb	02:33:48
2	Ca 317.933Radial†	10.0	-2.6	-10.825	ug/L	-10.825	ppb	02:33:48
2	Fe 238.204 Radial†	8.7	-0.9	-25.456	ug/L	-25.456	ppb	02:33:48
2	K 766.490 Radial†	2359.8	308.6	150.81	ug/L	150.81	ppb	02:33:28
2	Mg 279.077 IEC†	1.0	-0.7	-76.010	ug/L	-76.010	ppb	02:33:48
2	Na 589.592 Radial†	-943.7	-201.3	-63.666	ug/L	-63.666	ppb	02:33:28
2	Sr 421.552†	4.8	-29.9	-0.2880	ug/L	-0.2880	ppb	02:33:28
2	Sc 361.383	871268.2	871268.2	110.01	%			02:34:45
2	Y 371.029	743334.7	743334.7	109.69	%			02:34:45
2	Ag 328.068†	195.7	46.5	0.2471	ug/L	0.2471	ppb	02:34:45
2	As 188.979†	-22.3	-1.4	-0.8364	ug/L	-0.8364	ppb	02:35:05
2	B 249.677†	-329.5	77.8	2.2679	ug/L	2.2679	ppb	02:35:05
2	Ba 233.527†	14.0	13.0	0.1262	ug/L	0.1262	ppb	02:35:05
2	Be 313.107†	-3620.2	251.2	0.1128	ug/L	0.1128	ppb	02:34:45
2	Cd 226.502†	-171.4	0.5	0.0069	ug/L	0.0069	ppb	02:35:05
2	Co 228.616†	-62.1	-10.6	-0.2908	ug/L	-0.2908	ppb	02:35:05
2	Cr 267.716†	70.5	11.2	0.1576	ug/L	0.1576	ppb	02:35:05
2	Cu 324.752†	6442.8	-355.6	-1.1945	ug/L	-1.1945	ppb	02:34:45
2	Mn 257.610†	523.3	76.8	0.1068	ug/L	0.1068	ppb	02:35:05
2	Mo 202.031†	10.3	-3.6	-0.3345	ug/L	-0.3345	ppb	02:35:05
2	Ni 231.604†	35.4	-28.4	-0.9501	ug/L	-0.9501	ppb	02:35:05

2	P 214.914†	178.3	-2.2	-1.5166 ug/L	-1.5166 ppb	02:35:05
2	Pb 220.353†	-64.0	-14.5	-2.3829 ug/L	-2.3829 ppb	02:35:05
2	S 181.975 Axial†	66.7	29.8	56.999 ug/L	56.999 ppb	02:35:05
2	Sb 206.836†	37.1	11.0	4.7143 ug/L	4.7143 ppb	02:35:05
2	Se 196.026†	-14.0	8.0	6.7428 ug/L	6.7428 ppb	02:35:05
2	Si 251.611†	642.8	108.2	4.2334 ug/L	4.2334 ppb	02:35:05
2	Sn 189.927†	12.6	3.7	0.8773 ug/L	0.8773 ppb	02:35:05
2	Ti 334.940†	-1259.1	-216.1	-0.3766 ug/L	-0.3766 ppb	02:34:45
2	Tl 190.801†	-26.3	2.0	0.8384 ug/L	0.8384 ppb	02:35:05
2	U 409.014†	-2681.3	-465.2	-14.128 ug/L	-14.128 ppb	02:34:45
2	V 292.402†	-1429.3	-106.9	-0.9053 ug/L	-0.9053 ppb	02:34:45
2	Zn 213.857†	584.1	19.5	0.2612 ug/L	0.2612 ppb	02:35:05
2	SiO2†	677.1	140.5	11.810 ug/L	11.810 ppb	02:35:41
3	Sc Radial	3229.2	3229.2	101 %		02:34:13
3	Y RADIAL	2652.8	2652.8	101.0 %		02:34:13
3	Al 396.153Radial†	-69.8	-7.2	-15.620 ug/L	-15.620 ppb	02:34:13
3	Ca 317.933Radial†	12.5	-0.1	-0.2230 ug/L	-0.2230 ppb	02:34:13
3	Fe 238.204 Radial†	8.1	-1.4	-40.289 ug/L	-40.289 ppb	02:34:13
3	K 766.490 Radial†	2451.3	406.0	198.37 ug/L	198.37 ppb	02:33:53
3	Mg 279.077 IEC†	4.2	2.5	253.83 ug/L	253.83 ppb	02:34:13
3	Na 589.592 Radial†	-928.8	-189.1	-59.819 ug/L	-59.819 ppb	02:33:53
3	Sr 421.552†	19.1	-15.7	-0.1508 ug/L	-0.1508 ppb	02:33:53
3	Sc 361.383	872313.3	872313.3	110.15 %		02:35:10
3	Y 371.029	744690.2	744690.2	109.89 %		02:35:10
3	Ag 328.068†	141.3	-3.0	-0.0196 ug/L	-0.0196 ppb	02:35:10
3	As 188.979†	-20.7	0.1	0.0399 ug/L	0.0399 ppb	02:35:30
3	B 249.677†	-302.7	102.4	2.9871 ug/L	2.9871 ppb	02:35:30
3	Ba 233.527†	-1.7	-1.3	-0.0151 ug/L	-0.0151 ppb	02:35:30
3	Be 313.107†	-3610.2	264.2	0.1188 ug/L	0.1188 ppb	02:35:10
3	Cd 226.502†	-172.9	-0.7	-0.0098 ug/L	-0.0098 ppb	02:35:30
3	Co 228.616†	-46.2	3.9	0.1076 ug/L	0.1076 ppb	02:35:30
3	Cr 267.716†	78.1	18.1	0.2511 ug/L	0.2511 ppb	02:35:30
3	Cu 324.752†	6477.3	-331.3	-1.1136 ug/L	-1.1136 ppb	02:35:10
3	Mn 257.610†	527.2	79.8	0.0960 ug/L	0.0960 ppb	02:35:30
3	Mo 202.031†	6.4	-7.2	-0.6615 ug/L	-0.6615 ppb	02:35:30
3	Ni 231.604†	57.8	-8.1	-0.2716 ug/L	-0.2716 ppb	02:35:30
3	P 214.914†	177.8	-2.9	-2.0263 ug/L	-2.0263 ppb	02:35:30
3	Pb 220.353†	-67.8	-17.9	-2.9379 ug/L	-2.9379 ppb	02:35:30
3	S 181.975 Axial†	63.0	26.4	50.343 ug/L	50.343 ppb	02:35:30
3	Sb 206.836†	32.7	6.9	3.0041 ug/L	3.0041 ppb	02:35:30
3	Se 196.026†	-22.6	0.2	0.0247 ug/L	0.0247 ppb	02:35:30
3	Si 251.611†	669.0	131.3	5.1422 ug/L	5.1422 ppb	02:35:30
3	Sn 189.927†	18.7	9.2	2.1874 ug/L	2.1874 ppb	02:35:30
3	Ti 334.940†	-1225.1	-183.9	-0.3448 ug/L	-0.3448 ppb	02:35:10
3	Tl 190.801†	-27.7	0.8	0.3380 ug/L	0.3380 ppb	02:35:30
3	U 409.014†	-2653.7	-437.2	-13.275 ug/L	-13.275 ppb	02:35:10
3	V 292.402†	-1376.5	-57.4	-0.4941 ug/L	-0.4941 ppb	02:35:10
3	Zn 213.857†	593.5	27.5	0.3607 ug/L	0.3607 ppb	02:35:30
3	SiO2†	646.1	111.5	9.3891 ug/L	9.3891 ppb	02:35:46

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	871688.9	110.07	%	0.070				0.06%
Sc Radial	3231.6	101	%	0.2				0.18%
Y 371.029	743826.2	109.77	%	0.111				0.10%
Y RADIAL	2658.5	101.2	%	0.19				0.19%
Ag 328.068†	4.5	0.0237	ug/L	0.20519	0.0237	ppb	0.20519	866.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-11.3	-24.393	ug/L	14.9388	-24.393	ppb	14.9388	61.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.9	-1.7158	ug/L	2.32377	-1.7158	ppb	2.32377	135.43%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	91.7	2.6743	ug/L	0.36862	2.6743	ppb	0.36862	13.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	3.4	0.0312	ug/L	0.08232	0.0312	ppb	0.08232	264.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	250.0	0.1122	ug/L	0.00688	0.1122	ppb	0.00688	6.13%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.1	-8.7365	ug/L	7.68504	-8.7365	ppb	7.68504	87.96%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                4.4      0.0674 ug/L       0.11948      0.0674 ppb        0.11948 177.36%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                0.7      0.0193 ug/L       0.27669      0.0193 ppb        0.27669 >999.9%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               18.3      0.2548 ug/L       0.09903      0.2548 ppb        0.09903  38.87%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -311.6     -1.0459 ug/L       0.19165     -1.0459 ppb        0.19165  18.32%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        -1.0     -29.221 ug/L        9.7468     -29.221 ppb         9.7468  33.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†        377.9      184.67 ug/L        29.499      184.67 ppb         29.499  15.97%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            0.3      28.856 ug/L      194.9820      28.856 ppb       194.9820 675.71%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               69.0      0.0914 ug/L       0.01812      0.0914 ppb        0.01812  19.83%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               -8.1     -0.7444 ug/L       0.45705     -0.7444 ppb        0.45705  61.40%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      -209.9     -66.404 ug/L        8.3005     -66.404 ppb         8.3005  12.50%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              -17.0     -0.5675 ug/L       0.34746     -0.5675 ppb        0.34746  61.22%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 1.1      1.1031 ug/L       4.98548      1.1031 ppb        4.98548 451.94%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              -16.0     -2.6315 ug/L       0.28195     -2.6315 ppb        0.28195  10.71%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†          30.0      57.330 ug/L        7.1580      57.330 ppb         7.1580  12.49%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                9.2      3.9599 ug/L       0.87269      3.9599 ppb        0.87269  22.04%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -0.2     -0.2545 ug/L       7.14090     -0.2545 ppb        7.14090 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              111.9      4.3847 ug/L       0.69432      4.3847 ppb        0.69432  15.84%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                4.9      1.1569 ug/L       0.92298      1.1569 ppb        0.92298  79.78%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -24.5     -0.2357 ug/L       0.07418     -0.2357 ppb        0.07418  31.47%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†             -213.2     -0.3797 ug/L       0.03646     -0.3797 ppb        0.03646   9.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.8     -0.3176 ug/L       1.58868     -0.3176 ppb        1.58868 500.26%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†              -474.1     -14.397 ug/L        1.2774     -14.397 ppb         1.2774   8.87%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -83.9     -0.7199 ug/L       0.20855     -0.7199 ppb        0.20855  28.97%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               23.4      0.3085 ug/L       0.04996      0.3085 ppb        0.04996  16.20%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    132.1      11.118 ug/L        1.5066      11.118 ppb         1.5066  13.55%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 65
Sample ID: 247178004|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 86
Date Collected: 3/11/2010 02:37:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178004|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3428.6	3428.6	107	%			02:40:09
1	Y RADIAL	3190.6	3190.6	121.4	%			02:40:09
1	Al 396.153Radial†	14673.2	13776.5	29809	ug/L	29809	ppb	02:39:49
1	Ca 317.933Radial†	2328.4	2163.8	9040.7	ug/L	9040.7	ppb	02:40:09
1	Fe 238.204 Radial†	2487.2	2315.2	66636	ug/L	66636	ppb	02:40:09
1	K 766.490 Radial†	13975.9	11036.0	5387.8	ug/L	5387.8	ppb	02:39:49
1	Mg 279.077 IEC†	72.6	66.2	6777.4	ug/L	6777.4	ppb	02:40:09
1	Na 589.592 Radial†	212.1	930.9	294.48	ug/L	294.48	ppb	02:39:49
1	Sr 421.552†	6467.0	6009.8	57.808	ug/L	57.808	ppb	02:39:49
1	Sc 361.383	898965.4	898965.4	113.51	%			02:41:07
1	Y 371.029	857266.9	857266.9	126.51	%			02:41:07
1	Ag 328.068†	-3811.3	-3489.0	2.2993	ug/L	2.2993	ppb	02:41:07
1	As 188.979†	-22.2	-0.7	31.340	ug/L	31.340	ppb	02:41:27
1	B 249.677†	389.4	720.3	10.085	ug/L	10.085	ppb	02:41:07
1	Ba 233.527†	38253.0	33700.2	335.87	ug/L	335.87	ppb	02:41:07
1	Be 313.107†	-1545.5	2180.4	5.2181	ug/L	5.2181	ppb	02:41:07
1	Cd 226.502†	459.5	561.0	1.6994	ug/L	1.6994	ppb	02:41:27
1	Co 228.616†	737.5	695.6	14.464	ug/L	14.464	ppb	02:41:27
1	Cr 267.716†	3298.6	2853.1	42.011	ug/L	42.011	ppb	02:41:27
1	Cu 324.752†	49031.1	36983.2	128.43	ug/L	128.43	ppb	02:41:07
1	Mn 257.610†	1491930.8	1313953.3	1823.6	ug/L	1823.6	ppb	02:41:07
1	Mo 202.031†	-8.6	-20.6	3.3997	ug/L	3.3997	ppb	02:41:27
1	Ni 231.604†	1291.0	1076.7	35.981	ug/L	35.981	ppb	02:41:27
1	P 214.914†	812.3	551.3	371.42	ug/L	371.42	ppb	02:41:27
1	Pb 220.353†	562.4	539.1	85.603	ug/L	85.603	ppb	02:41:27
1	S 181.975 Axial†	211.4	155.4	291.31	ug/L	291.31	ppb	02:41:27
1	Sb 206.836†	43.3	15.4	-0.9831	ug/L	-0.9831	ppb	02:41:27
1	Se 196.026†	-288.8	-233.7	-7.4905	ug/L	-7.4905	ppb	02:41:27
1	Si 251.611†	890193.7	783761.4	30643	ug/L	30643	ppb	02:41:07
1	Sn 189.927†	-30.2	-34.4	-10.405	ug/L	-10.405	ppb	02:41:27
1	Ti 334.940†	1178589.0	1039234.6	1864.7	ug/L	1864.7	ppb	02:41:07
1	Tl 190.801†	-117.0	-77.1	-7.7823	ug/L	-7.7823	ppb	02:41:27
1	U 409.014†	-2033.6	180.5	-2.2004	ug/L	-2.2004	ppb	02:41:07
1	V 292.402†	9584.2	9635.7	67.367	ug/L	67.367	ppb	02:41:07
1	Zn 213.857†	27018.2	23290.9	287.56	ug/L	287.56	ppb	02:41:07
1	SiO2†	907126.1	798679.4	67100	ug/L	67100	ppb	02:42:25
2	Sc Radial	3414.7	3414.7	107	%			02:40:34
2	Y RADIAL	3175.9	3175.9	120.9	%			02:40:34
2	Al 396.153Radial†	15151.7	14281.4	30902	ug/L	30902	ppb	02:40:14
2	Ca 317.933Radial†	2353.9	2196.6	9177.8	ug/L	9177.8	ppb	02:40:34
2	Fe 238.204 Radial†	2515.3	2351.1	67669	ug/L	67669	ppb	02:40:34
2	K 766.490 Radial†	14350.9	11441.2	5585.7	ug/L	5585.7	ppb	02:40:14
2	Mg 279.077 IEC†	75.3	68.9	7061.4	ug/L	7061.4	ppb	02:40:34
2	Na 589.592 Radial†	226.8	945.5	299.10	ug/L	299.10	ppb	02:40:14
2	Sr 421.552†	6684.7	6238.7	60.011	ug/L	60.011	ppb	02:40:14
2	Sc 361.383	913374.0	913374.0	115.33	%			02:41:32
2	Y 371.029	870640.1	870640.1	128.48	%			02:41:32
2	Ag 328.068†	-3848.8	-3468.6	2.7256	ug/L	2.7256	ppb	02:41:32
2	As 188.979†	-32.8	-9.6	26.377	ug/L	26.377	ppb	02:41:52
2	B 249.677†	389.7	715.2	9.7701	ug/L	9.7701	ppb	02:41:32
2	Ba 233.527†	38857.3	33692.6	335.82	ug/L	335.82	ppb	02:41:32
2	Be 313.107†	-1502.5	2239.1	5.2446	ug/L	5.2446	ppb	02:41:32
2	Cd 226.502†	465.2	559.6	1.5696	ug/L	1.5696	ppb	02:41:52
2	Co 228.616†	718.0	668.4	13.699	ug/L	13.699	ppb	02:41:52
2	Cr 267.716†	3245.6	2761.3	40.794	ug/L	40.794	ppb	02:41:52
2	Cu 324.752†	49784.2	36954.8	128.39	ug/L	128.39	ppb	02:41:32
2	Mn 257.610†	1513936.8	1312300.1	1821.4	ug/L	1821.4	ppb	02:41:32
2	Mo 202.031†	-12.4	-23.8	3.1868	ug/L	3.1868	ppb	02:41:52
2	Ni 231.604†	1274.8	1044.8	34.913	ug/L	34.913	ppb	02:41:52

2	P 214.914†	815.2	542.5	363.82 ug/L	363.82 ppb	02:41:52
2	Pb 220.353†	554.9	524.9	83.355 ug/L	83.355 ppb	02:41:52
2	S 181.975 Axial†	212.7	153.6	287.60 ug/L	287.60 ppb	02:41:52
2	Sb 206.836†	40.8	12.6	-2.2674 ug/L	-2.2674 ppb	02:41:52
2	Se 196.026†	-282.3	-224.1	3.9156 ug/L	3.9156 ppb	02:41:52
2	Si 251.611†	904658.6	783932.1	30649 ug/L	30649 ppb	02:41:32
2	Sn 189.927†	-34.0	-37.3	-11.136 ug/L	-11.136 ppb	02:41:52
2	Ti 334.940†	1197456.1	1039214.4	1864.7 ug/L	1864.7 ppb	02:41:32
2	Tl 190.801†	-107.3	-67.1	-3.6870 ug/L	-3.6870 ppb	02:41:52
2	U 409.014†	-2241.8	28.3	-6.9405 ug/L	-6.9405 ppb	02:41:32
2	V 292.402†	9620.8	9534.2	66.378 ug/L	66.378 ppb	02:41:32
2	Zn 213.857†	27346.6	23200.2	286.25 ug/L	286.25 ppb	02:41:32
2	SiO2†	915005.5	792904.8	66615 ug/L	66615 ppb	02:42:31
3	Sc Radial	3385.1	3385.1	106 %		02:40:59
3	Y RADIAL	3148.5	3148.5	119.8 %		02:40:59
3	Al 396.153Radial†	15102.3	14358.8	31069 ug/L	31069 ppb	02:40:39
3	Ca 317.933Radial†	2313.1	2177.2	9096.8 ug/L	9096.8 ppb	02:40:59
3	Fe 238.204 Radial†	2470.7	2329.5	67047 ug/L	67047 ppb	02:40:59
3	K 766.490 Radial†	14428.3	11632.0	5679.0 ug/L	5679.0 ppb	02:40:39
3	Mg 279.077 IEC†	71.7	66.2	6781.9 ug/L	6781.9 ppb	02:40:59
3	Na 589.592 Radial†	193.2	915.5	289.61 ug/L	289.61 ppb	02:40:39
3	Sr 421.552†	6642.7	6253.8	60.157 ug/L	60.157 ppb	02:40:39
3	Sc 361.383	922956.0	922956.0	116.54 %		02:41:58
3	Y 371.029	879336.4	879336.4	129.76 %		02:41:58
3	Ag 328.068†	-3898.2	-3476.3	2.4888 ug/L	2.4888 ppb	02:41:58
3	As 188.979†	-35.1	-11.3	25.022 ug/L	25.022 ppb	02:42:18
3	B 249.677†	364.4	689.9	9.1381 ug/L	9.1381 ppb	02:41:58
3	Ba 233.527†	38592.9	33115.9	330.09 ug/L	330.09 ppb	02:41:58
3	Be 313.107†	-1583.9	2182.8	5.1598 ug/L	5.1598 ppb	02:41:58
3	Cd 226.502†	461.9	552.6	1.5260 ug/L	1.5260 ppb	02:42:18
3	Co 228.616†	710.9	655.9	13.418 ug/L	13.418 ppb	02:42:18
3	Cr 267.716†	3265.6	2749.3	40.602 ug/L	40.602 ppb	02:42:18
3	Cu 324.752†	49793.8	36514.8	126.87 ug/L	126.87 ppb	02:41:58
3	Mn 257.610†	1506145.8	1291986.6	1793.3 ug/L	1793.3 ppb	02:41:58
3	Mo 202.031†	7.2	-6.9	4.6850 ug/L	4.6850 ppb	02:42:18
3	Ni 231.604†	1270.0	1029.2	34.391 ug/L	34.391 ppb	02:42:18
3	P 214.914†	813.2	533.5	357.41 ug/L	357.41 ppb	02:42:18
3	Pb 220.353†	539.5	506.6	80.486 ug/L	80.486 ppb	02:42:18
3	S 181.975 Axial†	195.5	136.9	255.74 ug/L	255.74 ppb	02:42:18
3	Sb 206.836†	48.6	19.0	0.5896 ug/L	0.5896 ppb	02:42:18
3	Se 196.026†	-277.7	-217.6	7.7914 ug/L	7.7914 ppb	02:42:18
3	Si 251.611†	899884.1	771691.6	30171 ug/L	30171 ppb	02:41:58
3	Sn 189.927†	-34.8	-37.7	-11.207 ug/L	-11.207 ppb	02:42:18
3	Ti 334.940†	1193028.1	1024635.5	1838.5 ug/L	1838.5 ppb	02:41:58
3	Tl 190.801†	-99.5	-59.4	-0.8668 ug/L	-0.8668 ppb	02:42:18
3	U 409.014†	-2219.1	67.9	-5.6648 ug/L	-5.6648 ppb	02:41:58
3	V 292.402†	9590.5	9421.7	65.593 ug/L	65.593 ppb	02:41:58
3	Zn 213.857†	27205.7	22833.1	281.65 ug/L	281.65 ppb	02:41:58
3	SiO2†	916298.6	785777.5	66016 ug/L	66016 ppb	02:42:37

Mean Data: 247178004|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	911765.1	115.13	%	1.525				1.32%
Sc Radial	3409.4	106	%	0.7				0.65%
Y 371.029	869081.1	128.25	%	1.641				1.28%
Y RADIAL	3171.7	120.7	%	0.81				0.67%
Ag 328.068†	-3477.9	2.5046	ug/L	0.21358	2.5046	ppb	0.21358	8.53%
Al 396.153Radial†	14138.9	30593	ug/L	684.2	30593	ppb	684.2	2.24%
As 188.979†	-7.2	27.580	ug/L	3.3260	27.580	ppb	3.3260	12.06%
B 249.677†	708.5	9.6645	ug/L	0.48244	9.6645	ppb	0.48244	4.99%
Ba 233.527†	33502.9	333.93	ug/L	3.322	333.93	ppb	3.322	0.99%
Be 313.107†	2200.8	5.2075	ug/L	0.04340	5.2075	ppb	0.04340	0.83%
Ca 317.933Radial†	2179.2	9105.1	ug/L	68.90	9105.1	ppb	68.90	0.76%
Cd 226.502†	557.8	1.5983	ug/L	0.09019	1.5983	ppb	0.09019	5.64%
Co 228.616†	673.3	13.860	ug/L	0.5412	13.860	ppb	0.5412	3.90%
Cr 267.716†	2787.9	41.136	ug/L	0.7644	41.136	ppb	0.7644	1.86%
Cu 324.752†	36817.6	127.90	ug/L	0.889	127.90	ppb	0.889	0.69%
Fe 238.204 Radial†	2331.9	67117	ug/L	520.1	67117	ppb	520.1	0.77%
K 766.490 Radial†	11369.8	5550.8	ug/L	148.69	5550.8	ppb	148.69	2.68%

Mg 279.077 IEC†	67.1	6873.6	ug/L	162.69	6873.6	ppb	162.69	2.37%
Mn 257.610†	1306080.0	1812.7	ug/L	16.92	1812.7	ppb	16.92	0.93%
Mo 202.031†	-17.1	3.7572	ug/L	0.81057	3.7572	ppb	0.81057	21.57%
Na 589.592 Radial†	930.6	294.40	ug/L	4.749	294.40	ppb	4.749	1.61%
Ni 231.604†	1050.2	35.095	ug/L	0.8103	35.095	ppb	0.8103	2.31%
P 214.914†	542.4	364.21	ug/L	7.014	364.21	ppb	7.014	1.93%
Pb 220.353†	523.5	83.148	ug/L	2.5647	83.148	ppb	2.5647	3.08%
S 181.975 Axial†	148.7	278.21	ug/L	19.555	278.21	ppb	19.555	7.03%
Sb 206.836†	15.7	-0.8870	ug/L	1.43090	-0.8870	ppb	1.43090	161.32%
Se 196.026†	-225.2	1.4055	ug/L	7.94414	1.4055	ppb	7.94414	565.22%
Si 251.611†	779795.0	30488	ug/L	274.4	30488	ppb	274.4	0.90%
Sn 189.927†	-36.5	-10.916	ug/L	0.4440	-10.916	ppb	0.4440	4.07%
Sr 421.552†	6167.4	59.325	ug/L	1.3162	59.325	ppb	1.3162	2.22%
Ti 334.940†	1034361.5	1856.0	ug/L	15.10	1856.0	ppb	15.10	0.81%
Tl 190.801†	-67.9	-4.1120	ug/L	3.47731	-4.1120	ppb	3.47731	84.56%
U 409.014†	92.2	-4.9352	ug/L	2.45284	-4.9352	ppb	2.45284	49.70%
V 292.402†	9530.5	66.446	ug/L	0.8890	66.446	ppb	0.8890	1.34%
Zn 213.857†	23108.1	285.16	ug/L	3.101	285.16	ppb	3.101	1.09%
SiO2†	792453.9	66577	ug/L	543.0	66577	ppb	543.0	0.82%

Sequence No.: 66
Sample ID: 247178005|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 87
Date Collected: 3/11/2010 02:44:48
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178005|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3308.6	3308.6	103	%			02:46:41
1	Y RADIAL	3322.5	3322.5	126.5	%			02:46:41
1	Al 396.153Radial†	23090.9	22426.5	48526	ug/L	48526	ppb	02:46:41
1	Ca 317.933Radial†	3586.5	3461.2	14462	ug/L	14462	ppb	02:47:01
1	Fe 238.204 Radial†	4069.2	3931.7	113160	ug/L	113160	ppb	02:46:41
1	K 766.490 Radial†	21609.9	18903.5	9229.1	ug/L	9229.1	ppb	02:46:41
1	Mg 279.077 IEC†	127.0	121.3	12438	ug/L	12438	ppb	02:47:01
1	Na 589.592 Radial†	1045.8	1745.5	552.18	ug/L	552.18	ppb	02:46:41
1	Sr 421.552†	11337.8	10946.6	105.31	ug/L	105.31	ppb	02:46:41
1	Sc 361.383	917973.0	917973.0	115.91	%			02:47:59
1	Y 371.029	933697.4	933697.4	137.79	%			02:47:59
1	Ag 328.068†	-6366.7	-5624.1	5.6885	ug/L	5.6885	ppb	02:48:04
1	As 188.979†	-46.8	-21.5	38.809	ug/L	38.809	ppb	02:48:24
1	B 249.677†	770.7	1042.2	11.873	ug/L	11.873	ppb	02:48:04
1	Ba 233.527†	62024.1	53510.5	533.54	ug/L	533.54	ppb	02:48:04
1	Be 313.107†	-4603.1	-429.3	6.3350	ug/L	6.3350	ppb	02:48:04
1	Cd 226.502†	738.2	793.1	0.4074	ug/L	0.4074	ppb	02:48:24
1	Co 228.616†	1105.4	999.6	20.135	ug/L	20.135	ppb	02:48:24
1	Cr 267.716†	7123.8	6093.1	88.561	ug/L	88.561	ppb	02:48:04
1	Cu 324.752†	25094.4	15437.8	58.246	ug/L	58.246	ppb	02:48:04
1	Mn 257.610†	2416290.8	2084213.8	2893.3	ug/L	2893.3	ppb	02:47:59
1	Mo 202.031†	3.7	-9.8	8.0608	ug/L	8.0608	ppb	02:48:24
1	Ni 231.604†	2204.6	1841.4	61.536	ug/L	61.536	ppb	02:48:24
1	P 214.914†	1331.4	984.3	700.62	ug/L	700.62	ppb	02:48:24
1	Pb 220.353†	695.2	643.5	100.36	ug/L	100.36	ppb	02:48:24
1	S 181.975 Axial†	263.4	196.4	366.14	ug/L	366.14	ppb	02:48:24
1	Sb 206.836†	48.8	19.3	-3.5749	ug/L	-3.5749	ppb	02:48:24
1	Se 196.026†	-449.2	-366.8	12.447	ug/L	12.447	ppb	02:48:24
1	Si 251.611†	1021802.3	881065.9	34447	ug/L	34447	ppb	02:47:59
1	Sn 189.927†	-58.4	-58.1	-17.775	ug/L	-17.775	ppb	02:48:24
1	Ti 334.940†	1857383.6	1603353.6	2876.9	ug/L	2876.9	ppb	02:47:59
1	Tl 190.801†	-147.7	-101.5	-4.4711	ug/L	-4.4711	ppb	02:48:24
1	U 409.014†	-10349.6	-6956.9	-224.40	ug/L	-224.40	ppb	02:47:59
1	V 292.402†	17419.9	16221.0	113.16	ug/L	113.16	ppb	02:48:04
1	Zn 213.857†	43207.6	36765.2	452.89	ug/L	452.89	ppb	02:48:04
1	SiO2†	1023558.9	882582.5	74149	ug/L	74149	ppb	02:49:32
2	Sc Radial	3596.5	3596.5	112	%			02:47:06
2	Y RADIAL	3565.0	3565.0	135.7	%			02:47:06
2	Al 396.153Radial†	22505.7	20114.8	43524	ug/L	43524	ppb	02:47:06
2	Ca 317.933Radial†	3605.0	3199.6	13369	ug/L	13369	ppb	02:47:26
2	Fe 238.204 Radial†	3990.1	3545.7	102050	ug/L	102050	ppb	02:47:06
2	K 766.490 Radial†	21352.9	16999.0	8299.1	ug/L	8299.1	ppb	02:47:06
2	Mg 279.077 IEC†	130.4	114.5	11738	ug/L	11738	ppb	02:47:26
2	Na 589.592 Radial†	969.2	1596.2	504.95	ug/L	504.95	ppb	02:47:06
2	Sr 421.552†	11087.7	9844.7	94.706	ug/L	94.706	ppb	02:47:06
2	Sc 361.383	915365.7	915365.7	115.58	%			02:48:30
2	Y 371.029	931680.0	931680.0	137.49	%			02:48:30
2	Ag 328.068†	-6424.7	-5689.9	1.9195	ug/L	1.9195	ppb	02:48:35
2	As 188.979†	-25.6	-3.3	46.920	ug/L	46.920	ppb	02:48:55
2	B 249.677†	788.5	1059.5	14.179	ug/L	14.179	ppb	02:48:35
2	Ba 233.527†	62359.2	53952.9	537.59	ug/L	537.59	ppb	02:48:35
2	Be 313.107†	-4817.2	-625.9	6.2526	ug/L	6.2526	ppb	02:48:35
2	Cd 226.502†	779.2	830.4	2.1254	ug/L	2.1254	ppb	02:48:55
2	Co 228.616†	1113.5	1009.2	20.557	ug/L	20.557	ppb	02:48:55
2	Cr 267.716†	7216.6	6190.9	89.447	ug/L	89.447	ppb	02:48:35
2	Cu 324.752†	25295.7	15673.6	58.452	ug/L	58.452	ppb	02:48:35
2	Mn 257.610†	2412076.1	2086504.9	2895.4	ug/L	2895.4	ppb	02:48:30
2	Mo 202.031†	-0.5	-13.5	6.8498	ug/L	6.8498	ppb	02:48:55
2	Ni 231.604†	2201.2	1843.8	61.617	ug/L	61.617	ppb	02:48:55

2	P 214.914†	1342.9	997.6	718.81	ug/L	718.81 ppb	02:48:55
2	Pb 220.353†	681.5	633.3	99.145	ug/L	99.145 ppb	02:48:55
2	S 181.975 Axial†	251.0	186.3	347.75	ug/L	347.75 ppb	02:48:55
2	Sb 206.836†	57.4	26.9	-0.0567	ug/L	-0.0567 ppb	02:48:55
2	Se 196.026†	-440.6	-360.5	-14.224	ug/L	-14.224 ppb	02:48:55
2	Si 251.611†	1019818.2	881860.2	34478	ug/L	34478 ppb	02:48:30
2	Sn 189.927†	-50.1	-51.2	-15.672	ug/L	-15.672 ppb	02:48:55
2	Ti 334.940†	1853951.1	1604948.1	2879.7	ug/L	2879.7 ppb	02:48:30
2	Tl 190.801†	-141.7	-96.6	-2.4375	ug/L	-2.4375 ppb	02:48:55
2	U 409.014†	-10133.8	-6795.6	-218.24	ug/L	-218.24 ppb	02:48:30
2	V 292.402†	17524.4	16354.2	115.86	ug/L	115.86 ppb	02:48:35
2	Zn 213.857†	43375.2	37016.4	457.76	ug/L	457.76 ppb	02:48:35
2	SiO2†	1017867.3	880173.4	73947	ug/L	73947 ppb	02:49:38
3	Sc Radial	3477.3	3477.3	109	%		02:47:31
3	Y RADIAL	3474.6	3474.6	132.2	%		02:47:31
3	Al 396.153Radial†	22424.9	20728.0	44851	ug/L	44851 ppb	02:47:31
3	Ca 317.933Radial†	3571.4	3278.8	13699	ug/L	13699 ppb	02:47:51
3	Fe 238.204 Radial†	3974.3	3653.1	105150	ug/L	105150 ppb	02:47:31
3	K 766.490 Radial†	21334.6	17634.6	8609.5	ug/L	8609.5 ppb	02:47:31
3	Mg 279.077 IEC†	126.7	115.1	11801	ug/L	11801 ppb	02:47:51
3	Na 589.592 Radial†	969.8	1626.4	514.49	ug/L	514.49 ppb	02:47:31
3	Sr 421.552†	11027.5	10127.9	97.431	ug/L	97.431 ppb	02:47:31
3	Sc 361.383	924039.9	924039.9	116.68	%		02:49:01
3	Y 371.029	940788.1	940788.1	138.83	%		02:49:01
3	Ag 328.068†	-6424.3	-5637.4	3.1420	ug/L	3.1420 ppb	02:49:06
3	As 188.979†	-40.5	-15.8	40.151	ug/L	40.151 ppb	02:49:26
3	B 249.677†	767.0	1034.6	12.955	ug/L	12.955 ppb	02:49:06
3	Ba 233.527†	62250.6	53353.3	531.74	ug/L	531.74 ppb	02:49:06
3	Be 313.107†	-4820.3	-589.4	6.2324	ug/L	6.2324 ppb	02:49:06
3	Cd 226.502†	743.4	793.4	1.2418	ug/L	1.2418 ppb	02:49:26
3	Co 228.616†	1122.0	1007.5	20.496	ug/L	20.496 ppb	02:49:26
3	Cr 267.716†	7257.2	6167.1	89.245	ug/L	89.245 ppb	02:49:06
3	Cu 324.752†	25352.4	15516.7	58.085	ug/L	58.085 ppb	02:49:06
3	Mn 257.610†	2417961.1	2071958.5	2875.6	ug/L	2875.6 ppb	02:49:01
3	Mo 202.031†	-1.7	-14.5	6.9989	ug/L	6.9989 ppb	02:49:26
3	Ni 231.604†	2210.3	1833.8	61.282	ug/L	61.282 ppb	02:49:26
3	P 214.914†	1359.6	1000.9	719.45	ug/L	719.45 ppb	02:49:26
3	Pb 220.353†	685.7	631.4	98.689	ug/L	98.689 ppb	02:49:26
3	S 181.975 Axial†	269.3	200.0	373.70	ug/L	373.70 ppb	02:49:26
3	Sb 206.836†	68.7	36.1	3.9027	ug/L	3.9027 ppb	02:49:26
3	Se 196.026†	-437.7	-354.4	-0.1098	ug/L	-0.1098 ppb	02:49:26
3	Si 251.611†	1022626.6	875984.6	34248	ug/L	34248 ppb	02:49:01
3	Sn 189.927†	-47.3	-48.3	-15.116	ug/L	-15.116 ppb	02:49:26
3	Ti 334.940†	1861006.8	1595938.0	2863.6	ug/L	2863.6 ppb	02:49:01
3	Tl 190.801†	-162.9	-113.7	-9.6868	ug/L	-9.6868 ppb	02:49:26
3	U 409.014†	-10160.2	-6735.9	-216.78	ug/L	-216.78 ppb	02:49:01
3	V 292.402†	17483.0	16176.4	113.97	ug/L	113.97 ppb	02:49:06
3	Zn 213.857†	43418.0	36700.7	453.27	ug/L	453.27 ppb	02:49:06
3	SiO2†	1029758.6	882098.3	74108	ug/L	74108 ppb	02:49:44

Mean Data: 247178005|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	919126.2	116.06	%	0.562				0.48%
Sc Radial	3460.8	108	%	4.5				4.18%
Y 371.029	935388.5	138.04	%	0.706				0.51%
Y RADIAL	3454.0	131.5	%	4.66				3.55%
Ag 328.068†	-5650.5	3.5833	ug/L	1.92286	3.5833	ppb	1.92286	53.66%
Al 396.153Radial†	21089.8	45633	ug/L	2591.3	45633	ppb	2591.3	5.68%
As 188.979†	-13.6	41.960	ug/L	4.3472	41.960	ppb	4.3472	10.36%
B 249.677†	1045.4	13.002	ug/L	1.1535	13.002	ppb	1.1535	8.87%
Ba 233.527†	53605.5	534.29	ug/L	2.994	534.29	ppb	2.994	0.56%
Be 313.107†	-548.2	6.2733	ug/L	0.05435	6.2733	ppb	0.05435	0.87%
Ca 317.933Radial†	3313.2	13843	ug/L	560.4	13843	ppb	560.4	4.05%
Cd 226.502†	805.7	1.2582	ug/L	0.85913	1.2582	ppb	0.85913	68.28%
Co 228.616†	1005.5	20.396	ug/L	0.2282	20.396	ppb	0.2282	1.12%
Cr 267.716†	6150.4	89.084	ug/L	0.4641	89.084	ppb	0.4641	0.52%
Cu 324.752†	15542.7	58.261	ug/L	0.1841	58.261	ppb	0.1841	0.32%
Fe 238.204 Radial†	3710.2	106790	ug/L	5734.0	106790	ppb	5734.0	5.37%
K 766.490 Radial†	17845.7	8712.6	ug/L	473.52	8712.6	ppb	473.52	5.43%

Mg 279.077 IEC†	117.0	11992	ug/L	387.4	11992	ppb	387.4	3.23%
Mn 257.610†	2080892.4	2888.1	ug/L	10.89	2888.1	ppb	10.89	0.38%
Mo 202.031†	-12.6	7.3032	ug/L	0.66036	7.3032	ppb	0.66036	9.04%
Na 589.592 Radial†	1656.0	523.88	ug/L	24.976	523.88	ppb	24.976	4.77%
Ni 231.604†	1839.7	61.478	ug/L	0.1747	61.478	ppb	0.1747	0.28%
P 214.914†	994.3	712.96	ug/L	10.692	712.96	ppb	10.692	1.50%
Pb 220.353†	636.0	99.397	ug/L	0.8618	99.397	ppb	0.8618	0.87%
S 181.975 Axial†	194.3	362.53	ug/L	13.349	362.53	ppb	13.349	3.68%
Sb 206.836†	27.5	0.0904	ug/L	3.74099	0.0904	ppb	3.74099	>999.9%
Se 196.026†	-360.6	-0.6288	ug/L	13.34293	-0.6288	ppb	13.34293	>999.9%
Si 251.611†	879636.9	34391	ug/L	124.6	34391	ppb	124.6	0.36%
Sn 189.927†	-52.6	-16.188	ug/L	1.4022	-16.188	ppb	1.4022	8.66%
Sr 421.552†	10306.4	99.148	ug/L	5.5062	99.148	ppb	5.5062	5.55%
Ti 334.940†	1601413.2	2873.4	ug/L	8.62	2873.4	ppb	8.62	0.30%
Tl 190.801†	-103.9	-5.5318	ug/L	3.73927	-5.5318	ppb	3.73927	67.60%
U 409.014†	-6829.5	-219.80	ug/L	4.047	-219.80	ppb	4.047	1.84%
V 292.402†	16250.5	114.33	ug/L	1.384	114.33	ppb	1.384	1.21%
Zn 213.857†	36827.4	454.64	ug/L	2.712	454.64	ppb	2.712	0.60%
SiO2†	881618.1	74068	ug/L	107.1	74068	ppb	107.1	0.14%

Sequence No.: 67
Sample ID: 247178006|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 88
Date Collected: 3/11/2010 02:51:56
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178006|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3526.2	3526.2	110	%			02:54:09
1	Y RADIAL	3321.0	3321.0	126.4	%			02:54:09
1	Al 396.153Radial†	41441.4	37723.6	81625	ug/L	81625	ppb	02:53:49
1	Ca 317.933Radial†	5097.0	4619.7	19302	ug/L	19302	ppb	02:53:49
1	Fe 238.204 Radial†	4640.3	4207.6	121100	ug/L	121100	ppb	02:53:49
1	K 766.490 Radial†	33597.6	28506.6	13919	ug/L	13919	ppb	02:53:49
1	Mg 279.077 IEC†	207.7	187.0	19230	ug/L	19230	ppb	02:54:09
1	Na 589.592 Radial†	2742.5	3225.0	1020.2	ug/L	1020.2	ppb	02:53:49
1	Sr 421.552†	18294.7	16591.4	159.63	ug/L	159.63	ppb	02:53:49
1	Sc 361.383	902748.0	902748.0	113.99	%			02:55:07
1	Y 371.029	877081.0	877081.0	129.43	%			02:55:07
1	Ag 328.068†	-7788.4	-6964.0	1.2281	ug/L	1.2281	ppb	02:55:12
1	As 188.979†	-36.9	-13.5	40.338	ug/L	40.338	ppb	02:55:32
1	B 249.677†	1038.1	1288.0	17.696	ug/L	17.696	ppb	02:55:12
1	Ba 233.527†	96755.8	84882.5	844.53	ug/L	844.53	ppb	02:55:12
1	Be 313.107†	7563.7	10177.4	9.8147	ug/L	9.8147	ppb	02:55:12
1	Cd 226.502†	841.1	894.1	1.1464	ug/L	1.1464	ppb	02:55:32
1	Co 228.616†	1678.7	1518.6	35.687	ug/L	35.687	ppb	02:55:32
1	Cr 267.716†	8610.0	7500.6	108.30	ug/L	108.30	ppb	02:55:12
1	Cu 324.752†	26455.9	16997.3	63.943	ug/L	63.943	ppb	02:55:12
1	Mn 257.610†	2107032.9	1848064.4	2567.2	ug/L	2567.2	ppb	02:55:07
1	Mo 202.031†	-53.6	-60.1	4.1467	ug/L	4.1467	ppb	02:55:32
1	Ni 231.604†	3316.0	2848.4	95.190	ug/L	95.190	ppb	02:55:32
1	P 214.914†	1196.3	885.2	621.81	ug/L	621.81	ppb	02:55:32
1	Pb 220.353†	525.1	504.3	83.778	ug/L	83.778	ppb	02:55:32
1	S 181.975 Axial†	370.5	294.3	546.78	ug/L	546.78	ppb	02:55:32
1	Sb 206.836†	57.8	28.0	1.0812	ug/L	1.0812	ppb	02:55:32
1	Se 196.026†	-516.2	-432.1	-12.162	ug/L	-12.162	ppb	02:55:32
1	Si 251.611†	1246260.6	1092846.6	42727	ug/L	42727	ppb	02:55:07
1	Sn 189.927†	-85.0	-82.3	-23.131	ug/L	-23.131	ppb	02:55:32
1	Ti 334.940†	1457776.0	1279809.9	2296.7	ug/L	2296.7	ppb	02:55:07
1	Tl 190.801†	-131.8	-89.6	-6.1569	ug/L	-6.1569	ppb	02:55:32
1	U 409.014†	-10837.6	-7535.6	-242.92	ug/L	-242.92	ppb	02:55:07
1	V 292.402†	25378.8	23456.6	171.93	ug/L	171.93	ppb	02:55:12
1	Zn 213.857†	34967.9	30165.3	367.06	ug/L	367.06	ppb	02:55:12
1	SiO2†	1246931.0	1093435.8	91864	ug/L	91864	ppb	02:56:41
2	Sc Radial	3519.1	3519.1	110	%			02:54:35
2	Y RADIAL	3297.3	3297.3	125.5	%			02:54:35
2	Al 396.153Radial†	41700.9	38035.5	82300	ug/L	82300	ppb	02:54:15
2	Ca 317.933Radial†	5133.5	4662.2	19479	ug/L	19479	ppb	02:54:15
2	Fe 238.204 Radial†	4696.5	4267.3	122820	ug/L	122820	ppb	02:54:15
2	K 766.490 Radial†	33888.1	28832.4	14078	ug/L	14078	ppb	02:54:15
2	Mg 279.077 IEC†	203.6	183.7	18881	ug/L	18881	ppb	02:54:35
2	Na 589.592 Radial†	2760.3	3246.2	1026.9	ug/L	1026.9	ppb	02:54:15
2	Sr 421.552†	18465.0	16779.9	161.45	ug/L	161.45	ppb	02:54:15
2	Sc 361.383	925890.2	925890.2	116.91	%			02:55:38
2	Y 371.029	897764.1	897764.1	132.48	%			02:55:38
2	Ag 328.068†	-7585.9	-6620.0	3.5498	ug/L	3.5498	ppb	02:55:43
2	As 188.979†	-31.6	-8.2	43.207	ug/L	43.207	ppb	02:56:03
2	B 249.677†	966.6	1204.0	14.975	ug/L	14.975	ppb	02:55:43
2	Ba 233.527†	95800.9	81944.1	815.47	ug/L	815.47	ppb	02:55:43
2	Be 313.107†	7395.9	9868.0	9.5030	ug/L	9.5030	ppb	02:55:43
2	Cd 226.502†	845.0	879.0	0.7387	ug/L	0.7387	ppb	02:56:03
2	Co 228.616†	1684.7	1486.9	34.931	ug/L	34.931	ppb	02:56:03
2	Cr 267.716†	8442.5	7168.5	103.80	ug/L	103.80	ppb	02:55:43
2	Cu 324.752†	26166.2	16169.4	61.234	ug/L	61.234	ppb	02:55:43
2	Mn 257.610†	2088109.3	1785676.5	2481.1	ug/L	2481.1	ppb	02:55:38
2	Mo 202.031†	-62.2	-66.2	3.7174	ug/L	3.7174	ppb	02:56:03
2	Ni 231.604†	3351.1	2805.8	93.765	ug/L	93.765	ppb	02:56:03

2	P 214.914†	1195.0	857.8	599.18	ug/L	599.18 ppb	02:56:03
2	Pb 220.353†	503.6	474.4	78.782	ug/L	78.782 ppb	02:56:03
2	S 181.975 Axial†	371.2	286.7	532.19	ug/L	532.19 ppb	02:56:03
2	Sb 206.836†	52.4	22.0	-1.2918	ug/L	-1.2918 ppb	02:56:03
2	Se 196.026†	-528.9	-431.7	-6.8758	ug/L	-6.8758 ppb	02:56:03
2	Si 251.611†	1236837.3	1057459.3	41343	ug/L	41343 ppb	02:55:38
2	Sn 189.927†	-91.0	-85.6	-23.975	ug/L	-23.975 ppb	02:56:03
2	Ti 334.940†	1445840.5	1237635.8	2221.1	ug/L	2221.1 ppb	02:55:38
2	Tl 190.801†	-138.9	-92.8	-8.4824	ug/L	-8.4824 ppb	02:56:03
2	U 409.014†	-10863.2	-7319.8	-236.56	ug/L	-236.56 ppb	02:55:38
2	V 292.402†	25128.6	22686.1	165.45	ug/L	165.45 ppb	02:55:43
2	Zn 213.857†	34477.9	28979.5	351.64	ug/L	351.64 ppb	02:55:43
2	SiO2†	1233419.9	1054537.2	88596	ug/L	88596 ppb	02:56:47
3	Sc Radial	3635.2	3635.2	113	%		02:55:00
3	Y RADIAL	3399.1	3399.1	129.4	%		02:55:00
3	Al 396.153Radial†	40685.9	35928.4	77741	ug/L	77741 ppb	02:54:40
3	Ca 317.933Radial†	5032.7	4424.1	18485	ug/L	18485 ppb	02:54:40
3	Fe 238.204 Radial†	4564.3	4014.2	115540	ug/L	115540 ppb	02:54:40
3	K 766.490 Radial†	33247.1	27282.2	13321	ug/L	13321 ppb	02:54:40
3	Mg 279.077 IEC†	200.9	175.4	18034	ug/L	18034 ppb	02:55:00
3	Na 589.592 Radial†	2663.2	3080.4	974.46	ug/L	974.46 ppb	02:54:40
3	Sr 421.552†	17954.7	15793.2	151.95	ug/L	151.95 ppb	02:54:40
3	Sc 361.383	930431.6	930431.6	117.48	%		02:56:09
3	Y 371.029	900147.4	900147.4	132.84	%		02:56:09
3	Ag 328.068†	-7642.0	-6636.0	1.2222	ug/L	1.2222 ppb	02:56:14
3	As 188.979†	-32.2	-8.5	41.105	ug/L	41.105 ppb	02:56:34
3	B 249.677†	1108.0	1320.4	19.545	ug/L	19.545 ppb	02:56:14
3	Ba 233.527†	96204.5	81887.6	814.69	ug/L	814.69 ppb	02:56:14
3	Be 313.107†	7419.8	9857.5	9.4438	ug/L	9.4438 ppb	02:56:14
3	Cd 226.502†	843.9	874.6	1.4233	ug/L	1.4233 ppb	02:56:34
3	Co 228.616†	1688.5	1483.1	34.981	ug/L	34.981 ppb	02:56:34
3	Cr 267.716†	8576.0	7246.9	104.58	ug/L	104.58 ppb	02:56:14
3	Cu 324.752†	26370.5	16234.0	61.066	ug/L	61.066 ppb	02:56:14
3	Mn 257.610†	2079000.8	1769205.8	2457.6	ug/L	2457.6 ppb	02:56:09
3	Mo 202.031†	-67.2	-70.2	2.7784	ug/L	2.7784 ppb	02:56:34
3	Ni 231.604†	3349.2	2790.2	93.244	ug/L	93.244 ppb	02:56:34
3	P 214.914†	1212.5	867.7	611.79	ug/L	611.79 ppb	02:56:34
3	Pb 220.353†	538.5	502.1	83.330	ug/L	83.330 ppb	02:56:34
3	S 181.975 Axial†	377.2	290.2	539.83	ug/L	539.83 ppb	02:56:34
3	Sb 206.836†	51.4	21.0	-1.4973	ug/L	-1.4973 ppb	02:56:34
3	Se 196.026†	-521.6	-423.3	-21.042	ug/L	-21.042 ppb	02:56:34
3	Si 251.611†	1229780.4	1046288.9	40907	ug/L	40907 ppb	02:56:09
3	Sn 189.927†	-102.0	-94.7	-25.889	ug/L	-25.889 ppb	02:56:34
3	Ti 334.940†	1437225.4	1224266.5	2197.0	ug/L	2197.0 ppb	02:56:09
3	Tl 190.801†	-127.0	-82.2	-4.4139	ug/L	-4.4139 ppb	02:56:34
3	U 409.014†	-10828.5	-7245.0	-233.46	ug/L	-233.46 ppb	02:56:09
3	V 292.402†	25208.8	22649.5	166.22	ug/L	166.22 ppb	02:56:14
3	Zn 213.857†	34685.0	29011.8	353.15	ug/L	353.15 ppb	02:56:14
3	SiO2†	1216852.8	1035286.2	86979	ug/L	86979 ppb	02:56:53

Mean Data: 247178006|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	919689.9	116.13	%	1.875				1.61%
Sc Radial	3560.2	111	%	2.0				1.83%
Y 371.029	891664.2	131.58	%	1.872				1.42%
Y RADIAL	3339.2	127.1	%	2.03				1.60%
Ag 328.068†	-6740.0	2.0000	ug/L	1.34213	2.0000	ppb	1.34213	67.11%
Al 396.153Radial†	37229.2	80555	ug/L	2460.7	80555	ppb	2460.7	3.05%
As 188.979†	-10.1	41.550	ug/L	1.4851	41.550	ppb	1.4851	3.57%
B 249.677†	1270.8	17.405	ug/L	2.2986	17.405	ppb	2.2986	13.21%
Ba 233.527†	82904.7	824.90	ug/L	17.005	824.90	ppb	17.005	2.06%
Be 313.107†	9967.6	9.5871	ug/L	0.19925	9.5871	ppb	0.19925	2.08%
Ca 317.933Radial†	4568.6	19089	ug/L	530.6	19089	ppb	530.6	2.78%
Cd 226.502†	882.6	1.1028	ug/L	0.34437	1.1028	ppb	0.34437	31.23%
Co 228.616†	1496.2	35.200	ug/L	0.4224	35.200	ppb	0.4224	1.20%
Cr 267.716†	7305.3	105.56	ug/L	2.406	105.56	ppb	2.406	2.28%
Cu 324.752†	16466.9	62.081	ug/L	1.6149	62.081	ppb	1.6149	2.60%
Fe 238.204 Radial†	4163.0	119820	ug/L	3808.4	119820	ppb	3808.4	3.18%
K 766.490 Radial†	28207.1	13773	ug/L	399.1	13773	ppb	399.1	2.90%

Mg 279.077 IEC†	182.1	18715	ug/L	614.9	18715	ppb	614.9	3.29%
Mn 257.610†	1800982.2	2502.0	ug/L	57.69	2502.0	ppb	57.69	2.31%
Mo 202.031†	-65.5	3.5475	ug/L	0.69975	3.5475	ppb	0.69975	19.73%
Na 589.592 Radial†	3183.8	1007.2	ug/L	28.55	1007.2	ppb	28.55	2.83%
Ni 231.604†	2814.8	94.067	ug/L	1.0074	94.067	ppb	1.0074	1.07%
P 214.914†	870.3	610.92	ug/L	11.341	610.92	ppb	11.341	1.86%
Pb 220.353†	493.6	81.963	ug/L	2.7643	81.963	ppb	2.7643	3.37%
S 181.975 Axial†	290.4	539.60	ug/L	7.299	539.60	ppb	7.299	1.35%
Sb 206.836†	23.7	-0.5693	ug/L	1.43305	-0.5693	ppb	1.43305	251.71%
Se 196.026†	-429.0	-13.360	ug/L	7.1589	-13.360	ppb	7.1589	53.58%
Si 251.611†	1065531.6	41659	ug/L	950.3	41659	ppb	950.3	2.28%
Sn 189.927†	-87.5	-24.332	ug/L	1.4131	-24.332	ppb	1.4131	5.81%
Sr 421.552†	16388.1	157.68	ug/L	5.040	157.68	ppb	5.040	3.20%
Ti 334.940†	1247237.4	2238.3	ug/L	52.00	2238.3	ppb	52.00	2.32%
Tl 190.801†	-88.2	-6.3510	ug/L	2.04117	-6.3510	ppb	2.04117	32.14%
U 409.014†	-7366.8	-237.65	ug/L	4.828	-237.65	ppb	4.828	2.03%
V 292.402†	22930.8	167.86	ug/L	3.542	167.86	ppb	3.542	2.11%
Zn 213.857†	29385.5	357.28	ug/L	8.497	357.28	ppb	8.497	2.38%
SiO2†	1061086.4	89146	ug/L	2488.7	89146	ppb	2488.7	2.79%

Sequence No.: 68
Sample ID: 247178007|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 89
Date Collected: 3/11/2010 02:59:04
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178007|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3456.8	3456.8	108	%			03:01:17
1	Y RADIAL	3167.4	3167.4	120.5	%			03:01:17
1	Al 396.153Radial†	21308.6	19815.6	42876	ug/L	42876	ppb	03:00:57
1	Ca 317.933Radial†	4727.3	4369.9	18258	ug/L	18258	ppb	03:00:57
1	Fe 238.204 Radial†	3535.7	3268.2	94067	ug/L	94067	ppb	03:01:17
1	K 766.490 Radial†	23345.2	19614.8	9575.2	ug/L	9575.2	ppb	03:00:57
1	Mg 279.077 IEC†	117.5	107.2	10997	ug/L	10997	ppb	03:01:17
1	Na 589.592 Radial†	1049.5	1705.5	539.54	ug/L	539.54	ppb	03:00:57
1	Sr 421.552†	12613.5	11658.4	112.14	ug/L	112.14	ppb	03:00:57
1	Sc 361.383	916136.0	916136.0	115.68	%			03:02:15
1	Y 371.029	865334.4	865334.4	127.70	%			03:02:15
1	Ag 328.068†	-5672.5	-5035.0	2.6566	ug/L	2.6566	ppb	03:02:20
1	As 188.979†	-43.3	-18.6	35.891	ug/L	35.891	ppb	03:02:40
1	B 249.677†	731.2	1009.4	14.004	ug/L	14.004	ppb	03:02:20
1	Ba 233.527†	68894.4	59556.9	592.82	ug/L	592.82	ppb	03:02:20
1	Be 313.107†	-2378.9	1485.4	7.1552	ug/L	7.1552	ppb	03:02:20
1	Cd 226.502†	689.5	752.3	1.8054	ug/L	1.8054	ppb	03:02:40
1	Co 228.616†	1328.6	1194.4	25.850	ug/L	25.850	ppb	03:02:40
1	Cr 267.716†	8505.6	7299.9	104.25	ug/L	104.25	ppb	03:02:20
1	Cu 324.752†	48837.2	36005.9	126.57	ug/L	126.57	ppb	03:02:20
1	Mn 257.610†	2761766.7	2387044.4	3310.3	ug/L	3310.3	ppb	03:02:15
1	Mo 202.031†	-0.4	-13.3	6.3012	ug/L	6.3012	ppb	03:02:40
1	Ni 231.604†	2392.0	2007.2	67.077	ug/L	67.077	ppb	03:02:40
1	P 214.914†	1993.5	1559.0	1162.1	ug/L	1162.1	ppb	03:02:40
1	Pb 220.353†	1354.0	1214.1	195.45	ug/L	195.45	ppb	03:02:40
1	S 181.975 Axial†	375.0	293.4	552.34	ug/L	552.34	ppb	03:02:40
1	Sb 206.836†	66.6	34.8	3.3918	ug/L	3.3918	ppb	03:02:40
1	Se 196.026†	-404.9	-329.3	-9.7898	ug/L	-9.7898	ppb	03:02:40
1	Si 251.611†	942923.0	814645.3	31850	ug/L	31850	ppb	03:02:15
1	Sn 189.927†	-88.3	-84.1	-22.185	ug/L	-22.185	ppb	03:02:40
1	Ti 334.940†	1840656.5	1592106.6	2857.3	ug/L	2857.3	ppb	03:02:15
1	Tl 190.801†	-145.6	-99.9	-1.9994	ug/L	-1.9994	ppb	03:02:40
1	U 409.014†	-1588.1	599.2	7.2517	ug/L	7.2517	ppb	03:02:15
1	V 292.402†	17005.3	15892.7	113.68	ug/L	113.68	ppb	03:02:20
1	Zn 213.857†	38110.7	32433.9	400.22	ug/L	400.22	ppb	03:02:20
1	SiO2†	942267.9	814080.1	68394	ug/L	68394	ppb	03:03:48
2	Sc Radial	3408.2	3408.2	106	%			03:01:42
2	Y RADIAL	3130.4	3130.4	119.1	%			03:01:42
2	Al 396.153Radial†	21637.5	20406.5	44155	ug/L	44155	ppb	03:01:22
2	Ca 317.933Radial†	4804.3	4504.7	18821	ug/L	18821	ppb	03:01:22
2	Fe 238.204 Radial†	3502.4	3283.7	94511	ug/L	94511	ppb	03:01:42
2	K 766.490 Radial†	23903.4	20448.3	9982.2	ug/L	9982.2	ppb	03:01:22
2	Mg 279.077 IEC†	116.1	107.5	11021	ug/L	11021	ppb	03:01:42
2	Na 589.592 Radial†	1091.9	1759.3	556.54	ug/L	556.54	ppb	03:01:22
2	Sr 421.552†	12790.4	11991.4	115.34	ug/L	115.34	ppb	03:01:22
2	Sc 361.383	917472.6	917472.6	115.85	%			03:02:46
2	Y 371.029	867804.4	867804.4	128.06	%			03:02:46
2	Ag 328.068†	-5553.2	-4924.8	3.3579	ug/L	3.3579	ppb	03:02:51
2	As 188.979†	-47.9	-22.5	33.638	ug/L	33.638	ppb	03:03:11
2	B 249.677†	658.3	945.5	12.071	ug/L	12.071	ppb	03:02:51
2	Ba 233.527†	68060.7	58750.4	584.84	ug/L	584.84	ppb	03:02:51
2	Be 313.107†	-2373.7	1492.9	7.1459	ug/L	7.1459	ppb	03:02:51
2	Cd 226.502†	677.1	740.8	1.5839	ug/L	1.5839	ppb	03:03:11
2	Co 228.616†	1342.2	1204.5	26.127	ug/L	26.127	ppb	03:03:11
2	Cr 267.716†	8495.1	7280.2	103.99	ug/L	103.99	ppb	03:02:51
2	Cu 324.752†	48429.9	35592.8	125.20	ug/L	125.20	ppb	03:02:51
2	Mn 257.610†	2756615.0	2379119.4	3299.4	ug/L	3299.4	ppb	03:02:46
2	Mo 202.031†	-15.1	-26.0	5.1820	ug/L	5.1820	ppb	03:03:11
2	Ni 231.604†	2390.1	2002.5	66.919	ug/L	66.919	ppb	03:03:11

2	P 214.914†	2010.8	1571.4	1172.2	ug/L	1172.2 ppb	03:03:11
2	Pb 220.353†	1355.2	1213.5	195.57	ug/L	195.57 ppb	03:03:11
2	S 181.975 Axial†	374.8	292.7	550.80	ug/L	550.80 ppb	03:03:11
2	Sb 206.836†	60.1	29.2	0.9277	ug/L	0.9277 ppb	03:03:11
2	Se 196.026†	-398.6	-323.3	-3.0984	ug/L	-3.0984 ppb	03:03:11
2	Si 251.611†	942962.7	813492.1	31805	ug/L	31805 ppb	03:02:46
2	Sn 189.927†	-85.6	-81.7	-21.532	ug/L	-21.532 ppb	03:03:11
2	Ti 334.940†	1839720.1	1588980.3	2851.7	ug/L	2851.7 ppb	03:02:46
2	Tl 190.801†	-148.3	-102.1	-2.9918	ug/L	-2.9918 ppb	03:03:11
2	U 409.014†	-1501.7	675.8	9.5297	ug/L	9.5297 ppb	03:02:46
2	V 292.402†	16659.7	15573.0	110.99	ug/L	110.99 ppb	03:02:51
2	Zn 213.857†	37707.0	32037.4	395.08	ug/L	395.08 ppb	03:02:51
2	SiO2†	942575.4	813158.8	68317	ug/L	68317 ppb	03:03:54
3	Sc Radial	3446.7	3446.7	108	%		03:02:07
3	Y RADIAL	3172.5	3172.5	120.7	%		03:02:07
3	Al 396.153Radial†	21196.8	19769.6	42777	ug/L	42777 ppb	03:01:47
3	Ca 317.933Radial†	4706.9	4363.8	18233	ug/L	18233 ppb	03:01:47
3	Fe 238.204 Radial†	3539.5	3281.4	94445	ug/L	94445 ppb	03:02:07
3	K 766.490 Radial†	23212.6	19555.2	9546.1	ug/L	9546.1 ppb	03:01:47
3	Mg 279.077 IEC†	114.8	105.0	10772	ug/L	10772 ppb	03:02:07
3	Na 589.592 Radial†	1022.6	1683.4	532.52	ug/L	532.52 ppb	03:01:47
3	Sr 421.552†	12490.3	11578.2	111.36	ug/L	111.36 ppb	03:01:47
3	Sc 361.383	916437.1	916437.1	115.72	%		03:03:17
3	Y 371.029	866252.7	866252.7	127.83	%		03:03:17
3	Ag 328.068†	-5668.9	-5030.3	2.7894	ug/L	2.7894 ppb	03:03:22
3	As 188.979†	-48.1	-22.7	33.508	ug/L	33.508 ppb	03:03:42
3	B 249.677†	714.9	995.1	13.527	ug/L	13.527 ppb	03:03:22
3	Ba 233.527†	68297.9	59021.9	587.53	ug/L	587.53 ppb	03:03:22
3	Be 313.107†	-2304.8	1550.2	7.1701	ug/L	7.1701 ppb	03:03:22
3	Cd 226.502†	669.1	734.5	1.4949	ug/L	1.4949 ppb	03:03:42
3	Co 228.616†	1328.7	1194.1	25.845	ug/L	25.845 ppb	03:03:42
3	Cr 267.716†	8479.7	7275.1	103.92	ug/L	103.92 ppb	03:03:22
3	Cu 324.752†	48489.6	35691.7	125.53	ug/L	125.53 ppb	03:03:22
3	Mn 257.610†	2759002.7	2383871.7	3305.9	ug/L	3305.9 ppb	03:03:17
3	Mo 202.031†	-3.2	-15.8	6.1019	ug/L	6.1019 ppb	03:03:42
3	Ni 231.604†	2377.4	1993.9	66.631	ug/L	66.631 ppb	03:03:42
3	P 214.914†	2004.8	1568.2	1169.3	ug/L	1169.3 ppb	03:03:42
3	Pb 220.353†	1337.0	1199.1	192.90	ug/L	192.90 ppb	03:03:42
3	S 181.975 Axial†	371.1	289.9	545.73	ug/L	545.73 ppb	03:03:42
3	Sb 206.836†	62.1	31.0	1.7447	ug/L	1.7447 ppb	03:03:42
3	Se 196.026†	-390.9	-317.1	1.6286	ug/L	1.6286 ppb	03:03:42
3	Si 251.611†	941490.2	813139.4	31791	ug/L	31791 ppb	03:03:17
3	Sn 189.927†	-92.7	-87.9	-23.109	ug/L	-23.109 ppb	03:03:42
3	Ti 334.940†	1837175.7	1588576.0	2851.0	ug/L	2851.0 ppb	03:03:17
3	Tl 190.801†	-165.1	-116.7	-9.0044	ug/L	-9.0044 ppb	03:03:42
3	U 409.014†	-1550.4	632.3	8.2145	ug/L	8.2145 ppb	03:03:17
3	V 292.402†	16717.2	15638.9	111.54	ug/L	111.54 ppb	03:03:22
3	Zn 213.857†	37879.0	32222.8	397.46	ug/L	397.46 ppb	03:03:22
3	SiO2†	951656.6	821926.1	69053	ug/L	69053 ppb	03:04:00

Mean Data: 247178007|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	916681.9	115.75	%	0.089				0.08%
Sc Radial	3437.3	107	%	0.8				0.75%
Y 371.029	866463.8	127.86	%	0.184				0.14%
Y RADIAL	3156.7	120.1	%	0.88				0.73%
Ag 328.068†	-4996.7	2.9346	ug/L	0.37253	2.9346	ppb	0.37253	12.69%
Al 396.153Radial†	19997.2	43269	ug/L	768.6	43269	ppb	768.6	1.78%
As 188.979†	-21.3	34.346	ug/L	1.3401	34.346	ppb	1.3401	3.90%
B 249.677†	983.3	13.201	ug/L	1.0069	13.201	ppb	1.0069	7.63%
Ba 233.527†	59109.7	588.40	ug/L	4.059	588.40	ppb	4.059	0.69%
Be 313.107†	1509.5	7.1570	ug/L	0.01223	7.1570	ppb	0.01223	0.17%
Ca 317.933Radial†	4412.8	18437	ug/L	332.8	18437	ppb	332.8	1.81%
Cd 226.502†	742.5	1.6281	ug/L	0.15992	1.6281	ppb	0.15992	9.82%
Co 228.616†	1197.7	25.941	ug/L	0.1611	25.941	ppb	0.1611	0.62%
Cr 267.716†	7285.1	104.05	ug/L	0.173	104.05	ppb	0.173	0.17%
Cu 324.752†	35763.5	125.77	ug/L	0.716	125.77	ppb	0.716	0.57%
Fe 238.204 Radial†	3277.7	94341	ug/L	239.8	94341	ppb	239.8	0.25%
K 766.490 Radial†	19872.8	9701.2	ug/L	243.83	9701.2	ppb	243.83	2.51%

Mg 279.077 IEC†	106.6	10930	ug/L	137.6	10930	ppb	137.6	1.26%
Mn 257.610†	2383345.1	3305.2	ug/L	5.50	3305.2	ppb	5.50	0.17%
Mo 202.031†	-18.4	5.8617	ug/L	0.59701	5.8617	ppb	0.59701	10.19%
Na 589.592 Radial†	1716.1	542.87	ug/L	12.349	542.87	ppb	12.349	2.27%
Ni 231.604†	2001.2	66.876	ug/L	0.2259	66.876	ppb	0.2259	0.34%
P 214.914†	1566.2	1167.9	ug/L	5.23	1167.9	ppb	5.23	0.45%
Pb 220.353†	1208.9	194.64	ug/L	1.507	194.64	ppb	1.507	0.77%
S 181.975 Axial†	292.0	549.62	ug/L	3.459	549.62	ppb	3.459	0.63%
Sb 206.836†	31.6	2.0214	ug/L	1.25517	2.0214	ppb	1.25517	62.09%
Se 196.026†	-323.3	-3.7532	ug/L	5.73728	-3.7532	ppb	5.73728	152.86%
Si 251.611†	813758.9	31815	ug/L	30.8	31815	ppb	30.8	0.10%
Sn 189.927†	-84.6	-22.276	ug/L	0.7921	-22.276	ppb	0.7921	3.56%
Sr 421.552†	11742.7	112.95	ug/L	2.108	112.95	ppb	2.108	1.87%
Ti 334.940†	1589887.6	2853.3	ug/L	3.44	2853.3	ppb	3.44	0.12%
Tl 190.801†	-106.2	-4.6652	ug/L	3.79048	-4.6652	ppb	3.79048	81.25%
U 409.014†	635.8	8.3320	ug/L	1.14350	8.3320	ppb	1.14350	13.72%
V 292.402†	15701.5	112.07	ug/L	1.420	112.07	ppb	1.420	1.27%
Zn 213.857†	32231.4	397.59	ug/L	2.570	397.59	ppb	2.570	0.65%
SiO2†	816388.3	68588	ug/L	404.8	68588	ppb	404.8	0.59%

Sequence No.: 69
Sample ID: 247178008|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 90
Date Collected: 3/11/2010 03:06:11
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178008|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3427.9	3427.9	107	%			03:08:25
1	Y RADIAL	3286.7	3286.7	125.1	%			03:08:25
1	Al 396.153Radial†	14552.9	13666.9	29572	ug/L	29572	ppb	03:08:05
1	Ca 317.933Radial†	2944.3	2740.0	11448	ug/L	11448	ppb	03:08:25
1	Fe 238.204 Radial†	3027.4	2820.7	81185	ug/L	81185	ppb	03:08:25
1	K 766.490 Radial†	14218.0	11265.1	5498.6	ug/L	5498.6	ppb	03:08:05
1	Mg 279.077 IEC†	63.9	58.0	5919.9	ug/L	5919.9	ppb	03:08:25
1	Na 589.592 Radial†	1001.1	1668.5	527.83	ug/L	527.83	ppb	03:08:05
1	Sr 421.552†	7868.3	7321.1	70.417	ug/L	70.417	ppb	03:08:05
1	Sc 361.383	903920.8	903920.8	114.14	%			03:09:22
1	Y 371.029	891885.9	891885.9	131.62	%			03:09:22
1	Ag 328.068†	-4565.4	-4131.3	3.4159	ug/L	3.4159	ppb	03:09:27
1	As 188.979†	-39.5	-15.7	31.060	ug/L	31.060	ppb	03:09:47
1	B 249.677†	373.5	704.5	7.2599	ug/L	7.2599	ppb	03:09:27
1	Ba 233.527†	43660.0	38252.8	381.40	ug/L	381.40	ppb	03:09:27
1	Be 313.107†	-3378.1	582.2	5.8368	ug/L	5.8368	ppb	03:09:27
1	Cd 226.502†	625.7	704.5	2.3771	ug/L	2.3771	ppb	03:09:47
1	Co 228.616†	801.1	747.8	14.482	ug/L	14.482	ppb	03:09:47
1	Cr 267.716†	3344.3	2877.3	42.963	ug/L	42.963	ppb	03:09:47
1	Cu 324.752†	48876.3	36610.7	127.96	ug/L	127.96	ppb	03:09:27
1	Mn 257.610†	1900726.8	1664912.2	2310.5	ug/L	2310.5	ppb	03:09:22
1	Mo 202.031†	19.0	3.6	6.7706	ug/L	6.7706	ppb	03:09:47
1	Ni 231.604†	1301.5	1079.7	36.079	ug/L	36.079	ppb	03:09:47
1	P 214.914†	1238.4	920.7	656.39	ug/L	656.39	ppb	03:09:47
1	Pb 220.353†	804.6	748.6	117.88	ug/L	117.88	ppb	03:09:47
1	S 181.975 Axial†	326.5	255.3	482.08	ug/L	482.08	ppb	03:09:47
1	Sb 206.836†	65.6	34.7	5.1859	ug/L	5.1859	ppb	03:09:47
1	Se 196.026†	-338.9	-276.2	-3.6787	ug/L	-3.6787	ppb	03:09:47
1	Si 251.611†	839234.9	734814.8	28729	ug/L	28729	ppb	03:09:22
1	Sn 189.927†	-47.1	-49.1	-14.308	ug/L	-14.308	ppb	03:09:47
1	Ti 334.940†	1561094.5	1368672.6	2456.0	ug/L	2456.0	ppb	03:09:22
1	Tl 190.801†	-131.6	-89.4	-5.6348	ug/L	-5.6348	ppb	03:09:47
1	U 409.014†	-3440.3	-1042.2	-40.999	ug/L	-40.999	ppb	03:09:22
1	V 292.402†	10504.1	10395.4	70.789	ug/L	70.789	ppb	03:09:27
1	Zn 213.857†	37743.9	32557.7	403.92	ug/L	403.92	ppb	03:09:27
1	SiO2†	857195.6	750552.0	63057	ug/L	63057	ppb	03:10:56
2	Sc Radial	3437.4	3437.4	107	%			03:08:50
2	Y RADIAL	3279.9	3279.9	124.8	%			03:08:50
2	Al 396.153Radial†	14669.2	13737.6	29725	ug/L	29725	ppb	03:08:30
2	Ca 317.933Radial†	2941.5	2729.8	11406	ug/L	11406	ppb	03:08:50
2	Fe 238.204 Radial†	3020.0	2806.0	80763	ug/L	80763	ppb	03:08:50
2	K 766.490 Radial†	14416.3	11413.2	5571.0	ug/L	5571.0	ppb	03:08:30
2	Mg 279.077 IEC†	64.6	58.5	5967.8	ug/L	5967.8	ppb	03:08:50
2	Na 589.592 Radial†	958.1	1625.8	514.32	ug/L	514.32	ppb	03:08:30
2	Sr 421.552†	7902.2	7332.3	70.526	ug/L	70.526	ppb	03:08:30
2	Sc 361.383	917570.3	917570.3	115.86	%			03:09:53
2	Y 371.029	904727.0	904727.0	133.51	%			03:09:53
2	Ag 328.068†	-4575.8	-4080.8	3.5518	ug/L	3.5518	ppb	03:09:59
2	As 188.979†	-40.0	-15.7	30.995	ug/L	30.995	ppb	03:10:19
2	B 249.677†	318.5	652.1	5.8042	ug/L	5.8042	ppb	03:09:59
2	Ba 233.527†	43734.3	37747.9	376.39	ug/L	376.39	ppb	03:09:59
2	Be 313.107†	-3332.3	665.8	5.8723	ug/L	5.8723	ppb	03:09:59
2	Cd 226.502†	610.5	683.2	2.0959	ug/L	2.0959	ppb	03:10:19
2	Co 228.616†	807.9	743.2	14.360	ug/L	14.360	ppb	03:10:19
2	Cr 267.716†	3371.7	2857.3	42.671	ug/L	42.671	ppb	03:10:19
2	Cu 324.752†	48713.5	35833.2	125.31	ug/L	125.31	ppb	03:09:59
2	Mn 257.610†	1928175.2	1663830.6	2308.9	ug/L	2308.9	ppb	03:09:53
2	Mo 202.031†	20.2	4.4	6.8055	ug/L	6.8055	ppb	03:10:19
2	Ni 231.604†	1285.3	1048.7	35.044	ug/L	35.044	ppb	03:10:19

2	P 214.914†	1239.5	905.5	645.12 ug/L	645.12 ppb	03:10:19
2	Pb 220.353†	808.0	741.1	116.74 ug/L	116.74 ppb	03:10:19
2	S 181.975 Axial†	325.7	250.3	472.54 ug/L	472.54 ppb	03:10:19
2	Sb 206.836†	51.0	21.3	-0.5671 ug/L	-0.5671 ppb	03:10:19
2	Se 196.026†	-337.8	-270.9	-0.2391 ug/L	-0.2391 ppb	03:10:19
2	Si 251.611†	851986.8	734883.1	28732 ug/L	28732 ppb	03:09:53
2	Sn 189.927†	-49.9	-50.9	-14.730 ug/L	-14.730 ppb	03:10:19
2	Ti 334.940†	1584001.7	1368097.8	2455.0 ug/L	2455.0 ppb	03:09:53
2	Tl 190.801†	-139.6	-94.5	-7.7653 ug/L	-7.7653 ppb	03:10:19
2	U 409.014†	-3493.2	-1042.9	-40.973 ug/L	-40.973 ppb	03:09:53
2	V 292.402†	10599.5	10340.8	70.407 ug/L	70.407 ppb	03:09:59
2	Zn 213.857†	37815.1	32127.3	398.49 ug/L	398.49 ppb	03:09:59
2	SiO2†	853546.2	736230.2	61853 ug/L	61853 ppb	03:11:02
3	Sc Radial	3436.7	3436.7	107 %		03:09:15
3	Y RADIAL	3285.3	3285.3	125.0 %		03:09:15
3	Al 396.153Radial†	14621.0	13695.3	29633 ug/L	29633 ppb	03:08:55
3	Ca 317.933Radial†	2944.8	2733.4	11420 ug/L	11420 ppb	03:09:15
3	Fe 238.204 Radial†	3023.3	2809.6	80867 ug/L	80867 ppb	03:09:15
3	K 766.490 Radial†	14274.1	11283.1	5507.5 ug/L	5507.5 ppb	03:08:55
3	Mg 279.077 IEC†	62.0	56.1	5722.2 ug/L	5722.2 ppb	03:09:15
3	Na 589.592 Radial†	959.4	1627.2	514.75 ug/L	514.75 ppb	03:08:55
3	Sr 421.552†	7872.0	7305.5	70.268 ug/L	70.268 ppb	03:08:55
3	Sc 361.383	917814.9	917814.9	115.89 %		03:10:24
3	Y 371.029	903425.2	903425.2	133.32 %		03:10:24
3	Ag 328.068†	-4699.5	-4186.5	3.0212 ug/L	3.0212 ppb	03:10:30
3	As 188.979†	-39.4	-15.1	31.372 ug/L	31.372 ppb	03:10:50
3	B 249.677†	403.7	725.6	7.9249 ug/L	7.9249 ppb	03:10:30
3	Ba 233.527†	43845.6	37833.8	377.24 ug/L	377.24 ppb	03:10:30
3	Be 313.107†	-3315.1	681.4	5.8871 ug/L	5.8871 ppb	03:10:30
3	Cd 226.502†	601.3	675.1	1.9612 ug/L	1.9612 ppb	03:10:50
3	Co 228.616†	793.7	730.8	14.011 ug/L	14.011 ppb	03:10:50
3	Cr 267.716†	3362.8	2848.9	42.559 ug/L	42.559 ppb	03:10:50
3	Cu 324.752†	49088.0	36145.1	126.37 ug/L	126.37 ppb	03:10:30
3	Mn 257.610†	1929937.9	1664908.0	2310.4 ug/L	2310.4 ppb	03:10:24
3	Mo 202.031†	23.5	7.2	7.0755 ug/L	7.0755 ppb	03:10:50
3	Ni 231.604†	1269.0	1034.4	34.566 ug/L	34.566 ppb	03:10:50
3	P 214.914†	1249.7	914.1	651.64 ug/L	651.64 ppb	03:10:50
3	Pb 220.353†	809.3	742.0	116.86 ug/L	116.86 ppb	03:10:50
3	S 181.975 Axial†	327.3	251.6	475.02 ug/L	475.02 ppb	03:10:50
3	Sb 206.836†	69.3	37.0	6.1757 ug/L	6.1757 ppb	03:10:50
3	Se 196.026†	-337.2	-270.3	0.5133 ug/L	0.5133 ppb	03:10:50
3	Si 251.611†	853849.1	736294.1	28787 ug/L	28787 ppb	03:10:24
3	Sn 189.927†	-50.5	-51.4	-14.853 ug/L	-14.853 ppb	03:10:50
3	Ti 334.940†	1586646.4	1370015.6	2458.5 ug/L	2458.5 ppb	03:10:24
3	Tl 190.801†	-139.0	-94.0	-7.5215 ug/L	-7.5215 ppb	03:10:50
3	U 409.014†	-3366.1	-932.5	-37.630 ug/L	-37.630 ppb	03:10:24
3	V 292.402†	10618.5	10354.8	70.508 ug/L	70.508 ppb	03:10:30
3	Zn 213.857†	37932.9	32220.2	399.66 ug/L	399.66 ppb	03:10:30
3	SiO2†	841414.0	725565.2	60957 ug/L	60957 ppb	03:11:08

Mean Data: 247178008|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	913102.0	115.30	%	1.004				0.87%
Sc Radial	3434.0	107	%	0.2				0.15%
Y 371.029	900012.7	132.82	%	1.043				0.79%
Y RADIAL	3284.0	125.0	%	0.14				0.11%
Ag 328.068†	-4132.8	3.3296	ug/L	0.27563	3.3296	ppb	0.27563	8.28%
Al 396.153Radial†	13699.9	29643	ug/L	77.1	29643	ppb	77.1	0.26%
As 188.979†	-15.5	31.142	ug/L	0.2015	31.142	ppb	0.2015	0.65%
B 249.677†	694.1	6.9963	ug/L	1.08463	6.9963	ppb	1.08463	15.50%
Ba 233.527†	37944.8	378.34	ug/L	2.682	378.34	ppb	2.682	0.71%
Be 313.107†	643.1	5.8654	ug/L	0.02585	5.8654	ppb	0.02585	0.44%
Ca 317.933Radial†	2734.4	11425	ug/L	21.6	11425	ppb	21.6	0.19%
Cd 226.502†	687.6	2.1447	ug/L	0.21222	2.1447	ppb	0.21222	9.89%
Co 228.616†	740.6	14.284	ug/L	0.2443	14.284	ppb	0.2443	1.71%
Cr 267.716†	2861.2	42.731	ug/L	0.2090	42.731	ppb	0.2090	0.49%
Cu 324.752†	36196.3	126.55	ug/L	1.333	126.55	ppb	1.333	1.05%
Fe 238.204 Radial†	2812.1	80938	ug/L	220.0	80938	ppb	220.0	0.27%
K 766.490 Radial†	11320.5	5525.7	ug/L	39.49	5525.7	ppb	39.49	0.71%

Mg 279.077 IEC†	57.5	5870.0	ug/L	130.18	5870.0	ppb	130.18	2.22%
Mn 257.610†	1664550.2	2309.9	ug/L	0.88	2309.9	ppb	0.88	0.04%
Mo 202.031†	5.1	6.8839	ug/L	0.16689	6.8839	ppb	0.16689	2.42%
Na 589.592 Radial†	1640.5	518.97	ug/L	7.676	518.97	ppb	7.676	1.48%
Ni 231.604†	1054.3	35.230	ug/L	0.7738	35.230	ppb	0.7738	2.20%
P 214.914†	913.4	651.05	ug/L	5.659	651.05	ppb	5.659	0.87%
Pb 220.353†	743.9	117.16	ug/L	0.626	117.16	ppb	0.626	0.53%
S 181.975 Axial†	252.4	476.55	ug/L	4.954	476.55	ppb	4.954	1.04%
Sb 206.836†	31.0	3.5982	ug/L	3.64100	3.5982	ppb	3.64100	101.19%
Se 196.026†	-272.5	-1.1348	ug/L	2.23494	-1.1348	ppb	2.23494	196.94%
Si 251.611†	735330.7	28749	ug/L	32.6	28749	ppb	32.6	0.11%
Sn 189.927†	-50.4	-14.630	ug/L	0.2859	-14.630	ppb	0.2859	1.95%
Sr 421.552†	7319.6	70.404	ug/L	0.1294	70.404	ppb	0.1294	0.18%
Ti 334.940†	1368928.6	2456.5	ug/L	1.78	2456.5	ppb	1.78	0.07%
Tl 190.801†	-92.6	-6.9739	ug/L	1.16603	-6.9739	ppb	1.16603	16.72%
U 409.014†	-1005.9	-39.868	ug/L	1.9376	-39.868	ppb	1.9376	4.86%
V 292.402†	10363.6	70.568	ug/L	0.1983	70.568	ppb	0.1983	0.28%
Zn 213.857†	32301.7	400.69	ug/L	2.858	400.69	ppb	2.858	0.71%
SiO2†	737449.1	61956	ug/L	1053.4	61956	ppb	1053.4	1.70%

Sequence No.: 70
Sample ID: 247178009|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 91
Date Collected: 3/11/2010 03:13:19
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178009|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3412.4	3412.4	106	%			03:15:32
1	Y RADIAL	3303.7	3303.7	125.7	%			03:15:32
1	Al 396.153Radial†	16897.9	15930.6	34470	ug/L	34470	ppb	03:15:12
1	Ca 317.933Radial†	2479.1	2315.6	9674.9	ug/L	9674.9	ppb	03:15:32
1	Fe 238.204 Radial†	3116.1	2916.9	83953	ug/L	83953	ppb	03:15:32
1	K 766.490 Radial†	14086.8	11202.1	5468.6	ug/L	5468.6	ppb	03:15:12
1	Mg 279.077 IEC†	68.5	62.6	6392.6	ug/L	6392.6	ppb	03:15:32
1	Na 589.592 Radial†	1232.2	1889.8	597.82	ug/L	597.82	ppb	03:15:12
1	Sr 421.552†	7117.6	6649.4	63.962	ug/L	63.962	ppb	03:15:12
1	Sc 361.383	923063.3	923063.3	116.55	%			03:16:29
1	Y 371.029	922144.9	922144.9	136.08	%			03:16:29
1	Ag 328.068†	-4951.9	-4379.9	3.0689	ug/L	3.0689	ppb	03:16:34
1	As 188.979†	-49.5	-23.7	28.101	ug/L	28.101	ppb	03:16:54
1	B 249.677†	351.8	679.1	6.0738	ug/L	6.0738	ppb	03:16:34
1	Ba 233.527†	35357.2	30335.8	303.10	ug/L	303.10	ppb	03:16:34
1	Be 313.107†	-7256.8	-2684.3	4.6289	ug/L	4.6289	ppb	03:16:34
1	Cd 226.502†	571.9	646.9	1.2029	ug/L	1.2029	ppb	03:16:54
1	Co 228.616†	772.1	708.3	13.049	ug/L	13.049	ppb	03:16:54
1	Cr 267.716†	6494.8	5519.6	79.393	ug/L	79.393	ppb	03:16:54
1	Cu 324.752†	29160.0	18806.5	68.033	ug/L	68.033	ppb	03:16:34
1	Mn 257.610†	1530651.3	1312861.4	1823.8	ug/L	1823.8	ppb	03:16:29
1	Mo 202.031†	13.6	-1.4	6.5048	ug/L	6.5048	ppb	03:16:54
1	Ni 231.604†	1815.3	1496.9	50.025	ug/L	50.025	ppb	03:16:54
1	P 214.914†	1060.2	745.3	526.58	ug/L	526.58	ppb	03:16:54
1	Pb 220.353†	521.8	491.4	76.382	ug/L	76.382	ppb	03:16:54
1	S 181.975 Axial†	302.4	228.7	430.32	ug/L	430.32	ppb	03:16:54
1	Sb 206.836†	46.3	17.0	-2.9448	ug/L	-2.9448	ppb	03:16:54
1	Se 196.026†	-348.8	-278.6	3.3305	ug/L	3.3305	ppb	03:16:54
1	Si 251.611†	845165.1	724654.3	28332	ug/L	28332	ppb	03:16:29
1	Sn 189.927†	-39.0	-41.3	-12.927	ug/L	-12.927	ppb	03:16:54
1	Ti 334.940†	1671277.5	1434842.5	2574.5	ug/L	2574.5	ppb	03:16:29
1	Tl 190.801†	-119.6	-76.7	-1.7638	ug/L	-1.7638	ppb	03:16:54
1	U 409.014†	-7349.5	-4333.6	-141.37	ug/L	-141.37	ppb	03:16:29
1	V 292.402†	11066.7	10687.2	72.450	ug/L	72.450	ppb	03:16:34
1	Zn 213.857†	37211.3	31415.0	388.88	ug/L	388.88	ppb	03:16:34
1	SiO2†	842329.0	722222.1	60677	ug/L	60677	ppb	03:18:03
2	Sc Radial	3427.5	3427.5	107	%			03:15:57
2	Y RADIAL	3305.9	3305.9	125.8	%			03:15:57
2	Al 396.153Radial†	16971.6	15929.9	34468	ug/L	34468	ppb	03:15:37
2	Ca 317.933Radial†	2479.3	2305.6	9633.1	ug/L	9633.1	ppb	03:15:57
2	Fe 238.204 Radial†	3106.1	2894.6	83312	ug/L	83312	ppb	03:15:57
2	K 766.490 Radial†	13957.3	11023.0	5381.1	ug/L	5381.1	ppb	03:15:37
2	Mg 279.077 IEC†	65.7	59.7	6091.5	ug/L	6091.5	ppb	03:15:57
2	Na 589.592 Radial†	1343.8	1989.0	629.21	ug/L	629.21	ppb	03:15:37
2	Sr 421.552†	7153.1	6653.2	64.000	ug/L	64.000	ppb	03:15:37
2	Sc 361.383	923909.4	923909.4	116.66	%			03:17:00
2	Y 371.029	922332.7	922332.7	136.11	%			03:17:00
2	Ag 328.068†	-4873.9	-4309.2	3.2484	ug/L	3.2484	ppb	03:17:05
2	As 188.979†	-44.5	-19.3	30.522	ug/L	30.522	ppb	03:17:25
2	B 249.677†	283.9	620.6	4.4755	ug/L	4.4755	ppb	03:17:05
2	Ba 233.527†	35648.7	30558.0	305.28	ug/L	305.28	ppb	03:17:05
2	Be 313.107†	-7041.0	-2493.6	4.7211	ug/L	4.7211	ppb	03:17:05
2	Cd 226.502†	575.6	649.7	1.3112	ug/L	1.3112	ppb	03:17:25
2	Co 228.616†	778.8	713.5	13.196	ug/L	13.196	ppb	03:17:25
2	Cr 267.716†	6488.5	5509.1	79.223	ug/L	79.223	ppb	03:17:25
2	Cu 324.752†	29361.1	18956.0	68.502	ug/L	68.502	ppb	03:17:05
2	Mn 257.610†	1536775.7	1316908.6	1829.4	ug/L	1829.4	ppb	03:17:00
2	Mo 202.031†	17.3	1.8	6.7445	ug/L	6.7445	ppb	03:17:25
2	Ni 231.604†	1809.8	1490.8	49.820	ug/L	49.820	ppb	03:17:25

2	P 214.914†	1061.1	745.3	526.94	ug/L	526.94 ppb	03:17:25
2	Pb 220.353†	519.2	488.7	76.034	ug/L	76.034 ppb	03:17:25
2	S 181.975 Axial†	309.6	234.5	441.55	ug/L	441.55 ppb	03:17:25
2	Sb 206.836†	52.3	22.1	-0.7324	ug/L	-0.7324 ppb	03:17:25
2	Se 196.026†	-349.0	-278.5	1.6115	ug/L	1.6115 ppb	03:17:25
2	Si 251.611†	847141.1	725684.1	28372	ug/L	28372 ppb	03:17:00
2	Sn 189.927†	-38.6	-40.9	-12.800	ug/L	-12.800 ppb	03:17:25
2	Ti 334.940†	1674501.0	1436292.5	2577.1	ug/L	2577.1 ppb	03:17:00
2	Tl 190.801†	-121.2	-77.9	-2.2275	ug/L	-2.2275 ppb	03:17:25
2	U 409.014†	-7219.6	-4216.5	-137.74	ug/L	-137.74 ppb	03:17:00
2	V 292.402†	11251.1	10836.6	73.769	ug/L	73.769 ppb	03:17:05
2	Zn 213.857†	37457.7	31596.9	391.31	ug/L	391.31 ppb	03:17:05
2	SiO2†	843869.5	722880.8	60732	ug/L	60732 ppb	03:18:09
3	Sc Radial	3417.0	3417.0	107	%		03:16:22
3	Y RADIAL	3318.9	3318.9	126.3	%		03:16:22
3	Al 396.153Radial†	17066.3	16067.4	34766	ug/L	34766 ppb	03:16:02
3	Ca 317.933Radial†	2484.0	2317.1	9681.3	ug/L	9681.3 ppb	03:16:22
3	Fe 238.204 Radial†	3106.7	2904.1	83587	ug/L	83587 ppb	03:16:22
3	K 766.490 Radial†	13988.3	11092.0	5414.8	ug/L	5414.8 ppb	03:16:02
3	Mg 279.077 IEC†	67.4	61.5	6276.2	ug/L	6276.2 ppb	03:16:22
3	Na 589.592 Radial†	1257.9	1912.3	604.96	ug/L	604.96 ppb	03:16:02
3	Sr 421.552†	7212.4	6729.4	64.733	ug/L	64.733 ppb	03:16:02
3	Sc 361.383	919972.8	919972.8	116.16	%		03:17:31
3	Y 371.029	916064.2	916064.2	135.18	%		03:17:31
3	Ag 328.068†	-4919.7	-4366.5	3.0231	ug/L	3.0231 ppb	03:17:37
3	As 188.979†	-46.7	-21.4	29.405	ug/L	29.405 ppb	03:17:57
3	B 249.677†	320.9	653.5	5.3881	ug/L	5.3881 ppb	03:17:37
3	Ba 233.527†	35006.3	30135.7	301.11	ug/L	301.11 ppb	03:17:37
3	Be 313.107†	-7133.6	-2599.1	4.6783	ug/L	4.6783 ppb	03:17:37
3	Cd 226.502†	600.6	673.3	1.6428	ug/L	1.6428 ppb	03:17:57
3	Co 228.616†	753.0	694.1	12.652	ug/L	12.652 ppb	03:17:57
3	Cr 267.716†	6499.4	5542.2	79.688	ug/L	79.688 ppb	03:17:57
3	Cu 324.752†	29003.0	18755.4	67.841	ug/L	67.841 ppb	03:17:37
3	Mn 257.610†	1530301.4	1316971.9	1829.5	ug/L	1829.5 ppb	03:17:31
3	Mo 202.031†	16.9	1.5	6.7445	ug/L	6.7445 ppb	03:17:57
3	Ni 231.604†	1805.5	1493.7	49.919	ug/L	49.919 ppb	03:17:57
3	P 214.914†	1058.2	746.7	528.05	ug/L	528.05 ppb	03:17:57
3	Pb 220.353†	529.2	499.2	77.792	ug/L	77.792 ppb	03:17:57
3	S 181.975 Axial†	306.8	233.3	439.10	ug/L	439.10 ppb	03:17:57
3	Sb 206.836†	47.9	18.5	-2.2993	ug/L	-2.2993 ppb	03:17:57
3	Se 196.026†	-352.4	-282.6	-1.0884	ug/L	-1.0884 ppb	03:17:57
3	Si 251.611†	844005.8	726092.3	28388	ug/L	28388 ppb	03:17:31
3	Sn 189.927†	-35.2	-38.1	-12.151	ug/L	-12.151 ppb	03:17:57
3	Ti 334.940†	1668763.8	1437495.6	2579.3	ug/L	2579.3 ppb	03:17:31
3	Tl 190.801†	-130.6	-86.5	-5.7123	ug/L	-5.7123 ppb	03:17:57
3	U 409.014†	-7300.2	-4312.3	-140.68	ug/L	-140.68 ppb	03:17:31
3	V 292.402†	10919.9	10592.7	71.726	ug/L	71.726 ppb	03:17:37
3	Zn 213.857†	36840.4	31202.9	386.22	ug/L	386.22 ppb	03:17:37
3	SiO2†	835292.9	718592.8	60372	ug/L	60372 ppb	03:18:15

Mean Data: 247178009|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	922315.1	116.46	%	0.262				0.22%
Sc Radial	3418.9	107	%	0.2				0.23%
Y 371.029	920180.6	135.79	%	0.526				0.39%
Y RADIAL	3309.5	126.0	%	0.31				0.25%
Ag 328.068†	-4351.9	3.1135	ug/L	0.11910	3.1135	ppb	0.11910	3.83%
Al 396.153Radial†	15976.0	34568	ug/L	171.3	34568	ppb	171.3	0.50%
As 188.979†	-21.4	29.343	ug/L	1.2120	29.343	ppb	1.2120	4.13%
B 249.677†	651.1	5.3125	ug/L	0.80183	5.3125	ppb	0.80183	15.09%
Ba 233.527†	30343.2	303.17	ug/L	2.089	303.17	ppb	2.089	0.69%
Be 313.107†	-2592.3	4.6761	ug/L	0.04611	4.6761	ppb	0.04611	0.99%
Ca 317.933Radial†	2312.8	9663.1	ug/L	26.15	9663.1	ppb	26.15	0.27%
Cd 226.502†	656.6	1.3856	ug/L	0.22916	1.3856	ppb	0.22916	16.54%
Co 228.616†	705.3	12.966	ug/L	0.2813	12.966	ppb	0.2813	2.17%
Cr 267.716†	5523.6	79.435	ug/L	0.2350	79.435	ppb	0.2350	0.30%
Cu 324.752†	18839.3	68.126	ug/L	0.3402	68.126	ppb	0.3402	0.50%
Fe 238.204 Radial†	2905.2	83618	ug/L	321.6	83618	ppb	321.6	0.38%
K 766.490 Radial†	11105.7	5421.5	ug/L	44.15	5421.5	ppb	44.15	0.81%

Mg 279.077 IEC†	61.3	6253.4	ug/L	151.85	6253.4	ppb	151.85	2.43%
Mn 257.610†	1315580.7	1827.5	ug/L	3.23	1827.5	ppb	3.23	0.18%
Mo 202.031†	0.6	6.6646	ug/L	0.13843	6.6646	ppb	0.13843	2.08%
Na 589.592 Radial†	1930.4	610.66	ug/L	16.455	610.66	ppb	16.455	2.69%
Ni 231.604†	1493.8	49.921	ug/L	0.1024	49.921	ppb	0.1024	0.21%
P 214.914†	745.8	527.19	ug/L	0.769	527.19	ppb	0.769	0.15%
Pb 220.353†	493.1	76.736	ug/L	0.9311	76.736	ppb	0.9311	1.21%
S 181.975 Axial†	232.2	436.99	ug/L	5.907	436.99	ppb	5.907	1.35%
Sb 206.836†	19.2	-1.9922	ug/L	1.13773	-1.9922	ppb	1.13773	57.11%
Se 196.026†	-279.9	1.2845	ug/L	2.22752	1.2845	ppb	2.22752	173.41%
Si 251.611†	725476.9	28364	ug/L	29.0	28364	ppb	29.0	0.10%
Sn 189.927†	-40.1	-12.626	ug/L	0.4164	-12.626	ppb	0.4164	3.30%
Sr 421.552†	6677.4	64.232	ug/L	0.4346	64.232	ppb	0.4346	0.68%
Ti 334.940†	1436210.2	2576.9	ug/L	2.39	2576.9	ppb	2.39	0.09%
Tl 190.801†	-80.4	-3.2345	ug/L	2.15835	-3.2345	ppb	2.15835	66.73%
U 409.014†	-4287.5	-139.93	ug/L	1.928	-139.93	ppb	1.928	1.38%
V 292.402†	10705.5	72.648	ug/L	1.0359	72.648	ppb	1.0359	1.43%
Zn 213.857†	31404.9	388.80	ug/L	2.541	388.80	ppb	2.541	0.65%
SiO2†	721231.9	60593	ug/L	194.0	60593	ppb	194.0	0.32%

Sequence No.: 71
Sample ID: 247178010|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 92
Date Collected: 3/11/2010 03:20:26
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178010|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3433.7	3433.7	107	%			03:22:39
1	Y RADIAL	3416.6	3416.6	130.0	%			03:22:39
1	Al 396.153Radial†	13572.5	12728.9	27542	ug/L	27542	ppb	03:22:19
1	Ca 317.933Radial†	2792.3	2593.5	10836	ug/L	10836	ppb	03:22:39
1	Fe 238.204 Radial†	3028.6	2817.1	81081	ug/L	81081	ppb	03:22:39
1	K 766.490 Radial†	17283.0	14103.1	6885.3	ug/L	6885.3	ppb	03:22:19
1	Mg 279.077 IEC†	77.0	70.1	7173.1	ug/L	7173.1	ppb	03:22:39
1	Na 589.592 Radial†	1623.5	2247.8	711.08	ug/L	711.08	ppb	03:22:19
1	Sr 421.552†	8025.3	7455.1	71.713	ug/L	71.713	ppb	03:22:19
1	Sc 361.383	927203.1	927203.1	117.08	%			03:23:36
1	Y 371.029	954782.7	954782.7	140.90	%			03:23:36
1	Ag 328.068†	-4593.1	-4054.5	3.9258	ug/L	3.9258	ppb	03:23:41
1	As 188.979†	-37.2	-12.9	32.626	ug/L	32.626	ppb	03:24:01
1	B 249.677†	431.6	745.9	8.4775	ug/L	8.4775	ppb	03:23:41
1	Ba 233.527†	40977.6	35001.0	349.22	ug/L	349.22	ppb	03:23:41
1	Be 313.107†	-7208.2	-2615.0	4.3698	ug/L	4.3698	ppb	03:23:41
1	Cd 226.502†	532.9	611.5	0.9600	ug/L	0.9600	ppb	03:24:01
1	Co 228.616†	865.6	785.3	15.501	ug/L	15.501	ppb	03:24:01
1	Cr 267.716†	6640.9	5619.4	80.661	ug/L	80.661	ppb	03:24:01
1	Cu 324.752†	28004.5	17707.9	64.180	ug/L	64.180	ppb	03:23:41
1	Mn 257.610†	1797294.9	1534750.0	2130.4	ug/L	2130.4	ppb	03:23:36
1	Mo 202.031†	1.5	-11.8	5.3500	ug/L	5.3500	ppb	03:24:01
1	Ni 231.604†	2097.0	1730.5	57.834	ug/L	57.834	ppb	03:24:01
1	P 214.914†	1025.9	712.0	501.17	ug/L	501.17	ppb	03:24:01
1	Pb 220.353†	572.5	532.6	82.042	ug/L	82.042	ppb	03:24:01
1	S 181.975 Axial†	267.1	197.4	371.84	ug/L	371.84	ppb	03:24:01
1	Sb 206.836†	55.9	25.1	1.2780	ug/L	1.2780	ppb	03:24:01
1	Se 196.026†	-345.8	-274.7	-3.2458	ug/L	-3.2458	ppb	03:24:01
1	Si 251.611†	857254.0	731742.3	28609	ug/L	28609	ppb	03:23:36
1	Sn 189.927†	-4.3	-11.5	-5.4668	ug/L	-5.4668	ppb	03:24:01
1	Ti 334.940†	1595253.8	1363505.1	2446.6	ug/L	2446.6	ppb	03:23:36
1	Tl 190.801†	-139.4	-93.1	-8.1237	ug/L	-8.1237	ppb	03:24:01
1	U 409.014†	-8039.3	-4894.6	-158.09	ug/L	-158.09	ppb	03:23:36
1	V 292.402†	11871.5	11332.2	78.256	ug/L	78.256	ppb	03:23:41
1	Zn 213.857†	40305.1	33915.0	421.25	ug/L	421.25	ppb	03:23:41
1	SiO2†	858443.3	732759.2	61562	ug/L	61562	ppb	03:25:10
2	Sc Radial	3434.5	3434.5	107	%			03:23:04
2	Y RADIAL	3432.9	3432.9	130.7	%			03:23:04
2	Al 396.153Radial†	13543.7	12699.0	27478	ug/L	27478	ppb	03:22:44
2	Ca 317.933Radial†	2789.9	2590.7	10824	ug/L	10824	ppb	03:23:04
2	Fe 238.204 Radial†	3017.5	2806.0	80763	ug/L	80763	ppb	03:23:04
2	K 766.490 Radial†	17057.7	13889.1	6780.8	ug/L	6780.8	ppb	03:22:44
2	Mg 279.077 IEC†	75.6	68.8	7035.7	ug/L	7035.7	ppb	03:23:04
2	Na 589.592 Radial†	1628.3	2251.9	712.39	ug/L	712.39	ppb	03:22:44
2	Sr 421.552†	8017.0	7445.6	71.622	ug/L	71.622	ppb	03:22:44
2	Sc 361.383	931736.3	931736.3	117.65	%			03:24:07
2	Y 371.029	957896.1	957896.1	141.36	%			03:24:07
2	Ag 328.068†	-4607.9	-4048.0	3.8601	ug/L	3.8601	ppb	03:24:12
2	As 188.979†	-30.9	-7.4	35.807	ug/L	35.807	ppb	03:24:33
2	B 249.677†	446.3	756.6	8.8415	ug/L	8.8415	ppb	03:24:12
2	Ba 233.527†	41371.8	35165.9	350.84	ug/L	350.84	ppb	03:24:12
2	Be 313.107†	-7117.9	-2508.2	4.4336	ug/L	4.4336	ppb	03:24:12
2	Cd 226.502†	539.9	615.2	1.0502	ug/L	1.0502	ppb	03:24:33
2	Co 228.616†	858.6	775.7	15.227	ug/L	15.227	ppb	03:24:33
2	Cr 267.716†	6640.6	5591.6	80.265	ug/L	80.265	ppb	03:24:33
2	Cu 324.752†	28210.7	17766.8	64.361	ug/L	64.361	ppb	03:24:12
2	Mn 257.610†	1810211.3	1538259.8	2135.2	ug/L	2135.2	ppb	03:24:07
2	Mo 202.031†	-5.7	-17.8	4.7692	ug/L	4.7692	ppb	03:24:33
2	Ni 231.604†	2118.0	1739.7	58.140	ug/L	58.140	ppb	03:24:33

2	P 214.914†	1012.2	696.0	488.58 ug/L	488.58 ppb	03:24:33
2	Pb 220.353†	579.8	536.5	82.709 ug/L	82.709 ppb	03:24:33
2	S 181.975 Axial†	266.7	195.9	369.01 ug/L	369.01 ppb	03:24:33
2	Sb 206.836†	57.8	26.4	1.8211 ug/L	1.8211 ppb	03:24:33
2	Se 196.026†	-347.2	-274.5	-3.9413 ug/L	-3.9413 ppb	03:24:33
2	Si 251.611†	864508.4	734346.1	28711 ug/L	28711 ppb	03:24:07
2	Sn 189.927†	-8.2	-14.7	-6.2232 ug/L	-6.2232 ppb	03:24:33
2	Ti 334.940†	1607539.3	1367318.2	2453.5 ug/L	2453.5 ppb	03:24:07
2	Tl 190.801†	-136.2	-89.8	-6.6943 ug/L	-6.6943 ppb	03:24:33
2	U 409.014†	-7972.4	-4804.4	-155.31 ug/L	-155.31 ppb	03:24:07
2	V 292.402†	11941.1	11342.0	78.371 ug/L	78.371 ppb	03:24:12
2	Zn 213.857†	40583.9	33984.5	422.18 ug/L	422.18 ppb	03:24:12
2	SiO2†	858836.3	729525.9	61290 ug/L	61290 ppb	03:25:16
3	Sc Radial	3420.9	3420.9	107 %		03:23:29
3	Y RADIAL	3421.0	3421.0	130.2 %		03:23:29
3	Al 396.153Radial†	13506.8	12714.7	27512 ug/L	27512 ppb	03:23:09
3	Ca 317.933Radial†	2786.9	2598.2	10856 ug/L	10856 ppb	03:23:29
3	Fe 238.204 Radial†	3010.9	2811.0	80907 ug/L	80907 ppb	03:23:29
3	K 766.490 Radial†	17083.0	13976.0	6823.3 ug/L	6823.3 ppb	03:23:09
3	Mg 279.077 IEC†	77.2	70.6	7220.0 ug/L	7220.0 ppb	03:23:29
3	Na 589.592 Radial†	1600.6	2232.0	706.09 ug/L	706.09 ppb	03:23:09
3	Sr 421.552†	7953.1	7415.5	71.331 ug/L	71.331 ppb	03:23:09
3	Sc 361.383	926777.4	926777.4	117.02 %		03:24:38
3	Y 371.029	952625.8	952625.8	140.58 %		03:24:38
3	Ag 328.068†	-4706.1	-4152.8	3.3496 ug/L	3.3496 ppb	03:24:44
3	As 188.979†	-32.5	-9.0	34.918 ug/L	34.918 ppb	03:25:04
3	B 249.677†	483.1	790.1	9.7935 ug/L	9.7935 ppb	03:24:44
3	Ba 233.527†	41239.2	35240.7	351.58 ug/L	351.58 ppb	03:24:44
3	Be 313.107†	-7160.9	-2577.3	4.3957 ug/L	4.3957 ppb	03:24:44
3	Cd 226.502†	547.6	624.2	1.1734 ug/L	1.1734 ppb	03:25:04
3	Co 228.616†	850.0	772.2	15.137 ug/L	15.137 ppb	03:25:04
3	Cr 267.716†	6656.8	5635.6	80.875 ug/L	80.875 ppb	03:25:04
3	Cu 324.752†	28248.2	17927.1	64.910 ug/L	64.910 ppb	03:24:44
3	Mn 257.610†	1795992.9	1534342.6	2129.8 ug/L	2129.8 ppb	03:24:38
3	Mo 202.031†	1.5	-11.7	5.3404 ug/L	5.3404 ppb	03:25:04
3	Ni 231.604†	2104.0	1737.3	58.061 ug/L	58.061 ppb	03:25:04
3	P 214.914†	1008.9	697.9	489.83 ug/L	489.83 ppb	03:25:04
3	Pb 220.353†	573.0	533.3	82.172 ug/L	82.172 ppb	03:25:04
3	S 181.975 Axial†	257.6	189.4	356.53 ug/L	356.53 ppb	03:25:04
3	Sb 206.836†	49.8	19.8	-0.9761 ug/L	-0.9761 ppb	03:25:04
3	Se 196.026†	-333.6	-264.4	5.0416 ug/L	5.0416 ppb	03:25:04
3	Si 251.611†	857607.5	732380.8	28634 ug/L	28634 ppb	03:24:38
3	Sn 189.927†	-6.5	-13.4	-5.8979 ug/L	-5.8979 ppb	03:25:04
3	Ti 334.940†	1597076.3	1365688.4	2450.5 ug/L	2450.5 ppb	03:24:38
3	Tl 190.801†	-145.2	-98.1	-10.169 ug/L	-10.169 ppb	03:25:04
3	U 409.014†	-7910.4	-4787.6	-154.82 ug/L	-154.82 ppb	03:24:38
3	V 292.402†	11942.2	11397.3	78.818 ug/L	78.818 ppb	03:24:44
3	Zn 213.857†	40489.2	34088.1	423.48 ug/L	423.48 ppb	03:24:44
3	SiO2†	847962.1	724139.5	60838 ug/L	60838 ppb	03:25:22

Mean Data: 247178010|954672|1

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	928572.3	117.25	%	0.347				0.30%
Sc Radial	3429.7	107	%	0.2				0.22%
Y 371.029	955101.5	140.95	%	0.391				0.28%
Y RADIAL	3423.5	130.3	%	0.32				0.25%
Ag 328.068†	-4085.1	3.7118	ug/L	0.31537	3.7118	ppb	0.31537	8.50%
Al 396.153Radial†	12714.2	27511	ug/L	32.3	27511	ppb	32.3	0.12%
As 188.979†	-9.8	34.450	ug/L	1.6411	34.450	ppb	1.6411	4.76%
B 249.677†	764.2	9.0375	ug/L	0.67953	9.0375	ppb	0.67953	7.52%
Ba 233.527†	35135.9	350.55	ug/L	1.211	350.55	ppb	1.211	0.35%
Be 313.107†	-2566.8	4.3997	ug/L	0.03208	4.3997	ppb	0.03208	0.73%
Ca 317.933Radial†	2594.1	10839	ug/L	15.8	10839	ppb	15.8	0.15%
Cd 226.502†	616.9	1.0612	ug/L	0.10709	1.0612	ppb	0.10709	10.09%
Co 228.616†	777.7	15.288	ug/L	0.1898	15.288	ppb	0.1898	1.24%
Cr 267.716†	5615.6	80.600	ug/L	0.3095	80.600	ppb	0.3095	0.38%
Cu 324.752†	17800.6	64.484	ug/L	0.3799	64.484	ppb	0.3799	0.59%
Fe 238.204 Radial†	2811.4	80917	ug/L	159.6	80917	ppb	159.6	0.20%
K 766.490 Radial†	13989.4	6829.8	ug/L	52.57	6829.8	ppb	52.57	0.77%

Mg 279.077 IEC†	69.8	7142.9	ug/L	95.76	7142.9	ppb	95.76	1.34%
Mn 257.610†	1535784.1	2131.8	ug/L	2.97	2131.8	ppb	2.97	0.14%
Mo 202.031†	-13.8	5.1532	ug/L	0.33256	5.1532	ppb	0.33256	6.45%
Na 589.592 Radial†	2243.9	709.85	ug/L	3.324	709.85	ppb	3.324	0.47%
Ni 231.604†	1735.8	58.012	ug/L	0.1586	58.012	ppb	0.1586	0.27%
P 214.914†	701.9	493.19	ug/L	6.937	493.19	ppb	6.937	1.41%
Pb 220.353†	534.2	82.308	ug/L	0.3534	82.308	ppb	0.3534	0.43%
S 181.975 Axial†	194.2	365.80	ug/L	8.144	365.80	ppb	8.144	2.23%
Sb 206.836†	23.8	0.7077	ug/L	1.48325	0.7077	ppb	1.48325	209.59%
Se 196.026†	-271.2	-0.7151	ug/L	4.99761	-0.7151	ppb	4.99761	698.82%
Si 251.611†	732823.1	28651	ug/L	53.1	28651	ppb	53.1	0.19%
Sn 189.927†	-13.2	-5.8626	ug/L	0.37940	-5.8626	ppb	0.37940	6.47%
Sr 421.552†	7438.7	71.555	ug/L	0.1994	71.555	ppb	0.1994	0.28%
Ti 334.940†	1365503.9	2450.2	ug/L	3.44	2450.2	ppb	3.44	0.14%
Tl 190.801†	-93.7	-8.3291	ug/L	1.74650	-8.3291	ppb	1.74650	20.97%
U 409.014†	-4828.9	-156.07	ug/L	1.763	-156.07	ppb	1.763	1.13%
V 292.402†	11357.2	78.482	ug/L	0.2968	78.482	ppb	0.2968	0.38%
Zn 213.857†	33995.9	422.30	ug/L	1.124	422.30	ppb	1.124	0.27%
SiO2†	728808.2	61230	ug/L	365.8	61230	ppb	365.8	0.60%

Sequence No.: 72
Sample ID: 247178011|954672|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 93
Date Collected: 3/11/2010 03:27:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247178011|954672|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3433.0	3433.0	107	%			03:29:46
1	Y RADIAL	3199.8	3199.8	121.8	%			03:29:46
1	Al 396.153Radial†	24495.2	22927.3	49609	ug/L	49609	ppb	03:29:26
1	Ca 317.933Radial†	3444.4	3202.7	13382	ug/L	13382	ppb	03:29:46
1	Fe 238.204 Radial†	3209.5	2986.5	85958	ug/L	85958	ppb	03:29:46
1	K 766.490 Radial†	20226.1	16853.6	8228.4	ug/L	8228.4	ppb	03:29:26
1	Mg 279.077 IEC†	99.4	91.1	9335.3	ug/L	9335.3	ppb	03:29:46
1	Na 589.592 Radial†	529.8	1227.2	388.21	ug/L	388.21	ppb	03:29:26
1	Sr 421.552†	11444.0	10647.9	102.44	ug/L	102.44	ppb	03:29:26
1	Sc 361.383	917240.1	917240.1	115.82	%			03:30:43
1	Y 371.029	872242.7	872242.7	128.72	%			03:30:43
1	Ag 328.068†	-5053.1	-4494.3	3.0362	ug/L	3.0362	ppb	03:30:48
1	As 188.979†	-31.3	-8.2	34.664	ug/L	34.664	ppb	03:31:09
1	B 249.677†	465.6	779.3	8.6434	ug/L	8.6434	ppb	03:30:48
1	Ba 233.527†	57449.1	49603.1	494.00	ug/L	494.00	ppb	03:30:48
1	Be 313.107†	6417.3	9082.8	9.1759	ug/L	9.1759	ppb	03:30:48
1	Cd 226.502†	657.0	723.5	2.1897	ug/L	2.1897	ppb	03:31:09
1	Co 228.616†	1045.1	948.2	20.453	ug/L	20.453	ppb	03:31:09
1	Cr 267.716†	3839.8	3262.6	48.476	ug/L	48.476	ppb	03:31:09
1	Cu 324.752†	78491.1	61558.9	212.45	ug/L	212.45	ppb	03:30:48
1	Mn 257.610†	1687396.3	1456535.9	2022.6	ug/L	2022.6	ppb	03:30:43
1	Mo 202.031†	-22.6	-32.5	3.8597	ug/L	3.8597	ppb	03:31:09
1	Ni 231.604†	1541.5	1270.3	42.448	ug/L	42.448	ppb	03:31:09
1	P 214.914†	1225.8	894.0	619.38	ug/L	619.38	ppb	03:31:09
1	Pb 220.353†	1046.4	947.2	154.18	ug/L	154.18	ppb	03:31:09
1	S 181.975 Axial†	275.5	207.0	386.18	ug/L	386.18	ppb	03:31:09
1	Sb 206.836†	57.3	26.8	1.9015	ug/L	1.9015	ppb	03:31:09
1	Se 196.026†	-353.9	-284.8	7.7312	ug/L	7.7312	ppb	03:31:09
1	Si 251.611†	1040129.2	897594.1	35093	ug/L	35093	ppb	03:30:43
1	Sn 189.927†	-65.7	-64.6	-17.933	ug/L	-17.933	ppb	03:31:09
1	Ti 334.940†	1440312.0	1244525.2	2233.3	ug/L	2233.3	ppb	03:30:43
1	Tl 190.801†	-118.8	-76.6	-3.6883	ug/L	-3.6883	ppb	03:31:09
1	U 409.014†	-1423.7	742.9	12.664	ug/L	12.664	ppb	03:30:43
1	V 292.402†	15544.7	14613.9	105.01	ug/L	105.01	ppb	03:30:48
1	Zn 213.857†	33709.1	28593.8	352.35	ug/L	352.35	ppb	03:30:48
1	SiO2†	1040189.5	897647.2	75415	ug/L	75415	ppb	03:32:17
2	Sc Radial	3462.9	3462.9	108	%			03:30:11
2	Y RADIAL	3229.6	3229.6	122.9	%			03:30:11
2	Al 396.153Radial†	24880.1	23086.3	49953	ug/L	49953	ppb	03:29:51
2	Ca 317.933Radial†	3471.2	3199.8	13369	ug/L	13369	ppb	03:30:11
2	Fe 238.204 Radial†	3232.6	2982.0	85829	ug/L	85829	ppb	03:30:11
2	K 766.490 Radial†	20399.1	16850.8	8227.1	ug/L	8227.1	ppb	03:29:51
2	Mg 279.077 IEC†	104.7	95.2	9762.4	ug/L	9762.4	ppb	03:30:11
2	Na 589.592 Radial†	491.7	1187.6	375.71	ug/L	375.71	ppb	03:29:51
2	Sr 421.552†	11635.2	10732.7	103.26	ug/L	103.26	ppb	03:29:51
2	Sc 361.383	922290.4	922290.4	116.46	%			03:31:14
2	Y 371.029	876127.6	876127.6	129.29	%			03:31:14
2	Ag 328.068†	-4849.1	-4295.2	4.0445	ug/L	4.0445	ppb	03:31:20
2	As 188.979†	-25.8	-3.3	37.509	ug/L	37.509	ppb	03:31:40
2	B 249.677†	521.3	824.9	9.9946	ug/L	9.9946	ppb	03:31:20
2	Ba 233.527†	56840.7	48809.0	486.13	ug/L	486.13	ppb	03:31:20
2	Be 313.107†	6210.7	8875.0	9.0819	ug/L	9.0819	ppb	03:31:20
2	Cd 226.502†	637.8	703.9	1.9030	ug/L	1.9030	ppb	03:31:40
2	Co 228.616†	1032.2	932.2	20.012	ug/L	20.012	ppb	03:31:40
2	Cr 267.716†	3833.5	3239.0	48.144	ug/L	48.144	ppb	03:31:40
2	Cu 324.752†	77192.2	60072.5	207.42	ug/L	207.42	ppb	03:31:20
2	Mn 257.610†	1696249.5	1456160.2	2022.0	ug/L	2022.0	ppb	03:31:14
2	Mo 202.031†	-10.9	-22.4	4.7742	ug/L	4.7742	ppb	03:31:40
2	Ni 231.604†	1540.1	1261.9	42.165	ug/L	42.165	ppb	03:31:40

2	P 214.914†	1220.8	884.0	612.51 ug/L	612.51 ppb	03:31:40
2	Pb 220.353†	1015.5	915.7	149.11 ug/L	149.11 ppb	03:31:40
2	S 181.975 Axial†	280.2	209.8	391.44 ug/L	391.44 ppb	03:31:40
2	Sb 206.836†	53.8	23.5	0.5499 ug/L	0.5499 ppb	03:31:40
2	Se 196.026†	-357.1	-285.9	6.5596 ug/L	6.5596 ppb	03:31:40
2	Si 251.611†	1045525.9	897310.6	35082 ug/L	35082 ppb	03:31:14
2	Sn 189.927†	-45.8	-47.1	-13.767 ug/L	-13.767 ppb	03:31:40
2	Ti 334.940†	1448224.3	1244509.8	2233.3 ug/L	2233.3 ppb	03:31:14
2	Tl 190.801†	-116.5	-74.1	-2.6580 ug/L	-2.6580 ppb	03:31:40
2	U 409.014†	-1484.6	697.2	11.294 ug/L	11.294 ppb	03:31:14
2	V 292.402†	15317.7	14345.5	102.85 ug/L	102.85 ppb	03:31:20
2	Zn 213.857†	33338.0	28115.8	346.26 ug/L	346.26 ppb	03:31:20
2	SiO2†	1055511.4	905886.1	76107 ug/L	76107 ppb	03:32:23
3	Sc Radial	3482.4	3482.4	109 %		03:30:36
3	Y RADIAL	3241.1	3241.1	123.4 %		03:30:36
3	Al 396.153Radial†	24813.9	22896.0	49542 ug/L	49542 ppb	03:30:16
3	Ca 317.933Radial†	3492.3	3201.2	13375 ug/L	13375 ppb	03:30:36
3	Fe 238.204 Radial†	3262.0	2992.3	86124 ug/L	86124 ppb	03:30:36
3	K 766.490 Radial†	20291.1	16645.5	8126.8 ug/L	8126.8 ppb	03:30:16
3	Mg 279.077 IEC†	102.2	92.3	9462.6 ug/L	9462.6 ppb	03:30:36
3	Na 589.592 Radial†	441.0	1138.5	360.15 ug/L	360.15 ppb	03:30:16
3	Sr 421.552†	11595.5	10635.7	102.32 ug/L	102.32 ppb	03:30:16
3	Sc 361.383	919776.4	919776.4	116.14 %		03:31:46
3	Y 371.029	876985.7	876985.7	129.42 %		03:31:46
3	Ag 328.068†	-5021.6	-4455.1	3.2940 ug/L	3.2940 ppb	03:31:51
3	As 188.979†	-25.4	-3.0	37.697 ug/L	37.697 ppb	03:32:11
3	B 249.677†	367.5	693.7	6.1271 ug/L	6.1271 ppb	03:31:51
3	Ba 233.527†	57281.3	49321.9	491.22 ug/L	491.22 ppb	03:31:51
3	Be 313.107†	6365.5	9022.9	9.1385 ug/L	9.1385 ppb	03:31:51
3	Cd 226.502†	666.3	729.9	2.2700 ug/L	2.2700 ppb	03:32:11
3	Co 228.616†	1034.4	936.6	20.138 ug/L	20.138 ppb	03:32:11
3	Cr 267.716†	3862.0	3272.5	48.618 ug/L	48.618 ppb	03:32:11
3	Cu 324.752†	78019.0	60965.5	210.45 ug/L	210.45 ppb	03:31:51
3	Mn 257.610†	1687111.7	1452273.4	2016.7 ug/L	2016.7 ppb	03:31:46
3	Mo 202.031†	-19.1	-29.5	4.1542 ug/L	4.1542 ppb	03:32:11
3	Ni 231.604†	1535.0	1261.1	42.140 ug/L	42.140 ppb	03:32:11
3	P 214.914†	1213.7	880.7	608.94 ug/L	608.94 ppb	03:32:11
3	Pb 220.353†	1032.7	932.9	151.79 ug/L	151.79 ppb	03:32:11
3	S 181.975 Axial†	280.6	210.8	393.31 ug/L	393.31 ppb	03:32:11
3	Sb 206.836†	46.4	17.2	-2.1687 ug/L	-2.1687 ppb	03:32:11
3	Se 196.026†	-368.4	-296.6	-1.8428 ug/L	-1.8428 ppb	03:32:11
3	Si 251.611†	1040405.1	895355.3	35006 ug/L	35006 ppb	03:31:46
3	Sn 189.927†	-57.8	-57.6	-16.275 ug/L	-16.275 ppb	03:32:11
3	Ti 334.940†	1441364.1	1242002.0	2228.8 ug/L	2228.8 ppb	03:31:46
3	Tl 190.801†	-125.5	-82.1	-6.0290 ug/L	-6.0290 ppb	03:32:11
3	U 409.014†	-1445.9	727.1	12.166 ug/L	12.166 ppb	03:31:46
3	V 292.402†	15522.9	14558.1	104.54 ug/L	104.54 ppb	03:31:51
3	Zn 213.857†	33669.5	28479.4	350.86 ug/L	350.86 ppb	03:31:51
3	SiO2†	1041977.4	896710.2	75336 ug/L	75336 ppb	03:32:29

Mean Data: 247178011|954672|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	919769.0	116.14	%	0.319				0.27%
Sc Radial	3459.4	108	%	0.8				0.72%
Y 371.029	875118.7	129.14	%	0.373				0.29%
Y RADIAL	3223.5	122.7	%	0.81				0.66%
Ag 328.068†	-4414.9	3.4582	ug/L	0.52384	3.4582	ppb	0.52384	15.15%
Al 396.153Radial†	22969.9	49701	ug/L	220.8	49701	ppb	220.8	0.44%
As 188.979†	-4.9	36.623	ug/L	1.6996	36.623	ppb	1.6996	4.64%
B 249.677†	766.0	8.2550	ug/L	1.96278	8.2550	ppb	1.96278	23.78%
Ba 233.527†	49244.7	490.45	ug/L	3.992	490.45	ppb	3.992	0.81%
Be 313.107†	8993.6	9.1321	ug/L	0.04734	9.1321	ppb	0.04734	0.52%
Ca 317.933Radial†	3201.2	13375	ug/L	6.2	13375	ppb	6.2	0.05%
Cd 226.502†	719.1	2.1209	ug/L	0.19293	2.1209	ppb	0.19293	9.10%
Co 228.616†	939.0	20.201	ug/L	0.2273	20.201	ppb	0.2273	1.13%
Cr 267.716†	3258.0	48.413	ug/L	0.2433	48.413	ppb	0.2433	0.50%
Cu 324.752†	60865.6	210.10	ug/L	2.531	210.10	ppb	2.531	1.20%
Fe 238.204 Radial†	2986.9	85970	ug/L	148.0	85970	ppb	148.0	0.17%
K 766.490 Radial†	16783.3	8194.1	ug/L	58.31	8194.1	ppb	58.31	0.71%

Mg 279.077 IEC†	92.9	9520.1	ug/L	219.26	9520.1	ppb	219.26	2.30%
Mn 257.610†	1454989.8	2020.5	ug/L	3.25	2020.5	ppb	3.25	0.16%
Mo 202.031†	-28.1	4.2627	ug/L	0.46680	4.2627	ppb	0.46680	10.95%
Na 589.592 Radial†	1184.4	374.69	ug/L	14.055	374.69	ppb	14.055	3.75%
Ni 231.604†	1264.4	42.251	ug/L	0.1711	42.251	ppb	0.1711	0.40%
P 214.914†	886.2	613.61	ug/L	5.306	613.61	ppb	5.306	0.86%
Pb 220.353†	931.9	151.69	ug/L	2.533	151.69	ppb	2.533	1.67%
S 181.975 Axial†	209.2	390.31	ug/L	3.699	390.31	ppb	3.699	0.95%
Sb 206.836†	22.5	0.0942	ug/L	2.07300	0.0942	ppb	2.07300	>999.9%
Se 196.026†	-289.1	4.1493	ug/L	5.22230	4.1493	ppb	5.22230	125.86%
Si 251.611†	896753.3	35060	ug/L	47.7	35060	ppb	47.7	0.14%
Sn 189.927†	-56.4	-15.992	ug/L	2.0975	-15.992	ppb	2.0975	13.12%
Sr 421.552†	10672.1	102.67	ug/L	0.509	102.67	ppb	0.509	0.50%
Ti 334.940†	1243679.0	2231.8	ug/L	2.60	2231.8	ppb	2.60	0.12%
Tl 190.801†	-77.6	-4.1251	ug/L	1.72741	-4.1251	ppb	1.72741	41.88%
U 409.014†	722.4	12.041	ug/L	0.6937	12.041	ppb	0.6937	5.76%
V 292.402†	14505.8	104.14	ug/L	1.137	104.14	ppb	1.137	1.09%
Zn 213.857†	28396.3	349.82	ug/L	3.174	349.82	ppb	3.174	0.91%
SiO2†	900081.2	75619	ug/L	424.2	75619	ppb	424.2	0.56%

Sequence No.: 73
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/11/2010 03:34:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3338.8	3338.8	104	%			03:36:51
1	Y RADIAL	2734.0	2734.0	104.1	%			03:36:51
1	Al 396.153Radial†	2382.5	2348.7	5055.9	ug/L	5055.9	ppb	03:36:31
1	Ca 317.933Radial†	1417.3	1347.8	5631.5	ug/L	5631.5	ppb	03:36:51
1	Fe 238.204 Radial†	209.1	191.2	5520.6	ug/L	5520.6	ppb	03:36:51
1	K 766.490 Radial†	13880.5	11295.7	5512.0	ug/L	5512.0	ppb	03:36:31
1	Mg 279.077 IEC†	58.2	54.2	5607.2	ug/L	5607.2	ppb	03:36:51
1	Na 589.592 Radial†	31160.6	30640.2	9692.9	ug/L	9692.9	ppb	03:36:31
1	Sr 421.552†	52772.9	50616.2	487.40	ug/L	487.40	ppb	03:36:31
1	Sc 361.383	897124.2	897124.2	113.28	%			03:37:49
1	Y 371.029	755643.6	755643.6	111.51	%			03:37:49
1	Ag 328.068†	110438.0	97361.3	519.60	ug/L	519.60	ppb	03:37:54
1	As 188.979†	1074.6	967.5	571.07	ug/L	571.07	ppb	03:38:14
1	B 249.677†	19804.9	17860.7	517.25	ug/L	517.25	ppb	03:37:54
1	Ba 233.527†	62397.0	55083.3	546.71	ug/L	546.71	ppb	03:37:54
1	Be 313.107†	1330329.3	1177932.7	533.90	ug/L	533.90	ppb	03:37:49
1	Cd 226.502†	42577.2	37742.6	575.63	ug/L	575.63	ppb	03:37:54
1	Co 228.616†	23311.9	20625.2	569.19	ug/L	569.19	ppb	03:37:54
1	Cr 267.716†	45138.0	39794.2	547.08	ug/L	547.08	ppb	03:37:54
1	Cu 324.752†	173249.7	146729.7	495.59	ug/L	495.59	ppb	03:37:54
1	Mn 257.610†	437634.1	385936.7	534.09	ug/L	534.09	ppb	03:37:49
1	Mo 202.031†	6705.2	5906.2	539.89	ug/L	539.89	ppb	03:38:14
1	Ni 231.604†	19480.1	17136.1	572.47	ug/L	572.47	ppb	03:37:54
1	P 214.914†	4252.0	3589.3	2785.0	ug/L	2785.0	ppb	03:38:14
1	Pb 220.353†	3854.9	3446.7	566.85	ug/L	566.85	ppb	03:38:14
1	S 181.975 Axial†	731.8	615.2	1174.2	ug/L	1174.2	ppb	03:38:14
1	Sb 206.836†	1448.5	1256.0	559.37	ug/L	559.37	ppb	03:38:14
1	Se 196.026†	735.5	670.0	590.89	ug/L	590.89	ppb	03:38:14
1	Si 251.611†	77681.7	68099.9	2655.9	ug/L	2655.9	ppb	03:37:54
1	Sn 189.927†	2702.0	2377.4	566.86	ug/L	566.86	ppb	03:38:14
1	Ti 334.940†	318421.8	282025.4	505.76	ug/L	505.76	ppb	03:37:54
1	Tl 190.801†	1480.7	1333.1	551.66	ug/L	551.66	ppb	03:38:14
1	U 409.014†	15767.3	15891.1	480.83	ug/L	480.83	ppb	03:37:54
1	V 292.402†	71625.4	64421.8	534.92	ug/L	534.92	ppb	03:37:54
1	Zn 213.857†	49564.2	43243.0	548.01	ug/L	548.01	ppb	03:37:54
1	SiO2†	76918.2	67427.0	5650.1	ug/L	5650.1	ppb	03:39:22
2	Sc Radial	3323.3	3323.3	104	%			03:37:17
2	Y RADIAL	2722.6	2722.6	103.6	%			03:37:17
2	Al 396.153Radial†	2352.2	2330.1	5015.9	ug/L	5015.9	ppb	03:36:57
2	Ca 317.933Radial†	1419.2	1356.0	5665.7	ug/L	5665.7	ppb	03:37:17
2	Fe 238.204 Radial†	207.1	190.2	5491.2	ug/L	5491.2	ppb	03:37:17
2	K 766.490 Radial†	13675.9	11160.6	5446.1	ug/L	5446.1	ppb	03:36:57
2	Mg 279.077 IEC†	60.2	56.4	5834.6	ug/L	5834.6	ppb	03:37:17
2	Na 589.592 Radial†	30394.7	30041.2	9503.4	ug/L	9503.4	ppb	03:36:57
2	Sr 421.552†	51946.2	50055.3	482.00	ug/L	482.00	ppb	03:36:57
2	Sc 361.383	898838.6	898838.6	113.49	%			03:38:20
2	Y 371.029	756748.0	756748.0	111.67	%			03:38:20
2	Ag 328.068†	109908.9	96709.2	516.11	ug/L	516.11	ppb	03:38:25
2	As 188.979†	1061.1	953.8	563.03	ug/L	563.03	ppb	03:38:45
2	B 249.677†	19734.7	17765.5	514.50	ug/L	514.50	ppb	03:38:25
2	Ba 233.527†	61876.7	54519.7	541.12	ug/L	541.12	ppb	03:38:25
2	Be 313.107†	1336398.0	1181039.9	535.30	ug/L	535.30	ppb	03:38:20
2	Cd 226.502†	42198.0	37336.8	569.43	ug/L	569.43	ppb	03:38:25
2	Co 228.616†	23082.3	20383.7	562.53	ug/L	562.53	ppb	03:38:25
2	Cr 267.716†	44680.2	39314.8	540.49	ug/L	540.49	ppb	03:38:25
2	Cu 324.752†	172586.2	145853.4	492.63	ug/L	492.63	ppb	03:38:25
2	Mn 257.610†	439336.5	386699.8	535.14	ug/L	535.14	ppb	03:38:20
2	Mo 202.031†	6675.8	5869.0	536.49	ug/L	536.49	ppb	03:38:45
2	Ni 231.604†	19222.0	16875.9	563.78	ug/L	563.78	ppb	03:38:25

2	P 214.914†	4213.4	3548.1	2752.5 ug/L	2752.5 ppb	03:38:45
2	Pb 220.353†	3853.8	3439.2	565.61 ug/L	565.61 ppb	03:38:45
2	S 181.975 Axial†	722.3	605.6	1155.9 ug/L	1155.9 ppb	03:38:45
2	Sb 206.836†	1445.2	1250.6	556.98 ug/L	556.98 ppb	03:38:45
2	Se 196.026†	734.6	667.9	589.05 ug/L	589.05 ppb	03:38:45
2	Si 251.611†	76955.8	67329.5	2625.8 ug/L	2625.8 ppb	03:38:25
2	Sn 189.927†	2704.5	2375.1	566.31 ug/L	566.31 ppb	03:38:45
2	Ti 334.940†	316325.0	279641.8	501.47 ug/L	501.47 ppb	03:38:25
2	Tl 190.801†	1468.5	1319.9	546.21 ug/L	546.21 ppb	03:38:45
2	U 409.014†	15566.3	15687.5	474.67 ug/L	474.67 ppb	03:38:25
2	V 292.402†	70973.1	63726.5	529.18 ug/L	529.18 ppb	03:38:25
2	Zn 213.857†	49053.8	42709.8	541.25 ug/L	541.25 ppb	03:38:25
2	SiO2†	76556.3	66978.6	5612.5 ug/L	5612.5 ppb	03:39:27
3	Sc Radial	3301.0	3301.0	103 %		03:37:42
3	Y RADIAL	2704.6	2704.6	102.9 %		03:37:42
3	Al 396.153Radial†	2343.6	2337.1	5030.9 ug/L	5030.9 ppb	03:37:22
3	Ca 317.933Radial†	1411.8	1358.1	5674.4 ug/L	5674.4 ppb	03:37:42
3	Fe 238.204 Radial†	208.9	193.3	5581.2 ug/L	5581.2 ppb	03:37:42
3	K 766.490 Radial†	13674.7	11248.5	5489.0 ug/L	5489.0 ppb	03:37:22
3	Mg 279.077 IEC†	62.6	59.1	6116.2 ug/L	6116.2 ppb	03:37:42
3	Na 589.592 Radial†	30237.7	30086.9	9517.9 ug/L	9517.9 ppb	03:37:22
3	Sr 421.552†	51528.7	49988.5	481.35 ug/L	481.35 ppb	03:37:22
3	Sc 361.383	898611.5	898611.5	113.47 %		03:38:51
3	Y 371.029	757658.2	757658.2	111.81 %		03:38:51
3	Ag 328.068†	109614.9	96474.6	514.89 ug/L	514.89 ppb	03:38:56
3	As 188.979†	1070.7	962.4	568.09 ug/L	568.09 ppb	03:39:16
3	B 249.677†	19703.1	17742.0	513.80 ug/L	513.80 ppb	03:38:56
3	Ba 233.527†	61656.3	54339.3	539.33 ug/L	539.33 ppb	03:38:56
3	Be 313.107†	1335364.8	1180426.8	535.02 ug/L	535.02 ppb	03:38:51
3	Cd 226.502†	42053.2	37218.6	567.62 ug/L	567.62 ppb	03:38:56
3	Co 228.616†	23025.2	20338.4	561.29 ug/L	561.29 ppb	03:38:56
3	Cr 267.716†	44609.8	39262.7	539.77 ug/L	539.77 ppb	03:38:56
3	Cu 324.752†	172142.9	145501.2	491.44 ug/L	491.44 ppb	03:38:56
3	Mn 257.610†	438219.2	385812.9	533.91 ug/L	533.91 ppb	03:38:51
3	Mo 202.031†	6703.9	5895.2	538.89 ug/L	538.89 ppb	03:39:16
3	Ni 231.604†	19219.3	16877.8	563.84 ug/L	563.84 ppb	03:38:56
3	P 214.914†	4244.6	3576.5	2775.5 ug/L	2775.5 ppb	03:39:16
3	Pb 220.353†	3861.1	3446.6	566.81 ug/L	566.81 ppb	03:39:16
3	S 181.975 Axial†	731.6	614.0	1171.9 ug/L	1171.9 ppb	03:39:16
3	Sb 206.836†	1446.5	1252.1	557.73 ug/L	557.73 ppb	03:39:16
3	Se 196.026†	723.9	658.7	581.41 ug/L	581.41 ppb	03:39:16
3	Si 251.611†	76925.3	67319.7	2625.4 ug/L	2625.4 ppb	03:38:56
3	Sn 189.927†	2721.9	2391.0	570.10 ug/L	570.10 ppb	03:39:16
3	Ti 334.940†	315249.8	278764.7	499.88 ug/L	499.88 ppb	03:38:56
3	Tl 190.801†	1487.7	1337.1	553.29 ug/L	553.29 ppb	03:39:16
3	U 409.014†	15765.2	15866.3	480.09 ug/L	480.09 ppb	03:38:56
3	V 292.402†	70856.2	63639.3	528.50 ug/L	528.50 ppb	03:38:56
3	Zn 213.857†	48906.3	42590.7	539.72 ug/L	539.72 ppb	03:38:56
3	SiO2†	77141.2	67511.1	5657.2 ug/L	5657.2 ppb	03:39:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	898191.4	113.41	%	0.118				0.10%
Sc Radial	3321.0	104	%	0.6				0.57%
Y 371.029	756683.3	111.66	%	0.149				0.13%
Y RADIAL	2720.4	103.5	%	0.56				0.54%
Ag 328.068†	96848.4	516.87	ug/L	2.443	516.87	ppb	2.443	0.47%
QC value within limits for Ag 328.068 Recovery = 103.37%								
Al 396.153Radial†	2338.7	5034.2	ug/L	20.23	5034.2	ppb	20.23	0.40%
QC value within limits for Al 396.153Radial Recovery = 100.68%								
As 188.979†	961.2	567.40	ug/L	4.065	567.40	ppb	4.065	0.72%
QC value greater than the upper limit for As 188.979 Recovery = 113.48%								
B 249.677†	17789.4	515.18	ug/L	1.820	515.18	ppb	1.820	0.35%
QC value within limits for B 249.677 Recovery = 103.04%								
Ba 233.527†	54647.4	542.39	ug/L	3.850	542.39	ppb	3.850	0.71%
QC value within limits for Ba 233.527 Recovery = 108.48%								
Be 313.107†	1179799.8	534.74	ug/L	0.738	534.74	ppb	0.738	0.14%
QC value within limits for Be 313.107 Recovery = 106.95%								
Ca 317.933Radial†	1354.0	5657.2	ug/L	22.67	5657.2	ppb	22.67	0.40%

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   QC value greater than the upper limit for Ca 317.933Radial  Recovery = 113.14%
Cd 226.502†            37432.7      570.89 ug/L         4.198      570.89 ppb          4.198   0.74%
   QC value greater than the upper limit for Cd 226.502  Recovery = 114.18%
Co 228.616†            20449.1      564.34 ug/L         4.251      564.34 ppb          4.251   0.75%
   QC value greater than the upper limit for Co 228.616  Recovery = 112.87%
Cr 267.716†            39457.2      542.45 ug/L         4.026      542.45 ppb          4.026   0.74%
   QC value within limits for Cr 267.716  Recovery = 108.49%
Cu 324.752†           146028.1      493.22 ug/L         2.135      493.22 ppb          2.135   0.43%
   QC value within limits for Cu 324.752  Recovery = 98.64%
Fe 238.204 Radial†       191.6      5531.0 ug/L        45.88      5531.0 ppb          45.88   0.83%
   QC value greater than the upper limit for Fe 238.204 Radial  Recovery = 110.62%
K 766.490 Radial†      11235.0      5482.4 ug/L        33.48      5482.4 ppb          33.48   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 109.65%
Mg 279.077 IEC†           56.6      5852.6 ug/L       254.96      5852.6 ppb         254.96   4.36%
   QC value greater than the upper limit for Mg 279.077 IEC  Recovery = 117.05%
Mn 257.610†           386149.8      534.38 ug/L         0.663      534.38 ppb          0.663   0.12%
   QC value within limits for Mn 257.610  Recovery = 106.88%
Mo 202.031†             5890.1      538.43 ug/L         1.749      538.43 ppb          1.749   0.32%
   QC value within limits for Mo 202.031  Recovery = 107.69%
Na 589.592 Radial†     30256.1      9571.4 ug/L       105.49      9571.4 ppb         105.49   1.10%
   QC value within limits for Na 589.592 Radial  Recovery = 95.71%
Ni 231.604†            16963.3      566.70 ug/L         5.001      566.70 ppb          5.001   0.88%
   QC value greater than the upper limit for Ni 231.604  Recovery = 113.34%
P 214.914†              3571.3      2771.0 ug/L        16.70      2771.0 ppb          16.70   0.60%
   QC value greater than the upper limit for P 214.914  Recovery = 110.84%
Pb 220.353†             3444.2      566.43 ug/L         0.704      566.43 ppb          0.704   0.12%
   QC value greater than the upper limit for Pb 220.353  Recovery = 113.29%
S 181.975 Axial†         611.6      1167.3 ug/L         9.96      1167.3 ppb           9.96   0.85%
   QC value greater than the upper limit for S 181.975 Axial  Recovery = 116.73%
Sb 206.836†             1252.9      558.03 ug/L         1.223      558.03 ppb          1.223   0.22%
   QC value greater than the upper limit for Sb 206.836  Recovery = 111.61%
Se 196.026†              665.5      587.12 ug/L         5.027      587.12 ppb          5.027   0.86%
   QC value greater than the upper limit for Se 196.026  Recovery = 117.42%
Si 251.611†            67583.0      2635.7 ug/L        17.49      2635.7 ppb          17.49   0.66%
   QC value within limits for Si 251.611  Recovery = 105.43%
Sn 189.927†             2381.2      567.76 ug/L         2.047      567.76 ppb          2.047   0.36%
   QC value greater than the upper limit for Sn 189.927  Recovery = 113.55%
Sr 421.552†            50220.0      483.58 ug/L         3.320      483.58 ppb          3.320   0.69%
   QC value within limits for Sr 421.552  Recovery = 96.72%
Ti 334.940†           280144.0      502.37 ug/L         3.041      502.37 ppb          3.041   0.61%
   QC value within limits for Ti 334.940  Recovery = 100.47%
Tl 190.801†             1330.0      550.39 ug/L         3.708      550.39 ppb          3.708   0.67%
   QC value greater than the upper limit for Tl 190.801  Recovery = 110.08%
U 409.014†             15815.0      478.53 ug/L         3.367      478.53 ppb          3.367   0.70%
   QC value within limits for U 409.014  Recovery = 95.71%
V 292.402†             63929.2      530.87 ug/L         3.526      530.87 ppb          3.526   0.66%
   QC value within limits for V 292.402  Recovery = 106.17%
Zn 213.857†            42847.8      542.99 ug/L         4.411      542.99 ppb          4.411   0.81%
   QC value within limits for Zn 213.857  Recovery = 108.60%
SiO2†                  67305.5      5639.9 ug/L        24.01      5639.9 ppb          24.01   0.43%
   QC value within limits for SiO2  Recovery = 105.47%
QC Failed.  Continue with analysis.
```

Sequence No.: 74
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/11/2010 03:41:42
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3263.3	3263.3	102	%			03:43:54
1	Y RADIAL	2679.4	2679.4	102.0	%			03:43:54
1	Al 396.153Radial†	-69.6	-6.3	-13.595	ug/L	-13.595	ppb	03:43:54
1	Ca 317.933Radial†	7.4	-5.3	-21.949	ug/L	-21.949	ppb	03:43:54
1	Fe 238.204 Radial†	8.4	-1.2	-34.718	ug/L	-34.718	ppb	03:43:54
1	K 766.490 Radial†	2415.9	345.8	168.95	ug/L	168.95	ppb	03:43:34
1	Mg 279.077 IEC†	0.6	-1.1	-117.50	ug/L	-117.50	ppb	03:43:54
1	Na 589.592 Radial†	-914.2	-165.1	-52.228	ug/L	-52.228	ppb	03:43:34
1	Sr 421.552†	14.3	-20.6	-0.1984	ug/L	-0.1984	ppb	03:43:34
1	Sc 361.383	877500.1	877500.1	110.80	%			03:44:51
1	Y 371.029	748039.9	748039.9	110.39	%			03:44:51
1	Ag 328.068†	206.0	54.6	0.2881	ug/L	0.2881	ppb	03:44:51
1	As 188.979†	-21.4	-0.5	-0.2999	ug/L	-0.2999	ppb	03:45:11
1	B 249.677†	-384.0	30.7	0.8983	ug/L	0.8983	ppb	03:45:11
1	Ba 233.527†	3.9	3.8	0.0346	ug/L	0.0346	ppb	03:45:11
1	Be 313.107†	-3598.1	294.6	0.1322	ug/L	0.1322	ppb	03:44:51
1	Cd 226.502†	-158.5	13.2	0.2009	ug/L	0.2009	ppb	03:45:11
1	Co 228.616†	-60.3	-8.5	-0.2356	ug/L	-0.2356	ppb	03:45:11
1	Cr 267.716†	83.8	22.8	0.3161	ug/L	0.3161	ppb	03:45:11
1	Cu 324.752†	6429.2	-409.5	-1.3760	ug/L	-1.3760	ppb	03:44:51
1	Mn 257.610†	516.5	67.3	0.0945	ug/L	0.0945	ppb	03:45:11
1	Mo 202.031†	7.9	-5.9	-0.5455	ug/L	-0.5455	ppb	03:45:11
1	Ni 231.604†	45.8	-19.2	-0.6432	ug/L	-0.6432	ppb	03:45:11
1	P 214.914†	189.6	6.8	5.7364	ug/L	5.7364	ppb	03:45:11
1	Pb 220.353†	-56.6	-7.4	-1.2184	ug/L	-1.2184	ppb	03:45:11
1	S 181.975 Axial†	56.1	19.9	37.935	ug/L	37.935	ppb	03:45:11
1	Sb 206.836†	27.6	2.2	0.9448	ug/L	0.9448	ppb	03:45:11
1	Se 196.026†	-25.8	-2.6	-2.3319	ug/L	-2.3319	ppb	03:45:11
1	Si 251.611†	649.9	110.5	4.3265	ug/L	4.3265	ppb	03:45:11
1	Sn 189.927†	10.2	1.4	0.3289	ug/L	0.3289	ppb	03:45:11
1	Ti 334.940†	-1316.5	-259.8	-0.4524	ug/L	-0.4524	ppb	03:44:51
1	Tl 190.801†	-27.9	0.8	0.3223	ug/L	0.3223	ppb	03:45:11
1	U 409.014†	-2773.6	-531.2	-16.131	ug/L	-16.131	ppb	03:44:51
1	V 292.402†	-1466.3	-131.1	-1.1091	ug/L	-1.1091	ppb	03:44:51
1	Zn 213.857†	596.6	27.0	0.3572	ug/L	0.3572	ppb	03:45:11
1	SiO2†	634.4	97.5	8.2100	ug/L	8.2100	ppb	03:46:07
2	Sc Radial	3350.2	3350.2	105	%			03:44:19
2	Y RADIAL	2756.5	2756.5	104.9	%			03:44:19
2	Al 396.153Radial†	-69.9	-4.9	-10.540	ug/L	-10.540	ppb	03:44:19
2	Ca 317.933Radial†	12.8	-0.3	-1.1211	ug/L	-1.1211	ppb	03:44:19
2	Fe 238.204 Radial†	8.3	-1.5	-43.756	ug/L	-43.756	ppb	03:44:19
2	K 766.490 Radial†	2383.6	253.4	123.81	ug/L	123.81	ppb	03:43:59
2	Mg 279.077 IEC†	1.3	-0.5	-48.424	ug/L	-48.424	ppb	03:44:19
2	Na 589.592 Radial†	-931.7	-158.6	-50.159	ug/L	-50.159	ppb	03:43:59
2	Sr 421.552†	27.1	-8.7	-0.0838	ug/L	-0.0838	ppb	03:43:59
2	Sc 361.383	874546.0	874546.0	110.43	%			03:45:16
2	Y 371.029	746553.8	746553.8	110.17	%			03:45:16
2	Ag 328.068†	154.7	8.8	0.0374	ug/L	0.0374	ppb	03:45:16
2	As 188.979†	-18.6	2.0	1.1712	ug/L	1.1712	ppb	03:45:36
2	B 249.677†	-410.4	5.6	0.1713	ug/L	0.1713	ppb	03:45:36
2	Ba 233.527†	6.8	6.4	0.0597	ug/L	0.0597	ppb	03:45:36
2	Be 313.107†	-3646.9	239.4	0.1071	ug/L	0.1071	ppb	03:45:16
2	Cd 226.502†	-159.9	11.5	0.1775	ug/L	0.1775	ppb	03:45:36
2	Co 228.616†	-52.7	-1.9	-0.0508	ug/L	-0.0508	ppb	03:45:36
2	Cr 267.716†	81.4	20.9	0.2878	ug/L	0.2878	ppb	03:45:36
2	Cu 324.752†	6431.2	-388.1	-1.3068	ug/L	-1.3068	ppb	03:45:16
2	Mn 257.610†	504.1	57.6	0.0774	ug/L	0.0774	ppb	03:45:36
2	Mo 202.031†	11.4	-2.7	-0.2501	ug/L	-0.2501	ppb	03:45:36
2	Ni 231.604†	65.6	-1.2	-0.0404	ug/L	-0.0404	ppb	03:45:36

2	P 214.914†	176.1	-4.9	-3.6160 ug/L	-3.6160 ppb	03:45:36
2	Pb 220.353†	-72.2	-21.7	-3.5631 ug/L	-3.5631 ppb	03:45:36
2	S 181.975 Axial†	55.2	19.2	36.626 ug/L	36.626 ppb	03:45:36
2	Sb 206.836†	38.9	12.5	5.3506 ug/L	5.3506 ppb	03:45:36
2	Se 196.026†	-28.5	-5.1	-4.4804 ug/L	-4.4804 ppb	03:45:36
2	Si 251.611†	655.1	117.1	4.5824 ug/L	4.5824 ppb	03:45:36
2	Sn 189.927†	10.5	1.7	0.4184 ug/L	0.4184 ppb	03:45:36
2	Ti 334.940†	-1339.3	-284.5	-0.5016 ug/L	-0.5016 ppb	03:45:16
2	Tl 190.801†	-30.5	-1.7	-0.6823 ug/L	-0.6823 ppb	03:45:36
2	U 409.014†	-2581.7	-365.9	-11.110 ug/L	-11.110 ppb	03:45:16
2	V 292.402†	-1473.9	-142.5	-1.1863 ug/L	-1.1863 ppb	03:45:16
2	Zn 213.857†	579.3	13.2	0.1773 ug/L	0.1773 ppb	03:45:36
2	SiO2†	668.9	130.7	10.990 ug/L	10.990 ppb	03:46:12
3	Sc Radial	3269.4	3269.4	102 %		03:44:44
3	Y RADIAL	2684.8	2684.8	102.2 %		03:44:44
3	Al 396.153Radial†	-65.2	-1.9	-4.0640 ug/L	-4.0640 ppb	03:44:44
3	Ca 317.933Radial†	11.1	-1.6	-6.8636 ug/L	-6.8636 ppb	03:44:44
3	Fe 238.204 Radial†	9.9	0.2	6.3744 ug/L	6.3744 ppb	03:44:44
3	K 766.490 Radial†	2313.3	240.8	117.69 ug/L	117.69 ppb	03:44:24
3	Mg 279.077 IEC†	1.5	-0.3	-27.715 ug/L	-27.715 ppb	03:44:44
3	Na 589.592 Radial†	-966.0	-214.2	-67.769 ug/L	-67.769 ppb	03:44:24
3	Sr 421.552†	14.9	-20.0	-0.1925 ug/L	-0.1925 ppb	03:44:24
3	Sc 361.383	870449.9	870449.9	109.91 %		03:45:42
3	Y 371.029	744256.1	744256.1	109.83 %		03:45:42
3	Ag 328.068†	217.3	66.4	0.3650 ug/L	0.3650 ppb	03:45:42
3	As 188.979†	-26.5	-5.3	-3.1011 ug/L	-3.1011 ppb	03:46:02
3	B 249.677†	-401.8	11.7	0.3386 ug/L	0.3386 ppb	03:46:02
3	Ba 233.527†	18.9	17.5	0.1729 ug/L	0.1729 ppb	03:46:02
3	Be 313.107†	-3686.8	187.6	0.0837 ug/L	0.0837 ppb	03:45:42
3	Cd 226.502†	-148.2	21.4	0.3226 ug/L	0.3226 ppb	03:46:02
3	Co 228.616†	-49.9	0.5	0.0140 ug/L	0.0140 ppb	03:46:02
3	Cr 267.716†	89.4	28.5	0.3966 ug/L	0.3966 ppb	03:46:02
3	Cu 324.752†	6325.0	-457.3	-1.5361 ug/L	-1.5361 ppb	03:45:42
3	Mn 257.610†	497.0	53.3	0.0755 ug/L	0.0755 ppb	03:46:02
3	Mo 202.031†	8.9	-5.0	-0.4518 ug/L	-0.4518 ppb	03:46:02
3	Ni 231.604†	52.8	-12.6	-0.4200 ug/L	-0.4200 ppb	03:46:02
3	P 214.914†	196.7	14.7	12.076 ug/L	12.076 ppb	03:46:02
3	Pb 220.353†	-58.1	-9.2	-1.5109 ug/L	-1.5109 ppb	03:46:02
3	S 181.975 Axial†	58.6	22.5	43.041 ug/L	43.041 ppb	03:46:02
3	Sb 206.836†	41.5	15.0	6.4683 ug/L	6.4683 ppb	03:46:02
3	Se 196.026†	-18.0	4.4	3.7391 ug/L	3.7391 ppb	03:46:02
3	Si 251.611†	630.5	97.5	3.8187 ug/L	3.8187 ppb	03:46:02
3	Sn 189.927†	15.8	6.6	1.5607 ug/L	1.5607 ppb	03:46:02
3	Ti 334.940†	-1329.3	-281.1	-0.4967 ug/L	-0.4967 ppb	03:45:42
3	Tl 190.801†	-20.1	7.7	3.1442 ug/L	3.1442 ppb	03:46:02
3	U 409.014†	-2684.6	-470.4	-14.291 ug/L	-14.291 ppb	03:45:42
3	V 292.402†	-1331.7	-19.4	-0.1935 ug/L	-0.1935 ppb	03:45:42
3	Zn 213.857†	585.7	21.5	0.2784 ug/L	0.2784 ppb	03:46:02
3	SiO2†	694.3	156.7	13.173 ug/L	13.173 ppb	03:46:17

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	874165.3	110.38	%	0.447				0.41%
Sc Radial	3294.3	103	%	1.5				1.47%
Y 371.029	746283.2	110.13	%	0.281				0.26%
Y RADIAL	2706.9	103.0	%	1.64				1.59%
Ag 328.068†	43.3	0.2302	ug/L	0.17131	0.2302	ppb	0.17131	74.42%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	-4.4	-9.3995	ug/L	4.86658	-9.3995	ppb	4.86658	51.77%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-1.3	-0.7433	ug/L	2.17037	-0.7433	ppb	2.17037	292.00%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	16.0	0.4694	ug/L	0.38071	0.4694	ppb	0.38071	81.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	9.2	0.0891	ug/L	0.07372	0.0891	ppb	0.07372	82.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	240.5	0.1077	ug/L	0.02424	0.1077	ppb	0.02424	22.52%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-2.4	-9.9778	ug/L	10.75743	-9.9778	ppb	10.75743	107.81%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              15.3      0.2337 ug/L       0.07790      0.2337 ppb        0.07790  33.33%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              -3.3     -0.0908 ug/L       0.12947     -0.0908 ppb        0.12947 142.59%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              24.0      0.3335 ug/L       0.05644      0.3335 ppb        0.05644  16.92%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†            -418.3     -1.4063 ug/L       0.11761     -1.4063 ppb        0.11761   8.36%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.8     -24.033 ug/L       26.7188     -24.033 ppb        26.7188 111.17%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       280.0      136.82 ug/L        27.997      136.82 ppb         27.997  20.46%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6     -64.547 ug/L       47.0150     -64.547 ppb        47.0150  72.84%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              59.4      0.0824 ug/L       0.01046      0.0824 ppb        0.01046  12.69%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -4.5     -0.4158 ug/L       0.15100     -0.4158 ppb        0.15100  36.31%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†     -179.3     -56.718 ug/L        9.6254     -56.718 ppb         9.6254  16.97%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†             -11.0     -0.3679 ug/L       0.30478     -0.3679 ppb        0.30478  82.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                5.5      4.7321 ug/L       7.89401      4.7321 ppb        7.89401 166.82%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†             -12.8     -2.0975 ug/L       1.27771     -2.0975 ppb        1.27771  60.92%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         20.5      39.201 ug/L        3.3897      39.201 ppb         3.3897   8.65%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               9.9      4.2546 ug/L       2.92034      4.2546 ppb        2.92034  68.64%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.1     -1.0244 ug/L       4.26286     -1.0244 ppb        4.26286 416.14%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             108.4      4.2425 ug/L       0.38871      4.2425 ppb        0.38871   9.16%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               3.2      0.7693 ug/L       0.68676      0.7693 ppb        0.68676  89.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             -16.4     -0.1583 ug/L       0.06451     -0.1583 ppb        0.06451  40.76%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†            -275.1     -0.4836 ug/L       0.02713     -0.4836 ppb        0.02713   5.61%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.3      0.9280 ug/L       1.98388      0.9280 ppb        1.98388 213.77%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             -455.8     -13.844 ug/L        2.5403     -13.844 ppb         2.5403  18.35%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -97.6     -0.8297 ug/L       0.55228     -0.8297 ppb        0.55228  66.57%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              20.6      0.2710 ug/L       0.09015      0.2710 ppb        0.09015  33.27%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   128.3      10.791 ug/L        2.4876      10.791 ppb         2.4876  23.05%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS#3 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, March 13, 2010 11:25:28
Sample Description:
Method File: C:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.7463
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	321.6	321.604	13.012	4.0
	Mg	24.0	3774.7	3774.699	69.791	1.8
	Co	58.9	5434.4	5434.434	97.788	1.8
	Rh	102.9	18301.3	18301.316	201.345	1.1
	In	114.9	24738.4	24738.407	456.483	1.8
	Pb	208.0	17933.3	17933.251	254.857	1.4
⌈>	Ba	137.9	20028.2	20028.216	217.478	1.1
⌊	Ba++	69.0	301.8	0.015	0.000	2.6
⌈>	Ce	139.9	27582.4	27582.407	430.941	1.6
⌊	CeO	155.9	507.8	0.018	0.000	1.9
	Bkgd	220.0	1.3	1.300	0.837	64.4

Current Optimization File Data

Current Value	Description
1.04	Nebulizer Gas Flow
7.70	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	21	8.5	370.3
Co	59	21	10.3	6001.6
In	115	21	11.5	31167.6

ICPMS#3 Instrument Tuning Report

File Name: 100313.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	598	2060	0.651
Be	9.0	9.0	2059	2040	0.705
Mg	24.0	24.1	5728	2110	0.662
Mg	25.0	24.9	5858	2020	0.666
Mg	26.0	26.0	6249	2140	0.656
Co	58.9	58.9	14197	2115	0.637
Rh	102.9	102.9	24904	2165	0.680
In	114.9	114.9	27825	2180	0.677
Ce	139.9	139.9	33917	2220	0.633
Pb	206.0	206.1	50016	2280	0.689
Pb	207.0	207.0	50260	2310	0.634
Pb	208.0	208.0	50498	2300	0.666
U	238.1	238.1	57851	2340	0.701

ICPMS#3 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, March 14, 2010 09:36:46
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\Blank.552

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36797	
⌊	U	238		ug/L		10	

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	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#3 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Sunday, March 14, 2010 09:38:29
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\Standard 1.553

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		35883	35883.441
⌊	U	238	10.000	ug/L	2.144	23466	0.654

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	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#3 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Sunday, March 14, 2010 09:40:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\Standard 2.554

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36226	36226.314
⌊	U	238	99.975	ug/L	0.693	231080	6.380

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175					
⌊	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#3 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Sunday, March 14, 2010 09:41:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 1.555

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		36356	36356.023
	U	238	51.525	ug/L	1.740	119465	3.288

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175			98.8		
	U	238	103.050				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Sunday, March 14, 2010 09:43:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 2.556

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		37042	37042.040
⌊	U	238	0.038	ug/L	19.197	99	0.002

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			100.7		
⌊	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#3 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Sunday, March 14, 2010 09:45:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 3.557

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		35753	35752.778
⌊	U	238	0.212	ug/L	11.232	494	0.014

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175			97.2		
⌊	U	238	106.210				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Sunday, March 14, 2010 09:46:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 4.558

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		32473	32472.602
	U	238	0.210	ug/L	6.938	443	0.013

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		88.2			
	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#3 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, March 14, 2010 09:48:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 5.559

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		32950	32949.703
	U	238	21.644	ug/L	2.680	45469	1.381

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		89.5			
	U	238	108.218				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, March 14, 2010 09:50:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 6.560

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		35131	35130.914
	U	238	52.126	ug/L	2.320	116775	3.326

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175			95.5		
	U	238	104.253				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, March 14, 2010 09:52:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 7.561

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36380	36380.364
⌊	U	238	0.022	ug/L	6.706	60	0.001

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		98.9			
⌊	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#3 - Summary Report

Sample ID: 1202046581
Sample Date/Time: Sunday, March 14, 2010 09:53:49
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\1202046581.562

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		35807	35806.575
⌊	U	238	0.010	ug/L	7.893	33	0.001

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		97.3			
⌊	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#3 - Summary Report

Sample ID: 1202046586
Sample Date/Time: Sunday, March 14, 2010 09:55:33
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 954674|40|baj
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\1202046586.563

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36623	36623.328
⌊	U	238	0.506	ug/L	3.098	1191	0.032

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		99.5			
⌊	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#3 - Summary Report

Sample ID: 247178001
Sample Date/Time: Sunday, March 14, 2010 09:57:16
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178001.564

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Lu	175		ug/L		36653	36652.720
[	U	238	4.822	ug/L	1.248	11285	0.308

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
[>	Lu	175		99.6			
[	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#3 - Summary Report

Sample ID: 1202046582
Sample Date/Time: Sunday, March 14, 2010 09:58:57
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\1202046582.565

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		37017	37017.302
⌊	U	238	4.280	ug/L	1.124	10117	0.273

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.6			
⌊	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#3 - Summary Report

Sample ID: 1202046584
Sample Date/Time: Sunday, March 14, 2010 10:00:39
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\1202046584.566

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		36579	36578.900
	U	238	30.268	ug/L	2.682	70606	1.931

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		99.4			
	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#3 - Summary Report

Sample ID: 1202046585
Sample Date/Time: Sunday, March 14, 2010 10:02:22
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\1202046585.567

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		37131	37130.687
⌊	U	238	**31.133**	**ug/L**	3.202	73688	1.987

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		100.9			
⌊	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#3 - Summary Report

Sample ID: 1202046583
Sample Date/Time: Sunday, March 14, 2010 10:04:05
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 954674|10|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\1202046583.568

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		35075	35074.754
⌊	U	238	1.064	ug/L	4.355	2388	0.068

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		95.3			
⌊	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#3 - Summary Report

Sample ID: 247178002
Sample Date/Time: Sunday, March 14, 2010 10:05:48
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178002.569

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36207	36206.951
⌊	U	238	22.062	ug/L	2.939	50937	1.408

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		98.4			
⌊	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#3 - Summary Report

Sample ID: 247178003
Sample Date/Time: Sunday, March 14, 2010 10:07:33
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178003.570

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36743	36743.276
⌊	U	238	3.917	ug/L	1.042	9193	0.250

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		99.9			
⌊	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#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, March 14, 2010 10:09:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 6.571

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		33639	33638.709
	U	238	53.775	ug/L	4.483	115181	3.431

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		91.4			
	U	238	107.550				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, March 14, 2010 10:10:59
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 7.572

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		34618	34617.970
⌊	U	238	0.023	ug/L	15.724	60	0.001

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		94.1			
⌊	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#3 - Summary Report

Sample ID: 247178005
Sample Date/Time: Sunday, March 14, 2010 10:14:27
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no irs.mth
Dataset File: c:\elandata\dataset\100313\247178005.574

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		35998	35997.743
	U	238	18.264	ug/L	2.237	41931	1.165

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		97.8			
	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#3 - Summary Report

Sample ID: 247178006
Sample Date/Time: Sunday, March 14, 2010 10:16:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178006.575

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		34806	34805.749
⌊	U	238	3.711	ug/L	0.778	8251	0.237

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		94.6			
⌊	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#3 - Summary Report

Sample ID: 247178007
Sample Date/Time: Sunday, March 14, 2010 10:17:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178007.576

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		34947	34947.444
⌊	U	238	74.013	ug/L	1.265	165001	4.723

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		95.0			
⌊	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#3 - Summary Report

Sample ID: 247178008
Sample Date/Time: Sunday, March 14, 2010 10:19:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\247178008.577

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		36015	36014.760
⌊	U	238	72.359	ug/L	0.820	166326	4.617

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		97.9			
⌊	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#3 - Summary Report

Sample ID: 247178009
Sample Date/Time: Sunday, March 14, 2010 10:21:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178009.578

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		35891	35890.820
	U	238	31.772	ug/L	2.820	72708	2.027

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175			97.5		
	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#3 - Summary Report

Sample ID: 247178010
Sample Date/Time: Sunday, March 14, 2010 10:23:05
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178010.579

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		**ug/L**		35605	35605.100
⌊	U	238	**12.777**	**ug/L**	1.382	29024	0.815

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		96.8			
⌊	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#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, March 14, 2010 10:26:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 6.581

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		34131	34131.469
	U	238	52.846	ug/L	1.190	115063	3.372

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		92.8			
	U	238	105.693				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, March 14, 2010 10:28:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 7.582

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		34180	34180.219
	U	238	0.026	ug/L	16.171	66	0.002

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		92.9			
	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#3 - Summary Report

Sample ID: 247178011
Sample Date/Time: Sunday, March 14, 2010 10:33:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|10|baj
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\247178011.584

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		33566	33565.810
	U	238	21.489	ug/L	2.362	46003	1.371

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		91.2			
	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#3 - Summary Report

Sample ID: 247178004
Sample Date/Time: Sunday, March 14, 2010 10:36:20
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|10|baj
Method File: c:\elandata\Method\u only no lrs.mth
Dataset File: c:\elandata\dataset\100313\247178004.585

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		34360	34360.349
	U	238	23.053	ug/L	2.137	50520	1.471

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		93.4			
	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#3 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, March 14, 2010 10:38:02
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 6.586

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Lu	175		ug/L		33452	33451.827
	U	238	51.315	ug/L	1.687	109521	3.275

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Lu	175		90.9			
	U	238	102.629				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#3 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, March 14, 2010 10:39:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\u only no Irs.mth
Dataset File: c:\elandata\dataset\100313\QC Std 7.587

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Lu	175		ug/L		34002	34002.458
⌊	U	238	0.027	ug/L	2.998	68	0.002

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 % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Lu	175		92.4			
⌊	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

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, March 16, 2010 21:22:52
Sample Description:
Method File: c:\elandata\Method\daily2.mth
Dataset File: c:\elandata\Dataset\100125\Sample.365
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

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Be	9.0	22529.0	22528.957	468.731	2.1
	Mg	24.0	27478.6	27478.613	622.614	2.3
	Co	58.9	85619.6	85619.628	840.231	1.0
	Rh	102.9	178665.9	178665.866	2388.555	1.3
	In	114.9	246903.9	246903.915	2271.767	0.9
	Pb	208.0	70530.3	70530.290	622.535	0.9
⌈>	Ba	137.9	191972.6	191972.618	1541.134	0.8
⌊	Ba++	69.0	2586.9	0.013	0.000	2.5
⌈>	Ce	139.9	225976.9	225976.886	794.264	0.4
⌊	CeO	155.9	5239.1	0.023	0.000	1.4
	Bkgd	220.0	4.7	4.700	1.095	23.3

Current Optimization File Data

Current Value	Description
0.94	Nebulizer Gas Flow
6.00	Lens Voltage
1000.00	ICP RF Power
-1750.00	Analog Stage Voltage
900.00	Pulse Stage Voltage
50.00	Discriminator Threshold
-2.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	17	6.3	1944.8
Co	59	17	6.8	72799.7
In	115	17	7.3	188136.4

ICPMS #4 TUNING REPORT

File Name: default2.tun
File Path: c:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas Peak W
He	3.0	3.0	590	2060	0.633
Be	9.0	9.1	2318	2045	0.681
Mg	24.0	24.0	5659	2075	0.709
Mg	25.0	24.9	5943	2080	0.746
Mg	26.0	26.0	6148	2085	0.771
Co	58.9	58.9	14156	2140	0.727
Rh	102.9	102.8	24857	2230	0.742
In	114.9	114.9	27772	2255	0.766
Ce	139.9	139.8	33843	2310	0.738
Pb	206.0	206.0	49910	2480	0.670
Pb	207.0	206.9	50125	2365	0.717
Pb	208.0	208.0	50412	2600	0.653
U	238.1	238.1	57688	2510	0.716

ICPMS#4 - Summary Report

Sample ID: Blank
Sample Date/Time: Tuesday, March 16, 2010 21:30:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\Blank.059

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		477043	
	Cu	63		ug/L		652	
	Cu	65		ug/L		630	
>	Lu	175		ug/L		389185	
	Tl	205		ug/L		357	
	Pb	208		ug/L		1764	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Lu	175	Simple Linear	
Tl	205	Simple Linear	
Pb	208	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45					
	Cu	63					
	Cu	65					
>	Lu	175					
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 1
Sample Date/Time: Tuesday, March 16, 2010 21:33:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\Standard 1.060

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		542485	542484.823
|	Cu	63		ug/L		42468	0.077
⌊	Cu	65	10.000	ug/L	1.470	20843	0.037
⌈>	Lu	175		ug/L		387572	387572.364
|	Tl	205	10.000	ug/L	2.313	102790	0.264
⌊	Pb	208	10.000	ug/L	1.237	162729	0.415

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45					
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175					
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: Standard 2
Sample Date/Time: Tuesday, March 16, 2010 21:36:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\Standard 2.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		624285	624284.543
|	Cu	63		ug/L		408645	0.653
⌊	Cu	65	99.826	ug/L	2.597	197774	0.316
⌈>	Lu	175		ug/L		385834	385833.968
|	Tl	205	99.994	ug/L	1.306	1013685	2.627
⌊	Pb	208	99.977	ug/L	1.838	1567001	4.057

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45					
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175					
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 1
Sample Date/Time: Tuesday, March 16, 2010 21:39:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 1.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		514738	514738.262
|	Cu	63		ug/L		213553	0.414
⌊	Cu	65	62.559	ug/L	3.480	102449	0.198
⌈>	Lu	175		ug/L		390691	390690.643
|	Tl	205	49.506	ug/L	1.487	508390	1.300
⌊	Pb	208	49.663	ug/L	1.072	789144	2.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		107.9			
|	Cu	63					
⌊	Cu	65	125.117				
⌈>	Lu	175		100.4			
|	Tl	205	99.011				
⌊	Pb	208	99.325				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Cu	65	ICV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 2
Sample Date/Time: Tuesday, March 16, 2010 21:42:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 2.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		502517	502516.774
	Cu	63		ug/L		665	-0.000
	Cu	65	-0.023	ug/L	100.268	626	-0.000
>	Lu	175		ug/L		386436	386435.806
	Tl	205	0.296	ug/L	2.028	3355	0.008
	Pb	208	-0.009	ug/L	25.142	1618	-0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		105.3			
	Cu	63					
	Cu	65					
>	Lu	175		99.3			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 3
Sample Date/Time: Tuesday, March 16, 2010 21:45:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 3.064

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		589101	589101.283
|	Cu	63		ug/L		5839	0.009
⌊	Cu	65	**1.284**	ug/L	7.152	3167	0.004
⌈>	Lu	175		ug/L		386957	386956.818
|	Tl	205	**1.248**	ug/L	1.702	13036	0.033
⌊	Pb	208	**2.331**	ug/L	2.301	38357	0.095

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		123.5			
|	Cu	63					
⌊	Cu	65	128.360				
⌈>	Lu	175		99.4			
|	Tl	205	124.768				
⌊	Pb	208	116.570				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc	45	Int Std for QC Sc	45

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 4
Sample Date/Time: Tuesday, March 16, 2010 21:48:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 4.065

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		728500	728499.861
|	Cu	63		ug/L		10552	0.013
⌊	Cu	65	2.376	ug/L	3.303	6430	0.008
⌈>	Lu	175		ug/L		363196	363195.783
|	Tl	205	0.072	ug/L	1.539	1021	0.002
⌊	Pb	208	0.186	ug/L	3.706	4382	0.008

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		152.7			
|	Cu	63					
⌊	Cu	65	71.133				
⌈>	Lu	175		93.3			
|	Tl	205					
⌊	Pb	208	98.230				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc	45	Int Std for QC Sc	45

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Tuesday, March 16, 2010 21:51:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 5.066

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		667941	667941.350
	Cu	63		ug/L		85294	0.126
	Cu	65	19.223	ug/L	4.034	41447	0.061
>	Lu	175		ug/L		364563	364563.316
	Tl	205	18.498	ug/L	0.905	177484	0.486
	Pb	208	19.183	ug/L	0.847	285432	0.778

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		140.0			
	Cu	63					
	Cu	65	82.362				
>	Lu	175		93.7			
	Tl	205	92.490				
	Pb	208	95.015				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, March 16, 2010 21:54:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.067

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		522288	522287.879
	Cu	63		ug/L		219953	0.420
	Cu	65	63.327	ug/L	2.675	105249	0.200
>	Lu	175		ug/L		396916	396916.449
	Tl	205	48.217	ug/L	0.850	503074	1.267
	Pb	208	48.347	ug/L	0.436	780550	1.962

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		109.5			
	Cu	63					
	Cu	65	126.655				
>	Lu	175		102.0			
	Tl	205	96.434				
	Pb	208	96.695				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, March 16, 2010 21:57:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.068

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		514764	514764.272
|	Cu	63		ug/L		642	-0.000
⌊	Cu	65	-0.068	ug/L	17.387	569	-0.000
⌈>	Lu	175		ug/L		390064	390063.909
|	Tl	205	0.306	ug/L	1.378	3498	0.008
⌊	Pb	208	-0.019	ug/L	15.976	1467	-0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		107.9			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		100.2			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 10
Sample Date/Time: Tuesday, March 16, 2010 22:00:51
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 10.069

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		694759	694759.060
|	Cu	63		ug/L		3527833	5.084
⌊	Cu	65	**737.669**	ug/L	4.157	1619131	2.332
⌈>	Lu	175		ug/L		356034	356034.315
|	Tl	205	**456.907**	ug/L	1.521	4273235	12.002
⌊	Pb	208	**4632.573**	ug/L	1.230	66931498	187.996

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		145.6			
|	Cu	63					
⌊	Cu	65	73.767				
⌈>	Lu	175		91.5			
|	Tl	205	91.381				
⌊	Pb	208	92.651				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for QC	Sc	45	
QC Std 10	Cu	65	LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 11
Sample Date/Time: Tuesday, March 16, 2010 22:03:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 11.070

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		490478	490477.758
|	Cu	63		ug/L		216157	0.439
⌊	Cu	65	**66.767**	ug/L	3.651	104149	0.211
⌈>	Lu	175		ug/L		392760	392760.403
|	Tl	205	**48.841**	ug/L	1.657	504161	1.283
⌊	Pb	208	**49.101**	ug/L	0.770	784324	1.993

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		102.8			
|	Cu	63					
⌊	Cu	65	133.534				
⌈>	Lu	175		100.9			
|	Tl	205	97.682				
⌊	Pb	208	98.201				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 11	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 12
Sample Date/Time: Tuesday, March 16, 2010 22:06:50
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 12.071

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		527461	527460.912
	Cu	63		ug/L		740	0.000
	Cu	65	-0.049	ug/L	21.495	615	-0.000
>	Lu	175		ug/L		388161	388160.770
	Tl	205	0.525	ug/L	2.330	5705	0.014
	Pb	208	0.181	ug/L	1.622	4604	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		110.6			
	Cu	63					
	Cu	65					
>	Lu	175		99.7			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, March 16, 2010 22:18:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.075

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		513718	513717.899
|	Cu	63		ug/L		217851	0.423
⌊	Cu	65	**65.094**	ug/L	0.831	106407	0.206
⌈>	Lu	175		ug/L		390827	390826.561
|	Tl	205	**47.754**	ug/L	0.581	490634	1.254
⌊	Pb	208	**48.593**	ug/L	1.781	772366	1.972

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		107.7			
|	Cu	63					
⌊	Cu	65	130.188				
⌈>	Lu	175		100.4			
|	Tl	205	95.509				
⌊	Pb	208	97.186				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, March 16, 2010 22:21:54
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.076

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		526034	526034.057
|	Cu	63		ug/L		798	0.000
⌊	Cu	65	-0.063	ug/L	20.171	591	-0.000
⌈>	Lu	175		ug/L		387003	387003.111
|	Tl	205	0.318	ug/L	1.416	3591	0.008
⌊	Pb	208	0.046	ug/L	8.922	2478	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		110.3			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		99.4			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, March 16, 2010 22:37:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.081

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		545781	545780.630
|	Cu	63		ug/L		222557	0.407
⌊	Cu	65	**62.228**	ug/L	1.847	108075	0.197
⌈>	Lu	175		ug/L		393788	393788.027
|	Tl	205	**48.212**	ug/L	0.969	499045	1.266
⌊	Pb	208	**49.035**	ug/L	1.153	785365	1.990

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		114.4			
|	Cu	63					
⌊	Cu	65	124.457				
⌈>	Lu	175		101.2			
|	Tl	205	96.424				
⌊	Pb	208	98.070				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, March 16, 2010 22:40:05
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		538679	538679.471
|	Cu	63		ug/L		905	0.000
⌊	Cu	65	-0.090	ug/L	18.745	558	-0.000
⌈>	Lu	175		ug/L		393210	393209.724
|	Tl	205	0.273	ug/L	2.311	3184	0.007
⌊	Pb	208	0.005	ug/L	102.385	1862	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		112.9			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		101.0			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, March 16, 2010 22:58:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.088

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		510966	510965.510
|	Cu	63		ug/L		232418	0.454
⌊	Cu	65	**68.414**	ug/L	3.013	111161	0.216
⌈>	Lu	175		ug/L		403191	403190.929
|	Tl	205	**49.699**	ug/L	0.757	526744	1.305
⌊	Pb	208	**52.057**	ug/L	0.222	853580	2.113

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		107.1			
|	Cu	63					
⌊	Cu	65	136.827				
⌈>	Lu	175		103.6			
|	Tl	205	99.399				
⌊	Pb	208	104.114				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, March 16, 2010 23:01:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.089

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		522084	522084.440
	Cu	63		ug/L		1999	0.002
	Cu	65	0.320	ug/L	17.755	1216	0.001
>	Lu	175		ug/L		406508	406508.470
	Tl	205	0.193	ug/L	4.470	2436	0.005
	Pb	208	1.122	ug/L	0.295	20344	0.046

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		109.4			
	Cu	63					
	Cu	65					
>	Lu	175		104.5			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 1202046581
Sample Date/Time: Tuesday, March 16, 2010 23:04:17
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\1202046581.090

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		665252	665252.014
	Cu	63		ug/L		2379	0.002
	Cu	65	0.216	ug/L	7.119	1333	0.001
>	Lu	175		ug/L		420593	420592.565
	Tl	205	0.109	ug/L	3.326	1593	0.003
	Pb	208	1.037	ug/L	7.920	19592	0.042

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		139.5			
	Cu	63					
	Cu	65					
>	Lu	175		108.1			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sarr	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202046586
Sample Date/Time: Tuesday, March 16, 2010 23:07:20
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 965482|40|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\1202046586.091

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		596477	596477.432
	Cu	63		ug/L		222676	0.372
	Cu	65	**56.524**	ug/L	3.849	107312	0.179
>	Lu	175		ug/L		413181	413181.038
	Tl	205	**31.882**	ug/L	0.796	346377	0.837
	Pb	208	**23.206**	ug/L	1.671	390913	0.942

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		125.0			
	Cu	63					
	Cu	65					
>	Lu	175		106.2			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178001
Sample Date/Time: Tuesday, March 16, 2010 23:10:22
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|sk|
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178001.092

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		837333	837332.648
|	Cu	63		ug/L		103983	0.123
⌊	Cu	65	**18.601**	ug/L	2.350	50328	0.059
⌈>	Lu	175		ug/L		436465	436464.540
|	Tl	205	**0.500**	ug/L	2.704	6135	0.013
⌊	Pb	208	**21.715**	ug/L	0.276	386602	0.881

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		175.5			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		112.1			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202046582
Sample Date/Time: Tuesday, March 16, 2010 23:13:23
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\1202046582.093

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		775676	775675.614
|	Cu	63		ug/L		107507	0.137
⌊	Cu	65	21.242	ug/L	4.520	53065	0.067
⌈>	Lu	175		ug/L		434039	434039.421
|	Tl	205	0.358	ug/L	2.931	4475	0.009
⌊	Pb	208	22.005	ug/L	1.253	389543	0.893

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		162.6			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		111.5			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202046584
Sample Date/Time: Tuesday, March 16, 2010 23:16:24
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\1202046584.094

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		806695	806695.316
|	Cu	63		ug/L		239253	0.295
⌊	Cu	65	**45.210**	ug/L	2.054	116340	0.143
⌈>	Lu	175		ug/L		436314	436314.028
|	Tl	205	**47.867**	ug/L	1.387	548976	1.257
⌊	Pb	208	**120.435**	ug/L	1.081	2134281	4.887

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		169.1			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		112.1			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202046585
Sample Date/Time: Tuesday, March 16, 2010 23:19:26
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\1202046585.095

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		796310	796310.211
	Cu	63		ug/L		232544	0.291
	Cu	65	**44.461**	ug/L	2.024	112947	0.141
>	Lu	175		ug/L		440596	440596.331
	Tl	205	**49.794**	ug/L	1.484	576665	1.308
	Pb	208	**122.641**	ug/L	1.022	2194730	4.977

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		166.9			
	Cu	63					
	Cu	65					
>	Lu	175		113.2			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sarr	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 1202046583
Sample Date/Time: Tuesday, March 16, 2010 23:22:29
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 965482|10|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\1202046583.096

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		573541	573541.134
|	Cu	63		ug/L		22326	0.038
⌊	Cu	65	**5.739**	ug/L	0.938	11164	0.018
⌈>	Lu	175		ug/L		413648	413648.282
|	Tl	205	**0.262**	ug/L	2.079	3221	0.007
⌊	Pb	208	**4.793**	ug/L	2.399	82310	0.195

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		120.2			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		106.3			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, March 16, 2010 23:25:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.097

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		531031	531031.364
|	Cu	63		ug/L		234867	0.441
⌊	Cu	65	**67.562**	ug/L	1.828	114132	0.214
⌈>	Lu	175		ug/L		415801	415801.319
|	Tl	205	**49.934**	ug/L	1.033	545714	1.312
⌊	Pb	208	**51.236**	ug/L	1.770	866280	2.079

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		111.3			
|	Cu	63					
⌊	Cu	65	135.125				
⌈>	Lu	175		106.8			
|	Tl	205	99.867				
⌊	Pb	208	102.472				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, March 16, 2010 23:28:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.098

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		500457	500457.014
|	Cu	63		ug/L		1287	0.001
⌊	Cu	65	0.117	ug/L	30.641	846	0.000
⌈>	Lu	175		ug/L		401965	401964.727
|	Tl	205	0.201	ug/L	6.658	2491	0.005
⌊	Pb	208	0.210	ug/L	4.234	5239	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		104.9			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		103.3			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 247178002
Sample Date/Time: Tuesday, March 16, 2010 23:31:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178002.099

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		792878	792878.444
	Cu	63		ug/L		106723	0.133
	Cu	65	**20.113**	ug/L	3.959	51408	0.064
>	Lu	175		ug/L		431819	431819.134
	Tl	205	**0.342**	ug/L	2.048	4279	0.009
	Pb	208	**30.138**	ug/L	1.054	530051	1.223

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		166.2			
	Cu	63					
	Cu	65					
>	Lu	175		111.0			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178003
Sample Date/Time: Tuesday, March 16, 2010 23:34:39
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178003.100

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		824182	824181.940
	Cu	63		ug/L		114602	0.138
	Cu	65	20.688	ug/L	4.228	54937	0.065
>	Lu	175		ug/L		439628	439628.184
	Tl	205	0.387	ug/L	0.453	4878	0.010
	Pb	208	25.859	ug/L	1.358	463286	1.049

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		172.8			
	Cu	63					
	Cu	65					
>	Lu	175		113.0			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178004
Sample Date/Time: Tuesday, March 16, 2010 23:37:42
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178004.101

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		740516	740516.262
|	Cu	63		ug/L		305718	0.412
⌊	Cu	65	62.409	ug/L	1.082	147092	0.197
⌈>	Lu	175		ug/L		429870	429869.959
|	Tl	205	0.416	ug/L	1.924	5091	0.011
⌊	Pb	208	52.461	ug/L	2.310	916954	2.129

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		155.2			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		110.5			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sarr	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178005
Sample Date/Time: Tuesday, March 16, 2010 23:40:43
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178005.102

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		762408	762408.122
	Cu	63		ug/L		123551	0.161
	Cu	65	**24.315**	ug/L	3.767	59571	0.077
>	Lu	175		ug/L		436276	436275.957
	Tl	205	**0.334**	ug/L	1.439	4231	0.009
	Pb	208	**34.386**	ug/L	0.943	610763	1.395

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		159.8			
	Cu	63					
	Cu	65					
>	Lu	175		112.1			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sarr	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178006
Sample Date/Time: Tuesday, March 16, 2010 23:43:45
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178006.103

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		817593	817593.315
	Cu	63		ug/L		146545	0.178
	Cu	65	**27.210**	ug/L	4.279	71332	0.086
>	Lu	175		ug/L		421168	421168.361
	Tl	205	**0.718**	ug/L	1.103	8334	0.019
	Pb	208	**39.323**	ug/L	1.892	673871	1.596

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		171.4			
	Cu	63					
	Cu	65					
>	Lu	175		108.2			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Tuesday, March 16, 2010 23:46:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.104

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		515976	515975.660
	Cu	63		ug/L		233240	0.451
	Cu	65	**68.110**	ug/L	1.500	111782	0.215
>	Lu	175		ug/L		414357	414356.501
	Tl	205	**50.187**	ug/L	0.287	546630	1.318
	Pb	208	**51.015**	ug/L	0.916	859677	2.070

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		108.2			
	Cu	63					
	Cu	65	136.219				
>	Lu	175		106.5			
	Tl	205	100.373				
	Pb	208	102.030				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Tuesday, March 16, 2010 23:49:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.105

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		533962	533961.687
	Cu	63		ug/L		866	0.000
	Cu	65	-0.048	ug/L	30.286	625	-0.000
>	Lu	175		ug/L		415004	415004.354
	Tl	205	0.188	ug/L	4.158	2426	0.005
	Pb	208	0.123	ug/L	3.999	3949	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		111.9			
	Cu	63					
	Cu	65					
>	Lu	175		106.6			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#4 - Summary Report

Sample ID: 247178007
Sample Date/Time: Tuesday, March 16, 2010 23:52:52
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178007.106

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		807326	807326.396
	Cu	63		ug/L		263508	0.326
	Cu	65	**49.068**	ug/L	5.605	126027	0.155
>	Lu	175		ug/L		429606	429606.455
	Tl	205	**0.381**	ug/L	1.249	4696	0.010
	Pb	208	**83.427**	ug/L	0.876	1456344	3.386

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		169.2			
	Cu	63					
	Cu	65					
>	Lu	175		110.4			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178008
Sample Date/Time: Tuesday, March 16, 2010 23:55:55
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178008.107

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		763593	763592.840
	Cu	63		ug/L		332298	0.434
	Cu	65	65.196	ug/L	3.341	158339	0.206
>	Lu	175		ug/L		436844	436843.749
	Tl	205	0.251	ug/L	1.418	3280	0.007
	Pb	208	61.999	ug/L	0.369	1101077	2.516

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		160.1			
	Cu	63					
	Cu	65					
>	Lu	175		112.2			
	Tl	205					
	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178009
Sample Date/Time: Tuesday, March 16, 2010 23:58:59
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178009.108

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		773900	773900.401
|	Cu	63		ug/L		147929	0.190
⌊	Cu	65	28.962	ug/L	3.947	71817	0.092
⌈>	Lu	175		ug/L		431306	431305.572
|	Tl	205	0.261	ug/L	4.448	3353	0.007
⌊	Pb	208	33.524	ug/L	1.145	588689	1.360

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		162.2			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		110.8			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178010
Sample Date/Time: Wednesday, March 17, 2010 00:02:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178010.109

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		749499	749499.500
|	Cu	63		ug/L		134266	0.178
⌊	Cu	65	26.921	ug/L	5.573	64663	0.085
⌈>	Lu	175		ug/L		437455	437454.502
|	Tl	205	0.234	ug/L	2.605	3085	0.006
⌊	Pb	208	33.000	ug/L	0.548	587819	1.339

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		157.1			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		112.4			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for san	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: 247178011
Sample Date/Time: Wednesday, March 17, 2010 00:05:07
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 965482|2|skj
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\247178011.110

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		739504	739503.772
|	Cu	63		ug/L		269878	0.364
⌊	Cu	65	**55.021**	ug/L	2.295	129580	0.174
⌈>	Lu	175		ug/L		430436	430435.620
|	Tl	205	**0.239**	ug/L	0.641	3102	0.006
⌊	Pb	208	**54.995**	ug/L	1.928	962423	2.232

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		155.0			
|	Cu	63					
⌊	Cu	65					
⌈>	Lu	175		110.6			
|	Tl	205					
⌊	Pb	208					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Sc 45 Int Std for sam	Sc	45	

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Wednesday, March 17, 2010 00:08:08
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 6.111

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		525114	525114.312
|	Cu	63		ug/L		229699	0.436
⌊	Cu	65	**66.843**	ug/L	2.684	111667	0.211
⌈>	Lu	175		ug/L		415399	415398.754
|	Tl	205	**50.313**	ug/L	1.281	549364	1.322
⌊	Pb	208	**51.242**	ug/L	0.817	865679	2.079

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈>	Sc	45		110.1			
|	Cu	63					
⌊	Cu	65	133.686				
⌈>	Lu	175		106.7			
|	Tl	205	100.626				
⌊	Pb	208	102.484				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Cu	65	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#4 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Wednesday, March 17, 2010 00:11:10
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\cu pb tl.mth
Dataset File: c:\elandata\dataset\100316\QC Std 7.112

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		526138	526137.724
	Cu	63		ug/L		831	0.000
	Cu	65	-0.079	ug/L	9.244	563	-0.000
>	Lu	175		ug/L		405876	405875.698
	Tl	205	0.167	ug/L	2.891	2155	0.004
	Pb	208	0.092	ug/L	0.662	3347	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	0.9998
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Sc	45		110.3			
	Cu	63					
	Cu	65					
>	Lu	175		104.3			
	Tl	205					
	Pb	208					

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 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, March 13, 2010 11:40:30
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.721
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	4520.1	4520.115	54.893	1.2
	Mg	24.0	55289.0	55288.987	306.807	0.6
	Co	58.9	87540.8	87540.816	778.664	0.9
	Rh	102.9	177270.7	177270.741	1364.254	0.8
	In	114.9	235704.2	235704.214	1312.845	0.6
	Pb	208.0	251183.7	251183.732	2027.422	0.8
⌈>	Ba	137.9	234485.8	234485.829	1203.459	0.5
⌊	Ba++	69.0	3313.8	0.014	0.000	2.1
⌈>	Ce	139.9	285648.4	285648.387	1073.313	0.4
⌊	CeO	155.9	6640.8	0.023	0.000	1.4
	Bkgd	220.0	14.4	14.400	2.837	19.7

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
7.25	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	6.8	5178.3
Co	59	13	7.5	85693.6
In	115	13	8.8	231500.3

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	579	2050	0.728
Be	9.0	9.0	2041	2075	0.664
Mg	24.0	24.0	5673	2080	0.619
Mg	25.0	25.0	5949	2080	0.670
Mg	26.0	26.0	6144	2080	0.644
Co	58.9	59.0	14191	2110	0.643
Rh	102.9	102.9	24879	2160	0.659
In	114.9	114.9	27793	2180	0.664
Ce	139.9	139.9	33865	2200	0.660
Pb	206.0	206.0	49948	2295	0.623
Pb	207.0	207.0	50171	2240	0.649
Pb	208.0	208.0	50451	2265	0.724
U	238.1	238.1	57731	2275	0.763

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Saturday, March 13, 2010 20:52:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\Blank.203

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		22	
>	Sc	45		ug/L		584243	
	Ni	60		ug/L		113	
>	Ge	74		ug/L		346124	
	As	75		ug/L		-207	
	Se	77		ug/L		3983	
	Se	82		ug/L		6	
	Kr	83		ug/L		101	
>	Lu	175		ug/L		423513	
	Tl	205		ug/L		1272	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Linear Thru Zero	
Ni	60	Simple Linear	
Ge	74	Linear Thru Zero	
As	75	Simple Linear	
Se	77	Simple Linear	
Se	82	Simple Linear	
Kr	83	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Linear 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					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	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: Standard 1
Sample Date/Time: Saturday, March 13, 2010 20:56:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\Standard 1.204

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	10.000	ug/L	1.314	4899	0.009
>	Sc	45		ug/L		565361	565360.826
	Ni	60	10.000	ug/L	2.329	13577	0.024
>	Ge	74		ug/L		339112	339112.163
	As	75	10.000	ug/L	0.243	9799	0.029
	Se	77		ug/L		5600	0.005
	Se	82	10.000	ug/L	3.131	1022	0.003
	Kr	83		ug/L		103	0.000
>	Lu	175		ug/L		404672	404672.332
	Tl	205	10.000	ug/L	1.905	187358	0.460

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45					
	Ni	60					
>	Ge	74					
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175					
	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: Standard 2
Sample Date/Time: Saturday, March 13, 2010 21:00:09
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\Standard 2.205

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**99.984**	**ug/L**	2.468	47942	0.085
|>	Sc	45		**ug/L**		564182	564181.918
⌊	Ni	60	**99.979**	**ug/L**	0.281	131794	0.233
⌈>	Ge	74		**ug/L**		343153	343153.443
|	As	75	**99.992**	**ug/L**	0.689	100193	0.293
|	Se	77		**ug/L**		12857	0.026
|	Se	82	**100.007**	**ug/L**	1.834	10356	0.030
⌊	Kr	83		**ug/L**		134	0.000
⌈>	Lu	175		**ug/L**		410507	410506.990
⌊	Tl	205	**99.820**	**ug/L**	1.601	1598867	3.892

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
⌈	Be	9					
|>	Sc	45					
⌊	Ni	60					
⌈>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Kr	83					
⌈>	Lu	175					
⌊	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 1
Sample Date/Time: Saturday, March 13, 2010 21:03:45
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 1.206

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**49.780**	**ug/L**	0.093	25769	0.042
>	Sc	45		**ug/L**		608655	608655.390
	Ni	60	**48.981**	**ug/L**	0.967	69720	0.114
>	Ge	74		**ug/L**		361877	361877.089
	As	75	**49.829**	**ug/L**	3.937	52520	0.146
	Se	77		**ug/L**		8701	0.013
	Se	82	**52.095**	**ug/L**	2.173	5691	0.016
	Kr	83		**ug/L**		118	0.000
>	Lu	175		**ug/L**		431696	431696.003
	Tl	205	**50.759**	**ug/L**	2.509	855578	1.979

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9	99.560				
>	Sc	45		104.2			
	Ni	60	97.962				
>	Ge	74		104.6			
	As	75	99.658				
	Se	77					
	Se	82	104.190				
	Kr	83					
>	Lu	175		101.9			
	Tl	205	101.517				

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: Saturday, March 13, 2010 21:07:22
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 2.207

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.002**	ug/L	467.695	24	0.000
>	Sc	45		ug/L		611485	611484.688
	Ni	60	**0.005**	ug/L	216.010	125	0.000
>	Ge	74		ug/L		364194	364193.531
	As	75	**-0.027**	ug/L	550.467	-246	-0.000
	Se	77		ug/L		4621	0.001
	Se	82	**-0.041**	ug/L	189.410	2	-0.000
	Kr	83		ug/L		115	0.000
>	Lu	175		ug/L		437615	437614.612
	Tl	205	**0.226**	ug/L	4.789	5162	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.7			
	Ni	60					
>	Ge	74		105.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.3			
	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 3
Sample Date/Time: Saturday, March 13, 2010 21:11:00
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 3.208

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.535**	**ug/L**	4.504	289	0.000
>	Sc	45		**ug/L**		587669	587669.173
	Ni	60	**2.312**	**ug/L**	3.608	3283	0.005
>	Ge	74		**ug/L**		351222	351221.940
	As	75	**5.720**	**ug/L**	5.219	5666	0.017
	Se	77		**ug/L**		6056	0.006
	Se	82	**5.775**	**ug/L**	2.364	618	0.002
	Kr	83		**ug/L**		101	-0.000
>	Lu	175		**ug/L**		422995	422994.759
	Tl	205	**1.298**	**ug/L**	0.796	22670	0.051

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9	106.988				
>	Sc	45		100.6			
	Ni	60	115.590				
>	Ge	74		101.5			
	As	75	114.401				
	Se	77					
	Se	82	115.497				
	Kr	83					
>	Lu	175		99.9			
	Tl	205	129.751				

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: Saturday, March 13, 2010 21:14:37
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 4.209

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.074**	**ug/L**	21.126	58	0.000
>	Sc	45		**ug/L**		575387	575386.906
	Ni	60	**3.291**	**ug/L**	1.724	4532	0.008
>	Ge	74		**ug/L**		343646	343646.052
	As	75	**-0.247**	**ug/L**	103.404	-455	-0.001
	Se	77		**ug/L**		6138	0.006
	Se	82	**-1.572**	**ug/L**	7.664	-156	-0.000
	Kr	83		**ug/L**		321	0.001
>	Lu	175		**ug/L**		409796	409795.918
	Tl	205	**0.006**	**ug/L**	67.258	1328	0.000

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		98.5			
	Ni	60	99.424				
>	Ge	74		99.3			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		96.8			
	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 5
Sample Date/Time: Saturday, March 13, 2010 21:18:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 5.210

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**18.924**	**ug/L**	2.382	9148	0.016
>	Sc	45		**ug/L**		567624	567623.985
	Ni	60	**22.650**	**ug/L**	1.702	30116	0.053
>	Ge	74		**ug/L**		347320	347320.319
	As	75	**20.783**	**ug/L**	1.999	20912	0.061
	Se	77		**ug/L**		7377	0.010
	Se	82	**19.895**	**ug/L**	3.132	2090	0.006
	Kr	83		**ug/L**		326	0.001
>	Lu	175		**ug/L**		408903	408902.881
	Tl	205	**20.946**	**ug/L**	0.764	335177	0.817

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9	94.620				
>	Sc	45		97.2			
	Ni	60	97.167				
>	Ge	74		100.3			
	As	75	103.914				
	Se	77					
	Se	82	99.473				
	Kr	83					
>	Lu	175		96.6			
	Tl	205	104.730				

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: Saturday, March 13, 2010 21:21:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 6.211

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**49.793**	**ug/L**	0.446	25608	0.042
>	Sc	45		**ug/L**		604686	604686.151
	Ni	60	**49.335**	**ug/L**	0.665	69763	0.115
>	Ge	74		**ug/L**		369809	369809.223
	As	75	**49.665**	**ug/L**	2.534	53518	0.145
	Se	77		**ug/L**		9202	0.013
	Se	82	**51.344**	**ug/L**	2.116	5733	0.015
	Kr	83		**ug/L**		116	0.000
>	Lu	175		**ug/L**		432893	432893.248
	Tl	205	**50.404**	**ug/L**	2.212	852009	1.965

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9	99.585				
>	Sc	45		103.5			
	Ni	60	98.669				
>	Ge	74		106.8			
	As	75	99.331				
	Se	77					
	Se	82	102.689				
	Kr	83					
>	Lu	175		102.2			
	Tl	205	100.808				

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 7
Sample Date/Time: Saturday, March 13, 2010 21:25:30
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 7.212

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.005	ug/L	115.466	21	-0.000
>	Sc	45		ug/L		624265	624265.311
	Ni	60	0.003	ug/L	372.050	125	0.000
>	Ge	74		ug/L		377882	377882.033
	As	75	0.031	ug/L	1029.132	-187	0.000
	Se	77		ug/L		5532	0.003
	Se	82	0.031	ug/L	295.404	11	0.000
	Kr	83		ug/L		110	-0.000
>	Lu	175		ug/L		438475	438474.595
	Tl	205	0.149	ug/L	9.413	3865	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		106.9			
	Ni	60					
>	Ge	74		109.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		103.5			
	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: 1202046581
Sample Date/Time: Saturday, March 13, 2010 21:29:09
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\1202046581.213

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.011	ug/L	109.499	17	-0.000
>	Sc	45		ug/L		600638	600637.737
	Ni	60	0.071	ug/L	15.178	216	0.000
>	Ge	74		ug/L		356564	356563.757
	As	75	0.116	ug/L	462.297	-84	0.000
	Se	77		ug/L		4513	0.001
	Se	82	0.295	ug/L	5.577	38	0.000
	Kr	83		ug/L		104	-0.000
>	Lu	175		ug/L		420923	420923.107
	Tl	205	0.044	ug/L	15.857	1992	0.002

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		102.8			
	Ni	60					
>	Ge	74		103.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.4			
	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: 1202046586
Sample Date/Time: Saturday, March 13, 2010 21:32:45
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 954674|40|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\1202046586.214

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**21.919**	**ug/L**	2.893	11637	0.019
>	Sc	45		**ug/L**		623539	623538.807
	Ni	60	**39.165**	**ug/L**	0.991	57129	0.091
>	Ge	74		**ug/L**		373979	373979.449
	As	75	**31.969**	**ug/L**	4.367	34747	0.094
	Se	77		**ug/L**		12278	0.021
	Se	82	**85.875**	**ug/L**	1.120	9692	0.026
	Kr	83		**ug/L**		114	0.000
>	Lu	175		**ug/L**		434405	434405.097
	Tl	205	**37.368**	**ug/L**	2.512	634273	1.457

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		106.7			
	Ni	60					
>	Ge	74		108.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.6			
	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: 247178001
Sample Date/Time: Saturday, March 13, 2010 21:36:23
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178001.215

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.029**	**ug/L**	1.145	2243	0.003
>	Sc	45		**ug/L**		647902	647901.941
	Ni	60	**21.936**	**ug/L**	2.348	33294	0.051
>	Ge	74		**ug/L**		327760	327760.423
	As	75	**7.862**	**ug/L**	3.334	7346	0.023
	Se	77		**ug/L**		3382	-0.001
	Se	82	**0.263**	**ug/L**	157.850	32	0.000
	Kr	83		**ug/L**		267	0.001
>	Lu	175		**ug/L**		433513	433512.623
	Tl	205	**0.387**	**ug/L**	7.044	7845	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		110.9			
	Ni	60					
>	Ge	74		94.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		102.4			
	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: 1202046582
Sample Date/Time: Saturday, March 13, 2010 21:40:00
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\1202046582.216

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.636**	**ug/L**	0.544	2517	0.004
>	Sc	45		**ug/L**		632881	632881.232
	Ni	60	**23.097**	**ug/L**	1.597	34245	0.054
>	Ge	74		**ug/L**		316435	316434.823
	As	75	**9.128**	**ug/L**	4.241	8258	0.027
	Se	77		**ug/L**		3134	-0.002
	Se	82	**0.159**	**ug/L**	120.552	21	0.000
	Kr	83		**ug/L**		267	0.001
>	Lu	175		**ug/L**		430339	430338.649
	Tl	205	**0.324**	**ug/L**	2.779	6732	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		108.3			
	Ni	60					
>	Ge	74		91.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		101.6			
	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: 1202046584
Sample Date/Time: Saturday, March 13, 2010 21:43:39
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lani soil.mth
Dataset File: C:\elandata\Dataset\100313\1202046584.217

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**26.262**	**ug/L**	7.855	13650	0.022
>	Sc	45		**ug/L**		612915	612915.425
	Ni	60	**46.606**	**ug/L**	8.069	66551	0.109
>	Ge	74		**ug/L**		296510	296510.283
	As	75	**46.877**	**ug/L**	9.488	40211	0.137
	Se	77		**ug/L**		3536	0.001
	Se	82	**7.982**	**ug/L**	15.638	711	0.002
	Kr	83		**ug/L**		280	0.001
>	Lu	175		**ug/L**		398850	398850.418
	Tl	205	**50.517**	**ug/L**	9.340	782699	1.970

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.9			
	Ni	60					
>	Ge	74		85.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		94.2			
	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: 1202046585
Sample Date/Time: Saturday, March 13, 2010 21:47:18
Sample Type:
Sample Description: LANL 6020 MSD
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\1202046585.218

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**26.637**	**ug/L**	0.757	14590	0.023
>	Sc	45		**ug/L**		643516	643515.859
	Ni	60	**44.894**	**ug/L**	0.920	67567	0.105
>	Ge	74		**ug/L**		315570	315569.636
	As	75	**46.814**	**ug/L**	0.521	43035	0.137
	Se	77		**ug/L**		3578	-0.000
	Se	82	**7.510**	**ug/L**	4.999	720	0.002
	Kr	83		**ug/L**		299	0.001
>	Lu	175		**ug/L**		421930	421930.135
	Tl	205	**49.642**	**ug/L**	0.320	817932	1.936

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		110.1			
	Ni	60					
>	Ge	74		91.2			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		99.6			
	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: 1202046583
Sample Date/Time: Saturday, March 13, 2010 21:50:57
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 954674|10|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\1202046583.219

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.980**	**ug/L**	5.560	482	0.001
>	Sc	45		**ug/L**		553916	553915.585
	Ni	60	**5.236**	**ug/L**	0.947	6877	0.012
>	Ge	74		**ug/L**		325701	325700.869
	As	75	**2.050**	**ug/L**	6.900	1759	0.006
	Se	77		**ug/L**		3675	-0.000
	Se	82	**0.242**	**ug/L**	92.886	30	0.000
	Kr	83		**ug/L**		115	0.000
>	Lu	175		**ug/L**		396343	396342.777
	Tl	205	**0.124**	**ug/L**	5.598	3111	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		94.8			
	Ni	60					
>	Ge	74		94.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		93.6			
	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: 247178002
Sample Date/Time: Saturday, March 13, 2010 21:54:36
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178002.220

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.221**	**ug/L**	4.484	1610	0.003
>	Sc	45		**ug/L**		580468	580467.968
	Ni	60	**19.054**	**ug/L**	6.538	25889	0.044
>	Ge	74		**ug/L**		310518	310517.876
	As	75	**8.326**	**ug/L**	1.703	7378	0.024
	Se	77		**ug/L**		2993	-0.002
	Se	82	**-0.055**	**ug/L**	373.417	1	-0.000
	Kr	83		**ug/L**		214	0.000
>	Lu	175		**ug/L**		400843	400842.863
	Tl	205	**0.307**	**ug/L**	5.724	5998	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		99.4			
	Ni	60					
>	Ge	74		89.7			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		94.6			
	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: Saturday, March 13, 2010 21:58:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\anl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 8.221

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**51.436**	**ug/L**	2.463	24795	0.044
>	Sc	45		**ug/L**		567056	567056.407
	Ni	60	**50.048**	**ug/L**	1.815	66335	0.117
>	Ge	74		**ug/L**		345248	345248.339
	As	75	**50.127**	**ug/L**	1.575	50423	0.147
	Se	77		**ug/L**		8499	0.013
	Se	82	**50.597**	**ug/L**	1.826	5275	0.015
	Kr	83		**ug/L**		134	0.000
>	Lu	175		**ug/L**		405688	405688.246
	Tl	205	**51.151**	**ug/L**	0.737	810334	1.994

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9	102.873				
>	Sc	45		97.1			
	Ni	60	100.095				
>	Ge	74		99.7			
	As	75	100.253				
	Se	77					
	Se	82	101.195				
	Kr	83					
>	Lu	175		95.8			
	Tl	205	102.301				

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: Saturday, March 13, 2010 22:01:52
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 9.222

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.001**	**ug/L**	555.624	22	-0.000
>	Sc	45		**ug/L**		584014	584013.799
	Ni	60	**0.000**	**ug/L**	10169.647	113	0.000
>	Ge	74		**ug/L**		354583	354582.894
	As	75	**0.355**	**ug/L**	40.288	157	0.001
	Se	77		**ug/L**		4810	0.002
	Se	82	**-0.032**	**ug/L**	819.306	3	-0.000
	Kr	83		**ug/L**		115	0.000
>	Lu	175		**ug/L**		412152	412151.731
	Tl	205	**0.137**	**ug/L**	11.559	3440	0.005

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		100.0			
	Ni	60					
>	Ge	74		102.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		97.3			
	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: 247178003
Sample Date/Time: Saturday, March 13, 2010 22:05:31
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178003.223

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.615**	**ug/L**	1.254	1920	0.003
>	Sc	45		**ug/L**		617514	617513.867
	Ni	60	**24.024**	**ug/L**	3.084	34741	0.056
>	Ge	74		**ug/L**		307771	307770.878
	As	75	**7.013**	**ug/L**	2.911	6132	0.021
	Se	77		**ug/L**		3124	-0.001
	Se	82	**0.318**	**ug/L**	86.722	35	0.000
	Kr	83		**ug/L**		233	0.000
>	Lu	175		**ug/L**		409602	409602.068
	Tl	205	**0.353**	**ug/L**	1.464	6867	0.014

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		105.7			
	Ni	60					
>	Ge	74		88.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		96.7			
	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: 247178004
Sample Date/Time: Saturday, March 13, 2010 22:09:09
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178004.224

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.052**	**ug/L**	2.080	1516	0.003
>	Sc	45		**ug/L**		576226	576226.348
	Ni	60	**16.914**	**ug/L**	1.543	22862	0.039
>	Ge	74		**ug/L**		300712	300712.353
	As	75	**6.092**	**ug/L**	5.673	5179	0.018
	Se	77		**ug/L**		2857	-0.002
	Se	82	**0.033**	**ug/L**	301.637	9	0.000
	Kr	83		**ug/L**		197	0.000
>	Lu	175		**ug/L**		386911	386911.361
	Tl	205	**0.272**	**ug/L**	2.695	5258	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		98.6			
	Ni	60					
>	Ge	74		86.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		91.4			
	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: 247178005
Sample Date/Time: Saturday, March 13, 2010 22:12:47
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178005.225

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.048**	**ug/L**	6.382	1528	0.003
>	Sc	45		**ug/L**		581968	581968.448
	Ni	60	**19.424**	**ug/L**	3.140	26489	0.045
>	Ge	74		**ug/L**		302749	302749.479
	As	75	**6.949**	**ug/L**	6.772	5976	0.020
	Se	77		**ug/L**		2993	-0.002
	Se	82	**0.526**	**ug/L**	50.963	54	0.000
	Kr	83		**ug/L**		187	0.000
>	Lu	175		**ug/L**		392368	392368.150
	Tl	205	**0.306**	**ug/L**	0.829	5862	0.012

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		99.6			
	Ni	60					
>	Ge	74		87.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		92.6			
	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: 247178006
Sample Date/Time: Saturday, March 13, 2010 22:16:26
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178006.226

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.016**	**ug/L**	4.536	2186	0.003
>	Sc	45		**ug/L**		633746	633745.616
	Ni	60	**36.270**	**ug/L**	3.444	53771	0.085
>	Ge	74		**ug/L**		309283	309282.715
	As	75	**9.618**	**ug/L**	4.555	8515	0.028
	Se	77		**ug/L**		2836	-0.002
	Se	82	**-0.368**	**ug/L**	61.854	-29	-0.000
	Kr	83		**ug/L**		261	0.001
>	Lu	175		**ug/L**		398621	398621.410
	Tl	205	**0.704**	**ug/L**	1.828	12132	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.5			
	Ni	60					
>	Ge	74		89.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	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

ICPMS#5 - Summary Report

Sample ID: 247178007
Sample Date/Time: Saturday, March 13, 2010 22:20:06
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178007.227

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**3.195**	ug/L	3.652	1562	0.003
>	Sc	45		ug/L		567698	567697.646
	Ni	60	**17.729**	ug/L	2.287	23602	0.041
>	Ge	74		ug/L		299586	299586.352
	As	75	**7.192**	ug/L	1.824	6125	0.021
	Se	77		ug/L		2813	-0.002
	Se	82	**0.161**	ug/L	36.533	20	0.000
	Kr	83		ug/L		171	0.000
>	Lu	175		ug/L		385579	385579.404
	Tl	205	**0.291**	ug/L	3.682	5529	0.011

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		97.2			
	Ni	60					
>	Ge	74		86.6			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		91.0			
	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

ICPMS#5 - Summary Report

Sample ID: 247178008
Sample Date/Time: Saturday, March 13, 2010 22:23:46
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178008.228

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.845**	**ug/L**	6.575	1334	0.002
>	Sc	45		**ug/L**		543565	543565.454
	Ni	60	**12.694**	**ug/L**	1.975	16207	0.030
>	Ge	74		**ug/L**		302799	302799.086
	As	75	**5.154**	**ug/L**	11.983	4386	0.015
	Se	77		**ug/L**		2846	-0.002
	Se	82	**0.300**	**ug/L**	42.726	33	0.000
	Kr	83		**ug/L**		153	0.000
>	Lu	175		**ug/L**		387163	387162.984
	Tl	205	**0.166**	**ug/L**	1.483	3666	0.006

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		93.0			
	Ni	60					
>	Ge	74		87.5			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		91.4			
	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: 247178009
Sample Date/Time: Saturday, March 13, 2010 22:27:25
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178009.229

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	3.067	ug/L	1.127	1490	0.003
>	Sc	45		ug/L		563754	563754.288
	Ni	60	12.407	ug/L	0.347	16437	0.029
>	Ge	74		ug/L		298997	298996.513
	As	75	6.702	ug/L	3.395	5687	0.020
	Se	77		ug/L		2677	-0.003
	Se	82	0.329	ug/L	16.134	35	0.000
	Kr	83		ug/L		162	0.000
>	Lu	175		ug/L		385912	385912.401
	Tl	205	0.171	ug/L	6.807	3733	0.007

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		96.5			
	Ni	60					
>	Ge	74		86.4			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		91.1			
	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: 247178010
Sample Date/Time: Saturday, March 13, 2010 22:31:03
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178010.230

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**2.941**	**ug/L**	3.647	1444	0.002
>	Sc	45		**ug/L**		569140	569139.726
	Ni	60	**20.499**	**ug/L**	3.886	27337	0.048
>	Ge	74		**ug/L**		294672	294672.010
	As	75	**6.442**	**ug/L**	10.132	5368	0.019
	Se	77		**ug/L**		2717	-0.002
	Se	82	**0.098**	**ug/L**	208.019	14	0.000
	Kr	83		**ug/L**		199	0.000
>	Lu	175		**ug/L**		385279	385279.438
	Tl	205	**0.232**	**ug/L**	4.402	4639	0.009

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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 % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		97.4			
	Ni	60					
>	Ge	74		85.1			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		91.0			
	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

ICPMS#5 - Summary Report

Sample ID: 247178011
Sample Date/Time: Saturday, March 13, 2010 22:34:41
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954674|2|baj
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\247178011.231

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**4.122**	**ug/L**	6.874	1952	0.004
>	Sc	45		**ug/L**		551692	551692.112
	Ni	60	**17.127**	**ug/L**	0.225	22165	0.040
>	Ge	74		**ug/L**		294080	294080.292
	As	75	**7.152**	**ug/L**	2.943	5979	0.021
	Se	77		**ug/L**		2637	-0.003
	Se	82	**-0.009**	**ug/L**	2966.473	5	-0.000
	Kr	83		**ug/L**		167	0.000
>	Lu	175		**ug/L**		372594	372594.414
	Tl	205	**0.269**	**ug/L**	1.156	5024	0.010

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		94.4			
	Ni	60					
>	Ge	74		85.0			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		88.0			
	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

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Saturday, March 13, 2010 22:38:19
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 6.232

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**52.326**	**ug/L**	0.851	23763	0.044
>	Sc	45		**ug/L**		533977	533977.394
	Ni	60	**49.725**	**ug/L**	0.797	62094	0.116
>	Ge	74		**ug/L**		323536	323536.196
	As	75	**49.765**	**ug/L**	1.055	46911	0.146
	Se	77		**ug/L**		7701	0.012
	Se	82	**51.339**	**ug/L**	0.578	5016	0.015
	Kr	83		**ug/L**		101	0.000
>	Lu	175		**ug/L**		385328	385327.808
	Tl	205	**51.322**	**ug/L**	1.989	772118	2.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9	104.652				
>	Sc	45		91.4			
	Ni	60	99.449				
>	Ge	74		93.5			
	As	75	99.530				
	Se	77					
	Se	82	102.677				
	Kr	83					
>	Lu	175		91.0			
	Tl	205	102.644				

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 7
Sample Date/Time: Saturday, March 13, 2010 22:41:58
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\anl soil.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 7.233

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.004**	**ug/L**	307.278	19	-0.000
>	Sc	45		**ug/L**		549863	549862.534
	Ni	60	**-0.002**	**ug/L**	959.195	103	-0.000
>	Ge	74		**ug/L**		331801	331800.985
	As	75	**0.658**	**ug/L**	65.650	443	0.002
	Se	77		**ug/L**		4059	0.001
	Se	82	**0.162**	**ug/L**	52.518	22	0.000
	Kr	83		**ug/L**		103	0.000
>	Lu	175		**ug/L**		391146	391145.855
	Tl	205	**0.099**	**ug/L**	7.264	2682	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	1.0000
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	1.0000
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	1.0000
Kr	83	Linear Thru Zero	
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
	Be	9					
>	Sc	45		94.1			
	Ni	60					
>	Ge	74		95.9			
	As	75					
	Se	77					
	Se	82					
	Kr	83					
>	Lu	175		92.4			
	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

==========
Method Name: SOIL
Method Description: 7471A, ILM04 ANALYST JXL1
Element: Hg

Date: 03/04/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 030410S1.SIF Results Data Set Name: 030410S1

==========
Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/04/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0046	0.0046	10:02:27	No
2			0.0045	0.0045	10:03:02	No
Mean:			0.0046			
SD :			0.0001			
%RSD:			1.5609			

Auto-zero performed.

==========
Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/04/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0016	0.0062	10:04:24	No
2			0.0017	0.0063	10:04:58	No
Mean:			0.0017			
SD :			0.0001			
%RSD:			4.6700			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00835
Intercept : 0.00000

==========
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/04/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0050	0.0095	10:06:21	No
2			0.0050	0.0095	10:06:56	No
Mean:			0.0050			
SD :			0.0000			
%RSD:			0.2174			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99736 Slope: 0.01004
Intercept : -0.00013

==========
Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/04/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0215	0.0261	10:08:21	No
2			0.0210	0.0255	10:08:55	No
Mean:			0.0213			
SD :			0.0004			
%RSD:			1.8691			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99977 Slope: 0.01074
Intercept : -0.00027

==========
Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/04/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0518	0.0563	10:10:21	No
2			0.0514	0.0560	10:10:56	No
Mean:			0.0516			
SD :			0.0002			
%RSD:			0.4780			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99986 Slope: 0.01038
Intercept : -0.00008

==========
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/04/2010
Sample ID: S10

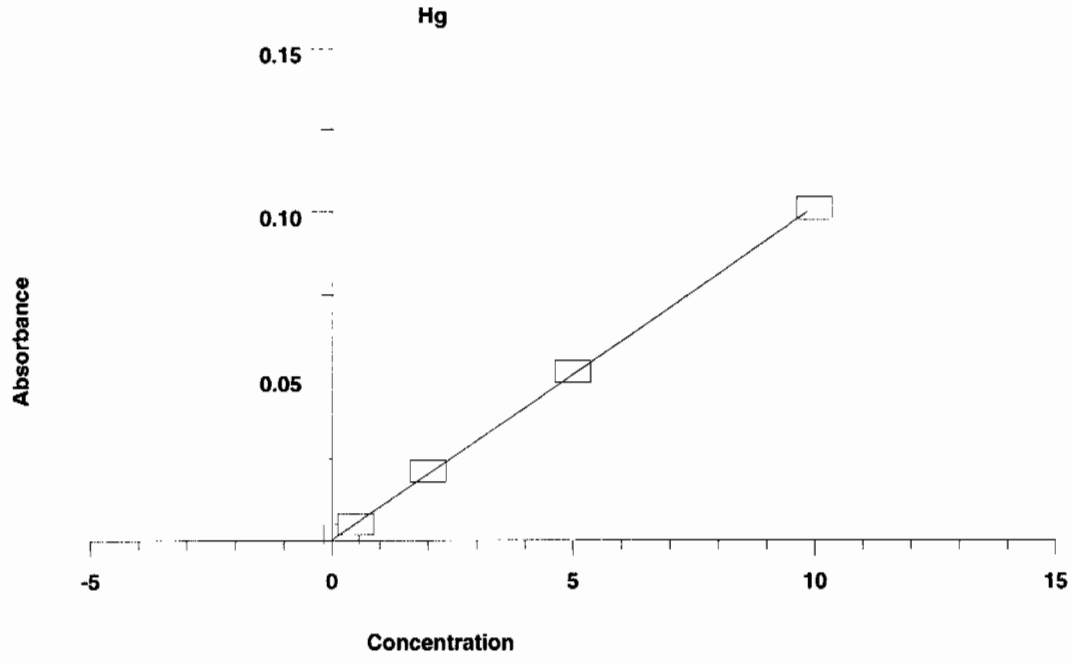
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0998	0.1044	10:12:23	No
2			0.1015	0.1061	10:12:58	No
Mean:			0.1007			
SD :			0.0012			
%RSD:			1.2141			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99986 Slope: 0.01010
Intercept : 0.00023

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	0.0017	0.200	0.143	0.0001	4.7
S0.5	0.0050	0.500	0.470	0.0000	0.2
S2.0	0.0213	2.000	2.081	0.0004	1.9
S5.0	0.0516	5.000	5.085	0.0002	0.5
S10	0.1007	10.000	9.944	0.0012	1.2

Correlation Coefficient: 0.99986 Slope: 0.01010 Intercept: 0.0002



==========

Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 03/04/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.134	5.134	0.0521	0.0566	10:14:27	No
2	5.223	5.223	0.0530	0.0575	10:15:01	No
Mean:	5.178	5.178	0.0525			
SD :	0.0629	0.0629	0.0006			
%RSD:	1.2	1.2	1.2095			

QC value within specified limits.

==========

Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 03/04/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.089	-0.089	-0.0007	0.0039	10:16:23	No
2	-0.095	-0.095	-0.0007	0.0038	10:16:58	No
Mean:	-0.092	-0.092	-0.0007			
SD :	0.0044	0.0044	0.0000			
%RSD:	4.8	4.8	6.2911			

QC value within specified limits.

==========

Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 03/04/2010
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.194	0.194	0.0022	0.0067	10:18:20	No
2	0.192	0.192	0.0022	0.0067	10:18:55	No
Mean:	0.193	0.193	0.0022			
SD :	0.0016	0.0016	0.0000			
%RSD:	0.8	0.8	0.7348			

QC value within specified limits.

==========

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/04/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.305	5.305	0.0538	0.0584	10:20:20	No
2	5.214	5.214	0.0529	0.0575	10:20:56	No
Mean:	5.259	5.259	0.0534			
SD :	0.0642	0.0642	0.0006			
%RSD:	1.2	1.2	1.2161			

QC value within specified limits.

==========

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/04/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.015	-0.015	0.0001	0.0046	10:22:24	No
2	-0.023	-0.023	0.0000	0.0045	10:22:59	No
Mean:	-0.019	-0.019	0.0000			
SD :	0.0057	0.0057	0.0001			
%RSD:	29.7	29.7	165.1552			

QC value within specified limits.

==========

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/04/2010
Sample ID: 1202047351|i||954983|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.043	-0.043	-0.0002	0.0044	10:24:25	No
2	-0.066	-0.066	-0.0004	0.0041	10:25:00	No
Mean:	-0.054	-0.054	-0.0003			
SD :	0.0169	0.0169	0.0002			
%RSD:	31.1	31.1	53.0222			

==========

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/04/2010
Sample ID: 1202047352|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.483	3.483	0.0354	0.0400	10:26:26	No
2	3.520	3.520	0.0358	0.0403	10:27:02	No
Mean:	3.501	3.501	0.0356			
SD :	0.0263	0.0263	0.0003			
%RSD:	0.7	0.7	0.7452			

==========

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/04/2010
Sample ID: 247195001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.105	0.105	0.0013	0.0058	10:28:28	No
2	0.093	0.093	0.0012	0.0057	10:29:03	No
Mean:	0.099	0.099	0.0012			
SD :	0.0083	0.0083	0.0001			
%RSD:	8.3	8.3	6.7922			

==========

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/04/2010
Sample ID: 1202047353|i|||DUP

```
%RSD:        1.7        1.7    1.6642

==========================================================================================
Element: Hg    Seq. No.: 21       AS Loc.: 21   Date: 03/04/2010
Sample ID: 247195004|i|||
------------------------------------------------------------------------------------------
Rep1   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.377     0.377    0.0040     0.0086   10:42:17  No
 2        0.378     0.378    0.0040     0.0086   10:42:52  No
Mean:     0.377     0.377    0.0040
SD  :    0.0010    0.0010    0.0000
%RSD:       0.3        0.3    0.2570

==========================================================================================
Element: Hg    Seq. No.: 22       AS Loc.: 7   Date: 03/04/2010
Sample ID: CCV
------------------------------------------------------------------------------------------
Rep1   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.131     5.131    0.0521     0.0566   10:44:18  No
 2        5.146     5.146    0.0522     0.0568   10:44:53  No
Mean:     5.139     5.139    0.0521
SD  :    0.0107    0.0107    0.0001
%RSD:       0.2        0.2    0.2082
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 23       AS Loc.: 8   Date: 03/04/2010
Sample ID: CCB
------------------------------------------------------------------------------------------
Rep1   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.001    -0.001    0.0002     0.0048   10:46:21  No
 2       -0.013    -0.013    0.0001     0.0046   10:46:55  No
Mean:    -0.007    -0.007    0.0002
SD  :    0.0085    0.0085    0.0001
%RSD:     121.7     121.7   54.2400
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 24       AS Loc.: 22   Date: 03/04/2010
Sample ID: 247195005|i|||
------------------------------------------------------------------------------------------
Rep1   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        2.769     2.769    0.0282     0.0328   10:48:20  No
 2        2.739     2.739    0.0279     0.0325   10:48:55  No
Mean:     2.754     2.754    0.0281
SD  :    0.0213    0.0213    0.0002
%RSD:       0.8        0.8    0.7684

==========================================================================================
Element: Hg    Seq. No.: 25       AS Loc.: 23   Date: 03/04/2010
Sample ID: 247195006|i|||
------------------------------------------------------------------------------------------
Rep1   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.226     0.226    0.0025     0.0071   10:50:18  No
 2        0.217     0.217    0.0024     0.0070   10:50:53  No
Mean:     0.221     0.221    0.0025
SD  :    0.0059    0.0059    0.0001
%RSD:       2.6        2.6    2.4026

==========================================================================================
Element: Hg    Seq. No.: 26       AS Loc.: 24   Date: 03/04/2010
Sample ID: 247195007|i|||
```

```
%RSD:       2.2        2.2    2.0958

==========================================================================================
Element: Hg    Seq. No.: 32       AS Loc.: 30   Date: 03/04/2010
Sample ID: 247195013|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.233     0.233    0.0026     0.0071   11:04:20  No
 2        0.228     0.228    0.0025     0.0071   11:04:56  No
Mean:     0.231     0.231    0.0026
SD  :    0.0037    0.0037    0.0000
%RSD:       1.6        1.6    1.4689

==========================================================================================
Element: Hg    Seq. No.: 33       AS Loc.: 31   Date: 03/04/2010
Sample ID: 247195014|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        2.395     2.395    0.0244     0.0290   11:06:23  No
 2        2.385     2.385    0.0243     0.0289   11:06:57  No
Mean:     2.390     2.390    0.0244
SD  :    0.0073    0.0073    0.0001
%RSD:       0.3        0.3    0.3047

==========================================================================================
Element: Hg    Seq. No.: 34       AS Loc.: 7    Date: 03/04/2010
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        5.314     5.314    0.0539     0.0585   11:08:25  No
 2        5.375     5.375    0.0545     0.0591   11:08:59  No
Mean:     5.344     5.344    0.0542
SD  :    0.0431    0.0431    0.0004
%RSD:       0.8        0.8    0.8036
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 35       AS Loc.: 8    Date: 03/04/2010
Sample ID: CCB
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1       -0.001    -0.001    0.0002     0.0048   11:10:27  No
 2       -0.026    -0.026    0.0000     0.0045   11:11:02  No
Mean:    -0.014    -0.014    0.0001
SD  :    0.0175    0.0175    0.0002
%RSD:     126.6     126.6  200.4262
QC value within specified limits.

==========================================================================================
Element: Hg    Seq. No.: 36       AS Loc.: 32   Date: 03/04/2010
Sample ID: 247195015|i|||
------------------------------------------------------------------------------------------
Repl   SampleConc  StndConc   BlnkCorr   Peak      Time    Peak
 #     µg/L        µg/L       Signal     Height            Stored
 1        0.455     0.455    0.0048     0.0094   11:12:26  No
 2        0.447     0.447    0.0047     0.0093   11:13:01  No
Mean:     0.451     0.451    0.0048
SD  :    0.0053    0.0053    0.0001
%RSD:       1.2        1.2    1.1239

==========================================================================================
Element: Hg    Seq. No.: 37       AS Loc.: 33   Date: 03/04/2010
Sample ID: 1202055944|i||958641|MB
```

%RSD: 0.5 0.5 0.5416

==========

Element: Hg Seq. No.: 43 AS Loc.: 39 Date: 03/04/2010
Sample ID: 1202055948|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0006	0.0052	11:26:00	No
2	0.018	0.018	0.0004	0.0050	11:26:35	No
Mean:	0.030	0.030	0.0005			
SD :	0.0156	0.0156	0.0002			
%RSD:	53.0	53.0	30.0388			

==========

Element: Hg Seq. No.: 44 AS Loc.: 40 Date: 03/04/2010
Sample ID: 247359002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.743	0.743	0.0077	0.0123	11:27:58	No
2	0.742	0.742	0.0077	0.0123	11:28:33	No
Mean:	0.743	0.743	0.0077			
SD :	0.0008	0.0008	0.0000			
%RSD:	0.1	0.1	0.1005			

==========

Element: Hg Seq. No.: 45 AS Loc.: 41 Date: 03/04/2010
Sample ID: 247359003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.101	0.101	0.0012	0.0058	11:29:58	No
2	0.100	0.100	0.0012	0.0058	11:30:33	No
Mean:	0.100	0.100	0.0012			
SD :	0.0006	0.0006	0.0000			
%RSD:	0.6	0.6	0.5114			

==========

Element: Hg Seq. No.: 46 AS Loc.: 7 Date: 03/04/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.237	5.237	0.0531	0.0577	11:31:58	No
2	5.320	5.320	0.0540	0.0585	11:32:33	No
Mean:	5.278	5.278	0.0535			
SD :	0.0582	0.0582	0.0006			
%RSD:	1.1	1.1	1.0971			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 8 Date: 03/04/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.067	-0.067	-0.0004	0.0041	11:34:01	No
2	-0.056	-0.056	-0.0003	0.0042	11:34:36	No
Mean:	-0.061	-0.061	-0.0004			
SD :	0.0074	0.0074	0.0001			
%RSD:	12.0	12.0	18.9738			

QC value within specified limits.

==========

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 03/04/2010
Sample ID: 247359004|i|||

```
%RSD:        8.1         8.1     6.9198

==========================================================================================
Element: Hg     Seq. No.: 54        AS Loc.: 48    Date: 03/04/2010
Sample ID: 247463006|i|||
------------------------------------------------------------------------------------------
Repl    SampleConc  StndConc    BlnkCorr    Peak       Time    Peak
 #      µg/L        µg/L        Signal      Height             Stored
 1        0.156      0.156     0.0018      0.0064    11:48:01  No
 2        0.141      0.141     0.0017      0.0062    11:48:36  No
Mean:     0.149      0.149     0.0017
SD  :    0.0104     0.0104     0.0001
%RSD:       7.0        7.0     6.0706

==========================================================================================
Element: Hg     Seq. No.: 55        AS Loc.: 49    Date: 03/04/2010
Sample ID: 247469001|i|||
------------------------------------------------------------------------------------------
Repl    SampleConc  StndConc    BlnkCorr    Peak       Time    Peak
 #      µg/L        µg/L        Signal      Height             Stored
 1        110.0      110.0     1.1117      1.1163    11:49:56  No
Sample absorbance is greater than that of the highest standard.
 2        109.6      109.6     1.1070      1.1116    11:50:31  No
Sample absorbance is greater than that of the highest standard.
Mean:     109.8      109.8     1.1094
SD  :    0.3298     0.3298     0.0033
%RSD:       0.3        0.3     0.3003
Sample absorbance is greater than that of the highest standard.

==========================================================================================
Element: Hg     Seq. No.: 56        AS Loc.: 50    Date: 03/04/2010
Sample ID: 247469002|i|||
------------------------------------------------------------------------------------------
Repl    SampleConc  StndConc    BlnkCorr    Peak       Time    Peak
 #      µg/L        µg/L        Signal      Height             Stored
 1        0.164      0.164     0.0019      0.0064    11:51:52  No
 2        0.182      0.182     0.0021      0.0066    11:52:27  No
Mean:     0.173      0.173     0.0020
SD  :    0.0127     0.0127     0.0001
%RSD:       7.3        7.3     6.4814

==========================================================================================
Element: Hg     Seq. No.: 57        AS Loc.: 51    Date: 03/04/2010
Sample ID: 247469003|i|||
------------------------------------------------------------------------------------------
Repl    SampleConc  StndConc    BlnkCorr    Peak       Time    Peak
 #      µg/L        µg/L        Signal      Height             Stored
 1        11.22      11.22     0.1136      0.1181    11:53:48  No
Sample absorbance is greater than that of the highest standard.
 2        11.16      11.16     0.1129      0.1175    11:54:23  No
Sample absorbance is greater than that of the highest standard.
Mean:     11.19      11.19     0.1133
SD  :    0.0469     0.0469     0.0005
%RSD:       0.4        0.4     0.4179
Sample absorbance is greater than that of the highest standard.

==========================================================================================
Element: Hg     Seq. No.: 58        AS Loc.: 7     Date: 03/04/2010
Sample ID: CCV
------------------------------------------------------------------------------------------
Repl    SampleConc  StndConc    BlnkCorr    Peak       Time    Peak
 #      µg/L        µg/L        Signal      Height             Stored
 1        5.264      5.264     0.0534      0.0580    11:55:47  No
 2        5.374      5.374     0.0545      0.0591    11:56:21  No
Mean:     5.319      5.319     0.0540
SD  :    0.0774     0.0774     0.0008
%RSD:       1.5        1.5     1.4491
```

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 8 Date: 03/04/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.022	-0.022	0.0000	0.0046	11:57:49	No
2	-0.040	-0.040	-0.0002	0.0044	11:58:24	No
Mean:	-0.031	-0.031	-0.0001			
SD :	0.0123	0.0123	0.0001			
%RSD:	39.8	39.8	146.9413			

QC value within specified limits.

==========

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 03/04/2010
Sample ID: 1202055896|i||958616|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.149	-0.149	-0.0013	0.0033	11:59:49	No
2	-0.128	-0.128	-0.0011	0.0035	12:00:24	No
Mean:	-0.139	-0.139	-0.0012			
SD :	0.0148	0.0148	0.0001			
%RSD:	10.7	10.7	12.7556			

==========

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 03/04/2010
Sample ID: 1202055897|i|10||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	3.996	3.996	0.0406	0.0451	12:01:46	No
2	3.898	3.898	0.0396	0.0442	12:02:21	No
Mean:	3.947	3.947	0.0401			
SD :	0.0695	0.0695	0.0007			
%RSD:	1.8	1.8	1.7501			

==========

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 03/04/2010
Sample ID: 247178001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.180	0.180	0.0020	0.0066	12:03:43	No
2	0.179	0.179	0.0020	0.0066	12:04:19	No
Mean:	0.179	0.179	0.0020			
SD :	0.0003	0.0003	0.0000			
%RSD:	0.1	0.1	0.1293			

==========

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 03/04/2010
Sample ID: 1202055898|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.308	0.308	0.0033	0.0079	12:05:42	No
2	0.295	0.295	0.0032	0.0078	12:06:17	No
Mean:	0.301	0.301	0.0033			
SD :	0.0089	0.0089	0.0001			
%RSD:	3.0	3.0	2.7561			

==========

Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 03/04/2010
Sample ID: 1202055899|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.622	2.622	0.0267	0.0313	12:07:41	No
2	2.684	2.684	0.0273	0.0319	12:08:15	No
Mean:	2.653	2.653	0.0270			
SD :	0.0436	0.0436	0.0004			
%RSD:	1.6	1.6	1.6279			

==========

Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 03/04/2010
Sample ID: 1202055901|i|||MSD

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.664	2.664	0.0271	0.0317	12:09:39	No
2	2.599	2.599	0.0265	0.0310	12:10:14	No
Mean:	2.631	2.631	0.0268			
SD :	0.0458	0.0458	0.0005			
%RSD:	1.7	1.7	1.7241			

==========

Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 03/04/2010
Sample ID: 1202055900|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.082	-0.082	-0.0006	0.0040	12:11:38	No
2	-0.090	-0.090	-0.0007	0.0039	12:12:13	No
Mean:	-0.086	-0.086	-0.0006			
SD :	0.0056	0.0056	0.0001			
%RSD:	6.6	6.6	8.9227			

==========

Element: Hg Seq. No.: 67 AS Loc.: 59 Date: 03/04/2010
Sample ID: 247178002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.127	0.127	0.0015	0.0061	12:13:37	No
2	0.127	0.127	0.0015	0.0061	12:14:12	No
Mean:	0.127	0.127	0.0015			
SD :	0.0001	0.0001	0.0000			
%RSD:						

==========

Element: Hg Seq. No.: 68 AS Loc.: 60 Date: 03/04/2010
Sample ID: 247178003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.209	0.209	0.0023	0.0069	12:15:37	No
2	0.208	0.208	0.0023	0.0069	12:16:13	No
Mean:	0.208	0.208	0.0023			
SD :	0.0009	0.0009	0.0000			
%RSD:	0.4	0.4	0.4058			

==========

Element: Hg Seq. No.: 69 AS Loc.: 61 Date: 03/04/2010
Sample ID: 247178004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.120	0.120	0.0014	0.0060	12:17:39	No
2	0.112	0.112	0.0014	0.0059	12:18:14	No
Mean:	0.116	0.116	0.0014			
SD :	0.0059	0.0059	0.0001			
%RSD:	5.1	5.1	4.2806			

Element: Hg Seq. No.: 70 AS Loc.: 7 Date: 03/04/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.110	5.110	0.0518	0.0564	12:19:40	No
2	5.175	5.175	0.0525	0.0571	12:20:15	No
Mean:	5.142	5.142	0.0522			
SD :	0.0461	0.0461	0.0005			
%RSD:	0.9	0.9	0.8925			

QC value within specified limits.

Element: Hg Seq. No.: 71 AS Loc.: 8 Date: 03/04/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.021	-0.021	0.0000	0.0046	12:21:43	No
2	-0.011	-0.011	0.0001	0.0047	12:22:18	No
Mean:	-0.016	-0.016	0.0001			
SD :	0.0073	0.0073	0.0001			
%RSD:	46.2	46.2	107.2280			

QC value within specified limits.

Element: Hg Seq. No.: 72 AS Loc.: 62 Date: 03/04/2010
Sample ID: 247178005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.081	0.081	0.0010	0.0056	12:23:45	No
2	0.073	0.073	0.0010	0.0055	12:24:20	No
Mean:	0.077	0.077	0.0010			
SD :	0.0058	0.0058	0.0001			
%RSD:	7.5	7.5	5.8096			

Element: Hg Seq. No.: 73 AS Loc.: 63 Date: 03/04/2010
Sample ID: 247178006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.687	0.687	0.0072	0.0117	12:25:42	No
2	0.663	0.663	0.0069	0.0115	12:26:18	No
Mean:	0.675	0.675	0.0070			
SD :	0.0169	0.0169	0.0002			
%RSD:	2.5	2.5	2.4177			

Element: Hg Seq. No.: 74 AS Loc.: 64 Date: 03/04/2010
Sample ID: 247178007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.140	0.140	0.0016	0.0062	12:27:37	No
2	0.128	0.128	0.0015	0.0061	12:28:12	No
Mean:	0.134	0.134	0.0016			
SD :	0.0082	0.0082	0.0001			
%RSD:	6.1	6.1	5.2198			

Element: Hg Seq. No.: 75 AS Loc.: 65 Date: 03/04/2010
Sample ID: 247178008|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.164	0.164	0.0019	0.0064	12:29:32	No

2	0.152	0.152	0.0018	0.0063	12:30:07	No
Mean:	0.158	0.158	0.0018			
SD :	0.0084	0.0084	0.0001			
%RSD:	5.4	5.4	4.6839			

==========

Element: Hg Seq. No.: 76 AS Loc.: 66 Date: 03/04/2010
Sample ID: 247178009|i|||

Rep1 #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.214	0.214	0.0024	0.0069	12:31:27	No
2	0.205	0.205	0.0023	0.0068	12:32:02	No
Mean:	0.209	0.209	0.0023			
SD :	0.0063	0.0063	0.0001			
%RSD:	3.0	3.0	2.7085			

==========

Element: Hg Seq. No.: 77 AS Loc.: 67 Date: 03/04/2010
Sample ID: 247178010|i|||

Rep1 #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.132	0.132	0.0016	0.0061	12:33:23	No
2	0.118	0.118	0.0014	0.0060	12:33:58	No
Mean:	0.125	0.125	0.0015			
SD :	0.0102	0.0102	0.0001			
%RSD:	8.1	8.1	6.9022			

==========

Element: Hg Seq. No.: 78 AS Loc.: 68 Date: 03/04/2010
Sample ID: 247178011|i|||

Rep1 #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.042	0.042	0.0006	0.0052	12:35:19	No
2	0.060	0.060	0.0008	0.0054	12:35:54	No
Mean:	0.051	0.051	0.0007			
SD :	0.0132	0.0132	0.0001			
%RSD:	25.9	25.9	17.9597			

==========

Element: Hg Seq. No.: 79 AS Loc.: 69 Date: 03/04/2010
Sample ID: 1202059622|i||960236|MB

Rep1 #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.029	-0.029	-0.0001	0.0045	12:37:17	No
2	-0.034	-0.034	-0.0001	0.0044	12:37:51	No
Mean:	-0.032	-0.032	-0.0001			
SD :	0.0032	0.0032	0.0000			
%RSD:	10.1	10.1	35.4496			

==========

Element: Hg Seq. No.: 80 AS Loc.: 70 Date: 03/04/2010
Sample ID: 1202059623|i|||LCS

Rep1 #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.290	2.290	0.0234	0.0279	12:39:14	No
2	2.259	2.259	0.0230	0.0276	12:39:48	No
Mean:	2.274	2.274	0.0232			
SD :	0.0223	0.0223	0.0002			
%RSD:	1.0	1.0	0.9715			

==========

Element: Hg Seq. No.: 81 AS Loc.: 71 Date: 03/04/2010

Sample ID: 247994002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.072	0.072	0.0010	0.0055	12:41:12	No
2	-0.017	-0.017	0.0001	0.0046	12:41:47	No
Mean:	0.028	0.028	0.0005			
SD :	0.0623	0.0623	0.0006			
%RSD:	226.4	226.4	124.3647			

Element: Hg Seq. No.: 82 AS Loc.: 7 Date: 03/04/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.156	5.156	0.0523	0.0569	12:43:12	No
2	5.385	5.385	0.0546	0.0592	12:43:47	No
Mean:	5.271	5.271	0.0535			
SD :	0.1613	0.1613	0.0016			
%RSD:	3.1	3.1	3.0476			

QC value within specified limits.

Element: Hg Seq. No.: 83 AS Loc.: 8 Date: 03/04/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.027	-0.027	0.0000	0.0045	12:45:15	No
2	-0.029	-0.029	-0.0001	0.0045	12:45:50	No
Mean:	-0.028	-0.028	-0.0001			
SD :	0.0017	0.0017	0.0000			
%RSD:	6.0	6.0	31.0616			

QC value within specified limits.

Element: Hg Seq. No.: 84 AS Loc.: 72 Date: 03/04/2010
Sample ID: 247994003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.135	0.135	0.0016	0.0061	12:47:16	No
2	0.122	0.122	0.0015	0.0060	12:47:51	No
Mean:	0.128	0.128	0.0015			
SD :	0.0098	0.0098	0.0001			
%RSD:	7.6	7.6	6.4709			

Element: Hg Seq. No.: 85 AS Loc.: 73 Date: 03/04/2010
Sample ID: 247994004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0003	0.0048	12:49:15	No
2	-0.030	-0.030	-0.0001	0.0045	12:49:51	No
Mean:	-0.014	-0.014	0.0001			
SD :	0.0226	0.0226	0.0002			
%RSD:	166.4	166.4	250.9337			

Element: Hg Seq. No.: 86 AS Loc.: 74 Date: 03/04/2010
Sample ID: 247994005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.012	0.012	0.0004	0.0049	12:51:15	No

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: **954671.0** Verified by:
Analyst: Anthony Green
Method: SW846 3050B
Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202046580	Metals Soil LCS SRM ICP/Hg	UI062540-I	.503	g
MS	1202046578	Metals Spike Mix I	UI100205-01	.25	mL
MS	1202046578	Metals Spike Mix II	UI100205-06	.25	mL
MSD	1202046579	Metals Spike Mix I	UI100205-01	.25	mL
MSD	1202046579	Metals Spike Mix II	UI100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202046575 MB	23-FEB-2010 08:00:00	Soil	0.507	50	98.61933	
1202046580 LCS	23-FEB-2010 08:00:00	Soil	0.503	50	99.40358	
247178001	23-FEB-2010 08:00:00	Soil	0.528	50	94.69697	
1202046576 DUP (247178001)	23-FEB-2010 08:00:00	Soil	0.532	50	93.98496	
1202046577 SDILT (247178001)	23-FEB-2010 08:00:00	Soil	0.528	50	94.69697	
1202046578 MS (247178001)	23-FEB-2010 08:00:00	Soil	0.506	50	98.81423	
1202046579 MSD (247178001)	23-FEB-2010 08:00:00	Soil	0.512	50	97.65625	
247178002	23-FEB-2010 08:00:00	Soil	0.525	50	95.2381	
247178003	23-FEB-2010 08:00:00	Soil	0.524	50	95.41985	
247178004	23-FEB-2010 08:00:00	Soil	0.522	50	95.78544	
247178005	23-FEB-2010 08:00:00	Soil	0.524	50	95.41985	
247178006	23-FEB-2010 08:00:00	Soil	0.541	50	92.42144	
247178007	23-FEB-2010 08:00:00	Soil	0.589	50	84.88964	
247178008	23-FEB-2010 08:00:00	Soil	0.546	50	91.57509	
247178009	23-FEB-2010 08:00:00	Soil	0.549	50	91.07468	
247178010	23-FEB-2010 08:00:00	Soil	0.546	50	91.57509	
247178011	23-FEB-2010 08:00:00	Soil	0.519	50	96.33911	

Reagent/Solvent Lot ID	Description	Amount
1265209	HYDROCHLORIC ACID	10 mL
1268732	Nitric Acid CONC.	1.25 mL

Comments:
Sample 247178001 consist of brown, soil with rocks.

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 954673.0 **Verified by:**
Analyst: Anthony Green
Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202046581 MB	23-FEB-2010 08:00:00	0.521	50	95.96929	
1202046586 LCS	23-FEB-2010 08:00:00	0.503	50	99.40358	
247178001	23-FEB-2010 08:00:00	0.504	50	99.20635	
1202046582 DUP (247178001)	23-FEB-2010 08:00:00	0.535	50	93.45794	
1202046583 SDILT (247178001)	23-FEB-2010 08:00:00	0.504	50	99.20635	
1202046584 MS (247178001)	23-FEB-2010 08:00:00	0.534	50	93.63296	
1202046585 MSD (247178001)	23-FEB-2010 08:00:00	0.506	50	98.81423	
247178002	23-FEB-2010 08:00:00	0.536	50	93.28358	
247178003	23-FEB-2010 08:00:00	0.503	50	99.40358	
247178004	23-FEB-2010 08:00:00	0.548	50	91.24088	
247178005	23-FEB-2010 08:00:00	0.527	50	94.87666	
247178006	23-FEB-2010 08:00:00	0.501	50	99.8004	
247178007	23-FEB-2010 08:00:00	0.578	50	86.50519	
247178008	23-FEB-2010 08:00:00	0.504	50	99.20635	
247178009	23-FEB-2010 08:00:00	0.581	50	86.05852	
247178010	23-FEB-2010 08:00:00	0.517	50	96.7118	
247178011	23-FEB-2010 08:00:00	0.5	50	100	

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202046586	Metals Soil LCS SRM ICPMS	UI062540-MS	.503	g
MS	1202046584	ICP-MS Spike for soil products.	UI091015-A	.5	mL
MS	1202046584	ICP-MS Spike for Soil Products	UI091015-B	.5	mL
MSD	1202046585	ICP-MS Spike for soil products.	UI091015-A	.5	mL
MSD	1202046585	ICP-MS Spike for Soil Products	UI091015-B	.5	mL
REGNT	All	Hydrogen Peroxide 30%	1250038-02	1.5	mL
REGNT	All	Nitric Acid CONC.	1268732	5	mL

Comments:
Sample 247178001 consist of brown, soil with rocks.

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 965478.0 **Verified by:** _____
Analyst: Anthony Green
Method: SW846 3050B

Lab SOP: GL-MA-E-009 REV# 19
Instrument: BAL-001

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202046581 - 2 MB	16-MAR-2010 08:30:00	0.516	50	96.89922	
1202046586 - 2 LCS	16-MAR-2010 08:30:00	0.508	50	98.4252	
247178001 - 2	16-MAR-2010 08:30:00	0.514	50	97.27626	
1202046582 - 2 DUP (247178001)	16-MAR-2010 08:30:00	0.512	50	97.65625	
1202046583 - 2 SDILT (247178001)	16-MAR-2010 08:30:00	0.514	50	97.27626	
1202046584 - 2 MS (247178001)	16-MAR-2010 08:30:00	0.52	50	96.15385	
1202046585 - 2 MSD (247178001)	16-MAR-2010 08:30:00	0.511	50	97.84736	
247178002 - 2	16-MAR-2010 08:30:00	0.544	50	91.91176	
247178003 - 2	16-MAR-2010 08:30:00	0.522	50	95.78544	
247178004 - 2	16-MAR-2010 08:30:00	0.541	50	92.42144	
247178005 - 2	16-MAR-2010 08:30:00	0.504	50	99.20635	
247178006 - 2	16-MAR-2010 08:30:00	0.519	50	96.33911	
247178007 - 2	16-MAR-2010 08:30:00	0.52	50	96.15385	
247178008 - 2	16-MAR-2010 08:30:00	0.519	50	96.33911	
247178009 - 2	16-MAR-2010 08:30:00	0.517	50	96.7118	
247178010 - 2	16-MAR-2010 08:30:00	0.509	50	98.23183	
247178011 - 2	16-MAR-2010 08:30:00	0.515	50	97.08738	

Type	Sample Id	Description	Serial Number	Spike Amt	Units
LCS	1202046586	Metals Soil LCS SRM ICPMS	UI062540-MS	.508	g
MS	1202046584	ICP-MS Spike for soil products.	UI090827-A	.5	mL
MS	1202046584	ICP-MS Spike for Soil Products	UI090827-B	.5	mL
MSD	1202046585	ICP-MS Spike for soil products.	UI090827-A	.5	mL
MSD	1202046585	ICP-MS Spike for Soil Products	UI090827-B	.5	mL
REGNT	All	Hydrogen Peroxide 30%	1250038-02	1.5	mL
REGNT	All	Nitric Acid CONC.	1282566	5	mL

Comments:

Sample 247178001 consist of rich, brown soil.

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **958615.0** Verified by:
Analyst: Tara Griffin
Method: SW846 7471A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: BAL-002

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202055897	Metals LCS Soil SRM	UI031809A	.209	g
MS	1202055899	Mercury soil working intermediate standard for MS	WHG100303-14	.3	mL
MSD	1202055901	Mercury soil working intermediate standard for MS	WHG100303-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202055896 MB	03-MAR-2010 16:00:00	Soil	0.554	30	54.15162	
1202055897 LCS	03-MAR-2010 16:00:00	Soil	0.209	30	143.54067	
247178001	03-MAR-2010 16:00:00	Soil	0.505	30	59.40594	
1202055898 DUP (247178001)	03-MAR-2010 16:00:00	Soil	0.6	30	50	
1202055899 MS (247178001)	03-MAR-2010 16:00:00	Soil	0.579	30	51.81347	
1202055901 MSD (247178001)	03-MAR-2010 16:00:00	Soil	0.521	30	57.58157	
1202055900 SDILT (247178001)	03-MAR-2010 16:00:00	Soil	0.505	30	59.40594	
247178002	03-MAR-2010 16:00:00	Soil	0.534	30	56.17978	
247178003	03-MAR-2010 16:00:00	Soil	0.515	30	58.25243	
247178004	03-MAR-2010 16:00:00	Soil	0.553	30	54.24955	
247178005	03-MAR-2010 16:00:00	Soil	0.52	30	57.69231	
247178006	03-MAR-2010 16:00:00	Soil	0.523	30	57.36138	
247178007	03-MAR-2010 16:00:00	Soil	0.596	30	50.33557	
247178008	03-MAR-2010 16:00:00	Soil	0.508	30	59.05512	
247178009	03-MAR-2010 16:00:00	Soil	0.583	30	51.45798	
247178010	03-MAR-2010 16:00:00	Soil	0.532	30	56.39098	
247178011	03-MAR-2010 16:00:00	Soil	0.516	30	58.13953	

Reagent/Solvent Lot ID	Description	Amount
1255532-C	Hg reducing agent	2 mL
1274391-1	NITRIC ACID	.375 mL
1277235-A	Hydrochloric Acid Conc.	1.125 mL
1277238-C	5% KMnO4 solution	7.5 mL
WHG100303-07	Mercury Working Standard 1st Source CAL S 0.2/CRA	30 uL
WHG100303-08	Mercury Working Standard 1st Source CAL S 0.5	75 uL
WHG100303-09	Mercury Working 1st Source CAL S 2.0	300 uL

Comments:

Sample 247178001 is a brown soil.

Digestion Start Date: 03-MAR-10 16:00

Digestion End Date: 03-MAR-10 16:30

DER Report No.: 804461
Revision No.: 1

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP/MS	SW846 3050B/6020	Solid	LANL
Batch ID:	**Sample Numbers:**		
954674	See Below		

Potentially affected work order(s)(SDG): 247178(10-1861)

Application Issues:

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed Recovery for MSD/PSD: QC 1202046585MSD	The matrix spike duplicate recovery failed outside of the control limits for Se 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 16-MAR-10

Data Validator/Group Leader:

Paul Boyd 16-MAR-10

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
15-MAR-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
ICP	SW846 3050B/6010B	Solid	LANL
Batch ID:	**Sample Numbers:**		
954672	See Below		

Potentially affected work order(s)(SDG): 247178(10-1861)

Application Issues:

Failed Recovery for MS/PS

Failed RPD for MS/MSD, or PS/PSD

Method Blank contamination

Failed Recovery for MSD/PSD

Specification and Requirements Exception Description:

1. Failed Recovery for MS/PS:

   QC 1202046578MS

2. Failed RPD for MS/MSD, or PS/PSD:

   QC 1202046579MSD

3. Failed Recovery for MSD/PSD:

   QC 1202046579MSD

4. Method Blank Contamination:

   QC 1202046575MB

DER Disposition:

1. The matrix spike recovery failed outside of the control limits for barium,calcium and potassium 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 matrix spike and matrix spike duplicate % RPD failed outside of the control limits for aluminum,barium,calcium,iron,magnesium,manganese and potassium 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.

3. The matrix spike duplicate recovery failed outside of the control limits for antimony,barium,magnesium and potassium 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.

4. The samples in this SDG contained the above noted analytes at concentrations more than ten times the amount present in the method blank (MB), therefore the data was not adversely affected.

Originator's Name:

Helen Camello 16-MAR-10

Data Validator/Group Leader:

Christopher Louviere 16-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:	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

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: UI090421-40 **Opened:** 09-OCT-09 **Amount :** 250 mL
Name: TRACE ICP Na-1000SOUR **Received:** 21-APR-09 **Catalog Number :** HP100052-1
Type: Source Material **Expires:** 09-OCT-10 **Lot Number :** 0830227
Employee: Helen Camello **Solvent :** 1%HNO3
Supplier: ENVIRONMENTAL EXPRESS
Description: Sodium 1000 +/- 3 ug/mL in 1% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

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: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-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

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: UI090827-A **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-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: UI090827-B **Opened:** 27-AUG-09 **Catalog Number :** 160067-03
Name: ICP-MS DOE SOIL SPIKE **Received:** 27-AUG-09 **Lot Number :** 1015749
Type: Source Material **Expires:** 27-AUG-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: 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
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

Analyte	Concentration	Analyte	Concentration
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

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
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 :** H20/tr HF
Supplier: ENVIRNMENTAL EXPRESS

Description: SILICON 1000mg/L H20/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

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		

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

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: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
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: UI100205-06 **Opened:** 05-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
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
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI100217-48 **Opened:** 04-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 17-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-10 **Lot Number :** 1018878
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

Standard Logbook

Serial ID:	UI100217-49.20	**Opened:**	15-MAR-10	**Amount :**	100 ml
Name:	Trace ICP ICSAB	**Received:**	17-FEB-10	**Catalog Number :**	160066-04
Type:	Source Material	**Expires:**	16-MAR-10	**Lot Number :**	1018879
Employee:	Helen Camello			**Solvent :**	3% HCl + 1% HNO3
Supplier:	o2si				

Description: Trace ICP Inteferent 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:	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 Standar	**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 Standar	**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:	UI100226-40	**Opened:**	26-FEB-10	**Amount :**	500 mL
Name:	ICP HIGH RANGE STD-A	**Received:**	25-FEB-10	**Catalog Number :**	160211-05-03
Type:	Source Material	**Expires:**	26-FEB-11	**Lot Number :**	1018981
Employee:	Helen Camello			**Solvent :**	+/-0.5%in2%HNO3
Supplier:	02SI				
Description:	ICP HIGH RANGE STD SOLUTION A				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L

Analyte	Concentration	Analyte	Concentration
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: UI100226-41 **Opened:** 26-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 1018981
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: UI100312-40 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100312-41 **Opened:** 14-MAR-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 12-MAR-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 14-MAR-11 **Lot Number :** 1018981
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: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 26-FEB-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-104JB
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: UMS100226-02 **Opened:** 26-FEB-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 26-FEB-10 **Lot Number :** 21-103JB
Type: Source Material **Expires:** 26-FEB-11
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: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 26-FEB-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-102JB
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: IHG100303-01 **Opened:** 03-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 03-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 04-MAR-10 **Solvent :** 1mL HNO3 + Typel 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: IHG100303-02 **Opened:** 03-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 04-MAR-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: WHG100303-07 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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.
IHG100303-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Serial ID: WHG100303-08 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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.
IHG100303-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100303-09 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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.
IHG100303-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100303-10 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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.
IHG100303-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Standard Logbook

Serial ID: WHG100303-11 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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.
IHG100303-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Serial ID: WHG100303-12 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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.
IHG100303-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100303-14 **Opened:** 03-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 03-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 10-MAR-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: WI100310-42 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1281689
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.
WI100310-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100310-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100310-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100310-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100310-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100310-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100310-43 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1281689
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP O.5/CCV CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	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: WI100310-44 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1281689
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: WI100310-45 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1281689
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
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

Serial ID: WI100310-46 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1281689
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: WI100310-47 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL &1%HNO3-1281689
Employee: Helen Camello
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

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: WI100315-42 **Opened:** 15-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 16-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
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.
WI100315-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100315-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100315-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100315-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100315-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100315-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100315-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100315-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100315-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100315-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100315-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100315-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100315-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100315-43 **Opened:** 15-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 16-MAR-10 **Solvent :** 3%HCL and 1%HNO3 --1285629
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.
UI090421-40	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: WI100315-44 **Opened:** 15-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 16-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1285629
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

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: WI100315-45 **Opened:** 15-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 16-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1285629
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
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

Serial ID: WI100315-46 **Opened:** 15-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 16-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
Employee: Helen Camello
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: WI100315-47 **Opened:** 15-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 16-MAR-10 **Solvent :** 3%HCL &1%HNO3-1285629
Employee: Helen Camello
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: WMS100312-04B **Opened:** 12-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 13-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1281622
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100313-04 **Opened:** 13-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-MAR-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1281622
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	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.
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100313-04A **Opened:** 13-MAR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1276824
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100312-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100312-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100312-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100312-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100313-05 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1281622
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: WMS100313-06 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1281622
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.	Aliquot	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: WMS100313-07 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1281622
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: WMS100313-08 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1281622
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: WMS100316-04 **Opened:** 16-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 16-MAR-10 **Balance Id :** 4025216
Type: Working **Expires:** 17-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1285348
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100316-04A **Opened:** 16-MAR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 16-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 17-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100316-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100316-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100316-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100316-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100316-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100316-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100316-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100316-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100316-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100316-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100316-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100316-05 **Opened:** 16-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 16-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 17-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100316-06 **Opened:** 16-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 16-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 17-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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

Serial ID: WMS100316-07 **Opened:** 16-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 16-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 17-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1285348
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100316-08 **Opened:** 16-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 16-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 17-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100316-70 **Opened:** 16-MAR-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 16-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 17-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1285348
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
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

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: 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: Hydroxlyamine Hydrochloride
Comments: None

Serial ID: 1250038-02 **Opened:** 04-JAN-10 **Lot Number :** ZU74081198 mL
Name: B-H2O2 **Received:** 04-JAN-10
Type: Reagent/Solvent **Expires:** 04-JAN-11
Employee: Bryan Davis
Supplier: EM SCIENCE
Description: Hydrogen Peroxide 30%
Comments: None

Standard Logbook

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: 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: 1268732 **Opened:** 11-FEB-10 **Lot Number :** H12022 L
Name: I-HNO3 **Received:** 11-FEB-10
Type: Reagent/Solvent **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1277235-A **Opened:** 01-MAR-10 **Lot Number :** J02039
Name: B-HCl-MER **Received:** 01-MAR-10
Type: Reagent/Solvent **Expires:** 01-MAR-11
Employee: Tara Griffin
Supplier: J T Baker
Description: Hydrochloric Acid Conc.
Comments: None

Standard Logbook

Serial ID: 1277238-C **Opened:** 01-MAR-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 01-MAR-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: 1281622 **Opened:** 08-MAR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 08-MAR-10
Type: Reagent/Solvent **Expires:** 15-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

Serial ID: 1281689 **Opened:** 08-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 14-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1282566 **Opened:** 09-MAR-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 09-MAR-10
Type: Reagent/Solvent **Expires:** 09-MAR-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1285348 **Opened:** 15-MAR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 15-MAR-10
Type: Reagent/Solvent **Expires:** 22-MAR-10
Employee: Paul Boyd
Supplier: GEL

Standard Logbook

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

Serial ID: 1285629 **Opened:** 15-MAR-10 **Amount :** 20 L

Name: B-ICP-RINSE SOLN **Received:** 05-MAR-10 **Lot Number :** H04040+G34050

Type: Reagent/Solvent **Expires:** 21-MAR-10 **Solvent :** 3%HCL+1%HNO3

Employee: Helen Camello

Supplier: GEL

Description: 3%HCL+1%HNO3 RINSE SOLN.

Comments: None

Metals Analysis

Case Narrative

Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1861-1

Sample Analysis

Sample ID	Client ID
247182001	RE15-10-8087
1202046565	Method Blank (MB) **ICP**
1202046566	Laboratory Control Sample (LCS)
1202046569	247192001(RE15-10-8235L) Serial Dilution (SD)
1202046567	247192001(RE15-10-8235D) Sample Duplicate (DUP)
1202046568	247192001(RE15-10-8235S) Matrix Spike (MS)
1202046570	Method Blank (MB) **ICP-MS**
1202046571	Laboratory Control Sample (LCS)
1202046574	247192001(RE15-10-8235L) Serial Dilution (SD)
1202046572	247192001(RE15-10-8235D) Sample Duplicate (DUP)
1202046573	247192001(RE15-10-8235S) Matrix Spike (MS)
1202052034	Method Blank (MB) **CVAA**
1202052035	Laboratory Control Sample (LCS)
1202052041	247548001(RE46-10-13373L) Serial Dilution (SD)
1202052036	247548001(RE46-10-13373D) Sample Duplicate (DUP)
1202052037	247548001(RE46-10-13373S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch: 954668, 954670 and 957034

Prep Batch :	954667, 954669 and 957032
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 5300 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 standards met the advisory control limits with the exceptions of thallium and iron, which recovered outside of the advisory limits of 70-130%.

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.

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: 247192001 (RE15-10-8235) and 247548001 (RE46-10-13373).

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. All applicable elements met the acceptance criteria.

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 (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.

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:** 3/15/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1861-1 **CONTRACT:** LANL01004 **METHOD TYPE:** SW846

SAMPLE ID: 247182001 **BASIS:** As Received **DATE COLLECTED** 10-FEB-10

CLIENT ID: RE15-10-8087 **LEVEL:** Low **DATE RECEIVED** 16-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	03/10/10 20:19	031010-1	954668
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-70-2	Calcium	580	ug/L		50	200	200	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/10/10 20:19	031010-1	954668
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/10/10 20:19	031010-1	954668
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/10/10 20:19	031010-1	954668
7439-96-5	Manganese	5	ug/L	U	1	5	5	1	MS	BAJ	03/14/10 09:50	100313-5	954670
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	02/25/10 12:46	022510W1-6	957034
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-09-7	Potassium	132	ug/L	J	50	150	150	1	P	HSC	03/10/10 20:19	031010-1	954668
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-23-5	Sodium	192	ug/L	J	100	300	300	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-28-0	Thallium	1	ug/L	U	0.3	1	1	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-61-1	Uranium	0.20	ug/L	U	0.05	0.2	0.2	1	MS	BAJ	03/14/10 05:15	100313-2	954670
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/10/10 20:19	031010-1	954668
7440-66-6	Zinc	4.74	ug/L	J	3.3	10	10	1	P	HSC	03/10/10 20:19	031010-1	954668

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
954668	954667	SW846 3005A	50	mL	50	mL	02/24/10	AXG2
954670	954669	SW846 3005A	50	mL	50	mL	02/24/10	AXG2
957034	957032	SW846 7470A Prep	20	mL	20	mL	02/24/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.12	ug/L	5	ug/L	102.5	90.0 - 110.0	AV	25-FEB-10 11:07	022510W1-6
	Aluminum	4920	ug/L	5000	ug/L	98.4	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Arsenic	480	ug/L	500	ug/L	96.1	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Barium	510	ug/L	500	ug/L	101.9	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Chromium	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Cobalt	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Copper	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Magnesium	5270	ug/L	5000	ug/L	105.4	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Nickel	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Potassium	2450	ug/L	2500	ug/L	97.9	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Selenium	2580	ug/L	2500	ug/L	103.1	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Silver	258	ug/L	250	ug/L	103.3	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Sodium	2370	ug/L	2500	ug/L	94.7	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Vanadium	512	ug/L	500	ug/L	102.4	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Zinc	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	10-MAR-10 17:06	031010-1
	Antimony	52.3	ug/L	50	ug/L	104.6	90.0 - 110.0	MS	14-MAR-10 03:39	100313-2
	Beryllium	49.8	ug/L	50	ug/L	99.5	90.0 - 110.0	MS	14-MAR-10 03:39	100313-2
	Cadmium	50.5	ug/L	50	ug/L	100.9	90.0 - 110.0	MS	14-MAR-10 03:39	100313-2
	Lead	51.8	ug/L	50	ug/L	103.7	90.0 - 110.0	MS	14-MAR-10 03:39	100313-2
	Thallium	50.7	ug/L	50	ug/L	101.3	90.0 - 110.0	MS	14-MAR-10 03:39	100313-2
	Uranium	52	ug/L	50	ug/L	104	90.0 - 110.0	MS	14-MAR-10 03:39	100313-2
	Manganese	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	14-MAR-10 09:16	100313-5
CCV01										
	Mercury	4.94	ug/L	5	ug/L	98.7	80.0 - 120.0	AV	25-FEB-10 11:13	022510W1-6
	Aluminum	4850	ug/L	5000	ug/L	97	90.0 - 110.0	P	10-MAR-10 17:55	031010-1
	Arsenic	528	ug/L	500	ug/L	105.5	90.0 - 110.0	P	10-MAR-10 17:55	031010-1
	Barium	504	ug/L	500	ug/L	100.8	90.0 - 110.0	P	10-MAR-10 17:55	031010-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	10-MAR-10 17:55	031010-1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Chromium	504	ug/L	500	ug/L	100.8	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Cobalt	515	ug/L	500	ug/L	103	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Copper	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Iron	5040	ug/L	5000	ug/L	100.7	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Magnesium	5310	ug/L	5000	ug/L	106.3	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Nickel	514	ug/L	500	ug/L	102.8	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Potassium	5590	ug/L	5000	ug/L	111.8	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Selenium	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Silver	505	ug/L	500	ug/L	100.9	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Sodium	9360	ug/L	10000	ug/L	93.6	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Vanadium	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Zinc	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	10–MAR–10 17:55	031010–1
	Antimony	49.5	ug/L	50	ug/L	99	90.0 – 110.0	MS	14–MAR–10 03:59	100313–2
	Beryllium	46.8	ug/L	50	ug/L	93.7	90.0 – 110.0	MS	14–MAR–10 03:59	100313–2
	Cadmium	48.4	ug/L	50	ug/L	96.8	90.0 – 110.0	MS	14–MAR–10 03:59	100313–2
	Lead	48.9	ug/L	50	ug/L	97.9	90.0 – 110.0	MS	14–MAR–10 03:59	100313–2
	Thallium	48.8	ug/L	50	ug/L	97.6	90.0 – 110.0	MS	14–MAR–10 03:59	100313–2
	Uranium	48.6	ug/L	50	ug/L	97.2	90.0 – 110.0	MS	14–MAR–10 03:59	100313–2
	Manganese	48.4	ug/L	50	ug/L	96.9	90.0 – 110.0	MS	14–MAR–10 09:27	100313–5
CCV02										
	Mercury	5.03	ug/L	5	ug/L	100.6	80.0 – 120.0	AV	25–FEB–10 11:37	022510W1–6
	Aluminum	4790	ug/L	5000	ug/L	95.9	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Arsenic	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Barium	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Calcium	5130	ug/L	5000	ug/L	102.6	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Chromium	503	ug/L	500	ug/L	100.7	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Cobalt	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Copper	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Iron	5020	ug/L	5000	ug/L	100.4	90.0 – 110.0	P	10–MAR–10 18:15	031010–1
	Magnesium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	10–MAR–10 18:15	031010–1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Nickel	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Potassium	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Selenium	518	ug/L	500	ug/L	103.6	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Silver	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Sodium	9270	ug/L	10000	ug/L	92.7	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Vanadium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Zinc	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	10-MAR-10 18:15	031010-1
	Antimony	53.1	ug/L	50	ug/L	106.1	90.0 - 110.0	MS	14-MAR-10 04:35	100313-2
	Beryllium	48.8	ug/L	50	ug/L	97.7	90.0 - 110.0	MS	14-MAR-10 04:35	100313-2
	Cadmium	51.5	ug/L	50	ug/L	103	90.0 - 110.0	MS	14-MAR-10 04:35	100313-2
	Lead	52.4	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	14-MAR-10 04:35	100313-2
	Thallium	51.7	ug/L	50	ug/L	103.4	90.0 - 110.0	MS	14-MAR-10 04:35	100313-2
	Uranium	51.9	ug/L	50	ug/L	103.8	90.0 - 110.0	MS	14-MAR-10 04:35	100313-2
	Manganese	49.2	ug/L	50	ug/L	98.3	90.0 - 110.0	MS	14-MAR-10 09:45	100313-5
CCV03										
	Mercury	5.3	ug/L	5	ug/L	106.1	80.0 - 120.0	AV	25-FEB-10 12:00	022510W1-6
	Aluminum	4740	ug/L	5000	ug/L	94.8	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Arsenic	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Calcium	5100	ug/L	5000	ug/L	102	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Chromium	497	ug/L	500	ug/L	99.4	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Copper	490	ug/L	500	ug/L	98	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Iron	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Magnesium	5190	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Nickel	508	ug/L	500	ug/L	101.6	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Potassium	5010	ug/L	5000	ug/L	100.2	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Selenium	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Silver	499	ug/L	500	ug/L	99.7	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Sodium	8970	ug/L	10000	ug/L	89.7	90.0 - 110.0	P	10-MAR-10 18:44	031010-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1861-1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Zinc	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	10-MAR-10 18:44	031010-1
	Antimony	49.6	ug/L	50	ug/L	99.3	90.0 - 110.0	MS	14-MAR-10 05:07	100313-2
	Beryllium	47.8	ug/L	50	ug/L	95.6	90.0 - 110.0	MS	14-MAR-10 05:07	100313-2
	Cadmium	48.5	ug/L	50	ug/L	97	90.0 - 110.0	MS	14-MAR-10 05:07	100313-2
	Lead	51	ug/L	50	ug/L	101.9	90.0 - 110.0	MS	14-MAR-10 05:07	100313-2
	Thallium	48.3	ug/L	50	ug/L	96.7	90.0 - 110.0	MS	14-MAR-10 05:07	100313-2
	Uranium	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	14-MAR-10 05:07	100313-2
	Manganese	48.2	ug/L	50	ug/L	96.3	90.0 - 110.0	MS	14-MAR-10 10:01	100313-5
CCV04										
	Mercury	5.03	ug/L	5	ug/L	100.7	80.0 - 120.0	AV	25-FEB-10 12:24	022510W1-6
	Aluminum	4820	ug/L	5000	ug/L	96.5	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Arsenic	499	ug/L	500	ug/L	99.9	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Barium	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Calcium	5050	ug/L	5000	ug/L	101	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Chromium	493	ug/L	500	ug/L	98.7	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Cobalt	504	ug/L	500	ug/L	100.7	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Copper	486	ug/L	500	ug/L	97.2	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Iron	4950	ug/L	5000	ug/L	99	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Magnesium	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Nickel	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Potassium	4890	ug/L	5000	ug/L	97.9	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Selenium	514	ug/L	500	ug/L	102.7	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Silver	495	ug/L	500	ug/L	99	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Sodium	9320	ug/L	10000	ug/L	93.2	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Vanadium	497	ug/L	500	ug/L	99.3	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Zinc	489	ug/L	500	ug/L	97.7	90.0 - 110.0	P	10-MAR-10 19:06	031010-1
	Antimony	49.2	ug/L	50	ug/L	98.4	90.0 - 110.0	MS	14-MAR-10 05:35	100313-2
	Beryllium	48.2	ug/L	50	ug/L	96.3	90.0 - 110.0	MS	14-MAR-10 05:35	100313-2
	Cadmium	48.3	ug/L	50	ug/L	96.7	90.0 - 110.0	MS	14-MAR-10 05:35	100313-2

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Lead	50.2	ug/L	50	ug/L	100.5	90.0 – 110.0	MS	14–MAR–10 05:35	100313–2
	Thallium	47.4	ug/L	50	ug/L	94.8	90.0 – 110.0	MS	14–MAR–10 05:35	100313–2
	Uranium	50.8	ug/L	50	ug/L	101.6	90.0 – 110.0	MS	14–MAR–10 05:35	100313–2
CCV05										
	Mercury	5.08	ug/L	5	ug/L	101.7	80.0 – 120.0	AV	25–FEB–10 12:48	022510W1–6
	Aluminum	4900	ug/L	5000	ug/L	97.9	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Arsenic	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Barium	492	ug/L	500	ug/L	98.5	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Calcium	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Chromium	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Copper	486	ug/L	500	ug/L	97.2	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Iron	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Magnesium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Nickel	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Potassium	4790	ug/L	5000	ug/L	95.8	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Selenium	515	ug/L	500	ug/L	103	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Silver	495	ug/L	500	ug/L	99	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Sodium	9800	ug/L	10000	ug/L	98	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Vanadium	496	ug/L	500	ug/L	99.3	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
	Zinc	488	ug/L	500	ug/L	97.7	90.0 – 110.0	P	10–MAR–10 20:04	031010–1
CCV06										
	Mercury	5.19	ug/L	5	ug/L	103.9	80.0 – 120.0	AV	25–FEB–10 13:12	022510W1–6
	Aluminum	4830	ug/L	5000	ug/L	96.7	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Arsenic	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Barium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Calcium	5060	ug/L	5000	ug/L	101.2	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Cobalt	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Copper	484	ug/L	500	ug/L	96.7	90.0 – 110.0	P	10–MAR–10 20:53	031010–1

METALS
–2a–
Initial and Continuing Calibration Verification

SDG No: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
	Iron	5020	ug/L	5000	ug/L	100.5	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Magnesium	5230	ug/L	5000	ug/L	104.5	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Nickel	500	ug/L	500	ug/L	100	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Potassium	4840	ug/L	5000	ug/L	96.8	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Selenium	514	ug/L	500	ug/L	102.7	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Silver	493	ug/L	500	ug/L	98.6	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Sodium	9510	ug/L	10000	ug/L	95.1	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Vanadium	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
	Zinc	488	ug/L	500	ug/L	97.6	90.0 – 110.0	P	10–MAR–10 20:53	031010–1
CCV07										
	Mercury	5.54	ug/L	5	ug/L	110.8	80.0 – 120.0	AV	25–FEB–10 13:35	022510W1–6

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1861-1

Contract: LANL01004 **Lab Code:** GEL

AA CRDL Standard Source SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Advisory Limits (%R)	M	Analysis Date/Time	Run Number
CRDL01										
	Mercury	.257	ug/L	.2	ug/L	128.7	70.0 - 130.0	AV	25-FEB-10 11:11	022510W1-6
	Lead	2.44	ug/L	2	ug/L	121.9	70.0 - 130.0	MS	14-MAR-10 03:47	100313-2
	Thallium	1.34	ug/L	1	ug/L	133.8	70.0 - 130.0	MS	14-MAR-10 03:47	100313-2
	Antimony	3.52	ug/L	3	ug/L	117.5	70.0 - 130.0	MS	14-MAR-10 03:47	100313-2
	Beryllium	.583	ug/L	.5	ug/L	116.6	70.0 - 130.0	MS	14-MAR-10 03:47	100313-2
	Uranium	.292	ug/L	.2	ug/L	146	70.0 - 130.0	MS	14-MAR-10 03:47	100313-2
	Cadmium	1.2	ug/L	1	ug/L	119.8	70.0 - 130.0	MS	14-MAR-10 03:47	100313-2
	Manganese	5.24	ug/L	5	ug/L	104.8	70.0 - 130.0	MS	14-MAR-10 09:21	100313-5
PQL01										
	Aluminum	217	ug/L	200	ug/L	108.7	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Iron	55.7	ug/L	100	ug/L	55.7	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Magnesium	381	ug/L	300	ug/L	126.9	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Nickel	5.66	ug/L	5	ug/L	113.2	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Potassium	153	ug/L	150	ug/L	102.2	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Silver	5.05	ug/L	5	ug/L	101.1	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Sodium	283	ug/L	300	ug/L	94.4	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Arsenic	29	ug/L	30	ug/L	96.5	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Barium	5.13	ug/L	5	ug/L	102.6	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Chromium	5.14	ug/L	5	ug/L	102.8	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Cobalt	5.23	ug/L	5	ug/L	104.7	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Copper	9.95	ug/L	10	ug/L	99.5	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Vanadium	4.54	ug/L	5	ug/L	90.9	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Zinc	12	ug/L	10	ug/L	120.2	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Calcium	204	ug/L	200	ug/L	102.1	70.0 - 130.0	P	10-MAR-10 17:21	031010-1
	Selenium	35.3	ug/L	30	ug/L	117.7	70.0 - 130.0	P	10-MAR-10 17:21	031010-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
ICB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–FEB–10 11:09	022510W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	10–MAR–10 17:13	031010–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 17:13	031010–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 17:13	031010–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	10–MAR–10 17:13	031010–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 17:13	031010–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 17:13	031010–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	10–MAR–10 17:13	031010–1
	Iron	–44.09	+/–100	J	30.0	100	LIQ	P	10–MAR–10 17:13	031010–1
	Magnesium	–158.8	+/–300	J	85.0	300	LIQ	P	10–MAR–10 17:13	031010–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	10–MAR–10 17:13	031010–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	10–MAR–10 17:13	031010–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 17:13	031010–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 17:13	031010–1
	Sodium	100	+/–300	U	100	300	LIQ	P	10–MAR–10 17:13	031010–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 17:13	031010–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	10–MAR–10 17:13	031010–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–MAR–10 03:43	100313–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	14–MAR–10 03:43	100313–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–MAR–10 03:43	100313–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–MAR–10 03:43	100313–2
	Thallium	0.3	+/–1	U	0.3	1.0	LIQ	MS	14–MAR–10 03:43	100313–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–MAR–10 03:43	100313–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–MAR–10 09:18	100313–5
CCB01										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–FEB–10 11:15	022510W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	10–MAR–10 18:02	031010–1
	Arsenic	9.71	+/–30	J	5.0	30.0	LIQ	P	10–MAR–10 18:02	031010–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:02	031010–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	10–MAR–10 18:02	031010–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:02	031010–1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1861-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 18:02	031010-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	10-MAR-10 18:02	031010-1
	Iron	-30.46	+/-100	J	30.0	100	LIQ	P	10-MAR-10 18:02	031010-1
	Magnesium	-135.77	+/-300	J	85.0	300	LIQ	P	10-MAR-10 18:02	031010-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	10-MAR-10 18:02	031010-1
	Potassium	232.38	+/-150		50.0	150	LIQ	P	10-MAR-10 18:02	031010-1
	Selenium	5.11	+/-30	J	5.0	30.0	LIQ	P	10-MAR-10 18:02	031010-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 18:02	031010-1
	Sodium	100	+/-300	U	100	300	LIQ	P	10-MAR-10 18:02	031010-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 18:02	031010-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	10-MAR-10 18:02	031010-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	14-MAR-10 04:03	100313-2
	Beryllium	0.1	+/-.5	U	0.1	0.5	LIQ	MS	14-MAR-10 04:03	100313-2
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	14-MAR-10 04:03	100313-2
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	14-MAR-10 04:03	100313-2
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	14-MAR-10 04:03	100313-2
	Uranium	0.05	+/-.2	U	0.05	0.2	LIQ	MS	14-MAR-10 04:03	100313-2
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	14-MAR-10 09:30	100313-5
CCB02										
	Mercury	0.066	+/-.2	U	0.066	0.2	LIQ	AV	25-FEB-10 11:39	022510W1-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	10-MAR-10 18:22	031010-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	10-MAR-10 18:22	031010-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 18:22	031010-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	10-MAR-10 18:22	031010-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 18:22	031010-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 18:22	031010-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	10-MAR-10 18:22	031010-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	10-MAR-10 18:22	031010-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	10-MAR-10 18:22	031010-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	10-MAR-10 18:22	031010-1
	Potassium	103.84	+/-150	J	50.0	150	LIQ	P	10-MAR-10 18:22	031010-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 18:22	031010–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:22	031010–1
	Sodium	100	+/–300	U	100	300	LIQ	P	10–MAR–10 18:22	031010–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:22	031010–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	10–MAR–10 18:22	031010–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–MAR–10 04:39	100313–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	14–MAR–10 04:39	100313–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–MAR–10 04:39	100313–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–MAR–10 04:39	100313–2
	Thallium	0.52	+/–1	J	0.3	1.0	LIQ	MS	14–MAR–10 04:39	100313–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–MAR–10 04:39	100313–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–MAR–10 09:48	100313–5
CCB03										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–FEB–10 12:02	022510W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	10–MAR–10 18:51	031010–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 18:51	031010–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:51	031010–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	10–MAR–10 18:51	031010–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:51	031010–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:51	031010–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	10–MAR–10 18:51	031010–1
	Iron	–36.53	+/–100	J	30.0	100	LIQ	P	10–MAR–10 18:51	031010–1
	Magnesium	–92.61	+/–300	J	85.0	300	LIQ	P	10–MAR–10 18:51	031010–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	10–MAR–10 18:51	031010–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	10–MAR–10 18:51	031010–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 18:51	031010–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:51	031010–1
	Sodium	100	+/–300	U	100	300	LIQ	P	10–MAR–10 18:51	031010–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 18:51	031010–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	10–MAR–10 18:51	031010–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–MAR–10 05:11	100313–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861–1

Contract: LANL01004 **Lab Code: GEL**

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	14–MAR–10 05:11	100313–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–MAR–10 05:11	100313–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–MAR–10 05:11	100313–2
	Thallium	0.399	+/–1	J	0.3	1.0	LIQ	MS	14–MAR–10 05:11	100313–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–MAR–10 05:11	100313–2
	Manganese	1.0	+/–5	U	1.0	5.0	LIQ	MS	14–MAR–10 10:04	100313–5
CCB04										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–FEB–10 12:26	022510W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	10–MAR–10 19:13	031010–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 19:13	031010–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 19:13	031010–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	10–MAR–10 19:13	031010–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 19:13	031010–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 19:13	031010–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	10–MAR–10 19:13	031010–1
	Iron	–38.84	+/–100	J	30.0	100	LIQ	P	10–MAR–10 19:13	031010–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	10–MAR–10 19:13	031010–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	10–MAR–10 19:13	031010–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	10–MAR–10 19:13	031010–1
	Selenium	5.23	+/–30	J	5.0	30.0	LIQ	P	10–MAR–10 19:13	031010–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 19:13	031010–1
	Sodium	100	+/–300	U	100	300	LIQ	P	10–MAR–10 19:13	031010–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 19:13	031010–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	10–MAR–10 19:13	031010–1
	Antimony	1.0	+/–3	U	1.0	3.0	LIQ	MS	14–MAR–10 05:39	100313–2
	Beryllium	0.1	+/–.5	U	0.1	0.5	LIQ	MS	14–MAR–10 05:39	100313–2
	Cadmium	0.11	+/–1	U	0.11	1.0	LIQ	MS	14–MAR–10 05:39	100313–2
	Lead	0.5	+/–2	U	0.5	2.0	LIQ	MS	14–MAR–10 05:39	100313–2
	Thallium	0.989	+/–1	J	0.3	1.0	LIQ	MS	14–MAR–10 05:39	100313–2
	Uranium	0.05	+/–.2	U	0.05	0.2	LIQ	MS	14–MAR–10 05:39	100313–2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10–1861–1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
CCB05										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–FEB–10 12:50	022510W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	10–MAR–10 20:11	031010–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 20:11	031010–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 20:11	031010–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	10–MAR–10 20:11	031010–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 20:11	031010–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 20:11	031010–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	10–MAR–10 20:11	031010–1
	Iron	30.0	+/–100	U	30.0	100	LIQ	P	10–MAR–10 20:11	031010–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	10–MAR–10 20:11	031010–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	10–MAR–10 20:11	031010–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	10–MAR–10 20:11	031010–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 20:11	031010–1
	Silver	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 20:11	031010–1
	Sodium	100	+/–300	U	100	300	LIQ	P	10–MAR–10 20:11	031010–1
	Vanadium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 20:11	031010–1
	Zinc	3.3	+/–10	U	3.3	10.0	LIQ	P	10–MAR–10 20:11	031010–1
CCB06										
	Mercury	0.066	+/–.2	U	0.066	0.2	LIQ	AV	25–FEB–10 13:14	022510W1–6
	Aluminum	68.0	+/–200	U	68.0	200	LIQ	P	10–MAR–10 21:00	031010–1
	Arsenic	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 21:00	031010–1
	Barium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 21:00	031010–1
	Calcium	50.0	+/–200	U	50.0	200	LIQ	P	10–MAR–10 21:00	031010–1
	Chromium	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 21:00	031010–1
	Cobalt	1.0	+/–5	U	1.0	5.0	LIQ	P	10–MAR–10 21:00	031010–1
	Copper	3.0	+/–10	U	3.0	10.0	LIQ	P	10–MAR–10 21:00	031010–1
	Iron	–51.86	+/–100	J	30.0	100	LIQ	P	10–MAR–10 21:00	031010–1
	Magnesium	85.0	+/–300	U	85.0	300	LIQ	P	10–MAR–10 21:00	031010–1
	Nickel	1.5	+/–5	U	1.5	5.0	LIQ	P	10–MAR–10 21:00	031010–1
	Potassium	50.0	+/–150	U	50.0	150	LIQ	P	10–MAR–10 21:00	031010–1
	Selenium	5.0	+/–30	U	5.0	30.0	LIQ	P	10–MAR–10 21:00	031010–1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1861-1

Contract: LANL01004

Lab Code: GEL

Sample ID	Analyte	Result ug/L	Acceptance	Conc Qual	MDL	RDL	Matrix	M	Analysis Date/Time	Run
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 21:00	031010-1
	Sodium	100	+/-300	U	100	300	LIQ	P	10-MAR-10 21:00	031010-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	10-MAR-10 21:00	031010-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	10-MAR-10 21:00	031010-1
CCB07	Mercury	-0.069	+/-.2	J	0.066	0.2	LIQ	AV	25-FEB-10 13:37	022510W1-6

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-1861-1

Contract: LANL01004

Matrix: WATER

Sample ID	Analyte	Result	Units	Acceptance Window	Conc Qual	M	MDL	RDL
1202046565								
	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
	Calcium	50	ug/L	+/-200	U	P	50	200
	Chromium	1	ug/L	+/-5	U	P	1	5
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Copper	3	ug/L	+/-10	U	P	3	10
	Iron	-43.7	ug/L	+/-100	J	P	30	100
	Magnesium	-151	ug/L	+/-300	J	P	85	300
	Nickel	1.5	ug/L	+/-5	U	P	1.5	5
	Potassium	50	ug/L	+/-150	U	P	50	150
	Selenium	5	ug/L	+/-30	U	P	5	30
	Silver	1	ug/L	+/-5	U	P	1	5
	Sodium	100	ug/L	+/-300	U	P	100	300
	Vanadium	1	ug/L	+/-5	U	P	1	5
	Zinc	3.3	ug/L	+/-10	U	P	3.3	10
1202046570								
	Antimony	1	ug/L	+/-3	U	MS	1	3
	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
	Thallium	0.3	ug/L	+/-1	U	MS	0.3	1
	Uranium	0.05	ug/L	+/-0.2	U	MS	0.05	0.2
1202052034								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS
–4–
Interference Check Sample

SDG No: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Aluminum	503000	ug/L	500000	ug/L	101	80.0 – 120.0	10–MAR–10 17:27	031010–1
	Arsenic	4.99	ug/L					10–MAR–10 17:27	031010–1
	Barium	0.49	ug/L					10–MAR–10 17:27	031010–1
	Calcium	469000	ug/L	500000	ug/L	93.7	80.0 – 120.0	10–MAR–10 17:27	031010–1
	Chromium	–1.2	ug/L					10–MAR–10 17:27	031010–1
	Cobalt	–1.23	ug/L					10–MAR–10 17:27	031010–1
	Copper	2.5	ug/L					10–MAR–10 17:27	031010–1
	Iron	181000	ug/L	200000	ug/L	90.7	80.0 – 120.0	10–MAR–10 17:27	031010–1
	Magnesium	488000	ug/L	500000	ug/L	97.6	80.0 – 120.0	10–MAR–10 17:27	031010–1
	Nickel	2.71	ug/L					10–MAR–10 17:27	031010–1
	Potassium	–177.0	ug/L					10–MAR–10 17:27	031010–1
	Selenium	–21.1	ug/L					10–MAR–10 17:27	031010–1
	Silver	–1.05	ug/L					10–MAR–10 17:27	031010–1
	Sodium	49.8	ug/L					10–MAR–10 17:27	031010–1
	Vanadium	0.158	ug/L					10–MAR–10 17:27	031010–1
	Zinc	0.584	ug/L					10–MAR–10 17:27	031010–1
ICSAB01									
	Aluminum	519000	ug/L	500000	ug/L	104	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Arsenic	529	ug/L	500	ug/L	106	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Barium	501	ug/L	500	ug/L	100	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Calcium	478000	ug/L	500000	ug/L	95.7	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Cobalt	450	ug/L	500	ug/L	90	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Copper	561	ug/L	500	ug/L	112	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Iron	185000	ug/L	200000	ug/L	92.7	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Magnesium	496000	ug/L	500000	ug/L	99.2	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Nickel	453	ug/L	500	ug/L	90.5	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Potassium	5610	ug/L	5000	ug/L	112	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Selenium	2540	ug/L	2500	ug/L	102	80.0 – 120.0	10–MAR–10 17:34	031010–1

METALS
–4–
Interference Check Sample

SDG No: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

ICS:

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
	Silver	276	ug/L	250	ug/L	110	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Sodium	5400	ug/L	5000	ug/L	108	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Vanadium	516	ug/L	500	ug/L	103	80.0 – 120.0	10–MAR–10 17:34	031010–1
	Zinc	499	ug/L	500	ug/L	99.8	80.0 – 120.0	10–MAR–10 17:34	031010–1

METALS
–4–
Interference Check Sample

SDG No: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Antimony	0.109	ug/L					14–MAR–10 03:51	100313–2
	Beryllium	0.049	ug/L					14–MAR–10 03:51	100313–2
	Cadmium	0.45	ug/L					14–MAR–10 03:51	100313–2
	Lead	0.21	ug/L					14–MAR–10 03:51	100313–2
	Thallium	0.041	ug/L					14–MAR–10 03:51	100313–2
	Uranium	–0.018	ug/L					14–MAR–10 03:51	100313–2
ICSAB01									
	Antimony	21.5	ug/L	20	ug/L	107	80.0 – 120.0	14–MAR–10 03:55	100313–2
	Beryllium	18.4	ug/L	20	ug/L	91.9	80.0 – 120.0	14–MAR–10 03:55	100313–2
	Cadmium	19.8	ug/L	20.44	ug/L	96.7	80.0 – 120.0	14–MAR–10 03:55	100313–2
	Lead	20.6	ug/L	20.19	ug/L	102	80.0 – 120.0	14–MAR–10 03:55	100313–2
	Thallium	20.5	ug/L	20	ug/L	102	80.0 – 120.0	14–MAR–10 03:55	100313–2
	Uranium	22.9	ug/L	20	ug/L	114	80.0 – 120.0	14–MAR–10 03:55	100313–2

METALS
-4-
Interference Check Sample

SDG No: 10-1861-1

Contract: LANL01004 **Lab Code:** GEL

ICS: O2Si

Instrument: ICPMS5

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	Analysis Date/Time	Run Number
ICSA01									
	Manganese	5.79	ug/L					14-MAR-10 09:23	100313-5
ICSAB01									
	Manganese	26.6	ug/L	25.8	ug/L	103	80.0 - 120.0	14-MAR-10 09:25	100313-5

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1861-1 **Client ID** RE15-10-8235S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 247192001 **Spike ID:** 1202046568

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	5070		68	U	5000	100		P
Arsenic	ug/L	75-125	497		5	U	500	99.2		P
Barium	ug/L	75-125	501		1	U	500	100		P
Calcium	ug/L	75-125	5070		50	U	5000	100		P
Chromium	ug/L	75-125	502		1.62	B	500	100		P
Cobalt	ug/L	75-125	494		1	U	500	98.9		P
Copper	ug/L	75-125	507		3	U	500	101		P
Iron	ug/L	75-125	5070		30	U	5000	101		P
Magnesium	ug/L	75-125	5120		85	U	5000	102		P
Nickel	ug/L	75-125	514		1.5	U	500	103		P
Potassium	ug/L	75-125	5130		204		5000	98.5		P
Selenium	ug/L	75-125	514		5	U	500	103		P
Silver	ug/L	75-125	486		1	U	500	97.2		P
Sodium	ug/L	75-125	5360		251	B	5000	102		P
Vanadium	ug/L	75-125	511		1	U	500	102		P
Zinc	ug/L	75-125	494		3.3	U	500	98.2		P

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1861-1 **Client ID** RE15-10-8235S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 247192001 **Spike ID:** 1202046573

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	208		1	U	200	104		MS
Beryllium	ug/L	75-125	48		0.1	U	50	96		MS
Cadmium	ug/L	75-125	10.7		0.11	U	10	107		MS
Lead	ug/L	75-125	42.3		0.5	U	40	106		MS
Manganese	ug/L	75-125	50.1		1	U	50	98.2		MS
Thallium	ug/L	75-125	81.1		0.3	U	100	81		MS
Uranium	ug/L	75-125	53.9		0.05	U	50	108		MS

METALS
-5a-
Matrix Spike Summary

SDG NO. 10-1861-1 **Client ID** RE46-10-13373S

Contract: LANL01004 **Level:** Low

Matrix: WATER **% Solids:**

Sample ID: 247548001 **Spike ID:** 1202052037

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Mercury	ug/L	75-125	2.25		0.066	U	2	113		AV

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1861-1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE15-10-8235D

Sample ID: 247192001 **Duplicate ID:** 1202046567 **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		50	U	50	U			P
Chromium	ug/L	+/-5	1.62	J	1.46	J	10.5		P
Cobalt	ug/L		1	U	1	U			P
Copper	ug/L		3	U	3	U			P
Iron	ug/L		30	U	30	U			P
Magnesium	ug/L		85	U	85	U			P
Nickel	ug/L		1.5	U	1.5	U			P
Potassium	ug/L	+/-150	204		198		3.25		P
Selenium	ug/L		5	U	5	U			P
Silver	ug/L		1	U	1	U			P
Sodium	ug/L	+/-300	251	J	263	J	4.76		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.: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE15–10–8235D

Sample ID: 247192001 **Duplicate ID:** 1202046572 **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.: 10–1861–1

Contract: LANL01004 **Lab Code:** GEL

Matrix: LIQUID **Level:** Low **Client ID:** RE46–10–13373D

Sample ID: 247548001 **Duplicate ID:** 1202052036 **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. 10-1861-1

Contract: LANL01004

Aqueous LCS Source: OS2I **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202046566								
	Aluminum	ug/L	5000	4680		93.5	80-120	P
	Arsenic	ug/L	500	482		96.4	80-120	P
	Barium	ug/L	500	481		96.2	80-120	P
	Calcium	ug/L	5000	4830		96.6	80-120	P
	Chromium	ug/L	500	481		96.1	80-120	P
	Cobalt	ug/L	500	475		95	80-120	P
	Copper	ug/L	500	484		96.8	80-120	P
	Iron	ug/L	5000	4740		94.8	80-120	P
	Magnesium	ug/L	5000	4890		97.7	80-120	P
	Nickel	ug/L	500	494		98.8	80-120	P
	Potassium	ug/L	5000	4660		93.3	80-120	P
	Selenium	ug/L	500	506		101	80-120	P
	Silver	ug/L	500	468		93.6	80-120	P
	Sodium	ug/L	5000	4490		89.8	80-120	P
	Vanadium	ug/L	500	490		97.9	80-120	P
	Zinc	ug/L	500	479		95.7	80-120	P

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1861-1

Contract: LANL01004

Aqueous LCS Source: O2si **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202046571								
	Antimony	ug/L	50	53.2		106	80-120	MS
	Beryllium	ug/L	50	46.5		93.1	80-120	MS
	Cadmium	ug/L	50	49.5		99.1	80-120	MS
	Lead	ug/L	50	49.7		99.4	80-120	MS
	Manganese	ug/L	50	51.1		102	80-120	MS
	Thallium	ug/L	50	44.9		89.8	80-120	MS
	Uranium	ug/L	50	49.8		99.5	80-120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1861-1

Contract: LANL01004

Aqueous LCS Source: GEL **Solid LCS Source:**

Sample ID	Analyte	Units	True Value	Result	C	% Recovery	Acceptance Limit	M
1202052035								
	Mercury	ug/L	2	2.34		117	80-120	AV

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1861-1 **Client ID** RE15-10-8235L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 247192001 **Serial Dilution ID:** 1202046569

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	50	U	250	U				P
Chromium	1.62	J	5	U	100			P
Cobalt	1	U	5	U				P
Copper	3	U	15	U				P
Iron	30	U	150	U				P
Magnesium	85	U	425	U				P
Nickel	1.5	U	7.5	U				P
Potassium	204		250	U	100			P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	251	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. 10–1861–1 **Client ID** RE15–10–8235L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 247192001 **Serial Dilution ID:** 1202046574

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
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	9.15					MS
Uranium	.05	U	.25	U				MS

METALS
-9-
Serial Dilution Sample Summary

SDG NO. 10-1861-1 **Client ID** RE46-10-13373L

Contract: LANL01004

Matrix: LIQUID **Level:** Low

Sample ID: 247548001 **Serial Dilution ID:** 1202052041

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Mercury	.066	U	.33	U				AV

METALS
–13–
SAMPLE PREPARATION SUMMARY

SDG No: 10–1861–1 **Method Type** P

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 954667							
1202046565	MB for batch 954667	MB	W	24–FEB–10	50mL	50mL	
1202046566	LCS for batch 954667	LCS	W	24–FEB–10	50mL	50mL	
1202046568	RE15–10–8235S	MS	W	24–FEB–10	50mL	50mL	
1202046567	RE15–10–8235D	DUP	W	24–FEB–10	50mL	50mL	
247182001	RE15–10–8087	SAMPLE	W	24–FEB–10	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1861-1 **Method Type** MS

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 954669							
1202046570	MB for batch 954669	MB	W	24-FEB-10	50mL	50mL	
1202046571	LCS for batch 954669	LCS	W	24-FEB-10	50mL	50mL	
1202046573	RE15-10-8235S	MS	W	24-FEB-10	50mL	50mL	
1202046572	RE15-10-8235D	DUP	W	24-FEB-10	50mL	50mL	
247182001	RE15-10-8087	SAMPLE	W	24-FEB-10	50mL	50mL	

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1861-1 **Method Type** AV

Contract: LANL01004 **Lab Code:** GEL

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size	Final Sample Volume	Percent Solids
Batch Number 957032							
1202052034	MB for batch 957032	MB	W	24-FEB-10	20mL	20mL	
1202052035	LCS for batch 957032	LCS	W	24-FEB-10	20mL	20mL	
1202052037	RE46-10-13373S	MS	W	24-FEB-10	20mL	20mL	
1202052036	RE46-10-13373D	DUP	W	24-FEB-10	20mL	20mL	
247182001	RE15-10-8087	SAMPLE	W	24-FEB-10	20mL	20mL	

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 14–MAR–10
End Date: 14–MAR–10
Client Sdg: 10–1861–1
Method MS
Data File: 100313–2

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	03:27		X			X	X						X									X	X		
S10	1	03:31		X			X	X						X									X	X		
S100	1	03:35		X			X	X						X									X	X		
ICV01	1	03:39		X			X	X						X									X	X		
ICB01	1	03:43		X			X	X						X									X	X		
CRDL01	1	03:47		X			X	X						X									X	X		
ICSA01	1	03:51		X			X	X						X									X	X		
ICSAB01	1	03:55		X			X	X						X									X	X		
CCV01	1	03:59		X			X	X						X									X	X		
CCB01	1	04:03		X			X	X						X									X	X		
ZZZZZZ	1	04:07																								
ZZZZZZ	1	04:11																								
ZZZZZZ	1	04:15																								
ZZZZZZ	1	04:19																								
ZZZZZZ	1	04:23																								
ZZZZZZ	1	04:27																								
ZZZZZZ	5	04:31																								
CCV02	1	04:35		X			X	X						X									X	X		
CCB02	1	04:39		X			X	X						X									X	X		
1202046570	1	04:43		X			X	X						X									X	X		
1202046571	1	04:47		X			X	X						X									X	X		
ZZZZZZ	1	04:51																								
ZZZZZZ	1	04:55																								
ZZZZZZ	1	04:59																								
ZZZZZZ	1	05:03																								
CCV03	1	05:07		X			X	X						X									X	X		
CCB03	1	05:11		X			X	X						X									X	X		
247182001	1	05:15		X			X	X						X									X	X		
ZZZZZZ	1	05:19																								
1202046572	1	05:23		X			X	X						X									X	X		
1202046573	1	05:27		X			X	X						X									X	X		
1202046574	5	05:31		X			X	X						X									X	X		
CCV04	1	05:35		X			X	X						X									X	X		
CCB04	1	05:39		X			X	X						X									X	X		

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: ICPMS5
Start Date: 14–MAR–10
End Date: 14–MAR–10

Client Sdg: 10–1861–1
Method MS
Data File: 100313–5

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	09:09														X										
S10	1	09:12														X										
S100	1	09:14														X										
ICV01	1	09:16														X										
ICB01	1	09:18														X										
CRDL01	1	09:21														X										
ICSA01	1	09:23														X										
ICSAB01	1	09:25														X										
CCV01	1	09:27														X										
CCB01	1	09:30														X										
1202046570	1	09:32														X										
1202046571	1	09:34														X										
ZZZZZZ	1	09:36																								
ZZZZZZ	1	09:39																								
ZZZZZZ	1	09:41																								
ZZZZZZ	1	09:43																								
CCV02	1	09:45														X										
CCB02	1	09:48														X										
247182001	1	09:50														X										
ZZZZZZ	1	09:52																								
1202046572	1	09:55														X										
1202046573	1	09:57														X										
1202046574	5	09:59														X										
CCV03	1	10:01														X										
CCB03	1	10:04														X										

Metals
–14–
Analysis Run Log

Contract: LANL01004
Lab Code: GEL
Inst Name: OPTIMA3
Start Date: 10–MAR–10
End Date: 10–MAR–10

Client Sdg: 10–1861–1
Method P
Data File: 031010–1

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	16:32	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S0.1	1	16:40			X	X				X	X	X						X	X	X	X				X	X
S0.5	1	16:47	X		X	X			X	X	X	X			X			X	X	X	X				X	X
SCAL	1	16:54	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
S10	1	17:01	X						X				X		X							X				
ICV01	1	17:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICB01	1	17:13	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
PQL01	1	17:21	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSA01	1	17:27	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ICSAB01	1	17:34	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR01	1	17:41	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR02	1	17:48	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV01	1	17:55	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB01	1	18:02	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV02	1	18:15	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB02	1	18:22	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR03	1	18:29	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
LR04	1	18:36	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV03	1	18:44	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB03	1	18:51	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV04	1	19:06	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB04	1	19:13	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202046565	1	19:21	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202046566	1	19:29	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	19:36																								
ZZZZZZ	1	19:43																								
ZZZZZZ	1	19:50																								
ZZZZZZ	1	19:57																								
CCV05	1	20:04	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB05	1	20:11	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
247182001	1	20:19	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
ZZZZZZ	1	20:26																								
1202046567	1	20:32	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202046568	1	20:39	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
1202046569	5	20:46	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCV06	1	20:53	X		X	X			X	X	X	X	X		X			X	X	X	X	X			X	X
CCB06	1	21:00	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: MER536
Start Date: 25-FEB-10
End Date: 25-FEB-10
Client Sdg: 10-1861-1
Method AV
Data File: 022510W1-6

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	10:55															X									
S0.2	1	10:57															X									
S0.5	1	10:59															X									
S2.0	1	11:01															X									
S5.0	1	11:03															X									
S10	1	11:05															X									
ICV01	1	11:07															X									
ICB01	1	11:09															X									
CRDL01	1	11:11															X									
CCV01	1	11:13															X									
CCB01	1	11:15															X									
ZZZZZZ	1	11:17																								
ZZZZZZ	1	11:19																								
ZZZZZZ	1	11:21																								
ZZZZZZ	1	11:23																								
ZZZZZZ	1	11:25																								
ZZZZZZ	5	11:27																								
ZZZZZZ	1	11:29																								
ZZZZZZ	1	11:31																								
ZZZZZZ	1	11:33																								
ZZZZZZ	1	11:35																								
CCV02	1	11:37															X									
CCB02	1	11:39															X									
ZZZZZZ	1	11:41																								
ZZZZZZ	1	11:43																								
ZZZZZZ	1	11:45																								
ZZZZZZ	1	11:46																								
ZZZZZZ	1	11:48																								
ZZZZZZ	1	11:50																								
ZZZZZZ	1	11:52																								
ZZZZZZ	1	11:54																								
ZZZZZZ	1	11:56																								
ZZZZZZ	1	11:58																								
CCV03	1	12:00															X									
CCB03	1	12:02															X									
ZZZZZZ	1	12:04																								
ZZZZZZ	1	12:06																								
ZZZZZZ	1	12:08																								
ZZZZZZ	1	12:10																								
ZZZZZZ	1	12:12																								

Metals
–14–
Analysis Run Log

Samp No.	D/F	Run Time																								
ZZZZZZ	1	12:14																								
ZZZZZZ	1	12:16																								
ZZZZZZ	1	12:18																								
ZZZZZZ	1	12:20																								
ZZZZZZ	1	12:22																								
CCV04	1	12:24														X										
CCB04	1	12:26														X										
ZZZZZZ	1	12:28																								
ZZZZZZ	1	12:30																								
ZZZZZZ	1	12:32																								
ZZZZZZ	5	12:34																								
ZZZZZZ	1	12:36																								
ZZZZZZ	1	12:38																								
ZZZZZZ	1	12:40																								
1202052034	1	12:42														X										
1202052035	1	12:44														X										
247182001	1	12:46														X										
CCV05	1	12:48														X										
CCB05	1	12:50														X										
ZZZZZZ	1	12:52																								
ZZZZZZ	1	12:54																								
ZZZZZZ	1	12:56																								
ZZZZZZ	1	12:58																								
ZZZZZZ	1	13:00																								
ZZZZZZ	1	13:02																								
ZZZZZZ	1	13:04																								
ZZZZZZ	1	13:06																								
ZZZZZZ	1	13:08																								
ZZZZZZ	1	13:10																								
CCV06	1	13:12														X										
CCB06	1	13:14														X										
ZZZZZZ	1	13:16																								
ZZZZZZ	1	13:18																								
ZZZZZZ	1	13:20																								
ZZZZZZ	1	13:22																								
ZZZZZZ	1	13:24																								
1202052036	1	13:26														X										
1202052037	1	13:28														X										
1202052041	5	13:29														X										
ZZZZZZ	1	13:31																								

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	13:33																								
CCV07	1	13:35															X									
CCB07	1	13:37															X									

Standards

METALS
–10–
Instrument Detection Limits

SDG NO. 10–1861–1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01–JUL–09

ICP/MS	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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. 10-1861-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

MERCURY	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1861-1

Contract: LANL01004 **Lab Code: GEL** **MDL Effective Date:** 01-JUL-09

ICP	Analyte	Wavelength (nm)	MDL ug/L	RDL ug/L
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
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Aluminum	Antimony	Arsenic	Barium	Beryllium
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.02697	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	-0.48147	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	-0.21356	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
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	-0.05186	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	0.00000	0.00000	0.00000	0.00000	0.00000
Sulfur	181.975	0.18741	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	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861-1
Effective Dates: 01-FEB-10

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	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	2.85580	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	0.44491	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	-29.9151	0.00000
Lead	220.353	0.00000	0.00000	0.00000	0.00000	0.57616
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	0.60374	0.00000
Phosphorous	214.914	0.00000	0.00000	0.00000	0.00000	198.62
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	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	4.37985	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.36147	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	2.23785	0.00000	0.00000
Vanadium	292.402	0.00000	0.00000	0.36818	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	1.35273

METALS
-11-
Interelement Correction Factors

Lab Code: GEL **GEL Job No:** 10-1861-1
Contract: LANL01004
Instrument: OPTIMA3 **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	48.4946
Antimony	206.836	-0.02515	0.00000	0.00000	0.00000	-20.5057
Arsenic	188.979	-0.23424	0.00000	0.00000	0.00000	2.41902
Barium	233.527	-0.03042	0.00000	0.00000	0.00000	0.00000
Beryllium	313.107	0.00000	0.00000	0.00000	0.00000	0.00000
Boron	249.677	0.16240	0.00000	0.00000	0.00000	0.00000
Cadmium	226.502	0.10329	0.00000	0.00000	0.00000	0.00000
Chromium	267.716	-0.01944	0.00000	0.00000	0.00000	0.00000
Cobalt	228.616	0.01444	0.00000	0.00000	0.00000	-2.33100
Copper	324.752	-0.05293	0.00000	0.00000	0.00000	0.00000
Iron	238.204	0.00000	0.00000	0.00000	0.00000	0.00000
Lead	220.353	0.09554	0.00000	0.00000	0.00000	-2.48774
Magnesium	279.077	1.04597	0.00000	0.00000	0.00000	-10.4683
Manganese	257.61	-0.09877	0.00000	0.04089	0.00000	0.00000
Molybdenum	202.031	-0.07763	0.00000	0.00000	0.00000	0.00000
Nickel	231.604	0.00000	0.00000	0.00000	0.00000	0.00000
Phosphorous	214.914	0.80543	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.39429	1.18725
Selenium	196.026	-3.27508	0.00000	0.00000	0.00000	-3.07287
Silica	251.611	0.00000	0.00000	0.00000	0.00000	27.2377
Silicon	251.611	0.00000	0.00000	0.00000	0.00000	12.3082
Silver	328.068	-0.32385	0.00000	0.00000	0.00000	0.00000
Strontium	421.552	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	-4.77918	0.00000
Tin	189.927	-0.01682	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.08168	0.00000	0.00000
Uranium	409.014	0.11400	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.14564	0.00000	-0.01931	0.00000	-14.1293
Zinc	213.857	0.09701	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Nickel	Phosphorous	Potassium	Selenium	Silica
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-0.84443	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	-0.63547	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
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	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	6.37026	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Silicon	Silver	Strontium	Sulfur	Thallium
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	0.00000	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
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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
Strontium	421.552	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	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-11-
Interelement Correction Factors

Lab Code: GEL
Contract: LANL01004
Instrument: OPTIMA3
Interelement Correction Factors (apparent ppb analyte/ppm interferent)

GEL Job No: 10-1861-1
Effective Dates: 01-FEB-10

Parmname	Wavelength	Tin	Titanium	Uranium	Vanadium	Zinc
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	-15.4932	3.30431	0.00000	-2.81282	0.00000
Arsenic	188.979	0.00000	-8.66313	0.00000	0.00000	0.00000
Barium	233.527	0.00000	0.00000	0.00000	-2.20293	0.00000
Beryllium	313.107	0.00000	-2.27027	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	-0.19473	0.00000	0.00000
Chromium	267.716	0.00000	0.00000	0.39645	-1.41250	0.00000
Cobalt	228.616	0.00000	2.09497	0.00000	0.00000	0.00000
Copper	324.752	0.00000	0.00000	0.55360	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	-9.37529	0.00000	0.00000	0.00000	0.00000
Potassium	766.49	0.00000	0.00000	0.00000	0.00000	0.00000
Selenium	196.026	0.00000	0.00000	0.00000	0.00000	0.00000
Silica	251.611	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	0.81635	-4.04400	0.00000
Strontium	421.552	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	-8.29801	0.00000	1.88584	0.00000
Tin	189.927	0.00000	0.00000	0.00000	0.00000	0.00000
Titanium	334.94	0.00000	0.00000	0.43915	0.00000	0.00000
Uranium	409.014	0.00000	0.00000	0.00000	0.00000	0.00000
Vanadium	292.402	0.00000	1.05947	-1.91382	0.00000	0.00000
Zinc	213.857	0.00000	0.00000	0.00000	0.00000	0.00000

METALS
-12-
Linear Ranges

SDG NO. 10-1861-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID ICPMS5

Analyte	Integration Time (msec)	LDR	Units	Effective Date
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. 10-1861-1

Contract: LANL01004 **Lab Code: GEL**

Instrument ID OPTIMA3

Analyte	Integration Time (sec)	LDR	Units	Effective Date
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
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

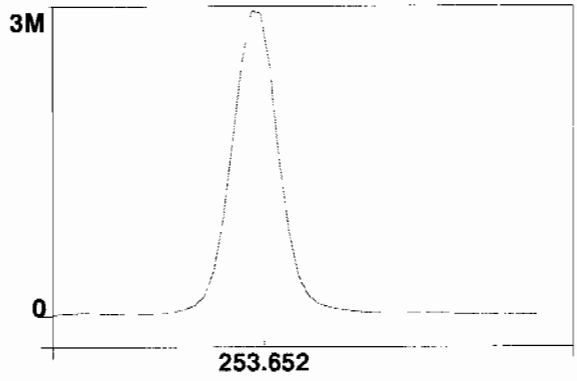
Raw Data

Method: Hg_ReAlign
Result: 031510

Sample ID: Hg_ReAlign

Hg 253.652

Rep: 1



Intensity: 3107014.2 cps
Conc:

1

==========

Analysis Begun

Start Time: 3/10/2010 16:32:56 **Plasma On Time: 3/8/2010 08:27:38**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif
Batch ID:
Results Data Set: 031010
Results Library: C:\pe\Optima3\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: S0 **Date Collected: 3/10/2010 16:32:57**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: S0

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3225.1	3225.1	0.000	%	16:35:10
1	Y RADIAL	2632.7	2632.7	0.000	%	16:35:10
1	Al 396.153Radial†	-59.7	-59.4	[0.00]	ug/L	16:35:10
1	Ca 317.933Radial†	11.9	11.8	[0.00]	ug/L	16:35:10
1	Fe 238.204 Radial†	10.7	10.6	[0.00]	ug/L	16:35:10
1	K 766.490 Radial†	2010.0	1997.2	[0.00]	ug/L	16:34:50
1	Mg 279.077 IEC†	3.4	3.4	[0.00]	ug/L	16:35:10
1	Na 589.592 Radial†	-743.7	-739.0	[0.00]	ug/L	16:34:50
1	Sr 421.552†	35.3	35.1	[0.00]	ug/L	16:34:50
1	Sc 361.383	788962.0	788962.0	0.0000	%	16:36:07
1	Y 371.029	674779.7	674779.7	0.0000	%	16:36:07
1	Ag 328.068†	76.4	76.7	[0.00]	ug/L	16:36:07
1	As 188.979†	-18.2	-18.2	[0.00]	ug/L	16:36:27
1	B 249.677†	-349.7	-351.0	[0.00]	ug/L	16:36:27
1	Ba 233.527†	-4.3	-4.4	[0.00]	ug/L	16:36:27
1	Be 313.107†	-3523.2	-3536.6	[0.00]	ug/L	16:36:07
1	Cd 226.502†	-151.2	-151.7	[0.00]	ug/L	16:36:27
1	Co 228.616†	-50.6	-50.8	[0.00]	ug/L	16:36:27
1	Cr 267.716†	58.8	59.0	[0.00]	ug/L	16:36:27
1	Cu 324.752†	6175.6	6199.1	[0.00]	ug/L	16:36:07
1	Mn 257.610†	402.6	404.2	[0.00]	ug/L	16:36:27
1	Mo 202.031†	10.9	10.9	[0.00]	ug/L	16:36:27
1	Ni 231.604†	59.3	59.5	[0.00]	ug/L	16:36:27
1	P 214.914†	157.1	157.7	[0.00]	ug/L	16:36:27
1	Pb 220.353†	-44.2	-44.4	[0.00]	ug/L	16:36:27
1	S 181.975 Axial†	32.5	32.6	[0.00]	ug/L	16:36:27
1	Sb 206.836†	28.0	28.1	[0.00]	ug/L	16:36:27
1	Se 196.026†	-21.8	-21.9	[0.00]	ug/L	16:36:27
1	Si 251.611†	474.7	476.5	[0.00]	ug/L	16:36:27
1	Sn 189.927†	10.3	10.3	[0.00]	ug/L	16:36:27
1	Ti 334.940†	-878.2	-881.5	[0.00]	ug/L	16:36:07
1	Tl 190.801†	-30.4	-30.5	[0.00]	ug/L	16:36:27
1	U 409.014†	-1952.1	-1959.6	[0.00]	ug/L	16:36:07
1	V 292.402†	-1236.9	-1241.6	[0.00]	ug/L	16:36:07
1	Zn 213.857†	514.3	516.3	[0.00]	ug/L	16:36:27
1	SiO2†	463.4	465.1	[0.00]	ug/L	16:37:38
2	Sc Radial	3187.5	3187.5	0.000	%	16:35:35
2	Y RADIAL	2619.6	2619.6	0.000	%	16:35:35
2	Al 396.153Radial†	-58.5	-58.8	[0.00]	ug/L	16:35:35
2	Ca 317.933Radial†	12.4	12.5	[0.00]	ug/L	16:35:35
2	Fe 238.204 Radial†	8.5	8.6	[0.00]	ug/L	16:35:35
2	K 766.490 Radial†	1956.1	1966.6	[0.00]	ug/L	16:35:15
2	Mg 279.077 IEC†	-1.4	-1.4	[0.00]	ug/L	16:35:35
2	Na 589.592 Radial†	-777.4	-781.6	[0.00]	ug/L	16:35:15
2	Sr 421.552†	39.0	39.2	[0.00]	ug/L	16:35:15
2	Sc 361.383	793522.6	793522.6	0.0000	%	16:36:32
2	Y 371.029	678954.5	678954.5	0.0000	%	16:36:32

2	Ag 328.068†	131.5	131.2	[0.00]	ug/L	16:36:32
2	As 188.979†	-18.7	-18.7	[0.00]	ug/L	16:36:52
2	B 249.677†	-387.4	-386.7	[0.00]	ug/L	16:36:52
2	Ba 233.527†	-10.9	-10.9	[0.00]	ug/L	16:36:52
2	Be 313.107†	-3560.8	-3553.8	[0.00]	ug/L	16:36:32
2	Cd 226.502†	-158.1	-157.8	[0.00]	ug/L	16:36:52
2	Co 228.616†	-47.4	-47.3	[0.00]	ug/L	16:36:52
2	Cr 267.716†	49.9	49.8	[0.00]	ug/L	16:36:52
2	Cu 324.752†	6248.8	6236.6	[0.00]	ug/L	16:36:32
2	Mn 257.610†	390.5	389.8	[0.00]	ug/L	16:36:52
2	Mo 202.031†	13.6	13.6	[0.00]	ug/L	16:36:52
2	Ni 231.604†	57.5	57.3	[0.00]	ug/L	16:36:52
2	P 214.914†	168.3	168.0	[0.00]	ug/L	16:36:52
2	Pb 220.353†	-49.5	-49.4	[0.00]	ug/L	16:36:52
2	S 181.975 Axial†	28.7	28.6	[0.00]	ug/L	16:36:52
2	Sb 206.836†	20.4	20.3	[0.00]	ug/L	16:36:52
2	Se 196.026†	-21.0	-20.9	[0.00]	ug/L	16:36:52
2	Si 251.611†	490.8	489.9	[0.00]	ug/L	16:36:52
2	Sn 189.927†	9.6	9.6	[0.00]	ug/L	16:36:52
2	Ti 334.940†	-948.2	-946.3	[0.00]	ug/L	16:36:32
2	Tl 190.801†	-22.2	-22.2	[0.00]	ug/L	16:36:52
2	U 409.014†	-1949.5	-1945.7	[0.00]	ug/L	16:36:32
2	V 292.402†	-1151.1	-1148.9	[0.00]	ug/L	16:36:32
2	Zn 213.857†	512.1	511.1	[0.00]	ug/L	16:36:52
2	SiO2†	471.3	470.3	[0.00]	ug/L	16:37:58
3	Sc Radial	3201.1	3201.1	0.000	%	16:36:00
3	Y RADIAL	2630.1	2630.1	0.000	%	16:36:00
3	Al 396.153Radial†	-67.8	-67.8	[0.00]	ug/L	16:36:00
3	Ca 317.933Radial†	13.1	13.1	[0.00]	ug/L	16:36:00
3	Fe 238.204 Radial†	9.2	9.2	[0.00]	ug/L	16:36:00
3	K 766.490 Radial†	2113.9	2116.2	[0.00]	ug/L	16:35:40
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	16:36:00
3	Na 589.592 Radial†	-676.5	-677.2	[0.00]	ug/L	16:35:40
3	Sr 421.552†	29.6	29.6	[0.00]	ug/L	16:35:40
3	Sc 361.383	793410.7	793410.7	0.0000	%	16:36:57
3	Y 371.029	679187.8	679187.8	0.0000	%	16:36:57
3	Ag 328.068†	186.4	186.1	[0.00]	ug/L	16:36:57
3	As 188.979†	-19.6	-19.6	[0.00]	ug/L	16:37:17
3	B 249.677†	-394.8	-394.1	[0.00]	ug/L	16:37:17
3	Ba 233.527†	14.4	14.3	[0.00]	ug/L	16:37:17
3	Be 313.107†	-3541.8	-3535.4	[0.00]	ug/L	16:36:57
3	Cd 226.502†	-159.5	-159.3	[0.00]	ug/L	16:37:17
3	Co 228.616†	-39.7	-39.6	[0.00]	ug/L	16:37:17
3	Cr 267.716†	49.7	49.7	[0.00]	ug/L	16:37:17
3	Cu 324.752†	6211.6	6200.3	[0.00]	ug/L	16:36:57
3	Mn 257.610†	403.4	402.6	[0.00]	ug/L	16:37:17
3	Mo 202.031†	14.6	14.6	[0.00]	ug/L	16:37:17
3	Ni 231.604†	65.1	65.0	[0.00]	ug/L	16:37:17
3	P 214.914†	167.6	167.3	[0.00]	ug/L	16:37:17
3	Pb 220.353†	-37.3	-37.3	[0.00]	ug/L	16:37:17
3	S 181.975 Axial†	31.2	31.2	[0.00]	ug/L	16:37:17
3	Sb 206.836†	19.7	19.7	[0.00]	ug/L	16:37:17
3	Se 196.026†	-19.3	-19.3	[0.00]	ug/L	16:37:17
3	Si 251.611†	462.8	461.9	[0.00]	ug/L	16:37:17
3	Sn 189.927†	3.5	3.5	[0.00]	ug/L	16:37:17
3	Ti 334.940†	-959.2	-957.4	[0.00]	ug/L	16:36:57
3	Tl 190.801†	-25.2	-25.2	[0.00]	ug/L	16:37:17
3	U 409.014†	-2014.6	-2010.9	[0.00]	ug/L	16:36:57
3	V 292.402†	-1188.4	-1186.3	[0.00]	ug/L	16:36:57
3	Zn 213.857†	507.7	506.8	[0.00]	ug/L	16:37:17
3	SiO2†	490.5	489.7	[0.00]	ug/L	16:38:18

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	791965.1	2601.35	0.33%	0.0000	%
Sc Radial	3204.6	19.03	0.59%	0.000	%
Y 371.029	677640.7	2480.38	0.37%	0.0000	%
Y RADIAL	2627.5	6.91	0.26%	0.000	%
Ag 328.068†	131.3	54.70	41.65%	[0.00]	ug/L

Al 396.153Radial†	-62.0	5.05	8.14%	[0.00]	ug/L
As 188.979†	-18.8	0.70	3.72%	[0.00]	ug/L
B 249.677†	-377.3	23.01	6.10%	[0.00]	ug/L
Ba 233.527†	-0.3	13.08	>999.9%	[0.00]	ug/L
Be 313.107†	-3541.9	10.32	0.29%	[0.00]	ug/L
Ca 317.933Radial†	12.5	0.67	5.35%	[0.00]	ug/L
Cd 226.502†	-156.3	3.98	2.54%	[0.00]	ug/L
Co 228.616†	-45.9	5.72	12.46%	[0.00]	ug/L
Cr 267.716†	52.8	5.38	10.18%	[0.00]	ug/L
Cu 324.752†	6212.0	21.28	0.34%	[0.00]	ug/L
Fe 238.204 Radial†	9.5	1.05	11.02%	[0.00]	ug/L
K 766.490 Radial†	2026.7	79.04	3.90%	[0.00]	ug/L
Mg 279.077 IEC†	1.7	2.67	156.13%	[0.00]	ug/L
Mn 257.610†	398.9	7.90	1.98%	[0.00]	ug/L
Mo 202.031†	13.0	1.89	14.51%	[0.00]	ug/L
Na 589.592 Radial†	-732.6	52.47	7.16%	[0.00]	ug/L
Ni 231.604†	60.6	3.96	6.53%	[0.00]	ug/L
P 214.914†	164.3	5.75	3.50%	[0.00]	ug/L
Pb 220.353†	-43.7	6.08	13.92%	[0.00]	ug/L
S 181.975 Axial†	30.8	2.03	6.58%	[0.00]	ug/L
Sb 206.836†	22.7	4.69	20.65%	[0.00]	ug/L
Se 196.026†	-20.7	1.33	6.42%	[0.00]	ug/L
Si 251.611†	476.1	13.96	2.93%	[0.00]	ug/L
Sn 189.927†	7.8	3.77	48.35%	[0.00]	ug/L
Sr 421.552†	34.6	4.83	13.94%	[0.00]	ug/L
Ti 334.940†	-928.4	41.01	4.42%	[0.00]	ug/L
Tl 190.801†	-26.0	4.24	16.34%	[0.00]	ug/L
U 409.014†	-1972.1	34.35	1.74%	[0.00]	ug/L
V 292.402†	-1192.3	46.67	3.91%	[0.00]	ug/L
Zn 213.857†	511.4	4.77	0.93%	[0.00]	ug/L
SiO2†	475.0	12.93	2.72%	[0.00]	ug/L

Sequence No.: 2
Sample ID: S0.1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 2
Date Collected: 3/10/2010 16:40:29
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3391.4	3391.4	106	%	16:42:42
1	Y RADIAL	2782.4	2782.4	105.9	%	16:42:42
1	K 766.490 Radial†	4144.4	1889.4	[1000]	ug/L	16:42:21
1	Sr 421.552†	11257.0	10602.0	[100]	ug/L	16:42:42
1	Sc 361.383	819759.9	819759.9	103.51	%	16:43:38
1	Y 371.029	700353.7	700353.7	103.35	%	16:43:38
1	Ag 328.068†	20390.8	19568.1	[100]	ug/L	16:43:38
1	As 188.979†	160.2	173.6	[100]	ug/L	16:43:59
1	B 249.677†	3227.1	3494.9	[100]	ug/L	16:43:38
1	Ba 233.527†	10836.7	10469.6	[100]	ug/L	16:43:38
1	Be 313.107†	232718.9	228370.2	[100]	ug/L	16:43:38
1	Cd 226.502†	6798.9	6724.6	[100]	ug/L	16:43:59
1	Co 228.616†	3913.9	3827.1	[100]	ug/L	16:43:59
1	Cr 267.716†	7876.0	7556.1	[100]	ug/L	16:43:38
1	Cu 324.752†	37685.2	30195.5	[100]	ug/L	16:43:38
1	Mn 257.610†	78646.5	75581.1	[100]	ug/L	16:43:38
1	Mo 202.031†	1185.0	1131.8	[100]	ug/L	16:43:59
1	Ni 231.604†	3346.4	3172.3	[100]	ug/L	16:43:59
1	P 214.914†	841.8	649.0	[500]	ug/L	16:43:59
1	Pb 220.353†	621.3	643.9	[100]	ug/L	16:43:59
1	S 181.975 Axial†	136.7	101.2	[200]	ug/L	16:43:59
1	Sb 206.836†	273.5	241.5	[100]	ug/L	16:43:59
1	Se 196.026†	107.8	124.8	[100]	ug/L	16:43:59
1	Si 251.611†	14031.9	13080.1	[500]	ug/L	16:43:38
1	Sn 189.927†	455.0	431.8	[100]	ug/L	16:43:59
1	Ti 334.940†	58272.8	57225.4	[100]	ug/L	16:43:38
1	Tl 190.801†	241.0	258.8	[100]	ug/L	16:43:59
1	U 409.014†	1682.6	3597.6	[100]	ug/L	16:43:38
1	V 292.402†	11714.4	12509.5	[100]	ug/L	16:43:38
1	Zn 213.857†	8940.3	8125.8	[100]	ug/L	16:43:38
1	SiO2†	13988.0	13038.7	[1069.5]	ug/L	16:44:55
2	Sc Radial	3340.1	3340.1	104	%	16:43:07
2	Y RADIAL	2749.9	2749.9	104.7	%	16:43:07
2	K 766.490 Radial†	4092.1	1899.4	[1000]	ug/L	16:42:47
2	Sr 421.552†	11075.9	10591.9	[100]	ug/L	16:43:07
2	Sc 361.383	831257.4	831257.4	104.96	%	16:44:04
2	Y 371.029	710207.1	710207.1	104.81	%	16:44:04
2	Ag 328.068†	20713.8	19603.3	[100]	ug/L	16:44:04
2	As 188.979†	160.4	171.6	[100]	ug/L	16:44:24
2	B 249.677†	3327.8	3547.8	[100]	ug/L	16:44:04
2	Ba 233.527†	11034.2	10512.9	[100]	ug/L	16:44:04
2	Be 313.107†	236491.5	228854.8	[100]	ug/L	16:44:04
2	Cd 226.502†	6793.4	6628.5	[100]	ug/L	16:44:24
2	Co 228.616†	3929.7	3789.8	[100]	ug/L	16:44:24
2	Cr 267.716†	8028.8	7596.4	[100]	ug/L	16:44:04
2	Cu 324.752†	38159.1	30143.4	[100]	ug/L	16:44:04
2	Mn 257.610†	79821.2	75649.3	[100]	ug/L	16:44:04
2	Mo 202.031†	1186.7	1117.6	[100]	ug/L	16:44:24
2	Ni 231.604†	3364.4	3144.7	[100]	ug/L	16:44:24
2	P 214.914†	838.3	634.3	[500]	ug/L	16:44:24
2	Pb 220.353†	635.4	649.0	[100]	ug/L	16:44:24
2	S 181.975 Axial†	132.9	95.8	[200]	ug/L	16:44:24
2	Sb 206.836†	273.5	237.8	[100]	ug/L	16:44:24
2	Se 196.026†	111.5	126.9	[100]	ug/L	16:44:24
2	Si 251.611†	14243.9	13094.5	[500]	ug/L	16:44:04
2	Sn 189.927†	459.9	430.4	[100]	ug/L	16:44:24
2	Ti 334.940†	59325.5	57449.7	[100]	ug/L	16:44:04
2	Tl 190.801†	250.5	264.6	[100]	ug/L	16:44:24
2	U 409.014†	1688.5	3580.8	[100]	ug/L	16:44:04

2	V 292.402†	11930.9	12559.2	[100]	ug/L	16:44:04
2	Zn 213.857†	9065.7	8125.8	[100]	ug/L	16:44:04
2	SiO2†	13942.6	12808.5	[1069.5]	ug/L	16:45:00
3	Sc Radial	3368.1	3368.1	105	%	16:43:32
3	Y RADIAL	2759.0	2759.0	105.0	%	16:43:32
3	K 766.490 Radial†	3984.8	1764.6	[1000]	ug/L	16:43:12
3	Sr 421.552†	11114.2	10539.8	[100]	ug/L	16:43:32
3	Sc 361.383	817163.3	817163.3	103.18	%	16:44:30
3	Y 371.029	697945.3	697945.3	103.00	%	16:44:30
3	Ag 328.068†	20389.9	19629.8	[100]	ug/L	16:44:30
3	As 188.979†	157.5	171.5	[100]	ug/L	16:44:50
3	B 249.677†	3232.5	3510.1	[100]	ug/L	16:44:30
3	Ba 233.527†	10868.1	10533.3	[100]	ug/L	16:44:30
3	Be 313.107†	232406.5	228781.9	[100]	ug/L	16:44:30
3	Cd 226.502†	6777.9	6725.2	[100]	ug/L	16:44:50
3	Co 228.616†	3898.5	3824.2	[100]	ug/L	16:44:50
3	Cr 267.716†	7870.1	7574.6	[100]	ug/L	16:44:30
3	Cu 324.752†	37732.8	30357.3	[100]	ug/L	16:44:30
3	Mn 257.610†	78751.9	75924.6	[100]	ug/L	16:44:30
3	Mo 202.031†	1189.4	1139.7	[100]	ug/L	16:44:50
3	Ni 231.604†	3339.7	3176.1	[100]	ug/L	16:44:50
3	P 214.914†	829.5	639.6	[500]	ug/L	16:44:50
3	Pb 220.353†	603.3	628.4	[100]	ug/L	16:44:50
3	S 181.975 Axial†	136.6	101.6	[200]	ug/L	16:44:50
3	Sb 206.836†	265.9	234.9	[100]	ug/L	16:44:50
3	Se 196.026†	102.9	120.4	[100]	ug/L	16:44:50
3	Si 251.611†	14028.0	13119.4	[500]	ug/L	16:44:30
3	Sn 189.927†	455.0	433.2	[100]	ug/L	16:44:50
3	Ti 334.940†	58302.0	57432.6	[100]	ug/L	16:44:30
3	Tl 190.801†	232.9	251.6	[100]	ug/L	16:44:50
3	U 409.014†	1581.6	3504.9	[100]	ug/L	16:44:30
3	V 292.402†	11687.3	12519.2	[100]	ug/L	16:44:30
3	Zn 213.857†	8939.3	8152.2	[100]	ug/L	16:44:30
3	SiO2†	13898.0	12994.4	[1069.5]	ug/L	16:45:05

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	822726.9	7500.91	0.91%	103.88	%
Sc Radial	3366.6	25.71	0.76%	105	%
Y 371.029	702835.3	6496.67	0.92%	103.72	%
Y RADIAL	2763.8	16.77	0.61%	105.2	%
Ag 328.068†	19600.4	30.98	0.16%	[100]	ug/L
As 188.979†	172.2	1.20	0.70%	[100]	ug/L
B 249.677†	3517.6	27.24	0.77%	[100]	ug/L
Ba 233.527†	10505.3	32.53	0.31%	[100]	ug/L
Be 313.107†	228669.0	261.29	0.11%	[100]	ug/L
Cd 226.502†	6692.8	55.63	0.83%	[100]	ug/L
Co 228.616†	3813.7	20.75	0.54%	[100]	ug/L
Cr 267.716†	7575.7	20.16	0.27%	[100]	ug/L
Cu 324.752†	30232.0	111.52	0.37%	[100]	ug/L
K 766.490 Radial†	1851.2	75.10	4.06%	[1000]	ug/L
Mn 257.610†	75718.3	181.89	0.24%	[100]	ug/L
Mo 202.031†	1129.7	11.23	0.99%	[100]	ug/L
Ni 231.604†	3164.4	17.14	0.54%	[100]	ug/L
P 214.914†	641.0	7.41	1.16%	[500]	ug/L
Pb 220.353†	640.4	10.74	1.68%	[100]	ug/L
S 181.975 Axial†	99.5	3.21	3.23%	[200]	ug/L
Sb 206.836†	238.1	3.27	1.37%	[100]	ug/L
Se 196.026†	124.0	3.32	2.68%	[100]	ug/L
Si 251.611†	13098.0	19.88	0.15%	[500]	ug/L
Sn 189.927†	431.8	1.41	0.33%	[100]	ug/L
Sr 421.552†	10577.9	33.38	0.32%	[100]	ug/L
Ti 334.940†	57369.3	124.83	0.22%	[100]	ug/L
Tl 190.801†	258.4	6.51	2.52%	[100]	ug/L
U 409.014†	3561.1	49.41	1.39%	[100]	ug/L
V 292.402†	12529.3	26.36	0.21%	[100]	ug/L
Zn 213.857†	8134.6	15.27	0.19%	[100]	ug/L
SiO2†	12947.2	122.11	0.94%	[1069.5]	ug/L

Sequence No.: 3
Sample ID: S0.5
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 3
Date Collected: 3/10/2010 16:47:16
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	3341.8	3341.8	104	%	16:49:28
1	Y RADIAL	2729.1	2729.1	103.9	%	16:49:28
1	Al 396.153Radial†	2289.7	2257.7	[5000]	ug/L	16:49:08
1	Ca 317.933Radial†	1311.1	1244.8	[5000]	ug/L	16:49:28
1	K 766.490 Radial†	12877.3	10321.8	[5000]	ug/L	16:49:08
1	Mg 279.077 IEC†	52.8	48.9	[5000]	ug/L	16:49:28
1	Sr 421.552†	52881.2	50674.9	[500]	ug/L	16:49:08
1	Sc 361.383	838716.0	838716.0	105.90	%	16:50:26
1	Y 371.029	709497.2	709497.2	104.70	%	16:50:26
1	Ag 328.068†	101896.8	96085.6	[500]	ug/L	16:50:31
1	As 188.979†	902.4	870.9	[500]	ug/L	16:50:51
1	B 249.677†	17924.0	17302.2	[500]	ug/L	16:50:31
1	Ba 233.527†	54137.1	51119.7	[500]	ug/L	16:50:31
1	Be 313.107†	1205583.6	1141925.1	[500]	ug/L	16:50:26
1	Cd 226.502†	35140.7	33338.1	[500]	ug/L	16:50:31
1	Co 228.616†	19811.5	18753.1	[500]	ug/L	16:50:31
1	Cr 267.716†	39344.3	37098.4	[500]	ug/L	16:50:31
1	Cu 324.752†	165256.1	149832.6	[500]	ug/L	16:50:31
1	Mn 257.610†	393593.2	371255.0	[500]	ug/L	16:50:26
1	Mo 202.031†	5949.7	5605.0	[500]	ug/L	16:50:51
1	Ni 231.604†	16523.9	15542.2	[500]	ug/L	16:50:31
1	P 214.914†	3544.5	3182.6	[2500]	ug/L	16:50:51
1	Pb 220.353†	3248.4	3111.0	[500]	ug/L	16:50:51
1	S 181.975 Axial†	600.7	536.4	[1000]	ug/L	16:50:51
1	Sb 206.836†	1272.8	1179.1	[500]	ug/L	16:50:51
1	Se 196.026†	617.2	603.5	[500]	ug/L	16:50:51
1	Si 251.611†	68896.8	64580.3	[2500]	ug/L	16:50:31
1	Sn 189.927†	2274.7	2140.1	[500]	ug/L	16:50:51
1	Ti 334.940†	293311.6	277890.6	[500]	ug/L	16:50:31
1	Tl 190.801†	1291.2	1245.1	[500]	ug/L	16:50:51
1	U 409.014†	16131.1	17204.0	[500]	ug/L	16:50:31
1	V 292.402†	64278.6	61887.9	[500]	ug/L	16:50:31
1	Zn 213.857†	42782.1	39886.0	[500]	ug/L	16:50:31
1	SiO2†	69484.8	65136.6	[5347.5]	ug/L	16:51:58
2	Sc Radial	3356.3	3356.3	105	%	16:49:54
2	Y RADIAL	2715.4	2715.4	103.3	%	16:49:54
2	Al 396.153Radial†	2290.2	2248.6	[5000]	ug/L	16:49:33
2	Ca 317.933Radial†	1308.6	1237.0	[5000]	ug/L	16:49:54
2	K 766.490 Radial†	12880.8	10271.7	[5000]	ug/L	16:49:33
2	Mg 279.077 IEC†	53.4	49.3	[5000]	ug/L	16:49:54
2	Sr 421.552†	52649.8	50234.1	[500]	ug/L	16:49:33
2	Sc 361.383	846396.6	846396.6	106.87	%	16:50:57
2	Y 371.029	716229.1	716229.1	105.69	%	16:50:57
2	Ag 328.068†	102043.3	95349.6	[500]	ug/L	16:51:02
2	As 188.979†	904.2	864.9	[500]	ug/L	16:51:22
2	B 249.677†	18037.2	17254.4	[500]	ug/L	16:51:02
2	Ba 233.527†	54310.0	50817.6	[500]	ug/L	16:51:02
2	Be 313.107†	1192902.0	1119728.7	[500]	ug/L	16:50:57
2	Cd 226.502†	35209.8	33101.8	[500]	ug/L	16:51:02
2	Co 228.616†	19893.8	18660.3	[500]	ug/L	16:51:02
2	Cr 267.716†	39317.6	36736.3	[500]	ug/L	16:51:02
2	Cu 324.752†	165208.7	148372.1	[500]	ug/L	16:51:02
2	Mn 257.610†	389278.1	363844.9	[500]	ug/L	16:50:57
2	Mo 202.031†	5930.2	5535.8	[500]	ug/L	16:51:22
2	Ni 231.604†	16519.5	15396.5	[500]	ug/L	16:51:02
2	P 214.914†	3537.2	3145.4	[2500]	ug/L	16:51:22
2	Pb 220.353†	3265.1	3098.8	[500]	ug/L	16:51:22
2	S 181.975 Axial†	599.8	530.5	[1000]	ug/L	16:51:22
2	Sb 206.836†	1273.3	1168.6	[500]	ug/L	16:51:22

2	Se 196.026†	613.8	595.0	[500]	ug/L	16:51:22
2	Si 251.611†	68967.6	64056.2	[2500]	ug/L	16:51:02
2	Sn 189.927†	2282.1	2127.6	[500]	ug/L	16:51:22
2	Ti 334.940†	293660.7	275703.9	[500]	ug/L	16:51:02
2	Tl 190.801†	1283.5	1226.9	[500]	ug/L	16:51:22
2	U 409.014†	16033.3	16974.3	[500]	ug/L	16:51:02
2	V 292.402†	64411.3	61461.3	[500]	ug/L	16:51:02
2	Zn 213.857†	42767.4	39505.7	[500]	ug/L	16:51:02
2	SiO2†	68759.1	63862.2	[5347.5]	ug/L	16:52:03
3	Sc Radial	2957.7	2957.7	92.3	%	16:50:19
3	Y RADIAL	2406.1	2406.1	91.57	%	16:50:19
3	Al 396.153Radial†	2274.2	2526.1	[5000]	ug/L	16:49:59
3	Ca 317.933Radial†	1321.9	1419.7	[5000]	ug/L	16:50:19
3	K 766.490 Radial†	12790.3	11831.3	[5000]	ug/L	16:49:59
3	Mg 279.077 IEC†	56.7	59.8	[5000]	ug/L	16:50:19
3	Sr 421.552†	52258.8	56586.6	[500]	ug/L	16:49:59
3	Sc 361.383	854125.8	854125.8	107.85	%	16:51:28
3	Y 371.029	722123.4	722123.4	106.56	%	16:51:28
3	Ag 328.068†	102130.0	94566.0	[500]	ug/L	16:51:33
3	As 188.979†	892.0	845.9	[500]	ug/L	16:51:53
3	B 249.677†	17974.1	17043.2	[500]	ug/L	16:51:33
3	Ba 233.527†	54633.2	50657.4	[500]	ug/L	16:51:33
3	Be 313.107†	1204455.8	1120341.1	[500]	ug/L	16:51:28
3	Cd 226.502†	35550.5	33119.5	[500]	ug/L	16:51:33
3	Co 228.616†	20054.4	18640.8	[500]	ug/L	16:51:33
3	Cr 267.716†	39490.6	36563.7	[500]	ug/L	16:51:33
3	Cu 324.752†	165304.4	147062.1	[500]	ug/L	16:51:33
3	Mn 257.610†	394313.7	365217.9	[500]	ug/L	16:51:28
3	Mo 202.031†	5898.1	5455.8	[500]	ug/L	16:51:53
3	Ni 231.604†	16674.6	15400.5	[500]	ug/L	16:51:33
3	P 214.914†	3533.3	3111.8	[2500]	ug/L	16:51:53
3	Pb 220.353†	3241.8	3049.5	[500]	ug/L	16:51:53
3	S 181.975 Axial†	590.7	516.9	[1000]	ug/L	16:51:53
3	Sb 206.836†	1268.3	1153.3	[500]	ug/L	16:51:53
3	Se 196.026†	610.7	586.9	[500]	ug/L	16:51:53
3	Si 251.611†	69188.4	63677.0	[2500]	ug/L	16:51:33
3	Sn 189.927†	2259.6	2087.3	[500]	ug/L	16:51:53
3	Ti 334.940†	294352.3	273858.7	[500]	ug/L	16:51:33
3	Tl 190.801†	1286.5	1218.8	[500]	ug/L	16:51:53
3	U 409.014†	15967.2	16777.3	[500]	ug/L	16:51:33
3	V 292.402†	64516.9	61013.9	[500]	ug/L	16:51:33
3	Zn 213.857†	42999.7	39358.9	[500]	ug/L	16:51:33
3	SiO2†	68280.7	62836.4	[5347.5]	ug/L	16:52:09

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	846412.8	7704.92	0.91%	106.88	%
Sc Radial	3218.6	226.10	7.02%	100	%
Y 371.029	715949.9	6317.71	0.88%	105.65	%
Y RADIAL	2616.8	182.66	6.98%	99.60	%
Ag 328.068†	95333.8	759.95	0.80%	[500]	ug/L
Al 396.153Radial†	2344.1	157.64	6.72%	[5000]	ug/L
As 188.979†	860.6	13.08	1.52%	[500]	ug/L
B 249.677†	17199.9	137.80	0.80%	[500]	ug/L
Ba 233.527†	50864.9	234.74	0.46%	[500]	ug/L
Be 313.107†	1127331.6	12642.01	1.12%	[500]	ug/L
Ca 317.933Radial†	1300.5	103.32	7.94%	[5000]	ug/L
Cd 226.502†	33186.5	131.65	0.40%	[500]	ug/L
Co 228.616†	18684.7	59.99	0.32%	[500]	ug/L
Cr 267.716†	36799.5	272.87	0.74%	[500]	ug/L
Cu 324.752†	148422.3	1385.95	0.93%	[500]	ug/L
K 766.490 Radial†	10808.3	886.35	8.20%	[5000]	ug/L
Mg 279.077 IEC†	52.7	6.15	11.68%	[5000]	ug/L
Mn 257.610†	366772.6	3942.15	1.07%	[500]	ug/L
Mo 202.031†	5532.2	74.69	1.35%	[500]	ug/L
Ni 231.604†	15446.4	82.99	0.54%	[500]	ug/L
P 214.914†	3146.6	35.43	1.13%	[2500]	ug/L
Pb 220.353†	3086.4	32.54	1.05%	[500]	ug/L
S 181.975 Axial†	527.9	9.99	1.89%	[1000]	ug/L

Sb 206.836†	1167.0	13.00	1.11%	[500]	ug/L
Se 196.026†	595.1	8.26	1.39%	[500]	ug/L
Si 251.611†	64104.5	453.61	0.71%	[2500]	ug/L
Sn 189.927†	2118.3	27.57	1.30%	[500]	ug/L
Sr 421.552†	52498.5	3547.25	6.76%	[500]	ug/L
Ti 334.940†	275817.7	2018.35	0.73%	[500]	ug/L
Tl 190.801†	1230.3	13.50	1.10%	[500]	ug/L
U 409.014†	16985.2	213.59	1.26%	[500]	ug/L
V 292.402†	61454.4	437.08	0.71%	[500]	ug/L
Zn 213.857†	39583.5	272.04	0.69%	[500]	ug/L
SiO2†	63945.1	1152.34	1.80%	[5347.5]	ug/L

Sequence No.: 4
Sample ID: SCAL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 4
Date Collected: 3/10/2010 16:54:19
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	3359.9	3359.9	105	%	16:56:32
1	Y RADIAL	2751.6	2751.6	104.7	%	16:56:32
1	Al 396.153Radial†	4639.9	4487.5	[10000]	ug/L	16:56:12
1	Ca 317.933Radial†	2550.9	2420.5	[10000]	ug/L	16:56:32
1	Fe 238.204 Radial†	380.4	353.3	[10000]	ug/L	16:56:32
1	K 766.490 Radial†	23104.7	20010.2	[10000]	ug/L	16:56:12
1	Mg 279.077 IEC†	106.0	99.4	[10000]	ug/L	16:56:32
1	Na 589.592 Radial†	31241.2	30529.8	[10000]	ug/L	16:56:12
1	Sr 421.552†	107711.7	102698.5	[1000]	ug/L	16:56:12
1	Sc 361.383	847989.8	847989.8	107.07	%	16:57:31
1	Y 371.029	716432.2	716432.2	105.72	%	16:57:31
1	Ag 328.068†	201482.4	188039.6	[1000]	ug/L	16:57:31
1	As 188.979†	1801.1	1701.0	[1000]	ug/L	16:57:51
1	B 249.677†	36367.1	34341.6	[1000]	ug/L	16:57:31
1	Ba 233.527†	107906.7	100777.9	[1000]	ug/L	16:57:31
1	Be 313.107†	2354801.0	2202766.7	[1000]	ug/L	16:57:31
1	Cd 226.502†	69836.8	65379.1	[1000]	ug/L	16:57:31
1	Co 228.616†	38328.8	35842.4	[1000]	ug/L	16:57:51
1	Cr 267.716†	77885.6	72687.1	[1000]	ug/L	16:57:31
1	Cu 324.752†	323410.2	295831.3	[1000]	ug/L	16:57:31
1	Mn 257.610†	771116.8	719772.1	[1000]	ug/L	16:57:31
1	Mo 202.031†	11687.3	10902.1	[1000]	ug/L	16:57:51
1	Ni 231.604†	31766.7	29607.4	[1000]	ug/L	16:57:51
1	P 214.914†	6792.6	6179.5	[5000]	ug/L	16:57:51
1	Pb 220.353†	6440.5	6058.7	[1000]	ug/L	16:57:51
1	S 181.975 Axial†	1149.7	1042.9	[2000]	ug/L	16:57:51
1	Sb 206.836†	2506.4	2318.1	[1000]	ug/L	16:57:51
1	Se 196.026†	1224.3	1164.1	[1000]	ug/L	16:57:51
1	Si 251.611†	137337.3	127787.6	[5000]	ug/L	16:57:31
1	Sn 189.927†	4478.6	4175.0	[1000]	ug/L	16:57:51
1	Ti 334.940†	596985.4	558472.4	[1000]	ug/L	16:57:31
1	Tl 190.801†	2561.7	2418.4	[1000]	ug/L	16:57:51
1	U 409.014†	32860.4	32661.4	[1000]	ug/L	16:57:31
1	V 292.402†	129215.9	121871.2	[1000]	ug/L	16:57:31
1	Zn 213.857†	83942.0	77884.8	[1000]	ug/L	16:57:31
1	SiO2†	136834.9	127319.5	[10695]	ug/L	16:58:52
2	Sc Radial	3348.7	3348.7	104	%	16:56:57
2	Y RADIAL	2743.8	2743.8	104.4	%	16:56:57
2	Al 396.153Radial†	4707.9	4567.3	[10000]	ug/L	16:56:37
2	Ca 317.933Radial†	2551.4	2429.1	[10000]	ug/L	16:56:57
2	Fe 238.204 Radial†	378.7	352.9	[10000]	ug/L	16:56:57
2	K 766.490 Radial†	23314.1	20284.1	[10000]	ug/L	16:56:37
2	Mg 279.077 IEC†	106.0	99.7	[10000]	ug/L	16:56:57
2	Na 589.592 Radial†	31689.5	31058.4	[10000]	ug/L	16:56:37
2	Sr 421.552†	108730.6	104016.8	[1000]	ug/L	16:56:37
2	Sc 361.383	849747.5	849747.5	107.30	%	16:57:59
2	Y 371.029	717436.8	717436.8	105.87	%	16:57:59
2	Ag 328.068†	201654.2	187810.5	[1000]	ug/L	16:57:59
2	As 188.979†	1815.0	1710.4	[1000]	ug/L	16:58:19
2	B 249.677†	36421.6	34322.2	[1000]	ug/L	16:57:59
2	Ba 233.527†	107902.0	100565.0	[1000]	ug/L	16:57:59
2	Be 313.107†	2354174.0	2197633.3	[1000]	ug/L	16:57:59
2	Cd 226.502†	69806.2	65215.7	[1000]	ug/L	16:57:59
2	Co 228.616†	38454.6	35885.6	[1000]	ug/L	16:58:19
2	Cr 267.716†	77831.7	72486.3	[1000]	ug/L	16:57:59
2	Cu 324.752†	324187.2	295930.7	[1000]	ug/L	16:57:59
2	Mn 257.610†	771858.7	718973.8	[1000]	ug/L	16:57:59
2	Mo 202.031†	11688.0	10880.2	[1000]	ug/L	16:58:19
2	Ni 231.604†	31772.8	29551.6	[1000]	ug/L	16:58:19

2	P 214.914†	6835.9	6206.7	[5000]	ug/L	16:58:19
2	Pb 220.353†	6471.8	6075.4	[1000]	ug/L	16:58:19
2	S 181.975 Axial†	1156.8	1047.4	[2000]	ug/L	16:58:19
2	Sb 206.836†	2512.8	2319.2	[1000]	ug/L	16:58:19
2	Se 196.026†	1225.1	1162.5	[1000]	ug/L	16:58:19
2	Si 251.611†	137414.4	127594.2	[5000]	ug/L	16:57:59
2	Sn 189.927†	4502.0	4188.1	[1000]	ug/L	16:58:19
2	Ti 334.940†	598149.5	558404.0	[1000]	ug/L	16:57:59
2	Tl 190.801†	2568.6	2419.9	[1000]	ug/L	16:58:19
2	U 409.014†	32817.8	32558.2	[1000]	ug/L	16:57:59
2	V 292.402†	129255.2	121658.2	[1000]	ug/L	16:57:59
2	Zn 213.857†	84003.6	77780.0	[1000]	ug/L	16:57:59
2	SiO2†	137104.4	127306.3	[10695]	ug/L	16:58:57
3	Sc Radial	3368.7	3368.7	105	%	16:57:22
3	Y RADIAL	2748.5	2748.5	104.6	%	16:57:22
3	Al 396.153Radial†	4728.8	4560.4	[10000]	ug/L	16:57:02
3	Ca 317.933Radial†	2560.2	2423.0	[10000]	ug/L	16:57:22
3	Fe 238.204 Radial†	383.1	355.0	[10000]	ug/L	16:57:22
3	K 766.490 Radial†	23480.0	20309.6	[10000]	ug/L	16:57:02
3	Mg 279.077 IEC†	106.2	99.3	[10000]	ug/L	16:57:22
3	Na 589.592 Radial†	31746.6	30932.7	[10000]	ug/L	16:57:02
3	Sr 421.552†	109237.7	103881.7	[1000]	ug/L	16:57:02
3	Sc 361.383	845362.0	845362.0	106.74	%	16:58:26
3	Y 371.029	713238.7	713238.7	105.25	%	16:58:26
3	Ag 328.068†	201005.5	188177.8	[1000]	ug/L	16:58:26
3	As 188.979†	1793.7	1699.3	[1000]	ug/L	16:58:46
3	B 249.677†	36287.8	34372.9	[1000]	ug/L	16:58:26
3	Ba 233.527†	107796.4	100987.8	[1000]	ug/L	16:58:26
3	Be 313.107†	2342063.8	2197670.5	[1000]	ug/L	16:58:26
3	Cd 226.502†	69660.9	65417.1	[1000]	ug/L	16:58:26
3	Co 228.616†	38491.4	36106.0	[1000]	ug/L	16:58:46
3	Cr 267.716†	77661.6	72703.3	[1000]	ug/L	16:58:26
3	Cu 324.752†	322314.7	295743.8	[1000]	ug/L	16:58:26
3	Mn 257.610†	770494.2	721427.5	[1000]	ug/L	16:58:26
3	Mo 202.031†	11723.7	10970.2	[1000]	ug/L	16:58:46
3	Ni 231.604†	31876.7	29802.6	[1000]	ug/L	16:58:46
3	P 214.914†	6842.6	6246.1	[5000]	ug/L	16:58:46
3	Pb 220.353†	6452.1	6088.2	[1000]	ug/L	16:58:46
3	S 181.975 Axial†	1149.3	1045.9	[2000]	ug/L	16:58:46
3	Sb 206.836†	2524.1	2342.0	[1000]	ug/L	16:58:46
3	Se 196.026†	1222.6	1166.1	[1000]	ug/L	16:58:46
3	Si 251.611†	137081.9	127947.1	[5000]	ug/L	16:58:26
3	Sn 189.927†	4494.2	4202.6	[1000]	ug/L	16:58:46
3	Ti 334.940†	596288.5	559552.7	[1000]	ug/L	16:58:26
3	Tl 190.801†	2563.8	2427.8	[1000]	ug/L	16:58:46
3	U 409.014†	32779.5	32681.0	[1000]	ug/L	16:58:26
3	V 292.402†	128848.4	121902.1	[1000]	ug/L	16:58:26
3	Zn 213.857†	83830.8	78024.2	[1000]	ug/L	16:58:26
3	SiO2†	135822.5	126768.3	[10695]	ug/L	16:59:02

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	847699.8	2207.10	0.26%	107.04	%
Sc Radial	3359.1	10.02	0.30%	105	%
Y 371.029	715702.6	2192.08	0.31%	105.62	%
Y RADIAL	2748.0	3.95	0.14%	104.6	%
Ag 328.068†	188009.3	185.49	0.10%	[1000]	ug/L
Al 396.153Radial†	4538.4	44.24	0.97%	[10000]	ug/L
As 188.979†	1703.5	6.01	0.35%	[1000]	ug/L
B 249.677†	34345.6	25.60	0.07%	[1000]	ug/L
Ba 233.527†	100776.9	211.37	0.21%	[1000]	ug/L
Be 313.107†	2199356.8	2953.08	0.13%	[1000]	ug/L
Ca 317.933Radial†	2424.2	4.44	0.18%	[10000]	ug/L
Cd 226.502†	65337.3	107.01	0.16%	[1000]	ug/L
Co 228.616†	35944.6	141.39	0.39%	[1000]	ug/L
Cr 267.716†	72625.6	120.86	0.17%	[1000]	ug/L
Cu 324.752†	295835.3	93.49	0.03%	[1000]	ug/L
Fe 238.204 Radial†	353.7	1.08	0.31%	[10000]	ug/L
K 766.490 Radial†	20201.3	166.00	0.82%	[10000]	ug/L

Mg 279.077 IEC†	99.5	0.23	0.23%	[10000]	ug/L
Mn 257.610†	720057.8	1251.53	0.17%	[1000]	ug/L
Mo 202.031†	10917.5	46.92	0.43%	[1000]	ug/L
Na 589.592 Radial†	30840.3	276.13	0.90%	[10000]	ug/L
Ni 231.604†	29653.9	131.80	0.44%	[1000]	ug/L
P 214.914†	6210.7	33.48	0.54%	[5000]	ug/L
Pb 220.353†	6074.1	14.79	0.24%	[1000]	ug/L
S 181.975 Axial†	1045.4	2.25	0.22%	[2000]	ug/L
Sb 206.836†	2326.4	13.50	0.58%	[1000]	ug/L
Se 196.026†	1164.2	1.78	0.15%	[1000]	ug/L
Si 251.611†	127776.3	176.70	0.14%	[5000]	ug/L
Sn 189.927†	4188.5	13.82	0.33%	[1000]	ug/L
Sr 421.552†	103532.4	725.25	0.70%	[1000]	ug/L
Ti 334.940†	558809.7	644.35	0.12%	[1000]	ug/L
Tl 190.801†	2422.0	5.07	0.21%	[1000]	ug/L
U 409.014†	32633.6	65.96	0.20%	[1000]	ug/L
V 292.402†	121810.5	132.79	0.11%	[1000]	ug/L
Zn 213.857†	77896.3	122.53	0.16%	[1000]	ug/L
SiO2†	127131.4	314.48	0.25%	[10695]	ug/L

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Sequence No.: 5
Sample ID: S10
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 5
Date Collected: 3/10/2010 17:01:12
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Analysis Time
1	Sc Radial	3310.8	3310.8	103	%	17:03:26
1	Y RADIAL	2712.0	2712.0	103.2	%	17:03:26
1	Al 396.153Radial†	23785.4	23083.9	[50000]	ug/L	17:03:06
1	Ca 317.933Radial†	12355.9	11946.8	[50000]	ug/L	17:03:06
1	Fe 238.204 Radial†	725.2	692.4	[20000]	ug/L	17:03:26
1	Mg 279.077 IEC†	500.9	483.2	[50000]	ug/L	17:03:26
1	Na 589.592 Radial†	64579.1	63238.9	[20000]	ug/L	17:03:06
1	Sc 361.383	819482.9	819482.9	103.47	%	17:04:23
1	Y 371.029	689581.6	689581.6	101.76	%	17:04:23
2	Sc Radial	3301.0	3301.0	103	%	17:03:51
2	Y RADIAL	2689.2	2689.2	102.3	%	17:03:51
2	Al 396.153Radial†	23944.8	23307.6	[50000]	ug/L	17:03:31
2	Ca 317.933Radial†	12427.7	12052.3	[50000]	ug/L	17:03:31
2	Fe 238.204 Radial†	725.7	695.0	[20000]	ug/L	17:03:51
2	Mg 279.077 IEC†	496.3	480.1	[50000]	ug/L	17:03:51
2	Na 589.592 Radial†	65353.0	64177.2	[20000]	ug/L	17:03:31
2	Sc 361.383	825396.3	825396.3	104.22	%	17:04:29
2	Y 371.029	694166.5	694166.5	102.44	%	17:04:29
3	Sc Radial	3369.6	3369.6	105	%	17:04:16
3	Y RADIAL	2747.7	2747.7	104.6	%	17:04:16
3	Al 396.153Radial†	24090.1	22972.2	[50000]	ug/L	17:03:56
3	Ca 317.933Radial†	12475.6	11852.1	[50000]	ug/L	17:03:56
3	Fe 238.204 Radial†	733.1	687.8	[20000]	ug/L	17:04:16
3	Mg 279.077 IEC†	509.9	483.2	[50000]	ug/L	17:04:16
3	Na 589.592 Radial†	65900.2	63405.1	[20000]	ug/L	17:03:56
3	Sc 361.383	820149.1	820149.1	103.56	%	17:04:34
3	Y 371.029	690175.9	690175.9	101.85	%	17:04:34

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	821676.1	3238.92	0.39%	103.75	%
Sc Radial	3327.1	37.11	1.12%	104	%
Y 371.029	691308.0	2493.33	0.36%	102.02	%
Y RADIAL	2716.3	29.52	1.09%	103.4	%
Al 396.153Radial†	23121.2	170.79	0.74%	[50000]	ug/L
Ca 317.933Radial†	11950.4	100.18	0.84%	[50000]	ug/L
Fe 238.204 Radial†	691.7	3.68	0.53%	[20000]	ug/L
Mg 279.077 IEC†	482.2	1.76	0.37%	[50000]	ug/L
Na 589.592 Radial†	63607.1	500.73	0.79%	[20000]	ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	188.6	0.00000	0.999978	
Al 396.153Radial	3	Lin Thru 0	0.0	0.4622	0.00000	0.999993	
As 188.979	3	Lin Thru 0	0.0	1.707	0.00000	0.999991	
B 249.677	3	Lin Thru 0	0.0	34.36	0.00000	0.999998	
Ba 233.527	3	Lin Thru 0	0.0	101.0	0.00000	0.999986	
Be 313.107	3	Lin Thru 0	0.0	2211	0.00000	0.999946	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.2393	0.00000	0.999960	
Cd 226.502	3	Lin Thru 0	0.0	65.56	0.00000	0.999978	
Co 228.616	3	Lin Thru 0	0.0	36.24	0.00000	0.999866	
Cr 267.716	3	Lin Thru 0	0.0	72.84	0.00000	0.999979	
Cu 324.752	3	Lin Thru 0	0.0	296.1	0.00000	0.999997	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0347	0.00000	0.999959	
K 766.490 Radial	3	Lin Thru 0	0.0	2.047	0.00000	0.999584	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0097	0.00000	0.999943
Mn 257.610	3	Lin Thru 0	0.0	723.0	0.00000	0.999963
Mo 202.031	3	Lin Thru 0	0.0	10.95	0.00000	0.999982
Na 589.592 Radia	2	Lin Thru 0	0.0	3.161	0.00000	0.999926
Ni 231.604	3	Lin Thru 0	0.0	29.92	0.00000	0.999851
P 214.914	3	Lin Thru 0	0.0	1.246	0.00000	0.999983
Pb 220.353	3	Lin Thru 0	0.0	6.096	0.00000	0.999969
S 181.975 Axial	3	Lin Thru 0	0.0	0.5235	0.00000	0.999982
Sb 206.836	3	Lin Thru 0	0.0	2.328	0.00000	0.999997
Se 196.026	3	Lin Thru 0	0.0	1.170	0.00000	0.999946
Si 251.611	3	Lin Thru 0	0.0	25.58	0.00000	0.999997
Sn 189.927	3	Lin Thru 0	0.0	4.199	0.00000	0.999986
Sr 421.552	3	Lin Thru 0	0.0	103.8	0.00000	0.999983
Ti 334.940	3	Lin Thru 0	0.0	557.5	0.00000	0.999983
Tl 190.801	3	Lin Thru 0	0.0	2.431	0.00000	0.999964
U 409.014	3	Lin Thru 0	0.0	32.92	0.00000	0.999843
V 292.402	3	Lin Thru 0	0.0	122.1	0.00000	0.999991
Zn 213.857	3	Lin Thru 0	0.0	78.18	0.00000	0.999972
SiO2	3	Lin Thru 0	0.0	11.90	0.00000	0.999996

Sequence No.: 6
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 9
Date Collected: 3/10/2010 17:06:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3325.8	3325.8	104	%			17:08:59
1	Y RADIAL	2701.2	2701.2	102.8	%			17:08:59
1	Al 396.153Radial†	2328.7	2305.8	4963.4	ug/L	4963.4	ppb	17:08:39
1	Ca 317.933Radial†	1264.8	1206.2	5039.8	ug/L	5039.8	ppb	17:08:59
1	Fe 238.204 Radial†	191.9	175.4	5063.7	ug/L	5063.7	ppb	17:08:59
1	K 766.490 Radial†	7346.1	5051.7	2464.6	ug/L	2464.6	ppb	17:08:39
1	Mg 279.077 IEC†	55.8	52.1	5386.7	ug/L	5386.7	ppb	17:08:59
1	Na 589.592 Radial†	7032.3	7508.5	2375.3	ug/L	2375.3	ppb	17:08:39
1	Sr 421.552†	55793.2	53724.9	517.34	ug/L	517.34	ppb	17:08:39
1	Sc 361.383	834717.9	834717.9	105.40	%			17:09:56
1	Y 371.029	709677.8	709677.8	104.73	%			17:09:56
1	Ag 328.068†	50954.8	48213.6	258.78	ug/L	258.78	ppb	17:09:56
1	As 188.979†	837.7	813.7	480.77	ug/L	480.77	ppb	17:10:16
1	B 249.677†	18334.6	17772.8	514.91	ug/L	514.91	ppb	17:09:56
1	Ba 233.527†	54038.2	51270.8	508.90	ug/L	508.90	ppb	17:09:56
1	Be 313.107†	600496.9	573282.4	260.40	ug/L	260.40	ppb	17:09:56
1	Cd 226.502†	34270.0	32671.0	498.27	ug/L	498.27	ppb	17:09:56
1	Co 228.616†	19662.4	18701.2	516.14	ug/L	516.14	ppb	17:09:56
1	Cr 267.716†	37520.4	35545.9	488.70	ug/L	488.70	ppb	17:09:56
1	Cu 324.752†	163950.7	149341.5	504.38	ug/L	504.38	ppb	17:09:56
1	Mn 257.610†	388452.2	368157.5	509.47	ug/L	509.47	ppb	17:09:56
1	Mo 202.031†	6160.0	5831.4	533.02	ug/L	533.02	ppb	17:10:16
1	Ni 231.604†	16184.2	15294.7	510.95	ug/L	510.95	ppb	17:09:56
1	P 214.914†	3464.1	3122.3	2408.4	ug/L	2408.4	ppb	17:10:16
1	Pb 220.353†	3169.4	3050.7	501.91	ug/L	501.91	ppb	17:10:16
1	S 181.975 Axial†	1398.6	1296.2	2474.9	ug/L	2474.9	ppb	17:10:16
1	Sb 206.836†	1249.5	1162.7	518.60	ug/L	518.60	ppb	17:10:16
1	Se 196.026†	3132.2	2992.4	2574.6	ug/L	2574.6	ppb	17:10:16
1	Si 251.611†	132757.0	125481.3	4899.4	ug/L	4899.4	ppb	17:09:56
1	Sn 189.927†	2366.3	2237.3	533.41	ug/L	533.41	ppb	17:10:16
1	Ti 334.940†	287857.1	274042.0	491.40	ug/L	491.40	ppb	17:09:56
1	Tl 190.801†	1330.9	1288.7	533.44	ug/L	533.44	ppb	17:10:16
1	U 409.014†	14771.1	15986.6	483.92	ug/L	483.92	ppb	17:09:56
1	V 292.402†	63702.8	61632.3	512.07	ug/L	512.07	ppb	17:09:56
1	Zn 213.857†	42332.0	39652.4	502.53	ug/L	502.53	ppb	17:09:56
1	SiO2†	133481.0	126169.3	10585	ug/L	10585	ppb	17:11:14
2	Sc Radial	3347.1	3347.1	104	%			17:09:24
2	Y RADIAL	2730.8	2730.8	103.9	%			17:09:24
2	Al 396.153Radial†	2279.9	2244.9	4831.6	ug/L	4831.6	ppb	17:09:04
2	Ca 317.933Radial†	1272.2	1205.6	5037.1	ug/L	5037.1	ppb	17:09:24
2	Fe 238.204 Radial†	192.4	174.8	5045.5	ug/L	5045.5	ppb	17:09:24
2	K 766.490 Radial†	7375.3	5034.7	2456.3	ug/L	2456.3	ppb	17:09:04
2	Mg 279.077 IEC†	53.3	49.3	5105.1	ug/L	5105.1	ppb	17:09:24
2	Na 589.592 Radial†	6990.4	7425.4	2349.0	ug/L	2349.0	ppb	17:09:04
2	Sr 421.552†	55417.3	53023.3	510.58	ug/L	510.58	ppb	17:09:04
2	Sc 361.383	837512.3	837512.3	105.75	%			17:10:22
2	Y 371.029	711184.4	711184.4	104.95	%			17:10:22
2	Ag 328.068†	50903.0	48003.4	257.65	ug/L	257.65	ppb	17:10:22
2	As 188.979†	836.0	809.3	478.24	ug/L	478.24	ppb	17:10:42
2	B 249.677†	18362.4	17741.0	513.99	ug/L	513.99	ppb	17:10:22
2	Ba 233.527†	54348.1	51392.7	510.10	ug/L	510.10	ppb	17:10:22
2	Be 313.107†	602536.7	573310.3	260.41	ug/L	260.41	ppb	17:10:22
2	Cd 226.502†	34428.8	32712.7	498.91	ug/L	498.91	ppb	17:10:22
2	Co 228.616†	19824.2	18792.0	518.63	ug/L	518.63	ppb	17:10:22
2	Cr 267.716†	37663.3	35562.2	488.92	ug/L	488.92	ppb	17:10:22
2	Cu 324.752†	164513.9	149355.0	504.42	ug/L	504.42	ppb	17:10:22
2	Mn 257.610†	390507.7	368871.5	510.46	ug/L	510.46	ppb	17:10:22
2	Mo 202.031†	6160.2	5812.2	531.26	ug/L	531.26	ppb	17:10:42
2	Ni 231.604†	16228.4	15285.2	510.63	ug/L	510.63	ppb	17:10:22

2	P 214.914†	3478.4	3124.9	2410.4 ug/L	2410.4 ppb	17:10:42
2	Pb 220.353†	3178.2	3049.1	501.61 ug/L	501.61 ppb	17:10:42
2	S 181.975 Axial†	1400.1	1293.2	2469.2 ug/L	2469.2 ppb	17:10:42
2	Sb 206.836†	1268.3	1176.6	524.52 ug/L	524.52 ppb	17:10:42
2	Se 196.026†	3150.4	2999.8	2580.8 ug/L	2580.8 ppb	17:10:42
2	Si 251.611†	133292.2	125567.1	4902.7 ug/L	4902.7 ppb	17:10:22
2	Sn 189.927†	2376.4	2239.4	533.90 ug/L	533.90 ppb	17:10:42
2	Ti 334.940†	289394.9	274584.9	492.39 ug/L	492.39 ppb	17:10:22
2	Tl 190.801†	1341.2	1294.2	535.70 ug/L	535.70 ppb	17:10:42
2	U 409.014†	14988.0	16145.0	488.73 ug/L	488.73 ppb	17:10:22
2	V 292.402†	63918.0	61634.2	512.07 ug/L	512.07 ppb	17:10:22
2	Zn 213.857†	42649.5	39818.7	504.66 ug/L	504.66 ppb	17:10:22
2	SiO2†	135760.2	127902.0	10731 ug/L	10731 ppb	17:11:19
3	Sc Radial	3350.9	3350.9	105 %		17:09:49
3	Y RADIAL	2742.2	2742.2	104.4 %		17:09:49
3	Al 396.153Radial†	2346.9	2306.4	4964.6 ug/L	4964.6 ppb	17:09:29
3	Ca 317.933Radial†	1278.0	1209.7	5054.3 ug/L	5054.3 ppb	17:09:49
3	Fe 238.204 Radial†	193.3	175.4	5063.2 ug/L	5063.2 ppb	17:09:49
3	K 766.490 Radial†	7303.7	4958.1	2418.8 ug/L	2418.8 ppb	17:09:29
3	Mg 279.077 IEC†	55.4	51.3	5310.6 ug/L	5310.6 ppb	17:09:49
3	Na 589.592 Radial†	7101.6	7524.1	2380.2 ug/L	2380.2 ppb	17:09:29
3	Sr 421.552†	56696.6	54186.0	521.78 ug/L	521.78 ppb	17:09:29
3	Sc 361.383	834025.5	834025.5	105.31 %		17:10:48
3	Y 371.029	707977.5	707977.5	104.48 %		17:10:48
3	Ag 328.068†	50758.9	48067.8	258.00 ug/L	258.00 ppb	17:10:48
3	As 188.979†	839.8	816.3	482.30 ug/L	482.30 ppb	17:11:08
3	B 249.677†	18317.3	17770.8	514.85 ug/L	514.85 ppb	17:10:48
3	Ba 233.527†	54116.6	51387.7	510.06 ug/L	510.06 ppb	17:10:48
3	Be 313.107†	599983.7	573268.1	260.39 ug/L	260.39 ppb	17:10:48
3	Cd 226.502†	34313.8	32739.6	499.32 ug/L	499.32 ppb	17:10:48
3	Co 228.616†	19741.0	18791.3	518.63 ug/L	518.63 ppb	17:10:48
3	Cr 267.716†	37486.9	35543.6	488.67 ug/L	488.67 ppb	17:10:48
3	Cu 324.752†	163538.2	149078.9	503.49 ug/L	503.49 ppb	17:10:48
3	Mn 257.610†	389357.8	369323.4	511.08 ug/L	511.08 ppb	17:10:48
3	Mo 202.031†	6177.1	5852.6	534.95 ug/L	534.95 ppb	17:11:08
3	Ni 231.604†	16191.7	15314.5	511.61 ug/L	511.61 ppb	17:10:48
3	P 214.914†	3464.8	3125.7	2411.3 ug/L	2411.3 ppb	17:11:08
3	Pb 220.353†	3176.3	3059.8	503.40 ug/L	503.40 ppb	17:11:08
3	S 181.975 Axial†	1409.4	1307.5	2496.6 ug/L	2496.6 ppb	17:11:08
3	Sb 206.836†	1258.1	1171.9	522.63 ug/L	522.63 ppb	17:11:08
3	Se 196.026†	3129.1	2992.0	2574.2 ug/L	2574.2 ppb	17:11:08
3	Si 251.611†	132833.3	125658.4	4906.3 ug/L	4906.3 ppb	17:10:48
3	Sn 189.927†	2375.4	2247.8	535.91 ug/L	535.91 ppb	17:11:08
3	Ti 334.940†	287884.9	274295.1	491.86 ug/L	491.86 ppb	17:10:48
3	Tl 190.801†	1327.2	1286.2	532.39 ug/L	532.39 ppb	17:11:08
3	U 409.014†	14919.9	16139.6	488.56 ug/L	488.56 ppb	17:10:48
3	V 292.402†	63650.8	61633.1	512.11 ug/L	512.11 ppb	17:10:48
3	Zn 213.857†	42455.5	39803.1	504.45 ug/L	504.45 ppb	17:10:48
3	SiO2†	133630.9	126416.8	10606 ug/L	10606 ppb	17:11:24

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	835418.6	105.49	%	0.233				0.22%
Sc Radial	3341.2	104	%	0.4				0.40%
Y 371.029	709613.2	104.72	%	0.237				0.23%
Y RADIAL	2724.7	103.7	%	0.81				0.78%
Ag 328.068†	48094.9	258.14	ug/L	0.576	258.14	ppb	0.576	0.22%
QC value within limits for Ag 328.068 Recovery = 103.26%								
Al 396.153Radial†	2285.7	4919.9	ug/L	76.43	4919.9	ppb	76.43	1.55%
QC value within limits for Al 396.153Radial Recovery = 98.40%								
As 188.979†	813.1	480.44	ug/L	2.052	480.44	ppb	2.052	0.43%
QC value within limits for As 188.979 Recovery = 96.09%								
B 249.677†	17761.5	514.58	ug/L	0.517	514.58	ppb	0.517	0.10%
QC value within limits for B 249.677 Recovery = 102.92%								
Ba 233.527†	51350.4	509.69	ug/L	0.683	509.69	ppb	0.683	0.13%
QC value within limits for Ba 233.527 Recovery = 101.94%								
Be 313.107†	573286.9	260.40	ug/L	0.010	260.40	ppb	0.010	0.00%
QC value within limits for Be 313.107 Recovery = 104.16%								
Ca 317.933Radial†	1207.2	5043.8	ug/L	9.25	5043.8	ppb	9.25	0.18%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†          32707.8      498.83 ug/L        0.528      498.83 ppb        0.528   0.11%
   QC value within limits for Cd 226.502  Recovery = 99.77%
Co 228.616†          18761.5      517.80 ug/L        1.441      517.80 ppb        1.441   0.28%
   QC value within limits for Co 228.616  Recovery = 103.56%
Cr 267.716†          35550.6      488.77 ug/L        0.138      488.77 ppb        0.138   0.03%
   QC value within limits for Cr 267.716  Recovery = 97.75%
Cu 324.752†         149258.5      504.10 ug/L        0.526      504.10 ppb        0.526   0.10%
   QC value within limits for Cu 324.752  Recovery = 100.82%
Fe 238.204 Radial†     175.2      5057.4 ug/L        10.38      5057.4 ppb        10.38   0.21%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.15%
K 766.490 Radial†     5014.8      2446.6 ug/L        24.37      2446.6 ppb        24.37   1.00%
   QC value within limits for K 766.490 Radial  Recovery = 97.86%
Mg 279.077 IEC†         50.9      5267.5 ug/L       145.66      5267.5 ppb       145.66   2.77%
   QC value within limits for Mg 279.077 IEC  Recovery = 105.35%
Mn 257.610†         368784.1      510.34 ug/L        0.815      510.34 ppb        0.815   0.16%
   QC value within limits for Mn 257.610  Recovery = 102.07%
Mo 202.031†          5832.1      533.08 ug/L        1.845      533.08 ppb        1.845   0.35%
   QC value within limits for Mo 202.031  Recovery = 106.62%
Na 589.592 Radial†   7486.0      2368.2 ug/L        16.78      2368.2 ppb        16.78   0.71%
   QC value within limits for Na 589.592 Radial  Recovery = 94.73%
Ni 231.604†         15298.1      511.07 ug/L        0.500      511.07 ppb        0.500   0.10%
   QC value within limits for Ni 231.604  Recovery = 102.21%
P 214.914†           3124.3      2410.0 ug/L         1.51      2410.0 ppb         1.51   0.06%
   QC value within limits for P 214.914  Recovery = 96.40%
Pb 220.353†          3053.2      502.31 ug/L        0.961      502.31 ppb        0.961   0.19%
   QC value within limits for Pb 220.353  Recovery = 100.46%
S 181.975 Axial†     1299.0      2480.3 ug/L        14.46      2480.3 ppb        14.46   0.58%
   QC value within limits for S 181.975 Axial  Recovery = 99.21%
Sb 206.836†          1170.4      521.91 ug/L        3.023      521.91 ppb        3.023   0.58%
   QC value within limits for Sb 206.836  Recovery = 104.38%
Se 196.026†          2994.7      2576.5 ug/L         3.68      2576.5 ppb         3.68   0.14%
   QC value within limits for Se 196.026  Recovery = 103.06%
Si 251.611†         125568.9      4902.8 ug/L         3.45      4902.8 ppb         3.45   0.07%
   QC value within limits for Si 251.611  Recovery = 98.06%
Sn 189.927†          2241.5      534.41 ug/L        1.324      534.41 ppb        1.324   0.25%
   QC value within limits for Sn 189.927  Recovery = 106.88%
Sr 421.552†         53644.7      516.57 ug/L        5.638      516.57 ppb        5.638   1.09%
   QC value within limits for Sr 421.552  Recovery = 103.31%
Ti 334.940†         274307.3      491.88 ug/L        0.498      491.88 ppb        0.498   0.10%
   QC value within limits for Ti 334.940  Recovery = 98.38%
Tl 190.801†          1289.7      533.84 ug/L        1.691      533.84 ppb        1.691   0.32%
   QC value within limits for Tl 190.801  Recovery = 106.77%
U 409.014†          16090.4      487.07 ug/L        2.731      487.07 ppb        2.731   0.56%
   QC value within limits for U 409.014  Recovery = 97.41%
V 292.402†          61633.2      512.09 ug/L        0.025      512.09 ppb        0.025   0.00%
   QC value within limits for V 292.402  Recovery = 102.42%
Zn 213.857†         39758.1      503.88 ug/L        1.175      503.88 ppb        1.175   0.23%
   QC value within limits for Zn 213.857  Recovery = 100.78%
SiO2†              126829.3       10641 ug/L         78.8       10641 ppb         78.8   0.74%
   QC value within limits for SiO2  Recovery = 99.49%
All analyte(s) passed QC.
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Sequence No.: 7
Sample ID: ICB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 3/10/2010 17:13:35
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3233.0	3233.0	101	%			17:15:48
1	Y RADIAL	2653.1	2653.1	101.0	%			17:15:48
1	Al 396.153Radial†	-61.4	1.1	2.4288	ug/L	2.4288	ppb	17:15:48
1	Ca 317.933Radial†	9.5	-3.1	-12.892	ug/L	-12.892	ppb	17:15:48
1	Fe 238.204 Radial†	6.8	-2.7	-77.655	ug/L	-77.655	ppb	17:15:48
1	K 766.490 Radial†	1974.8	-69.2	-33.813	ug/L	-33.813	ppb	17:15:28
1	Mg 279.077 IEC†	1.2	-0.5	-54.844	ug/L	-54.844	ppb	17:15:48
1	Na 589.592 Radial†	-693.3	45.4	14.358	ug/L	14.358	ppb	17:15:28
1	Sr 421.552†	46.1	11.0	0.1063	ug/L	0.1063	ppb	17:15:28
1	Sc 361.383	794657.3	794657.3	100.34	%			17:16:45
1	Y 371.029	680293.5	680293.5	100.39	%			17:16:45
1	Ag 328.068†	222.3	90.2	0.4543	ug/L	0.4543	ppb	17:16:45
1	As 188.979†	-16.5	2.4	1.3585	ug/L	1.3585	ppb	17:17:05
1	B 249.677†	-41.2	336.2	9.7982	ug/L	9.7982	ppb	17:17:05
1	Ba 233.527†	22.8	23.0	0.2252	ug/L	0.2252	ppb	17:17:05
1	Be 313.107†	-3451.1	102.5	0.0462	ug/L	0.0462	ppb	17:16:45
1	Cd 226.502†	-151.5	5.2	0.0879	ug/L	0.0879	ppb	17:17:05
1	Co 228.616†	-54.6	-8.6	-0.2351	ug/L	-0.2351	ppb	17:17:05
1	Cr 267.716†	68.2	15.1	0.2046	ug/L	0.2046	ppb	17:17:05
1	Cu 324.752†	6139.7	-93.1	-0.3181	ug/L	-0.3181	ppb	17:16:45
1	Mn 257.610†	426.3	26.0	0.0305	ug/L	0.0305	ppb	17:17:05
1	Mo 202.031†	12.8	-0.3	-0.0334	ug/L	-0.0334	ppb	17:17:05
1	Ni 231.604†	67.2	6.4	0.2133	ug/L	0.2133	ppb	17:17:05
1	P 214.914†	166.6	1.7	1.5076	ug/L	1.5076	ppb	17:17:05
1	Pb 220.353†	-66.6	-22.7	-3.7159	ug/L	-3.7159	ppb	17:17:05
1	S 181.975 Axial†	28.2	-2.7	-5.1138	ug/L	-5.1138	ppb	17:17:05
1	Sb 206.836†	30.3	7.5	3.2150	ug/L	3.2150	ppb	17:17:05
1	Se 196.026†	-24.9	-4.2	-3.7677	ug/L	-3.7677	ppb	17:17:05
1	Si 251.611†	495.5	17.7	0.6926	ug/L	0.6926	ppb	17:17:05
1	Sn 189.927†	11.2	3.4	0.8126	ug/L	0.8126	ppb	17:17:05
1	Ti 334.940†	-969.0	-37.3	-0.0639	ug/L	-0.0639	ppb	17:16:45
1	Tl 190.801†	-21.9	4.1	1.6990	ug/L	1.6990	ppb	17:17:05
1	U 409.014†	-2003.9	-25.0	-0.7520	ug/L	-0.7520	ppb	17:16:45
1	V 292.402†	-1225.6	-29.2	-0.2307	ug/L	-0.2307	ppb	17:16:45
1	Zn 213.857†	517.5	4.3	0.0658	ug/L	0.0658	ppb	17:17:05
1	SiO2†	491.8	15.1	1.2658	ug/L	1.2658	ppb	17:18:16
2	Sc Radial	3175.6	3175.6	99.1	%			17:16:13
2	Y RADIAL	2610.4	2610.4	99.35	%			17:16:13
2	Al 396.153Radial†	-51.4	10.2	21.970	ug/L	21.970	ppb	17:16:13
2	Ca 317.933Radial†	9.7	-2.7	-11.448	ug/L	-11.448	ppb	17:16:13
2	Fe 238.204 Radial†	7.7	-1.7	-49.950	ug/L	-49.950	ppb	17:16:13
2	K 766.490 Radial†	2032.9	24.8	12.131	ug/L	12.131	ppb	17:15:53
2	Mg 279.077 IEC†	-1.0	-2.7	-277.06	ug/L	-277.06	ppb	17:16:13
2	Na 589.592 Radial†	-755.2	-29.4	-9.3145	ug/L	-9.3145	ppb	17:15:53
2	Sr 421.552†	12.3	-22.3	-0.2144	ug/L	-0.2144	ppb	17:15:53
2	Sc 361.383	792924.8	792924.8	100.12	%			17:17:10
2	Y 371.029	677870.8	677870.8	100.03	%			17:17:10
2	Ag 328.068†	144.0	12.5	0.0482	ug/L	0.0482	ppb	17:17:10
2	As 188.979†	-15.6	3.2	1.8678	ug/L	1.8678	ppb	17:17:30
2	B 249.677†	-53.3	324.0	9.4358	ug/L	9.4358	ppb	17:17:30
2	Ba 233.527†	6.2	6.5	0.0623	ug/L	0.0623	ppb	17:17:30
2	Be 313.107†	-3488.7	57.4	0.0262	ug/L	0.0262	ppb	17:17:10
2	Cd 226.502†	-131.5	24.9	0.3859	ug/L	0.3859	ppb	17:17:30
2	Co 228.616†	-40.4	5.6	0.1548	ug/L	0.1548	ppb	17:17:30
2	Cr 267.716†	56.3	3.4	0.0429	ug/L	0.0429	ppb	17:17:30
2	Cu 324.752†	6169.7	-49.8	-0.1725	ug/L	-0.1725	ppb	17:17:10
2	Mn 257.610†	431.0	31.6	0.0502	ug/L	0.0502	ppb	17:17:30
2	Mo 202.031†	15.5	2.5	0.2202	ug/L	0.2202	ppb	17:17:30
2	Ni 231.604†	64.7	4.0	0.1329	ug/L	0.1329	ppb	17:17:30

2	P 214.914†	166.4	1.9	1.5761	ug/L	1.5761 ppb	17:17:30
2	Pb 220.353†	-38.6	5.1	0.8445	ug/L	0.8445 ppb	17:17:30
2	S 181.975 Axial†	24.9	-5.9	-11.293	ug/L	-11.293 ppb	17:17:30
2	Sb 206.836†	22.6	-0.2	-0.0479	ug/L	-0.0479 ppb	17:17:30
2	Se 196.026†	-22.0	-1.3	-1.2344	ug/L	-1.2344 ppb	17:17:30
2	Si 251.611†	484.7	8.0	0.3085	ug/L	0.3085 ppb	17:17:30
2	Sn 189.927†	12.1	4.3	1.0173	ug/L	1.0173 ppb	17:17:30
2	Ti 334.940†	-875.3	54.1	0.1168	ug/L	0.1168 ppb	17:17:10
2	Tl 190.801†	-22.5	3.5	1.4275	ug/L	1.4275 ppb	17:17:30
2	U 409.014†	-1871.2	103.2	3.1388	ug/L	3.1388 ppb	17:17:10
2	V 292.402†	-1201.9	-8.2	-0.0559	ug/L	-0.0559 ppb	17:17:10
2	Zn 213.857†	503.1	-8.9	-0.1074	ug/L	-0.1074 ppb	17:17:30
2	SiO2†	492.2	16.6	1.3890	ug/L	1.3890 ppb	17:18:36
3	Sc Radial	3178.4	3178.4	99.2	%		17:16:38
3	Y RADIAL	2619.6	2619.6	99.70	%		17:16:38
3	Al 396.153Radial†	-67.3	-5.8	-12.556	ug/L	-12.556 ppb	17:16:38
3	Ca 317.933Radial†	7.5	-4.9	-20.366	ug/L	-20.366 ppb	17:16:38
3	Fe 238.204 Radial†	9.2	-0.2	-4.6521	ug/L	-4.6521 ppb	17:16:38
3	K 766.490 Radial†	2140.4	131.4	64.199	ug/L	64.199 ppb	17:16:18
3	Mg 279.077 IEC†	0.3	-1.4	-144.49	ug/L	-144.49 ppb	17:16:38
3	Na 589.592 Radial†	-772.3	-46.0	-14.557	ug/L	-14.557 ppb	17:16:18
3	Sr 421.552†	17.5	-17.0	-0.1635	ug/L	-0.1635 ppb	17:16:18
3	Sc 361.383	782197.8	782197.8	98.767	%		17:17:36
3	Y 371.029	668759.1	668759.1	98.689	%		17:17:36
3	Ag 328.068†	156.4	27.0	0.1403	ug/L	0.1403 ppb	17:17:36
3	As 188.979†	-25.1	-6.6	-3.8440	ug/L	-3.8440 ppb	17:17:56
3	B 249.677†	-81.3	295.0	8.5837	ug/L	8.5837 ppb	17:17:56
3	Ba 233.527†	6.7	7.1	0.0697	ug/L	0.0697 ppb	17:17:56
3	Be 313.107†	-3458.6	40.2	0.0179	ug/L	0.0179 ppb	17:17:36
3	Cd 226.502†	-144.3	10.1	0.1552	ug/L	0.1552 ppb	17:17:56
3	Co 228.616†	-32.9	12.5	0.3467	ug/L	0.3467 ppb	17:17:56
3	Cr 267.716†	72.4	20.5	0.2798	ug/L	0.2798 ppb	17:17:56
3	Cu 324.752†	6094.3	-41.6	-0.1414	ug/L	-0.1414 ppb	17:17:36
3	Mn 257.610†	399.6	5.7	0.0134	ug/L	0.0134 ppb	17:17:56
3	Mo 202.031†	15.7	2.9	0.2622	ug/L	0.2622 ppb	17:17:56
3	Ni 231.604†	55.7	-4.3	-0.1425	ug/L	-0.1425 ppb	17:17:56
3	P 214.914†	173.1	11.0	8.8460	ug/L	8.8460 ppb	17:17:56
3	Pb 220.353†	-29.2	14.1	2.3110	ug/L	2.3110 ppb	17:17:56
3	S 181.975 Axial†	24.9	-5.6	-10.599	ug/L	-10.599 ppb	17:17:56
3	Sb 206.836†	25.0	2.6	1.1413	ug/L	1.1413 ppb	17:17:56
3	Se 196.026†	-19.7	0.8	0.6446	ug/L	0.6446 ppb	17:17:56
3	Si 251.611†	489.6	19.6	0.7647	ug/L	0.7647 ppb	17:17:56
3	Sn 189.927†	12.1	4.5	1.0669	ug/L	1.0669 ppb	17:17:56
3	Ti 334.940†	-972.3	-56.1	-0.0922	ug/L	-0.0922 ppb	17:17:36
3	Tl 190.801†	-25.1	0.6	0.2437	ug/L	0.2437 ppb	17:17:56
3	U 409.014†	-1902.2	46.2	1.4018	ug/L	1.4018 ppb	17:17:36
3	V 292.402†	-1202.0	-24.7	-0.1980	ug/L	-0.1980 ppb	17:17:36
3	Zn 213.857†	509.6	4.6	0.0607	ug/L	0.0607 ppb	17:17:56
3	SiO2†	494.0	25.1	2.1037	ug/L	2.1037 ppb	17:18:56

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	789926.6	99.743	%	0.8522				0.85%
Sc Radial	3195.7	99.7	%	1.01				1.01%
Y 371.029	675641.1	99.705	%	0.8975				0.90%
Y RADIAL	2627.7	100.0	%	0.85				0.85%
Ag 328.068†	43.3	0.2142	ug/L	0.21292	0.2142	ppb	0.21292	99.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.8	3.9475	ug/L	17.31264	3.9475	ppb	17.31264	438.57%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.3	-0.2059	ug/L	3.16099	-0.2059	ppb	3.16099	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	318.4	9.2726	ug/L	0.62351	9.2726	ppb	0.62351	6.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	12.2	0.1190	ug/L	0.09199	0.1190	ppb	0.09199	77.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	66.7	0.0301	ug/L	0.01454	0.0301	ppb	0.01454	48.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-3.6	-14.902	ug/L	4.7867	-14.902	ppb	4.7867	32.12%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                13.4      0.2097 ug/L       0.15626      0.2097 ppb        0.15626  74.53%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 3.2      0.0888 ug/L       0.29646      0.0888 ppb        0.29646 333.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                13.0      0.1758 ug/L       0.12106      0.1758 ppb        0.12106  68.87%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -61.5     -0.2107 ug/L       0.09434     -0.2107 ppb        0.09434  44.78%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.5     -44.086 ug/L       36.8532     -44.086 ppb        36.8532  83.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          29.0      14.172 ug/L       49.0380      14.172 ppb        49.0380 346.02%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.5     -158.80 ug/L       111.795     -158.80 ppb        111.795  70.40%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                21.1      0.0313 ug/L       0.01842      0.0313 ppb        0.01842  58.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 1.7      0.1497 ug/L       0.15995      0.1497 ppb        0.15995 106.88%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -10.0     -3.1714 ug/L      15.40529     -3.1714 ppb       15.40529 485.76%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 2.0      0.0679 ug/L       0.18663      0.0679 ppb        0.18663 274.85%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  4.8      3.9766 ug/L       4.21721      3.9766 ppb        4.21721 106.05%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                -1.2     -0.1868 ug/L       3.14302     -0.1868 ppb        3.14302 >999.9%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -4.7     -9.0021 ug/L       3.38520     -9.0021 ppb        3.38520  37.60%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 3.3      1.4361 ug/L       1.65132      1.4361 ppb        1.65132 114.98%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                -1.6     -1.4525 ug/L       2.21424     -1.4525 ppb        2.21424 152.44%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                15.1      0.5886 ug/L       0.24522      0.5886 ppb        0.24522  41.66%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 4.1      0.9656 ug/L       0.13483      0.9656 ppb        0.13483  13.96%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -9.4     -0.0905 ug/L       0.17235     -0.0905 ppb        0.17235 190.40%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†               -13.1     -0.0131 ug/L       0.11340     -0.0131 ppb        0.11340 865.88%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 2.7      1.1234 ug/L       0.77386      1.1234 ppb        0.77386  68.89%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 41.4      1.2628 ug/L       1.94910      1.2628 ppb        1.94910 154.34%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -20.7     -0.1616 ug/L       0.09291     -0.1616 ppb        0.09291  57.51%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                -0.0      0.0064 ug/L       0.09854      0.0064 ppb        0.09854 >999.9%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      18.9      1.5862 ug/L       0.45242      1.5862 ppb        0.45242  28.52%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 8
Sample ID: PQL
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 3/10/2010 17:21:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3212.8	3212.8	100	%			17:23:22
1	Y RADIAL	2638.2	2638.2	100.4	%			17:23:22
1	Al 396.153Radial†	37.9	99.8	215.42	ug/L	215.42	ppb	17:23:22
1	Ca 317.933Radial†	62.8	50.2	209.69	ug/L	209.69	ppb	17:23:22
1	Fe 238.204 Radial†	12.3	2.8	79.924	ug/L	79.924	ppb	17:23:22
1	K 766.490 Radial†	2360.9	328.3	160.16	ug/L	160.16	ppb	17:23:02
1	Mg 279.077 IEC†	3.5	1.8	187.46	ug/L	187.46	ppb	17:23:22
1	Na 589.592 Radial†	241.0	973.0	307.81	ug/L	307.81	ppb	17:23:02
1	Sr 421.552†	539.7	503.7	4.8488	ug/L	4.8488	ppb	17:23:02
1	Sc 361.383	806124.5	806124.5	101.79	%			17:24:19
1	Y 371.029	689288.3	689288.3	101.72	%			17:24:19
1	Ag 328.068†	1129.7	978.5	5.1853	ug/L	5.1853	ppb	17:24:19
1	As 188.979†	33.6	51.9	30.433	ug/L	30.433	ppb	17:24:39
1	B 249.677†	1480.5	1831.7	53.276	ug/L	53.276	ppb	17:24:19
1	Ba 233.527†	514.1	505.3	5.0156	ug/L	5.0156	ppb	17:24:39
1	Be 313.107†	7619.9	11028.0	4.9990	ug/L	4.9990	ppb	17:24:19
1	Cd 226.502†	184.4	337.4	5.1522	ug/L	5.1522	ppb	17:24:39
1	Co 228.616†	151.1	194.3	5.3726	ug/L	5.3726	ppb	17:24:39
1	Cr 267.716†	437.1	376.6	5.1591	ug/L	5.1591	ppb	17:24:39
1	Cu 324.752†	9295.6	2920.3	9.8384	ug/L	9.8384	ppb	17:24:19
1	Mn 257.610†	8079.5	7538.7	10.427	ug/L	10.427	ppb	17:24:19
1	Mo 202.031†	121.1	105.9	9.6803	ug/L	9.6803	ppb	17:24:39
1	Ni 231.604†	232.6	167.9	5.6100	ug/L	5.6100	ppb	17:24:39
1	P 214.914†	361.7	191.0	151.46	ug/L	151.46	ppb	17:24:39
1	Pb 220.353†	16.0	59.3	9.7911	ug/L	9.7911	ppb	17:24:39
1	S 181.975 Axial†	78.1	46.0	87.745	ug/L	87.745	ppb	17:24:39
1	Sb 206.836†	53.7	30.1	13.248	ug/L	13.248	ppb	17:24:39
1	Se 196.026†	24.4	44.6	38.445	ug/L	38.445	ppb	17:24:39
1	Si 251.611†	3008.4	2479.5	96.820	ug/L	96.820	ppb	17:24:39
1	Sn 189.927†	48.2	39.5	9.4472	ug/L	9.4472	ppb	17:24:39
1	Ti 334.940†	1884.1	2779.5	4.9736	ug/L	4.9736	ppb	17:24:19
1	Tl 190.801†	18.4	44.0	18.164	ug/L	18.164	ppb	17:24:39
1	U 409.014†	-259.0	1717.7	52.152	ug/L	52.152	ppb	17:24:19
1	V 292.402†	-665.7	538.2	4.6311	ug/L	4.6311	ppb	17:24:19
1	Zn 213.857†	1485.2	947.7	12.062	ug/L	12.062	ppb	17:24:39
1	SiO2†	3087.0	2557.7	214.62	ug/L	214.62	ppb	17:25:35
2	Sc Radial	3267.2	3267.2	102	%			17:23:47
2	Y RADIAL	2683.3	2683.3	102.1	%			17:23:47
2	Al 396.153Radial†	37.2	98.5	212.73	ug/L	212.73	ppb	17:23:47
2	Ca 317.933Radial†	60.4	46.8	195.48	ug/L	195.48	ppb	17:23:47
2	Fe 238.204 Radial†	11.3	1.6	45.429	ug/L	45.429	ppb	17:23:47
2	K 766.490 Radial†	2336.4	264.9	129.24	ug/L	129.24	ppb	17:23:27
2	Mg 279.077 IEC†	7.3	5.5	564.22	ug/L	564.22	ppb	17:23:47
2	Na 589.592 Radial†	149.2	879.0	278.07	ug/L	278.07	ppb	17:23:27
2	Sr 421.552†	532.3	487.4	4.6926	ug/L	4.6926	ppb	17:23:27
2	Sc 361.383	801531.1	801531.1	101.21	%			17:24:44
2	Y 371.029	685747.5	685747.5	101.20	%			17:24:44
2	Ag 328.068†	1128.2	983.5	5.1989	ug/L	5.1989	ppb	17:24:44
2	As 188.979†	28.8	47.3	27.756	ug/L	27.756	ppb	17:25:04
2	B 249.677†	1472.8	1832.5	53.306	ug/L	53.306	ppb	17:24:44
2	Ba 233.527†	523.7	517.7	5.1367	ug/L	5.1367	ppb	17:25:04
2	Be 313.107†	7641.9	11092.6	5.0283	ug/L	5.0283	ppb	17:24:44
2	Cd 226.502†	189.7	343.7	5.2527	ug/L	5.2527	ppb	17:25:04
2	Co 228.616†	137.7	182.0	5.0319	ug/L	5.0319	ppb	17:25:04
2	Cr 267.716†	431.5	373.5	5.1137	ug/L	5.1137	ppb	17:25:04
2	Cu 324.752†	9292.4	2969.6	10.002	ug/L	10.002	ppb	17:24:44
2	Mn 257.610†	8024.0	7529.4	10.395	ug/L	10.395	ppb	17:24:44
2	Mo 202.031†	119.2	104.7	9.5675	ug/L	9.5675	ppb	17:25:04
2	Ni 231.604†	241.6	178.1	5.9515	ug/L	5.9515	ppb	17:25:04

2	P 214.914†	357.0	188.4	149.36 ug/L	149.36 ppb	17:25:04
2	Pb 220.353†	28.2	71.5	11.791 ug/L	11.791 ppb	17:25:04
2	S 181.975 Axial†	84.3	52.5	100.30 ug/L	100.30 ppb	17:25:04
2	Sb 206.836†	40.4	17.2	7.7434 ug/L	7.7434 ppb	17:25:04
2	Se 196.026†	19.1	39.5	34.009 ug/L	34.009 ppb	17:25:04
2	Si 251.611†	2997.5	2485.6	97.062 ug/L	97.062 ppb	17:25:04
2	Sn 189.927†	50.7	42.3	10.095 ug/L	10.095 ppb	17:25:04
2	Ti 334.940†	1891.8	2797.7	4.9726 ug/L	4.9726 ppb	17:24:44
2	Tl 190.801†	29.4	55.0	22.683 ug/L	22.683 ppb	17:25:04
2	U 409.014†	-181.4	1792.9	54.440 ug/L	54.440 ppb	17:24:44
2	V 292.402†	-671.3	528.9	4.5700 ug/L	4.5700 ppb	17:24:44
2	Zn 213.857†	1467.9	939.0	11.953 ug/L	11.953 ppb	17:25:04
2	SiO2†	3035.0	2523.7	211.77 ug/L	211.77 ppb	17:25:40
3	Sc Radial	3246.9	3246.9	101 %		17:24:12
3	Y RADIAL	2662.3	2662.3	101.3 %		17:24:12
3	Al 396.153Radial†	42.2	103.7	223.90 ug/L	223.90 ppb	17:24:12
3	Ca 317.933Radial†	63.0	49.7	207.49 ug/L	207.49 ppb	17:24:12
3	Fe 238.204 Radial†	11.1	1.4	41.691 ug/L	41.691 ppb	17:24:12
3	K 766.490 Radial†	2407.7	349.6	170.62 ug/L	170.62 ppb	17:23:52
3	Mg 279.077 IEC†	5.6	3.8	390.62 ug/L	390.62 ppb	17:24:12
3	Na 589.592 Radial†	102.0	833.3	263.60 ug/L	263.60 ppb	17:23:52
3	Sr 421.552†	527.6	486.0	4.6790 ug/L	4.6790 ppb	17:23:52
3	Sc 361.383	790532.8	790532.8	99.819 %		17:25:09
3	Y 371.029	677458.5	677458.5	99.973 %		17:25:09
3	Ag 328.068†	1034.1	904.6	4.7769 ug/L	4.7769 ppb	17:25:09
3	As 188.979†	30.0	48.9	28.660 ug/L	28.660 ppb	17:25:29
3	B 249.677†	1514.5	1894.5	55.112 ug/L	55.112 ppb	17:25:09
3	Ba 233.527†	526.4	527.7	5.2349 ug/L	5.2349 ppb	17:25:29
3	Be 313.107†	7522.7	11078.3	5.0213 ug/L	5.0213 ppb	17:25:09
3	Cd 226.502†	194.9	351.5	5.3727 ug/L	5.3727 ppb	17:25:29
3	Co 228.616†	145.5	191.7	5.2988 ug/L	5.2988 ppb	17:25:29
3	Cr 267.716†	428.3	376.3	5.1504 ug/L	5.1504 ppb	17:25:29
3	Cu 324.752†	9165.6	2970.2	10.002 ug/L	10.002 ppb	17:25:09
3	Mn 257.610†	7853.3	7468.6	10.318 ug/L	10.318 ppb	17:25:09
3	Mo 202.031†	112.6	99.7	9.1139 ug/L	9.1139 ppb	17:25:29
3	Ni 231.604†	222.2	162.0	5.4111 ug/L	5.4111 ppb	17:25:29
3	P 214.914†	356.5	192.8	152.91 ug/L	152.91 ppb	17:25:29
3	Pb 220.353†	11.4	55.1	9.0943 ug/L	9.0943 ppb	17:25:29
3	S 181.975 Axial†	81.4	50.8	96.919 ug/L	96.919 ppb	17:25:29
3	Sb 206.836†	49.5	26.8	11.870 ug/L	11.870 ppb	17:25:29
3	Se 196.026†	18.2	39.0	33.516 ug/L	33.516 ppb	17:25:29
3	Si 251.611†	2973.2	2502.5	97.729 ug/L	97.729 ppb	17:25:29
3	Sn 189.927†	50.7	43.0	10.284 ug/L	10.284 ppb	17:25:29
3	Ti 334.940†	1733.4	2664.9	4.7491 ug/L	4.7491 ppb	17:25:09
3	Tl 190.801†	15.7	41.6	17.189 ug/L	17.189 ppb	17:25:29
3	U 409.014†	-92.9	1879.0	57.057 ug/L	57.057 ppb	17:25:09
3	V 292.402†	-679.1	512.0	4.4271 ug/L	4.4271 ppb	17:25:09
3	Zn 213.857†	1453.8	945.1	12.035 ug/L	12.035 ppb	17:25:29
3	SiO2†	3098.5	2629.0	220.63 ug/L	220.63 ppb	17:25:45

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	799396.1	100.94	%	1.012				1.00%
Sc Radial	3242.3	101	%	0.9				0.85%
Y 371.029	684164.7	100.96	%	0.896				0.89%
Y RADIAL	2661.3	101.3	%	0.86				0.85%
Ag 328.068†	955.5	5.0537	ug/L	0.23985	5.0537	ppb	0.23985	4.75%
QC value within limits for Ag 328.068 Recovery = 101.07%								
Al 396.153Radial†	100.7	217.35	ug/L	5.831	217.35	ppb	5.831	2.68%
QC value within limits for Al 396.153Radial Recovery = 108.67%								
As 188.979†	49.4	28.950	ug/L	1.3619	28.950	ppb	1.3619	4.70%
QC value within limits for As 188.979 Recovery = 96.50%								
B 249.677†	1852.9	53.898	ug/L	1.0511	53.898	ppb	1.0511	1.95%
QC value within limits for B 249.677 Recovery = 107.80%								
Ba 233.527†	516.9	5.1291	ug/L	0.10983	5.1291	ppb	0.10983	2.14%
QC value within limits for Ba 233.527 Recovery = 102.58%								
Be 313.107†	11066.3	5.0162	ug/L	0.01530	5.0162	ppb	0.01530	0.31%
QC value within limits for Be 313.107 Recovery = 100.32%								
Ca 317.933Radial†	48.9	204.22	ug/L	7.652	204.22	ppb	7.652	3.75%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.11%
Cd 226.502†              344.2      5.2592 ug/L       0.11038      5.2592 ppb        0.11038   2.10%
   QC value within limits for Cd 226.502  Recovery = 105.18%
Co 228.616†              189.3      5.2344 ug/L       0.17924      5.2344 ppb        0.17924   3.42%
   QC value within limits for Co 228.616  Recovery = 104.69%
Cr 267.716†              375.5      5.1411 ug/L       0.02406      5.1411 ppb        0.02406   0.47%
   QC value within limits for Cr 267.716  Recovery = 102.82%
Cu 324.752†             2953.4      9.9474 ug/L       0.09442      9.9474 ppb        0.09442   0.95%
   QC value within limits for Cu 324.752  Recovery = 99.47%
Fe 238.204 Radial†         1.9      55.681 ug/L       21.0779      55.681 ppb        21.0779  37.85%
   QC value less than the lower limit for Fe 238.204 Radial  Recovery = 55.68%
K 766.490 Radial†        314.3      153.34 ug/L        21.518      153.34 ppb         21.518  14.03%
   QC value within limits for K 766.490 Radial  Recovery = 102.23%
Mg 279.077 IEC†            3.7      380.77 ug/L       188.574      380.77 ppb        188.574  49.52%
   QC value within limits for Mg 279.077 IEC  Recovery = 126.92%
Mn 257.610†             7512.2      10.380 ug/L        0.0561      10.380 ppb         0.0561   0.54%
   QC value within limits for Mn 257.610  Recovery = 103.80%
Mo 202.031†              103.4      9.4539 ug/L       0.29981      9.4539 ppb        0.29981   3.17%
   QC value within limits for Mo 202.031  Recovery = 94.54%
Na 589.592 Radial†       895.1      283.16 ug/L        22.542      283.16 ppb         22.542   7.96%
   QC value within limits for Na 589.592 Radial  Recovery = 94.39%
Ni 231.604†              169.3      5.6575 ug/L       0.27333      5.6575 ppb        0.27333   4.83%
   QC value within limits for Ni 231.604  Recovery = 113.15%
P 214.914†               190.8      151.24 ug/L         1.785      151.24 ppb          1.785   1.18%
   QC value within limits for P 214.914  Recovery = 100.83%
Pb 220.353†               62.0      10.225 ug/L        1.3998      10.225 ppb         1.3998  13.69%
   QC value within limits for Pb 220.353  Recovery = 102.25%
S 181.975 Axial†          49.8      94.987 ug/L        6.4960      94.987 ppb         6.4960   6.84%
   QC value within limits for S 181.975 Axial  Recovery = 94.99%
Sb 206.836†               24.7      10.954 ug/L        2.8646      10.954 ppb         2.8646  26.15%
   QC value within limits for Sb 206.836  Recovery = 109.54%
Se 196.026†               41.0      35.323 ug/L        2.7145      35.323 ppb         2.7145   7.68%
   QC value within limits for Se 196.026  Recovery = 117.74%
Si 251.611†             2489.2      97.203 ug/L        0.4706      97.203 ppb         0.4706   0.48%
   QC value within limits for Si 251.611  Recovery = 97.20%
Sn 189.927†               41.6      9.9419 ug/L       0.43866      9.9419 ppb        0.43866   4.41%
   QC value within limits for Sn 189.927  Recovery = 99.42%
Sr 421.552†              492.4      4.7401 ug/L       0.09432      4.7401 ppb        0.09432   1.99%
   QC value within limits for Sr 421.552  Recovery = 94.80%
Ti 334.940†             2747.3      4.8984 ug/L       0.12932      4.8984 ppb        0.12932   2.64%
   QC value within limits for Ti 334.940  Recovery = 97.97%
Tl 190.801†               46.9      19.345 ug/L        2.9315      19.345 ppb         2.9315  15.15%
   QC value within limits for Tl 190.801  Recovery = 96.73%
U 409.014†              1796.5      54.550 ug/L        2.4542      54.550 ppb         2.4542   4.50%
   QC value within limits for U 409.014  Recovery = 109.10%
V 292.402†               526.4      4.5427 ug/L       0.10472      4.5427 ppb        0.10472   2.31%
   QC value within limits for V 292.402  Recovery = 90.85%
Zn 213.857†              943.9      12.017 ug/L        0.0568      12.017 ppb         0.0568   0.47%
   QC value within limits for Zn 213.857  Recovery = 120.17%
SiO2†                   2570.2      215.67 ug/L         4.522      215.67 ppb          4.522   2.10%
   QC value within limits for SiO2  Recovery = 101.25%
QC Failed.  Continue with analysis.
```

Sequence No.: 9
Sample ID: ICSA
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 3/10/2010 17:27:57
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	3111.8	3111.8	97.1	%			17:30:11
1	Y RADIAL	2539.8	2539.8	96.66	%			17:30:11
1	Al 396.153Radial†	226812.0	233637.4	505540	ug/L	505540	ppb	17:29:51
1	Ca 317.933Radial†	109445.2	112696.2	470870	ug/L	470870	ppb	17:29:51
1	Fe 238.204 Radial†	6144.4	6318.2	181850	ug/L	181850	ppb	17:30:11
1	K 766.490 Radial†	1924.4	-44.8	-179.42	ug/L	-179.42	ppb	17:29:51
1	Mg 279.077 IEC†	4577.0	4711.8	487400	ug/L	487400	ppb	17:30:11
1	Na 589.592 Radial†	-523.0	194.0	61.380	ug/L	61.380	ppb	17:30:11
1	Sr 421.552†	384.7	361.6	-0.0341	ug/L	-0.0341	ppb	17:30:11
1	Sc 361.383	729561.3	729561.3	92.120	%			17:31:08
1	Y 371.029	611690.9	611690.9	90.268	%			17:31:08
1	Ag 328.068†	-8653.7	-9525.3	-0.6430	ug/L	-0.6430	ppb	17:31:08
1	As 188.979†	-88.2	-76.9	-2.6441	ug/L	-2.6441	ppb	17:31:28
1	B 249.677†	569.3	995.2	-0.5738	ug/L	-0.5738	ppb	17:31:08
1	Ba 233.527†	-460.1	-499.2	0.6282	ug/L	0.6282	ppb	17:31:28
1	Be 313.107†	-3788.7	-570.9	-0.3169	ug/L	-0.3169	ppb	17:31:08
1	Cd 226.502†	1114.7	1366.3	2.0696	ug/L	2.0696	ppb	17:31:28
1	Co 228.616†	6.1	52.5	-1.1733	ug/L	-1.1733	ppb	17:31:28
1	Cr 267.716†	-523.5	-621.1	-1.0617	ug/L	-1.0617	ppb	17:31:28
1	Cu 324.752†	3837.7	-2046.0	2.6860	ug/L	2.6860	ppb	17:31:28
1	Mn 257.610†	298.3	-75.0	-2.0793	ug/L	-2.0793	ppb	17:31:08
1	Mo 202.031†	-208.5	-239.3	-2.1381	ug/L	-2.1381	ppb	17:31:28
1	Ni 231.604†	132.8	83.5	2.7918	ug/L	2.7918	ppb	17:31:28
1	P 214.914†	123.9	-29.9	-43.795	ug/L	-43.795	ppb	17:31:28
1	Pb 220.353†	-563.7	-568.2	-0.6877	ug/L	-0.6877	ppb	17:31:28
1	S 181.975 Axial†	43.6	16.5	-63.245	ug/L	-63.245	ppb	17:31:28
1	Sb 206.836†	50.6	32.1	-3.4424	ug/L	-3.4424	ppb	17:31:28
1	Se 196.026†	-716.4	-757.0	-3.1077	ug/L	-3.1077	ppb	17:31:28
1	Si 251.611†	348.0	-98.3	-3.5750	ug/L	-3.5750	ppb	17:31:28
1	Sn 189.927†	-311.2	-345.7	-9.1032	ug/L	-9.1032	ppb	17:31:28
1	Ti 334.940†	-14126.6	-14406.5	-2.5311	ug/L	-2.5311	ppb	17:31:08
1	Tl 190.801†	-73.9	-54.3	-22.581	ug/L	-22.581	ppb	17:31:28
1	U 409.014†	-226.0	1726.8	31.738	ug/L	31.738	ppb	17:31:08
1	V 292.402†	850.9	2116.0	0.0902	ug/L	0.0902	ppb	17:31:28
1	Zn 213.857†	2451.1	2149.3	0.2711	ug/L	0.2711	ppb	17:31:28
1	SiO2†	357.7	-86.7	-6.6884	ug/L	-6.6884	ppb	17:32:24
2	Sc Radial	3125.3	3125.3	97.5	%			17:30:36
2	Y RADIAL	2558.7	2558.7	97.38	%			17:30:36
2	Al 396.153Radial†	224247.5	229995.2	497660	ug/L	497660	ppb	17:30:16
2	Ca 317.933Radial†	108373.3	111108.6	464230	ug/L	464230	ppb	17:30:16
2	Fe 238.204 Radial†	6150.0	6296.4	181220	ug/L	181220	ppb	17:30:36
2	K 766.490 Radial†	1935.6	-42.0	-175.80	ug/L	-175.80	ppb	17:30:16
2	Mg 279.077 IEC†	4609.3	4724.4	488710	ug/L	488710	ppb	17:30:36
2	Na 589.592 Radial†	-595.2	122.3	38.690	ug/L	38.690	ppb	17:30:36
2	Sr 421.552†	399.4	374.9	0.1435	ug/L	0.1435	ppb	17:30:36
2	Sc 361.383	726310.0	726310.0	91.710	%			17:31:33
2	Y 371.029	608445.8	608445.8	89.789	%			17:31:33
2	Ag 328.068†	-8729.4	-9649.8	-1.4031	ug/L	-1.4031	ppb	17:31:33
2	As 188.979†	-61.3	-48.0	14.176	ug/L	14.176	ppb	17:31:53
2	B 249.677†	518.2	942.3	-2.0110	ug/L	-2.0110	ppb	17:31:33
2	Ba 233.527†	-462.4	-503.9	0.5622	ug/L	0.5622	ppb	17:31:53
2	Be 313.107†	-3731.7	-527.1	-0.2973	ug/L	-0.2973	ppb	17:31:33
2	Cd 226.502†	1113.2	1370.1	2.1918	ug/L	2.1918	ppb	17:31:53
2	Co 228.616†	11.4	58.3	-1.0010	ug/L	-1.0010	ppb	17:31:53
2	Cr 267.716†	-549.8	-652.4	-1.5148	ug/L	-1.5148	ppb	17:31:53
2	Cu 324.752†	3756.5	-2115.9	2.4194	ug/L	2.4194	ppb	17:31:53
2	Mn 257.610†	237.0	-140.5	-2.2850	ug/L	-2.2850	ppb	17:31:33
2	Mo 202.031†	-195.6	-226.3	-1.0746	ug/L	-1.0746	ppb	17:31:53
2	Ni 231.604†	124.2	74.8	2.4997	ug/L	2.4997	ppb	17:31:53

2	P 214.914†	134.5	-17.7	-35.430	ug/L	-35.430 ppb	17:31:53
2	Pb 220.353†	-558.2	-565.0	-1.9047	ug/L	-1.9047 ppb	17:31:53
2	S 181.975 Axial†	38.5	11.2	-71.854	ug/L	-71.854 ppb	17:31:53
2	Sb 206.836†	53.4	35.5	-1.7430	ug/L	-1.7430 ppb	17:31:53
2	Se 196.026†	-744.2	-790.8	-35.962	ug/L	-35.962 ppb	17:31:53
2	Si 251.611†	405.6	-33.8	-1.0675	ug/L	-1.0675 ppb	17:31:53
2	Sn 189.927†	-309.4	-345.2	-10.131	ug/L	-10.131 ppb	17:31:53
2	Ti 334.940†	-14101.2	-14447.5	-3.5987	ug/L	-3.5987 ppb	17:31:33
2	Tl 190.801†	-56.6	-35.7	-14.944	ug/L	-14.944 ppb	17:31:53
2	U 409.014†	-367.8	1571.0	27.079	ug/L	27.079 ppb	17:31:33
2	V 292.402†	839.4	2107.5	0.1449	ug/L	0.1449 ppb	17:31:53
2	Zn 213.857†	2457.6	2168.4	0.6106	ug/L	0.6106 ppb	17:31:53
2	SiO2†	340.7	-103.5	-8.1333	ug/L	-8.1333 ppb	17:32:29
3	Sc Radial	3125.6	3125.6	97.5	%		17:31:01
3	Y RADIAL	2549.0	2549.0	97.01	%		17:31:01
3	Al 396.153Radial†	227846.1	233666.6	505600	ug/L	505600 ppb	17:30:41
3	Ca 317.933Radial†	109957.5	112724.0	470980	ug/L	470980 ppb	17:30:41
3	Fe 238.204 Radial†	6145.0	6290.8	181060	ug/L	181060 ppb	17:31:01
3	K 766.490 Radial†	1937.3	-40.3	-177.25	ug/L	-177.25 ppb	17:30:41
3	Mg 279.077 IEC†	4601.5	4716.1	487840	ug/L	487840 ppb	17:31:01
3	Na 589.592 Radial†	-562.8	155.6	49.217	ug/L	49.217 ppb	17:31:01
3	Sr 421.552†	390.6	365.8	0.0062	ug/L	0.0062 ppb	17:31:01
3	Sc 361.383	719376.9	719376.9	90.834	%		17:31:59
3	Y 371.029	603067.5	603067.5	88.995	%		17:31:59
3	Ag 328.068†	-8573.3	-9569.7	-1.1178	ug/L	-1.1178 ppb	17:31:59
3	As 188.979†	-77.3	-66.3	3.4296	ug/L	3.4296 ppb	17:32:19
3	B 249.677†	465.8	890.1	-3.5044	ug/L	-3.5044 ppb	17:31:59
3	Ba 233.527†	-483.6	-532.1	0.2788	ug/L	0.2788 ppb	17:32:19
3	Be 313.107†	-3761.4	-599.0	-0.3302	ug/L	-0.3302 ppb	17:31:59
3	Cd 226.502†	1108.3	1376.4	2.3036	ug/L	2.3036 ppb	17:32:19
3	Co 228.616†	-5.9	39.4	-1.5227	ug/L	-1.5227 ppb	17:32:19
3	Cr 267.716†	-512.1	-616.6	-1.0293	ug/L	-1.0293 ppb	17:32:19
3	Cu 324.752†	3719.0	-2117.7	2.4064	ug/L	2.4064 ppb	17:32:19
3	Mn 257.610†	268.8	-102.9	-2.2138	ug/L	-2.2138 ppb	17:31:59
3	Mo 202.031†	-203.7	-237.3	-2.0155	ug/L	-2.0155 ppb	17:32:19
3	Ni 231.604†	132.2	85.0	2.8393	ug/L	2.8393 ppb	17:32:19
3	P 214.914†	128.6	-22.8	-37.452	ug/L	-37.452 ppb	17:32:19
3	Pb 220.353†	-565.0	-578.3	-2.2222	ug/L	-2.2222 ppb	17:32:19
3	S 181.975 Axial†	34.8	7.5	-80.450	ug/L	-80.450 ppb	17:32:19
3	Sb 206.836†	67.8	51.9	5.0213	ug/L	5.0213 ppb	17:32:19
3	Se 196.026†	-726.5	-779.1	-24.164	ug/L	-24.164 ppb	17:32:19
3	Si 251.611†	366.4	-72.8	-2.5777	ug/L	-2.5777 ppb	17:32:19
3	Sn 189.927†	-318.9	-358.9	-12.190	ug/L	-12.190 ppb	17:32:19
3	Ti 334.940†	-14064.0	-14554.7	-2.8145	ug/L	-2.8145 ppb	17:31:59
3	Tl 190.801†	-73.1	-54.5	-22.681	ug/L	-22.681 ppb	17:32:19
3	U 409.014†	-439.1	1488.7	24.595	ug/L	24.595 ppb	17:31:59
3	V 292.402†	843.1	2120.4	0.2385	ug/L	0.2385 ppb	17:32:19
3	Zn 213.857†	2451.0	2186.9	0.8694	ug/L	0.8694 ppb	17:32:19
3	SiO2†	350.2	-89.5	-6.9314	ug/L	-6.9314 ppb	17:32:34

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	725082.7	91.555	%	0.6568				0.72%
Sc Radial	3120.9	97.4	%	0.25				0.25%
Y 371.029	607734.7	89.684	%	0.6427				0.72%
Y RADIAL	2549.2	97.02	%	0.361				0.37%
Ag 328.068†	-9581.6	-1.0546	ug/L	0.38395	-1.0546	ppb	0.38395	36.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	232433.0	502930	ug/L	4568.4	502930	ppb	4568.4	0.91%
QC value within limits for Al 396.153Radial Recovery = 100.59%								
As 188.979†	-63.7	4.9873	ug/L	8.51772	4.9873	ppb	8.51772	170.79%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	942.5	-2.0297	ug/L	1.46536	-2.0297	ppb	1.46536	72.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	-511.7	0.4898	ug/L	0.18562	0.4898	ppb	0.18562	37.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	-565.7	-0.3148	ug/L	0.01657	-0.3148	ppb	0.01657	5.27%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	112176.3	468690	ug/L	3863.7	468690	ppb	3863.7	0.82%

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   QC value within limits for Ca 317.933Radial  Recovery = 93.74%
Cd 226.502†            1370.9      2.1883 ug/L       0.11704      2.1883 ppb        0.11704   5.35%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†              50.1     -1.2323 ug/L       0.26578     -1.2323 ppb        0.26578  21.57%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -630.0     -1.2019 ug/L       0.27143     -1.2019 ppb        0.27143  22.58%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†           -2093.2      2.5039 ug/L       0.15785      2.5039 ppb        0.15785   6.30%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†     6301.8     181380 ug/L         416.0     181380 ppb          416.0   0.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 90.69%
K 766.490 Radial†       -42.4     -177.49 ug/L         1.820     -177.49 ppb          1.820   1.03%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†        4717.4     487980 ug/L         664.2     487980 ppb          664.2   0.14%
   QC value within limits for Mg 279.077 IEC  Recovery = 97.60%
Mn 257.610†            -106.1     -2.1927 ug/L       0.10447     -2.1927 ppb        0.10447   4.76%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†            -234.3     -1.7428 ug/L       0.58185     -1.7428 ppb        0.58185  33.39%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†      157.3     49.762 ug/L       11.3547      49.762 ppb        11.3547  22.82%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†              81.1      2.7103 ug/L       0.18389      2.7103 ppb        0.18389   6.78%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†              -23.4     -38.892 ug/L        4.3643     -38.892 ppb         4.3643  11.22%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†            -570.5     -1.6048 ug/L       0.81001     -1.6048 ppb        0.81001  50.47%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         11.7     -71.850 ug/L        8.6027     -71.850 ppb         8.6027  11.97%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†              39.9     -0.0547 ug/L       4.47729     -0.0547 ppb        4.47729 >999.9%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -775.6     -21.078 ug/L       16.6432     -21.078 ppb        16.6432  78.96%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -68.3     -2.4067 ug/L       1.26246     -2.4067 ppb        1.26246  52.46%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -349.9     -10.475 ug/L        1.5720     -10.475 ppb         1.5720  15.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†             367.4      0.0385 ug/L       0.09312      0.0385 ppb        0.09312 241.85%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†          -14469.6     -2.9814 ug/L       0.55308     -2.9814 ppb        0.55308  18.55%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -48.2     -20.068 ug/L        4.4385     -20.068 ppb         4.4385  22.12%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†             1595.5      27.804 ug/L        3.6259      27.804 ppb         3.6259  13.04%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†             2114.6      0.1578 ug/L       0.07502      0.1578 ppb        0.07502  47.52%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†            2168.2      0.5837 ug/L       0.30008      0.5837 ppb        0.30008  51.41%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                   -93.2     -7.2511 ug/L       0.77369     -7.2511 ppb        0.77369  10.67%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 10
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 3/10/2010 17:34:46
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3096.4	3096.4	96.6	%			17:36:58
1	Y RADIAL	2547.9	2547.9	96.97	%			17:36:58
1	Al 396.153Radial†	232858.7	241052.1	521560	ug/L	521560	ppb	17:36:38
1	Ca 317.933Radial†	111212.6	115083.7	480840	ug/L	480840	ppb	17:36:38
1	Fe 238.204 Radial†	6240.3	6448.7	185620	ug/L	185620	ppb	17:36:58
1	K 766.490 Radial†	13507.0	11952.0	5675.5	ug/L	5675.5	ppb	17:36:38
1	Mg 279.077 IEC†	4636.1	4796.3	496140	ug/L	496140	ppb	17:36:58
1	Na 589.592 Radial†	15925.3	17214.0	5445.6	ug/L	5445.6	ppb	17:36:38
1	Sr 421.552†	51806.9	53581.3	512.40	ug/L	512.40	ppb	17:36:38
1	Sc 361.383	732866.6	732866.6	92.538	%			17:37:56
1	Y 371.029	615168.1	615168.1	90.781	%			17:37:56
1	Ag 328.068†	39199.0	42228.7	276.45	ug/L	276.45	ppb	17:37:56
1	As 188.979†	736.6	814.8	523.82	ug/L	523.82	ppb	17:38:16
1	B 249.677†	17157.1	18917.9	519.10	ug/L	519.10	ppb	17:37:56
1	Ba 233.527†	46182.0	49906.4	500.93	ug/L	500.93	ppb	17:37:56
1	Be 313.107†	499478.2	543298.1	246.82	ug/L	246.82	ppb	17:37:56
1	Cd 226.502†	28959.1	31450.7	460.98	ug/L	460.98	ppb	17:38:16
1	Co 228.616†	15125.5	16391.1	449.66	ug/L	449.66	ppb	17:38:16
1	Cr 267.716†	32264.7	34813.7	486.07	ug/L	486.07	ppb	17:37:56
1	Cu 324.752†	156972.3	163418.6	561.45	ug/L	561.45	ppb	17:37:56
1	Mn 257.610†	322560.4	348172.8	479.59	ug/L	479.59	ppb	17:37:56
1	Mo 202.031†	4771.2	5143.0	489.82	ug/L	489.82	ppb	17:38:16
1	Ni 231.604†	12560.7	13513.0	451.43	ug/L	451.43	ppb	17:38:16
1	P 214.914†	3090.8	3175.7	2424.0	ug/L	2424.0	ppb	17:38:16
1	Pb 220.353†	1997.4	2202.1	457.79	ug/L	457.79	ppb	17:38:16
1	S 181.975 Axial†	1339.2	1416.4	2607.7	ug/L	2607.7	ppb	17:38:16
1	Sb 206.836†	1198.1	1272.0	546.32	ug/L	546.32	ppb	17:38:16
1	Se 196.026†	2020.3	2203.9	2544.0	ug/L	2544.0	ppb	17:38:16
1	Si 251.611†	126343.9	136056.2	5313.6	ug/L	5313.6	ppb	17:37:56
1	Sn 189.927†	1571.0	1689.9	477.21	ug/L	477.21	ppb	17:38:16
1	Ti 334.940†	248557.0	269529.1	507.00	ug/L	507.00	ppb	17:37:56
1	Tl 190.801†	967.5	1071.5	444.10	ug/L	444.10	ppb	17:38:16
1	U 409.014†	14762.1	17924.6	522.22	ug/L	522.22	ppb	17:37:56
1	V 292.402†	58440.2	64345.1	516.72	ug/L	516.72	ppb	17:37:56
1	Zn 213.857†	38863.3	41485.8	499.27	ug/L	499.27	ppb	17:37:56
1	SiO2†	123363.6	132836.7	11147	ug/L	11147	ppb	17:39:12
2	Sc Radial	3139.2	3139.2	98.0	%			17:37:24
2	Y RADIAL	2576.3	2576.3	98.05	%			17:37:24
2	Al 396.153Radial†	231641.3	236528.1	511770	ug/L	511770	ppb	17:37:04
2	Ca 317.933Radial†	110696.8	112990.0	472090	ug/L	472090	ppb	17:37:04
2	Fe 238.204 Radial†	6311.9	6433.9	185190	ug/L	185190	ppb	17:37:24
2	K 766.490 Radial†	13388.8	11641.0	5526.5	ug/L	5526.5	ppb	17:37:04
2	Mg 279.077 IEC†	4698.1	4794.3	495930	ug/L	495930	ppb	17:37:24
2	Na 589.592 Radial†	15806.5	16868.3	5336.2	ug/L	5336.2	ppb	17:37:04
2	Sr 421.552†	51283.0	52316.6	500.29	ug/L	500.29	ppb	17:37:04
2	Sc 361.383	725944.0	725944.0	91.664	%			17:38:21
2	Y 371.029	608293.9	608293.9	89.766	%			17:38:21
2	Ag 328.068†	38730.2	42121.2	275.87	ug/L	275.87	ppb	17:38:21
2	As 188.979†	743.9	830.4	532.85	ug/L	532.85	ppb	17:38:41
2	B 249.677†	17014.7	18939.4	519.80	ug/L	519.80	ppb	17:38:21
2	Ba 233.527†	45711.2	49868.7	500.55	ug/L	500.55	ppb	17:38:21
2	Be 313.107†	494065.5	542540.3	246.48	ug/L	246.48	ppb	17:38:21
2	Cd 226.502†	28660.7	31423.6	460.61	ug/L	460.61	ppb	17:38:41
2	Co 228.616†	14927.3	16330.7	448.00	ug/L	448.00	ppb	17:38:41
2	Cr 267.716†	31984.9	34840.9	486.42	ug/L	486.42	ppb	17:38:21
2	Cu 324.752†	155390.4	163310.4	561.06	ug/L	561.06	ppb	17:38:21
2	Mn 257.610†	319883.1	348576.1	480.11	ug/L	480.11	ppb	17:38:21
2	Mo 202.031†	4730.3	5147.5	490.10	ug/L	490.10	ppb	17:38:41
2	Ni 231.604†	12463.8	13536.7	452.23	ug/L	452.23	ppb	17:38:41

2	P 214.914†	3034.1	3145.8	2397.9	ug/L	2397.9 ppb	17:38:41
2	Pb 220.353†	1986.7	2211.0	457.03	ug/L	457.03 ppb	17:38:41
2	S 181.975 Axial†	1317.7	1406.7	2591.1	ug/L	2591.1 ppb	17:38:41
2	Sb 206.836†	1169.6	1253.3	538.59	ug/L	538.59 ppb	17:38:41
2	Se 196.026†	1990.3	2192.0	2529.9	ug/L	2529.9 ppb	17:38:41
2	Si 251.611†	125375.0	136301.1	5323.2	ug/L	5323.2 ppb	17:38:21
2	Sn 189.927†	1569.8	1704.8	479.22	ug/L	479.22 ppb	17:38:41
2	Ti 334.940†	246867.5	270247.3	507.13	ug/L	507.13 ppb	17:38:21
2	Tl 190.801†	962.6	1076.1	446.01	ug/L	446.01 ppb	17:38:41
2	U 409.014†	14642.2	17945.9	522.91	ug/L	522.91 ppb	17:38:21
2	V 292.402†	57890.8	64348.0	516.81	ug/L	516.81 ppb	17:38:21
2	Zn 213.857†	38442.9	41427.7	498.59	ug/L	498.59 ppb	17:38:21
2	SiO2†	123713.8	134489.9	11286	ug/L	11286 ppb	17:39:17
3	Sc Radial	3102.5	3102.5	96.8	%		17:37:49
3	Y RADIAL	2552.3	2552.3	97.14	%		17:37:49
3	Al 396.153Radial†	233950.2	241707.9	522980	ug/L	522980 ppb	17:37:29
3	Ca 317.933Radial†	111711.2	115373.4	482050	ug/L	482050 ppb	17:37:29
3	Fe 238.204 Radial†	6241.4	6437.2	185290	ug/L	185290 ppb	17:37:49
3	K 766.490 Radial†	13450.5	11866.3	5633.2	ug/L	5633.2 ppb	17:37:29
3	Mg 279.077 IEC†	4636.7	4787.5	495230	ug/L	495230 ppb	17:37:49
3	Na 589.592 Radial†	15909.7	17165.7	5430.3	ug/L	5430.3 ppb	17:37:29
3	Sr 421.552†	51758.3	53426.3	510.90	ug/L	510.90 ppb	17:37:29
3	Sc 361.383	725559.0	725559.0	91.615	%		17:38:47
3	Y 371.029	608403.4	608403.4	89.783	%		17:38:47
3	Ag 328.068†	38775.6	42193.2	276.14	ug/L	276.14 ppb	17:38:47
3	As 188.979†	741.3	828.0	531.48	ug/L	531.48 ppb	17:39:07
3	B 249.677†	17000.5	18933.7	519.61	ug/L	519.61 ppb	17:38:47
3	Ba 233.527†	45654.5	49833.3	500.20	ug/L	500.20 ppb	17:38:47
3	Be 313.107†	492926.4	541583.0	246.04	ug/L	246.04 ppb	17:38:47
3	Cd 226.502†	28859.3	31656.9	464.16	ug/L	464.16 ppb	17:39:07
3	Co 228.616†	15051.9	16475.4	451.99	ug/L	451.99 ppb	17:39:07
3	Cr 267.716†	31912.3	34780.2	485.59	ug/L	485.59 ppb	17:38:47
3	Cu 324.752†	155286.6	163287.1	560.99	ug/L	560.99 ppb	17:38:47
3	Mn 257.610†	319088.0	347893.3	479.20	ug/L	479.20 ppb	17:38:47
3	Mo 202.031†	4730.4	5150.3	490.48	ug/L	490.48 ppb	17:39:07
3	Ni 231.604†	12511.7	13596.2	454.21	ug/L	454.21 ppb	17:39:07
3	P 214.914†	3063.1	3179.2	2427.5	ug/L	2427.5 ppb	17:39:07
3	Pb 220.353†	1992.8	2218.9	460.93	ug/L	460.93 ppb	17:39:07
3	S 181.975 Axial†	1331.9	1423.0	2620.0	ug/L	2620.0 ppb	17:39:07
3	Sb 206.836†	1194.5	1281.1	550.28	ug/L	550.28 ppb	17:39:07
3	Se 196.026†	1995.2	2198.5	2538.8	ug/L	2538.8 ppb	17:39:07
3	Si 251.611†	125099.4	136073.0	5314.2	ug/L	5314.2 ppb	17:38:47
3	Sn 189.927†	1573.4	1709.6	482.14	ug/L	482.14 ppb	17:39:07
3	Ti 334.940†	246209.8	269672.3	507.49	ug/L	507.49 ppb	17:38:47
3	Tl 190.801†	961.8	1075.8	445.88	ug/L	445.88 ppb	17:39:07
3	U 409.014†	14695.1	18012.1	524.92	ug/L	524.92 ppb	17:38:47
3	V 292.402†	57762.8	64241.8	515.92	ug/L	515.92 ppb	17:38:47
3	Zn 213.857†	38492.7	41504.4	499.54	ug/L	499.54 ppb	17:38:47
3	SiO2†	125479.6	136488.9	11454	ug/L	11454 ppb	17:39:23

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	728123.2	91.939	%	0.5193				0.56%
Sc Radial	3112.7	97.1	%	0.72				0.74%
Y 371.029	610621.8	90.110	%	0.5811				0.64%
Y RADIAL	2558.9	97.39	%	0.582				0.60%
Ag 328.068†	42181.0	276.16	ug/L	0.292	276.16	ppb	0.292	0.11%
QC value within limits for Ag 328.068 Recovery = 110.46%								
Al 396.153Radial†	239762.7	518770	ug/L	6102.6	518770	ppb	6102.6	1.18%
QC value within limits for Al 396.153Radial Recovery = 103.75%								
As 188.979†	824.4	529.38	ug/L	4.867	529.38	ppb	4.867	0.92%
QC value within limits for As 188.979 Recovery = 105.88%								
B 249.677†	18930.3	519.50	ug/L	0.362	519.50	ppb	0.362	0.07%
QC value within limits for B 249.677 Recovery = 103.90%								
Ba 233.527†	49869.5	500.56	ug/L	0.368	500.56	ppb	0.368	0.07%
QC value within limits for Ba 233.527 Recovery = 100.11%								
Be 313.107†	542473.8	246.45	ug/L	0.389	246.45	ppb	0.389	0.16%
QC value within limits for Be 313.107 Recovery = 98.58%								
Ca 317.933Radial†	114482.4	478330	ug/L	5433.7	478330	ppb	5433.7	1.14%

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   QC value within limits for Ca 317.933Radial  Recovery = 95.67%
Cd 226.502†            31510.4      461.92 ug/L         1.953      461.92 ppb          1.953   0.42%
   QC value within limits for Cd 226.502  Recovery = 92.38%
Co 228.616†            16399.1      449.88 ug/L         2.006      449.88 ppb          2.006   0.45%
   QC value within limits for Co 228.616  Recovery = 89.98%
Cr 267.716†            34811.6      486.03 ug/L         0.417      486.03 ppb          0.417   0.09%
   QC value within limits for Cr 267.716  Recovery = 97.21%
Cu 324.752†           163338.7      561.17 ug/L         0.249      561.17 ppb          0.249   0.04%
   QC value within limits for Cu 324.752  Recovery = 112.23%
Fe 238.204 Radial†      6439.9      185370 ug/L         223.2      185370 ppb          223.2   0.12%
   QC value within limits for Fe 238.204 Radial  Recovery = 92.68%
K 766.490 Radial†      11819.8      5611.7 ug/L         76.78      5611.7 ppb          76.78   1.37%
   QC value within limits for K 766.490 Radial  Recovery = 112.23%
Mg 279.077 IEC†         4792.7      495770 ug/L         476.2      495770 ppb          476.2   0.10%
   QC value within limits for Mg 279.077 IEC  Recovery = 99.15%
Mn 257.610†           348214.1      479.63 ug/L         0.455      479.63 ppb          0.455   0.09%
   QC value within limits for Mn 257.610  Recovery = 95.93%
Mo 202.031†             5146.9      490.13 ug/L         0.330      490.13 ppb          0.330   0.07%
   QC value within limits for Mo 202.031  Recovery = 98.03%
Na 589.592 Radial†     17082.7      5404.0 ug/L         59.22      5404.0 ppb          59.22   1.10%
   QC value within limits for Na 589.592 Radial  Recovery = 108.08%
Ni 231.604†            13548.7      452.62 ug/L         1.432      452.62 ppb          1.432   0.32%
   QC value within limits for Ni 231.604  Recovery = 90.52%
P 214.914†              3166.9      2416.5 ug/L         16.14      2416.5 ppb          16.14   0.67%
   QC value within limits for P 214.914  Recovery = 96.66%
Pb 220.353†             2210.7      458.58 ug/L         2.066      458.58 ppb          2.066   0.45%
   QC value within limits for Pb 220.353  Recovery = 91.72%
S 181.975 Axial†        1415.4      2606.3 ug/L         14.50      2606.3 ppb          14.50   0.56%
   QC value within limits for S 181.975 Axial  Recovery = 104.25%
Sb 206.836†             1268.8      545.06 ug/L         5.947      545.06 ppb          5.947   1.09%
   QC value within limits for Sb 206.836  Recovery = 109.01%
Se 196.026†             2198.1      2537.6 ug/L          7.15      2537.6 ppb           7.15   0.28%
   QC value within limits for Se 196.026  Recovery = 101.50%
Si 251.611†           136143.4      5317.0 ug/L          5.35      5317.0 ppb           5.35   0.10%
   QC value within limits for Si 251.611  Recovery = 106.34%
Sn 189.927†             1701.4      479.53 ug/L         2.478      479.53 ppb          2.478   0.52%
   QC value within limits for Sn 189.927  Recovery = 95.91%
Sr 421.552†            53108.0      507.87 ug/L         6.603      507.87 ppb          6.603   1.30%
   QC value within limits for Sr 421.552  Recovery = 101.57%
Ti 334.940†           269816.2      507.21 ug/L         0.255      507.21 ppb          0.255   0.05%
   QC value within limits for Ti 334.940  Recovery = 101.44%
Tl 190.801†             1074.5      445.33 ug/L         1.066      445.33 ppb          1.066   0.24%
   QC value within limits for Tl 190.801  Recovery = 89.07%
U 409.014†             17960.9      523.35 ug/L         1.400      523.35 ppb          1.400   0.27%
   QC value within limits for U 409.014  Recovery = 104.67%
V 292.402†             64311.6      516.48 ug/L         0.490      516.48 ppb          0.490   0.09%
   QC value within limits for V 292.402  Recovery = 103.30%
Zn 213.857†            41472.6      499.13 ug/L         0.492      499.13 ppb          0.492   0.10%
   QC value within limits for Zn 213.857  Recovery = 99.83%
SiO2†                 134605.2       11296 ug/L         153.6       11296 ppb          153.6   1.36%
   QC value within limits for SiO2  Recovery = 105.62%
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: LR1
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 3/10/2010 17:41:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3041.1	3041.1	94.9	%			17:43:45
1	Y RADIAL	2499.1	2499.1	95.11	%			17:43:45
1	Al 396.153Radial†	224027.1	236133.1	510940	ug/L	510940	ppb	17:43:25
1	Ca 317.933Radial†	110852.3	116799.4	488010	ug/L	488010	ppb	17:43:25
1	Fe 238.204 Radial†	14344.5	15106.2	434790	ug/L	434790	ppb	17:43:45
1	K 766.490 Radial†	2502.4	610.3	-57.796	ug/L	-57.796	ppb	17:43:25
1	Mg 279.077 IEC†	4641.8	4889.7	505540	ug/L	505540	ppb	17:43:45
1	Na 589.592 Radial†	1481728.5	1562120.8	494170	ug/L	494170	ppb	17:43:25
1	Sr 421.552†	1207.8	1238.1	8.2791	ug/L	8.2791	ppb	17:43:45
1	Sc 361.383	708216.3	708216.3	89.425	%			17:44:44
1	Y 371.029	595223.0	595223.0	87.838	%			17:44:44
1	Ag 328.068†	-20165.8	-22681.8	-4.6998	ug/L	-4.6998	ppb	17:44:44
1	As 188.979†	-147.5	-146.1	16.199	ug/L	16.199	ppb	17:45:04
1	B 249.677†	1659.5	2233.0	-5.6438	ug/L	-5.6438	ppb	17:44:44
1	Ba 233.527†	-1269.1	-1418.9	-0.7581	ug/L	-0.7581	ppb	17:45:04
1	Be 313.107†	-10014.5	-7656.8	-3.5144	ug/L	-3.5144	ppb	17:44:44
1	Cd 226.502†	2875.1	3371.3	9.4727	ug/L	9.4727	ppb	17:45:04
1	Co 228.616†	193.6	262.3	0.8986	ug/L	0.8986	ppb	17:45:04
1	Cr 267.716†	-356.0	-451.0	5.6794	ug/L	5.6794	ppb	17:45:04
1	Cu 324.752†	1718.6	-4290.1	0.1334	ug/L	0.1334	ppb	17:44:44
1	Mn 257.610†	-18812.7	-21436.3	-7.3944	ug/L	-7.3944	ppb	17:44:44
1	Mo 202.031†	-421.6	-484.5	-4.6934	ug/L	-4.6934	ppb	17:45:04
1	Ni 231.604†	240.9	208.8	6.9739	ug/L	6.9739	ppb	17:45:04
1	P 214.914†	464.6	355.2	64.359	ug/L	64.359	ppb	17:45:04
1	Pb 220.353†	-408.3	-412.9	-9.8189	ug/L	-9.8189	ppb	17:45:04
1	S 181.975 Axial†	62.5	39.1	-21.020	ug/L	-21.020	ppb	17:45:04
1	Sb 206.836†	42.9	25.3	-9.9411	ug/L	-9.9411	ppb	17:45:04
1	Se 196.026†	-1749.3	-1935.5	-310.80	ug/L	-310.80	ppb	17:45:04
1	Si 251.611†	-378.6	-899.5	-34.622	ug/L	-34.622	ppb	17:45:04
1	Sn 189.927†	-336.4	-383.9	-29.694	ug/L	-29.694	ppb	17:45:04
1	Ti 334.940†	-12120.4	-12625.2	-5.1736	ug/L	-5.1736	ppb	17:44:44
1	Tl 190.801†	-106.8	-93.4	-38.854	ug/L	-38.854	ppb	17:45:04
1	U 409.014†	444449.2	498978.8	15107	ug/L	15107	ppb	17:44:44
1	V 292.402†	2020.2	3451.4	3.1328	ug/L	3.1328	ppb	17:45:04
1	Zn 213.857†	4727.1	4774.7	-4.0148	ug/L	-4.0148	ppb	17:45:04
1	SiO2†	-403.5	-926.3	-76.616	ug/L	-76.616	ppb	17:46:01
2	Sc Radial	3053.4	3053.4	95.3	%			17:44:11
2	Y RADIAL	2517.1	2517.1	95.80	%			17:44:11
2	Al 396.153Radial†	222609.1	233690.5	505650	ug/L	505650	ppb	17:43:51
2	Ca 317.933Radial†	110426.4	115880.1	484170	ug/L	484170	ppb	17:43:51
2	Fe 238.204 Radial†	14367.5	15069.2	433720	ug/L	433720	ppb	17:44:11
2	K 766.490 Radial†	2544.7	644.0	-37.702	ug/L	-37.702	ppb	17:43:51
2	Mg 279.077 IEC†	4647.5	4875.8	504110	ug/L	504110	ppb	17:44:11
2	Na 589.592 Radial†	1469738.3	1543224.1	488190	ug/L	488190	ppb	17:43:51
2	Sr 421.552†	1219.9	1245.7	8.3806	ug/L	8.3806	ppb	17:44:11
2	Sc 361.383	711092.3	711092.3	89.788	%			17:45:09
2	Y 371.029	596632.2	596632.2	88.046	%			17:45:09
2	Ag 328.068†	-20205.8	-22635.1	-4.7286	ug/L	-4.7286	ppb	17:45:09
2	As 188.979†	-143.2	-140.7	19.115	ug/L	19.115	ppb	17:45:30
2	B 249.677†	1667.4	2234.3	-5.4383	ug/L	-5.4383	ppb	17:45:09
2	Ba 233.527†	-1289.6	-1436.0	-0.9587	ug/L	-0.9587	ppb	17:45:30
2	Be 313.107†	-9932.6	-7520.3	-3.4529	ug/L	-3.4529	ppb	17:45:09
2	Cd 226.502†	2863.5	3345.5	9.1881	ug/L	9.1881	ppb	17:45:30
2	Co 228.616†	225.4	296.9	1.8693	ug/L	1.8693	ppb	17:45:30
2	Cr 267.716†	-345.0	-437.1	5.8260	ug/L	5.8260	ppb	17:45:30
2	Cu 324.752†	1625.7	-4401.4	-0.2992	ug/L	-0.2992	ppb	17:45:09
2	Mn 257.610†	-18851.1	-21393.9	-7.3822	ug/L	-7.3822	ppb	17:45:09
2	Mo 202.031†	-415.5	-475.8	-4.0229	ug/L	-4.0229	ppb	17:45:30
2	Ni 231.604†	247.1	214.6	7.1670	ug/L	7.1670	ppb	17:45:30

2	P 214.914†	464.6	353.1	62.326 ug/L	62.326 ppb	17:45:30
2	Pb 220.353†	-417.4	-421.2	-12.247 ug/L	-12.247 ppb	17:45:30
2	S 181.975 Axial†	51.8	26.9	-43.459 ug/L	-43.459 ppb	17:45:30
2	Sb 206.836†	43.8	26.1	-9.3659 ug/L	-9.3659 ppb	17:45:30
2	Se 196.026†	-1747.8	-1925.9	-306.96 ug/L	-306.96 ppb	17:45:30
2	Si 251.611†	-428.2	-953.0	-36.726 ug/L	-36.726 ppb	17:45:30
2	Sn 189.927†	-324.2	-368.9	-26.727 ug/L	-26.727 ppb	17:45:30
2	Ti 334.940†	-12214.0	-12674.7	-5.6606 ug/L	-5.6606 ppb	17:45:09
2	Tl 190.801†	-87.3	-71.3	-29.733 ug/L	-29.733 ppb	17:45:30
2	U 409.014†	446273.0	498999.9	15107 ug/L	15107 ppb	17:45:09
2	V 292.402†	2068.3	3495.7	3.6364 ug/L	3.6364 ppb	17:45:30
2	Zn 213.857†	4783.5	4816.1	-3.3264 ug/L	-3.3264 ppb	17:45:30
2	SiO2†	-441.5	-966.7	-80.035 ug/L	-80.035 ppb	17:46:06
3	Sc Radial	3066.8	3066.8	95.7 %		17:44:37
3	Y RADIAL	2531.8	2531.8	96.36 %		17:44:37
3	Al 396.153Radial†	226013.2	236225.2	511140 ug/L	511140 ppb	17:44:17
3	Ca 317.933Radial†	111898.3	116911.0	488480 ug/L	488480 ppb	17:44:17
3	Fe 238.204 Radial†	14430.4	15068.9	433710 ug/L	433710 ppb	17:44:37
3	K 766.490 Radial†	2419.6	501.6	-109.76 ug/L	-109.76 ppb	17:44:17
3	Mg 279.077 IEC†	4676.5	4884.8	505040 ug/L	505040 ppb	17:44:37
3	Na 589.592 Radial†	1484470.6	1551869.2	490930 ug/L	490930 ppb	17:44:17
3	Sr 421.552†	1237.6	1258.5	8.4720 ug/L	8.4720 ppb	17:44:37
3	Sc 361.383	711939.5	711939.5	89.895 %		17:45:35
3	Y 371.029	597879.3	597879.3	88.230 %		17:45:35
3	Ag 328.068†	-20327.4	-22743.6	-5.3750 ug/L	-5.3750 ppb	17:45:35
3	As 188.979†	-142.4	-139.6	19.751 ug/L	19.751 ppb	17:45:55
3	B 249.677†	1583.7	2138.9	-8.2089 ug/L	-8.2089 ppb	17:45:35
3	Ba 233.527†	-1263.0	-1404.6	-0.6509 ug/L	-0.6509 ppb	17:45:55
3	Be 313.107†	-9913.4	-7485.8	-3.4380 ug/L	-3.4380 ppb	17:45:35
3	Cd 226.502†	2861.1	3338.9	9.0895 ug/L	9.0895 ppb	17:45:55
3	Co 228.616†	201.4	269.9	1.1237 ug/L	1.1237 ppb	17:45:55
3	Cr 267.716†	-343.0	-434.4	5.8593 ug/L	5.8593 ppb	17:45:55
3	Cu 324.752†	1575.6	-4459.2	-0.4986 ug/L	-0.4986 ppb	17:45:35
3	Mn 257.610†	-18646.4	-21141.2	-7.0716 ug/L	-7.0716 ppb	17:45:35
3	Mo 202.031†	-424.8	-485.6	-4.8673 ug/L	-4.8673 ppb	17:45:55
3	Ni 231.604†	197.5	159.0	5.3119 ug/L	5.3119 ppb	17:45:55
3	P 214.914†	455.6	342.5	55.176 ug/L	55.176 ppb	17:45:55
3	Pb 220.353†	-438.3	-443.9	-14.709 ug/L	-14.709 ppb	17:45:55
3	S 181.975 Axial†	66.7	43.4	-12.958 ug/L	-12.958 ppb	17:45:55
3	Sb 206.836†	46.2	28.6	-8.4944 ug/L	-8.4944 ppb	17:45:55
3	Se 196.026†	-1733.8	-1908.0	-290.19 ug/L	-290.19 ppb	17:45:55
3	Si 251.611†	-439.9	-965.5	-37.202 ug/L	-37.202 ppb	17:45:55
3	Sn 189.927†	-337.1	-382.8	-29.291 ug/L	-29.291 ppb	17:45:55
3	Ti 334.940†	-12392.4	-12857.0	-5.4887 ug/L	-5.4887 ppb	17:45:35
3	Tl 190.801†	-96.0	-80.8	-33.658 ug/L	-33.658 ppb	17:45:55
3	U 409.014†	447003.3	499220.9	15114 ug/L	15114 ppb	17:45:35
3	V 292.402†	1951.7	3363.3	2.5709 ug/L	2.5709 ppb	17:45:55
3	Zn 213.857†	4741.1	4762.7	-3.9963 ug/L	-3.9963 ppb	17:45:55
3	SiO2†	-438.3	-962.6	-79.667 ug/L	-79.667 ppb	17:46:11

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	710416.0	89.703	%	0.2464				0.27%
Sc Radial	3053.8	95.3	%	0.40				0.42%
Y 371.029	596578.1	88.038	%	0.1961				0.22%
Y RADIAL	2516.0	95.76	%	0.622				0.65%
Ag 328.068†	-22686.8	-4.9345	ug/L	0.38180	-4.9345	ppb	0.38180	7.74%
Al 396.153Radial†	235349.6	509240	ug/L	3110.6	509240	ppb	3110.6	0.61%
QC value within limits for Al 396.153Radial Recovery = 101.85%								
As 188.979†	-142.1	18.355	ug/L	1.8936	18.355	ppb	1.8936	10.32%
B 249.677†	2202.1	-6.4304	ug/L	1.54371	-6.4304	ppb	1.54371	24.01%
Ba 233.527†	-1419.8	-0.7892	ug/L	0.15623	-0.7892	ppb	0.15623	19.80%
Be 313.107†	-7554.3	-3.4685	ug/L	0.04050	-3.4685	ppb	0.04050	1.17%
Ca 317.933Radial†	116530.2	486880	ug/L	2363.7	486880	ppb	2363.7	0.49%
QC value within limits for Ca 317.933Radial Recovery = 97.38%								
Cd 226.502†	3351.9	9.2501	ug/L	0.19899	9.2501	ppb	0.19899	2.15%
Co 228.616†	276.4	1.2972	ug/L	0.50809	1.2972	ppb	0.50809	39.17%
Cr 267.716†	-440.8	5.7883	ug/L	0.09573	5.7883	ppb	0.09573	1.65%
Cu 324.752†	-4383.6	-0.2214	ug/L	0.32311	-0.2214	ppb	0.32311	145.91%

Fe 238.204 Radial†	15081.5	434070	ug/L	617.2	434070	ppb	617.2	0.14%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 86.81%								
K 766.490 Radial†	585.3	-68.421	ug/L	37.1873	-68.421	ppb	37.1873	54.35%
Mg 279.077 IEC†	4883.4	504900	ug/L	728.2	504900	ppb	728.2	0.14%
QC value within limits for Mg 279.077 IEC Recovery = 100.98%								
Mn 257.610†	-21323.8	-7.2827	ug/L	0.18293	-7.2827	ppb	0.18293	2.51%
Mo 202.031†	-482.0	-4.5278	ug/L	0.44586	-4.5278	ppb	0.44586	9.85%
Na 589.592 Radial†	1552404.7	491100	ug/L	2992.6	491100	ppb	2992.6	0.61%
QC value within limits for Na 589.592 Radial Recovery = 98.22%								
Ni 231.604†	194.1	6.4843	ug/L	1.01989	6.4843	ppb	1.01989	15.73%
P 214.914†	350.3	60.620	ug/L	4.8232	60.620	ppb	4.8232	7.96%
Pb 220.353†	-426.0	-12.258	ug/L	2.4449	-12.258	ppb	2.4449	19.95%
S 181.975 Axial†	36.5	-25.812	ug/L	15.8050	-25.812	ppb	15.8050	61.23%
Sb 206.836†	26.6	-9.2671	ug/L	0.72835	-9.2671	ppb	0.72835	7.86%
Se 196.026†	-1923.1	-302.65	ug/L	10.961	-302.65	ppb	10.961	3.62%
Si 251.611†	-939.3	-36.183	ug/L	1.3728	-36.183	ppb	1.3728	3.79%
Sn 189.927†	-378.5	-28.571	ug/L	1.6091	-28.571	ppb	1.6091	5.63%
Sr 421.552†	1247.4	8.3772	ug/L	0.09653	8.3772	ppb	0.09653	1.15%
Ti 334.940†	-12719.0	-5.4410	ug/L	0.24699	-5.4410	ppb	0.24699	4.54%
Tl 190.801†	-81.8	-34.082	ug/L	4.5751	-34.082	ppb	4.5751	13.42%
U 409.014†	499066.5	15109	ug/L	4.1	15109	ppb	4.1	0.03%
QC value within limits for U 409.014 Recovery = 100.73%								
V 292.402†	3436.8	3.1134	ug/L	0.53298	3.1134	ppb	0.53298	17.12%
Zn 213.857†	4784.5	-3.7792	ug/L	0.39222	-3.7792	ppb	0.39222	10.38%
SiO2†	-951.9	-78.773	ug/L	1.8767	-78.773	ppb	1.8767	2.38%

QC Failed. Continue with analysis.

Sequence No.: 12
Sample ID: LR2
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 3/10/2010 17:48:21
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3310.9	3310.9	103	%			17:50:39
1	Y RADIAL	2699.3	2699.3	102.7	%			17:50:39
1	Al 396.153Radial†	156.1	213.1	-15.569	ug/L	-15.569	ppb	17:50:39
1	Ca 317.933Radial†	22.4	9.2	38.554	ug/L	38.554	ppb	17:50:39
1	Fe 238.204 Radial†	-2.5	-11.9	-55.942	ug/L	-55.942	ppb	17:50:39
1	K 766.490 Radial†	663136.4	639804.6	312560	ug/L	312560	ppb	17:50:14
1	Mg 279.077 IEC†	-0.1	-1.8	-84.716	ug/L	-84.716	ppb	17:50:39
1	Na 589.592 Radial†	149.4	877.2	277.51	ug/L	277.51	ppb	17:50:19
1	Sr 421.552†	1022669.2	989778.4	9531.7	ug/L	9531.7	ppb	17:50:14
1	Sc 361.383	822561.3	822561.3	103.86	%			17:51:56
1	Y 371.029	688529.6	688529.6	101.61	%			17:51:56
1	Ag 328.068†	-7003.2	-6874.0	4.6347	ug/L	4.6347	ppb	17:52:01
1	As 188.979†	17589.7	16954.3	9993.2	ug/L	9993.2	ppb	17:52:01
1	B 249.677†	177345.1	171125.7	4952.5	ug/L	4952.5	ppb	17:52:01
1	Ba 233.527†	1195987.2	1151501.3	11423	ug/L	11423	ppb	17:51:56
1	Be 313.107†	6659337.7	6415177.3	2924.0	ug/L	2924.0	ppb	17:51:50
1	Cd 226.502†	672614.7	647752.2	9887.3	ug/L	9887.3	ppb	17:51:56
1	Co 228.616†	361925.0	348508.6	9612.1	ug/L	9612.1	ppb	17:52:01
1	Cr 267.716†	1856190.1	1787094.0	24548	ug/L	24548	ppb	17:51:56
1	Cu 324.752†	6263520.2	6024328.8	20346	ug/L	20346	ppb	17:51:50
1	Mn 257.610†	7138500.6	6872576.4	9505.2	ug/L	9505.2	ppb	17:51:50
1	Mo 202.031†	111780.8	107610.0	9827.7	ug/L	9827.7	ppb	17:52:01
1	Ni 231.604†	306253.7	294801.6	9848.7	ug/L	9848.7	ppb	17:52:01
1	P 214.914†	24141.2	23078.9	14581	ug/L	14581	ppb	17:52:01
1	Pb 220.353†	151215.4	145634.4	23902	ug/L	23902	ppb	17:52:01
1	S 181.975 Axial†	27940.1	26870.0	51325	ug/L	51325	ppb	17:52:01
1	Sb 206.836†	25183.3	24223.8	10768	ug/L	10768	ppb	17:52:01
1	Se 196.026†	12305.9	11868.9	10174	ug/L	10174	ppb	17:52:01
1	Si 251.611†	1273608.9	1225759.4	47802	ug/L	47802	ppb	17:51:56
1	Sn 189.927†	44509.3	42845.9	10204	ug/L	10204	ppb	17:52:01
1	Ti 334.940†	5743744.8	5531027.5	9912.2	ug/L	9912.2	ppb	17:51:50
1	Tl 190.801†	24460.5	23576.6	9764.9	ug/L	9764.9	ppb	17:52:01
1	U 409.014†	-883.8	1121.2	-20.808	ug/L	-20.808	ppb	17:52:01
1	V 292.402†	1290832.5	1244010.7	10312	ug/L	10312	ppb	17:51:56
1	Zn 213.857†	1160803.2	1117114.3	14200	ug/L	14200	ppb	17:51:56
1	SiO2†	1263382.0	1215913.9	101890	ug/L	101890	ppb	17:52:46
2	Sc Radial	3346.6	3346.6	104	%			17:51:09
2	Y RADIAL	2710.1	2710.1	103.1	%			17:51:09
2	Al 396.153Radial†	165.9	220.8	6.7442	ug/L	6.7442	ppb	17:51:09
2	Ca 317.933Radial†	18.4	5.1	21.475	ug/L	21.475	ppb	17:51:09
2	Fe 238.204 Radial†	-1.4	-10.8	-25.603	ug/L	-25.603	ppb	17:51:09
2	K 766.490 Radial†	671314.2	640798.6	313050	ug/L	313050	ppb	17:50:44
2	Mg 279.077 IEC†	-0.6	-2.3	-138.31	ug/L	-138.31	ppb	17:51:09
2	Na 589.592 Radial†	105.4	833.6	263.69	ug/L	263.69	ppb	17:50:49
2	Sr 421.552†	1037954.7	993871.8	9571.1	ug/L	9571.1	ppb	17:50:44
2	Sc 361.383	829293.5	829293.5	104.71	%			17:52:15
2	Y 371.029	694151.1	694151.1	102.44	%			17:52:15
2	Ag 328.068†	-7055.0	-6868.8	4.5074	ug/L	4.5074	ppb	17:52:20
2	As 188.979†	17560.5	16788.9	9896.0	ug/L	9896.0	ppb	17:52:20
2	B 249.677†	176767.2	169187.8	4896.4	ug/L	4896.4	ppb	17:52:20
2	Ba 233.527†	1196895.8	1143021.1	11339	ug/L	11339	ppb	17:52:15
2	Be 313.107†	6643461.6	6347966.2	2893.4	ug/L	2893.4	ppb	17:52:09
2	Cd 226.502†	673207.0	643060.6	9815.7	ug/L	9815.7	ppb	17:52:15
2	Co 228.616†	361763.7	345525.8	9529.7	ug/L	9529.7	ppb	17:52:20
2	Cr 267.716†	1860907.2	1777090.7	24410	ug/L	24410	ppb	17:52:15
2	Cu 324.752†	6264173.8	5975997.1	20183	ug/L	20183	ppb	17:52:09
2	Mn 257.610†	7136298.7	6814678.8	9425.2	ug/L	9425.2	ppb	17:52:09
2	Mo 202.031†	111392.5	106365.4	9714.0	ug/L	9714.0	ppb	17:52:20
2	Ni 231.604†	305911.8	292081.4	9757.8	ug/L	9757.8	ppb	17:52:20

2	P 214.914†	24129.9	22879.4	14453	ug/L	14453 ppb	17:52:20
2	Pb 220.353†	151092.9	144335.5	23689	ug/L	23689 ppb	17:52:20
2	S 181.975 Axial†	27816.7	26533.8	50683	ug/L	50683 ppb	17:52:20
2	Sb 206.836†	25076.0	23924.5	10636	ug/L	10636 ppb	17:52:20
2	Se 196.026†	12249.0	11718.3	10045	ug/L	10045 ppb	17:52:20
2	Si 251.611†	1280745.2	1222619.8	47681	ug/L	47681 ppb	17:52:15
2	Sn 189.927†	44493.9	42483.3	10117	ug/L	10117 ppb	17:52:20
2	Ti 334.940†	5747870.5	5490074.2	9838.8	ug/L	9838.8 ppb	17:52:09
2	Tl 190.801†	24503.4	23426.4	9702.5	ug/L	9702.5 ppb	17:52:20
2	U 409.014†	-614.6	1385.1	-12.486	ug/L	-12.486 ppb	17:52:20
2	V 292.402†	1296375.1	1239214.6	10271	ug/L	10271 ppb	17:52:15
2	Zn 213.857†	1162813.1	1109960.8	14109	ug/L	14109 ppb	17:52:15
2	SiO2†	1280815.6	1222688.2	102460	ug/L	102460 ppb	17:52:52
3	Sc Radial	3342.7	3342.7	104	%		17:51:40
3	Y RADIAL	2709.8	2709.8	103.1	%		17:51:40
3	Al 396.153Radial†	158.2	213.7	-10.572	ug/L	-10.572 ppb	17:51:40
3	Ca 317.933Radial†	17.8	4.6	19.339	ug/L	19.339 ppb	17:51:40
3	Fe 238.204 Radial†	-0.8	-10.2	-7.9875	ug/L	-7.9875 ppb	17:51:40
3	K 766.490 Radial†	670775.3	641035.0	313160	ug/L	313160 ppb	17:51:15
3	Mg 279.077 IEC†	-0.7	-2.4	-143.24	ug/L	-143.24 ppb	17:51:40
3	Na 589.592 Radial†	-10.4	722.6	228.61	ug/L	228.61 ppb	17:51:20
3	Sr 421.552†	1035317.5	992507.9	9558.0	ug/L	9558.0 ppb	17:51:15
3	Sc 361.383	833102.2	833102.2	105.19	%		17:52:35
3	Y 371.029	697383.7	697383.7	102.91	%		17:52:35
3	Ag 328.068†	-6999.7	-6785.4	4.8083	ug/L	4.8083 ppb	17:52:40
3	As 188.979†	17712.5	16856.7	9935.3	ug/L	9935.3 ppb	17:52:40
3	B 249.677†	178852.2	170398.1	4931.6	ug/L	4931.6 ppb	17:52:40
3	Ba 233.527†	1198334.4	1139163.1	11301	ug/L	11301 ppb	17:52:35
3	Be 313.107†	6648023.9	6323298.2	2882.2	ug/L	2882.2 ppb	17:52:29
3	Cd 226.502†	672850.2	639782.4	9765.7	ug/L	9765.7 ppb	17:52:35
3	Co 228.616†	364065.8	346134.8	9546.7	ug/L	9546.7 ppb	17:52:40
3	Cr 267.716†	1859800.7	1767914.2	24284	ug/L	24284 ppb	17:52:35
3	Cu 324.752†	6290536.1	5973708.7	20175	ug/L	20175 ppb	17:52:29
3	Mn 257.610†	7135665.3	6782920.0	9381.2	ug/L	9381.2 ppb	17:52:29
3	Mo 202.031†	112338.5	106778.4	9751.8	ug/L	9751.8 ppb	17:52:40
3	Ni 231.604†	308014.4	292744.6	9780.0	ug/L	9780.0 ppb	17:52:40
3	P 214.914†	24237.9	22876.8	14452	ug/L	14452 ppb	17:52:40
3	Pb 220.353†	152104.9	144637.9	23738	ug/L	23738 ppb	17:52:40
3	S 181.975 Axial†	28125.7	26706.1	51012	ug/L	51012 ppb	17:52:40
3	Sb 206.836†	25258.7	23988.7	10664	ug/L	10664 ppb	17:52:40
3	Se 196.026†	12377.5	11787.1	10104	ug/L	10104 ppb	17:52:40
3	Si 251.611†	1282768.0	1218951.1	47537	ug/L	47537 ppb	17:52:35
3	Sn 189.927†	44681.5	42467.4	10113	ug/L	10113 ppb	17:52:40
3	Ti 334.940†	5757137.2	5473788.5	9809.6	ug/L	9809.6 ppb	17:52:29
3	Tl 190.801†	24657.0	23465.4	9718.1	ug/L	9718.1 ppb	17:52:40
3	U 409.014†	-650.3	1353.9	-13.157	ug/L	-13.157 ppb	17:52:40
3	V 292.402†	1297654.6	1234771.0	10235	ug/L	10235 ppb	17:52:35
3	Zn 213.857†	1161863.2	1103981.1	14032	ug/L	14032 ppb	17:52:35
3	SiO2†	1279027.0	1215395.9	101840	ug/L	101840 ppb	17:52:58

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	828319.0	104.59	%	0.674				0.64%
Sc Radial	3333.4	104	%	0.6				0.59%
Y 371.029	693354.8	102.32	%	0.661				0.65%
Y RADIAL	2706.4	103.0	%	0.24				0.23%
Ag 328.068†	-6842.8	4.6501	ug/L	0.15105	4.6501	ppb	0.15105	3.25%
Al 396.153Radial†	215.9	-6.4656	ug/L	11.70960	-6.4656	ppb	11.70960	181.11%
As 188.979†	16866.6	9941.5	ug/L	48.89	9941.5	ppb	48.89	0.49%
QC value within limits for As 188.979 Recovery = 99.41%								
B 249.677†	170237.2	4926.8	ug/L	28.38	4926.8	ppb	28.38	0.58%
QC value within limits for B 249.677 Recovery = 98.54%								
Ba 233.527†	1144561.8	11355	ug/L	62.6	11355	ppb	62.6	0.55%
QC value less than the lower limit for Ba 233.527 Recovery = 75.70%								
Be 313.107†	6362147.3	2899.9	ug/L	21.63	2899.9	ppb	21.63	0.75%
QC value within limits for Be 313.107 Recovery = 96.66%								
Ca 317.933Radial†	6.3	26.456	ug/L	10.5318	26.456	ppb	10.5318	39.81%
Cd 226.502†	643531.7	9822.9	ug/L	61.13	9822.9	ppb	61.13	0.62%
QC value within limits for Cd 226.502 Recovery = 98.23%								

Co 228.616†	346723.1	9562.9 ug/L	43.50	9562.9 ppb	43.50	0.45%
QC value within limits for Co 228.616 Recovery = 95.63%						
Cr 267.716†	1777366.3	24414 ug/L	131.7	24414 ppb	131.7	0.54%
QC value within limits for Cr 267.716 Recovery = 97.66%						
Cu 324.752†	5991344.9	20235 ug/L	96.6	20235 ppb	96.6	0.48%
QC value within limits for Cu 324.752 Recovery = 101.18%						
Fe 238.204 Radial†	-11.0	-29.844 ug/L	24.2570	-29.844 ppb	24.2570	81.28%
K 766.490 Radial†	640546.1	312920 ug/L	319.1	312920 ppb	319.1	0.10%
QC value within limits for K 766.490 Radial Recovery = 104.31%						
Mg 279.077 IEC†	-2.2	-122.09 ug/L	32.458	-122.09 ppb	32.458	26.59%
Mn 257.610†	6823391.7	9437.2 ug/L	62.87	9437.2 ppb	62.87	0.67%
QC value within limits for Mn 257.610 Recovery = 94.37%						
Mo 202.031†	106917.9	9764.5 ug/L	57.89	9764.5 ppb	57.89	0.59%
QC value within limits for Mo 202.031 Recovery = 97.64%						
Na 589.592 Radial†	811.1	256.60 ug/L	25.213	256.60 ppb	25.213	9.83%
Ni 231.604†	293209.2	9795.5 ug/L	47.39	9795.5 ppb	47.39	0.48%
QC value within limits for Ni 231.604 Recovery = 97.95%						
P 214.914†	22945.0	14495 ug/L	74.4	14495 ppb	74.4	0.51%
QC value within limits for P 214.914 Recovery = 96.63%						
Pb 220.353†	144869.3	23776 ug/L	111.6	23776 ppb	111.6	0.47%
QC value within limits for Pb 220.353 Recovery = 95.10%						
S 181.975 Axial†	26703.3	51006 ug/L	321.1	51006 ppb	321.1	0.63%
QC value within limits for S 181.975 Axial Recovery = 102.01%						
Sb 206.836†	24045.7	10689 ug/L	69.6	10689 ppb	69.6	0.65%
QC value within limits for Sb 206.836 Recovery = 106.89%						
Se 196.026†	11791.4	10107 ug/L	64.5	10107 ppb	64.5	0.64%
QC value within limits for Se 196.026 Recovery = 101.07%						
Si 251.611†	1222443.4	47673 ug/L	132.8	47673 ppb	132.8	0.28%
QC value within limits for Si 251.611 Recovery = 95.35%						
Sn 189.927†	42598.9	10145 ug/L	51.0	10145 ppb	51.0	0.50%
QC value within limits for Sn 189.927 Recovery = 101.45%						
Sr 421.552†	992052.7	9553.6 ug/L	20.07	9553.6 ppb	20.07	0.21%
QC value within limits for Sr 421.552 Recovery = 95.54%						
Ti 334.940†	5498296.7	9853.5 ug/L	52.85	9853.5 ppb	52.85	0.54%
QC value within limits for Ti 334.940 Recovery = 98.54%						
Tl 190.801†	23489.5	9728.5 ug/L	32.45	9728.5 ppb	32.45	0.33%
QC value within limits for Tl 190.801 Recovery = 97.29%						
U 409.014†	1286.7	-15.484 ug/L	4.6231	-15.484 ppb	4.6231	29.86%
V 292.402†	1239332.1	10272 ug/L	38.3	10272 ppb	38.3	0.37%
QC value within limits for V 292.402 Recovery = 102.72%						
Zn 213.857†	1110352.1	14114 ug/L	83.8	14114 ppb	83.8	0.59%
QC value within limits for Zn 213.857 Recovery = 94.09%						
SiO2†	1217999.3	102060 ug/L	343.0	102060 ppb	343.0	0.34%
QC value within limits for SiO2 Recovery = 95.39%						

QC Failed. Continue with analysis.

Sequence No.: 13
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/10/2010 17:55:09
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3327.0	3327.0	104	%			17:57:21
1	Y RADIAL	2697.8	2697.8	102.7	%			17:57:21
1	Al 396.153Radial†	2292.4	2270.1	4887.5	ug/L	4887.5	ppb	17:57:01
1	Ca 317.933Radial†	1294.2	1234.1	5156.2	ug/L	5156.2	ppb	17:57:21
1	Fe 238.204 Radial†	189.8	173.4	5005.0	ug/L	5005.0	ppb	17:57:21
1	K 766.490 Radial†	14217.9	11668.1	5694.3	ug/L	5694.3	ppb	17:57:01
1	Mg 279.077 IEC†	58.7	54.8	5670.3	ug/L	5670.3	ppb	17:57:21
1	Na 589.592 Radial†	30156.7	29779.8	9420.7	ug/L	9420.7	ppb	17:57:01
1	Sr 421.552†	52544.7	50576.9	487.02	ug/L	487.02	ppb	17:57:01
1	Sc 361.383	842360.9	842360.9	106.36	%			17:58:18
1	Y 371.029	712833.7	712833.7	105.19	%			17:58:18
1	Ag 328.068†	101430.1	95230.6	508.02	ug/L	508.02	ppb	17:58:24
1	As 188.979†	940.8	903.3	533.37	ug/L	533.37	ppb	17:58:44
1	B 249.677†	19429.6	18644.4	540.29	ug/L	540.29	ppb	17:58:24
1	Ba 233.527†	54364.5	51112.3	507.33	ug/L	507.33	ppb	17:58:24
1	Be 313.107†	1177228.5	1110340.6	503.31	ug/L	503.31	ppb	17:58:18
1	Cd 226.502†	35304.6	33348.7	508.62	ug/L	508.62	ppb	17:58:24
1	Co 228.616†	19899.3	18754.7	517.53	ug/L	517.53	ppb	17:58:24
1	Cr 267.716†	39336.7	36930.5	507.70	ug/L	507.70	ppb	17:58:24
1	Cu 324.752†	164770.8	148701.1	502.20	ug/L	502.20	ppb	17:58:24
1	Mn 257.610†	381685.5	358451.6	496.03	ug/L	496.03	ppb	17:58:24
1	Mo 202.031†	5892.1	5526.6	505.18	ug/L	505.18	ppb	17:58:44
1	Ni 231.604†	16510.5	15462.1	516.55	ug/L	516.55	ppb	17:58:24
1	P 214.914†	3506.5	3132.4	2416.7	ug/L	2416.7	ppb	17:58:44
1	Pb 220.353†	3283.3	3130.5	514.93	ug/L	514.93	ppb	17:58:44
1	S 181.975 Axial†	595.4	529.0	1009.4	ug/L	1009.4	ppb	17:58:44
1	Sb 206.836†	1296.1	1195.8	531.79	ug/L	531.79	ppb	17:58:44
1	Se 196.026†	614.1	598.1	527.88	ug/L	527.88	ppb	17:58:44
1	Si 251.611†	69155.5	64542.0	2517.2	ug/L	2517.2	ppb	17:58:24
1	Sn 189.927†	2264.6	2121.3	505.82	ug/L	505.82	ppb	17:58:44
1	Ti 334.940†	292894.9	276300.3	495.42	ug/L	495.42	ppb	17:58:24
1	Tl 190.801†	1287.3	1236.3	511.83	ug/L	511.83	ppb	17:58:44
1	U 409.014†	15916.6	16936.4	512.73	ug/L	512.73	ppb	17:58:24
1	V 292.402†	64171.7	61524.8	510.86	ug/L	510.86	ppb	17:58:24
1	Zn 213.857†	42943.0	39862.4	505.19	ug/L	505.19	ppb	17:58:24
1	SiO2†	68947.2	64347.3	5392.3	ug/L	5392.3	ppb	17:59:51
2	Sc Radial	3347.3	3347.3	104	%			17:57:46
2	Y RADIAL	2718.4	2718.4	103.5	%			17:57:46
2	Al 396.153Radial†	2261.6	2227.1	4794.6	ug/L	4794.6	ppb	17:57:26
2	Ca 317.933Radial†	1297.9	1230.1	5139.6	ug/L	5139.6	ppb	17:57:46
2	Fe 238.204 Radial†	191.9	174.3	5030.7	ug/L	5030.7	ppb	17:57:46
2	K 766.490 Radial†	13958.3	11336.3	5532.2	ug/L	5532.2	ppb	17:57:26
2	Mg 279.077 IEC†	51.0	47.1	4871.3	ug/L	4871.3	ppb	17:57:46
2	Na 589.592 Radial†	29958.5	29413.3	9304.8	ug/L	9304.8	ppb	17:57:26
2	Sr 421.552†	52096.0	49839.3	479.92	ug/L	479.92	ppb	17:57:26
2	Sc 361.383	843961.5	843961.5	106.57	%			17:58:49
2	Y 371.029	712814.2	712814.2	105.19	%			17:58:49
2	Ag 328.068†	100655.5	94322.8	503.21	ug/L	503.21	ppb	17:58:54
2	As 188.979†	936.1	897.2	529.78	ug/L	529.78	ppb	17:59:14
2	B 249.677†	19228.1	18420.7	533.78	ug/L	533.78	ppb	17:58:54
2	Ba 233.527†	54091.4	50759.1	503.82	ug/L	503.82	ppb	17:58:54
2	Be 313.107†	1177292.7	1108301.6	502.38	ug/L	502.38	ppb	17:58:49
2	Cd 226.502†	35247.7	33232.3	506.84	ug/L	506.84	ppb	17:58:54
2	Co 228.616†	19840.7	18664.2	515.04	ug/L	515.04	ppb	17:58:54
2	Cr 267.716†	39100.3	36638.5	503.69	ug/L	503.69	ppb	17:58:54
2	Cu 324.752†	162774.5	146534.0	494.89	ug/L	494.89	ppb	17:58:54
2	Mn 257.610†	380112.2	356294.7	493.08	ug/L	493.08	ppb	17:58:54
2	Mo 202.031†	5876.5	5501.4	502.88	ug/L	502.88	ppb	17:59:14
2	Ni 231.604†	16449.7	15375.6	513.66	ug/L	513.66	ppb	17:58:54

2	P 214.914†	3486.1	3107.0	2397.6 ug/L	2397.6 ppb	17:59:14
2	Pb 220.353†	3261.0	3103.7	510.50 ug/L	510.50 ppb	17:59:14
2	S 181.975 Axial†	592.1	524.8	1001.5 ug/L	1001.5 ppb	17:59:14
2	Sb 206.836†	1293.1	1190.7	529.49 ug/L	529.49 ppb	17:59:14
2	Se 196.026†	609.9	593.0	523.62 ug/L	523.62 ppb	17:59:14
2	Si 251.611†	68559.9	63859.8	2490.5 ug/L	2490.5 ppb	17:58:54
2	Sn 189.927†	2253.0	2106.4	502.24 ug/L	502.24 ppb	17:59:14
2	Ti 334.940†	290993.9	273994.2	491.35 ug/L	491.35 ppb	17:58:54
2	Tl 190.801†	1283.6	1230.5	509.41 ug/L	509.41 ppb	17:59:14
2	U 409.014†	15768.1	16768.7	507.64 ug/L	507.64 ppb	17:58:54
2	V 292.402†	63774.8	61038.0	506.81 ug/L	506.81 ppb	17:58:54
2	Zn 213.857†	42749.9	39604.7	501.92 ug/L	501.92 ppb	17:58:54
2	SiO2†	68218.2	63540.2	5324.6 ug/L	5324.6 ppb	17:59:56
3	Sc Radial	3302.8	3302.8	103 %		17:58:11
3	Y RADIAL	2690.4	2690.4	102.4 %		17:58:11
3	Al 396.153Radial†	2264.1	2258.8	4863.3 ug/L	4863.3 ppb	17:57:51
3	Ca 317.933Radial†	1283.2	1232.5	5149.7 ug/L	5149.7 ppb	17:58:11
3	Fe 238.204 Radial†	191.0	175.8	5075.5 ug/L	5075.5 ppb	17:58:11
3	K 766.490 Radial†	13803.5	11366.5	5546.9 ug/L	5546.9 ppb	17:57:51
3	Mg 279.077 IEC†	55.5	52.2	5396.8 ug/L	5396.8 ppb	17:58:11
3	Na 589.592 Radial†	29763.7	29611.5	9367.5 ug/L	9367.5 ppb	17:57:51
3	Sr 421.552†	51991.2	50410.8	485.42 ug/L	485.42 ppb	17:57:51
3	Sc 361.383	845363.3	845363.3	106.74 %		17:59:20
3	Y 371.029	714121.5	714121.5	105.38 %		17:59:20
3	Ag 328.068†	100676.2	94185.6	502.48 ug/L	502.48 ppb	17:59:25
3	As 188.979†	918.8	879.6	519.45 ug/L	519.45 ppb	17:59:45
3	B 249.677†	19028.9	18204.2	527.48 ug/L	527.48 ppb	17:59:25
3	Ba 233.527†	53872.0	50469.5	500.95 ug/L	500.95 ppb	17:59:25
3	Be 313.107†	1176126.8	1105377.5	501.05 ug/L	501.05 ppb	17:59:20
3	Cd 226.502†	34898.6	32850.5	501.01 ug/L	501.01 ppb	17:59:25
3	Co 228.616†	19754.2	18552.3	511.94 ug/L	511.94 ppb	17:59:25
3	Cr 267.716†	38938.6	36426.2	500.77 ug/L	500.77 ppb	17:59:25
3	Cu 324.752†	162933.0	146429.2	494.53 ug/L	494.53 ppb	17:59:25
3	Mn 257.610†	378744.2	354421.6	490.47 ug/L	490.47 ppb	17:59:25
3	Mo 202.031†	5845.4	5463.1	499.38 ug/L	499.38 ppb	17:59:45
3	Ni 231.604†	16434.6	15335.9	512.33 ug/L	512.33 ppb	17:59:25
3	P 214.914†	3465.8	3082.5	2378.0 ug/L	2378.0 ppb	17:59:45
3	Pb 220.353†	3234.4	3073.8	505.59 ug/L	505.59 ppb	17:59:45
3	S 181.975 Axial†	585.0	517.2	987.09 ug/L	987.09 ppb	17:59:45
3	Sb 206.836†	1286.7	1182.7	525.93 ug/L	525.93 ppb	17:59:45
3	Se 196.026†	612.8	594.8	525.22 ug/L	525.22 ppb	17:59:45
3	Si 251.611†	68494.6	63691.9	2484.0 ug/L	2484.0 ppb	17:59:25
3	Sn 189.927†	2240.5	2091.1	498.62 ug/L	498.62 ppb	17:59:45
3	Ti 334.940†	290044.2	272651.6	488.90 ug/L	488.90 ppb	17:59:25
3	Tl 190.801†	1281.6	1226.6	507.79 ug/L	507.79 ppb	17:59:45
3	U 409.014†	15856.4	16826.9	509.41 ug/L	509.41 ppb	17:59:25
3	V 292.402†	63554.7	60732.4	504.27 ug/L	504.27 ppb	17:59:25
3	Zn 213.857†	42459.3	39265.9	497.59 ug/L	497.59 ppb	17:59:25
3	SiO2†	68315.1	63524.9	5323.4 ug/L	5323.4 ppb	18:00:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	843895.2	106.56	%	0.190				0.18%
Sc Radial	3325.7	104	%	0.7				0.67%
Y 371.029	713256.4	105.26	%	0.111				0.11%
Y RADIAL	2702.2	102.8	%	0.55				0.54%
Ag 328.068†	94579.6	504.57	ug/L	3.012	504.57	ppb	3.012	0.60%
QC value within limits for Ag 328.068 Recovery = 100.91%								
Al 396.153Radial†	2252.0	4848.5	ug/L	48.17	4848.5	ppb	48.17	0.99%
QC value within limits for Al 396.153Radial Recovery = 96.97%								
As 188.979†	893.4	527.53	ug/L	7.227	527.53	ppb	7.227	1.37%
QC value within limits for As 188.979 Recovery = 105.51%								
B 249.677†	18423.1	533.85	ug/L	6.403	533.85	ppb	6.403	1.20%
QC value within limits for B 249.677 Recovery = 106.77%								
Ba 233.527†	50780.3	504.03	ug/L	3.194	504.03	ppb	3.194	0.63%
QC value within limits for Ba 233.527 Recovery = 100.81%								
Be 313.107†	1108006.6	502.25	ug/L	1.136	502.25	ppb	1.136	0.23%
QC value within limits for Be 313.107 Recovery = 100.45%								
Ca 317.933Radial†	1232.2	5148.5	ug/L	8.39	5148.5	ppb	8.39	0.16%

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   QC value within limits for Ca 317.933Radial  Recovery = 102.97%
Cd 226.502†            33143.8      505.49 ug/L         3.981      505.49 ppb          3.981   0.79%
   QC value within limits for Cd 226.502  Recovery = 101.10%
Co 228.616†            18657.1      514.84 ug/L         2.798      514.84 ppb          2.798   0.54%
   QC value within limits for Co 228.616  Recovery = 102.97%
Cr 267.716†            36665.1      504.05 ug/L         3.479      504.05 ppb          3.479   0.69%
   QC value within limits for Cr 267.716  Recovery = 100.81%
Cu 324.752†           147221.4      497.21 ug/L         4.329      497.21 ppb          4.329   0.87%
   QC value within limits for Cu 324.752  Recovery = 99.44%
Fe 238.204 Radial†       174.5      5037.1 ug/L        35.67      5037.1 ppb         35.67   0.71%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.74%
K 766.490 Radial†      11457.0      5591.2 ug/L        89.62      5591.2 ppb         89.62   1.60%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = 111.82%
Mg 279.077 IEC†           51.3      5312.8 ug/L       406.06      5312.8 ppb        406.06   7.64%
   QC value within limits for Mg 279.077 IEC  Recovery = 106.26%
Mn 257.610†           356389.3      493.19 ug/L         2.780      493.19 ppb          2.780   0.56%
   QC value within limits for Mn 257.610  Recovery = 98.64%
Mo 202.031†             5497.0      502.48 ug/L         2.917      502.48 ppb          2.917   0.58%
   QC value within limits for Mo 202.031  Recovery = 100.50%
Na 589.592 Radial†     29601.5      9364.3 ug/L        58.04      9364.3 ppb         58.04   0.62%
   QC value within limits for Na 589.592 Radial  Recovery = 93.64%
Ni 231.604†            15391.2      514.18 ug/L         2.156      514.18 ppb          2.156   0.42%
   QC value within limits for Ni 231.604  Recovery = 102.84%
P 214.914†              3107.3      2397.5 ug/L        19.31      2397.5 ppb         19.31   0.81%
   QC value within limits for P 214.914  Recovery = 95.90%
Pb 220.353†             3102.7      510.34 ug/L         4.672      510.34 ppb          4.672   0.92%
   QC value within limits for Pb 220.353  Recovery = 102.07%
S 181.975 Axial†         523.7      999.33 ug/L        11.331      999.33 ppb         11.331   1.13%
   QC value within limits for S 181.975 Axial  Recovery = 99.93%
Sb 206.836†             1189.7      529.07 ug/L         2.953      529.07 ppb          2.953   0.56%
   QC value within limits for Sb 206.836  Recovery = 105.81%
Se 196.026†              595.3      525.57 ug/L         2.151      525.57 ppb          2.151   0.41%
   QC value within limits for Se 196.026  Recovery = 105.11%
Si 251.611†            64031.3      2497.2 ug/L        17.57      2497.2 ppb         17.57   0.70%
   QC value within limits for Si 251.611  Recovery = 99.89%
Sn 189.927†             2106.3      502.23 ug/L         3.599      502.23 ppb          3.599   0.72%
   QC value within limits for Sn 189.927  Recovery = 100.45%
Sr 421.552†            50275.7      484.12 ug/L         3.726      484.12 ppb          3.726   0.77%
   QC value within limits for Sr 421.552  Recovery = 96.82%
Ti 334.940†           274315.4      491.89 ug/L         3.293      491.89 ppb          3.293   0.67%
   QC value within limits for Ti 334.940  Recovery = 98.38%
Tl 190.801†             1231.1      509.68 ug/L         2.030      509.68 ppb          2.030   0.40%
   QC value within limits for Tl 190.801  Recovery = 101.94%
U 409.014†             16844.0      509.93 ug/L         2.583      509.93 ppb          2.583   0.51%
   QC value within limits for U 409.014  Recovery = 101.99%
V 292.402†             61098.4      507.31 ug/L         3.321      507.31 ppb          3.321   0.65%
   QC value within limits for V 292.402  Recovery = 101.46%
Zn 213.857†            39577.7      501.56 ug/L         3.814      501.56 ppb          3.814   0.76%
   QC value within limits for Zn 213.857  Recovery = 100.31%
SiO2†                  63804.1      5346.8 ug/L        39.46      5346.8 ppb         39.46   0.74%
   QC value within limits for SiO2  Recovery = 99.99%
QC Failed.  Continue with analysis.
```

Sequence No.: 14
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/10/2010 18:02:10
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3227.2	3227.2	101	%			18:04:23
1	Y RADIAL	2637.0	2637.0	100.4	%			18:04:23
1	Al 396.153Radial†	-62.0	0.4	0.9021	ug/L	0.9021	ppb	18:04:23
1	Ca 317.933Radial†	10.0	-2.6	-10.853	ug/L	-10.853	ppb	18:04:23
1	Fe 238.204 Radial†	11.0	1.4	40.155	ug/L	40.155	ppb	18:04:23
1	K 766.490 Radial†	2611.7	566.7	276.85	ug/L	276.85	ppb	18:04:03
1	Mg 279.077 IEC†	2.7	1.0	105.38	ug/L	105.38	ppb	18:04:23
1	Na 589.592 Radial†	-622.4	114.6	36.240	ug/L	36.240	ppb	18:04:03
1	Sr 421.552†	59.3	24.2	0.2332	ug/L	0.2332	ppb	18:04:03
1	Sc 361.383	801551.8	801551.8	101.21	%			18:05:20
1	Y 371.029	685310.5	685310.5	101.13	%			18:05:20
1	Ag 328.068†	208.7	74.9	0.4057	ug/L	0.4057	ppb	18:05:20
1	As 188.979†	0.2	19.0	11.134	ug/L	11.134	ppb	18:05:40
1	B 249.677†	536.7	907.5	26.402	ug/L	26.402	ppb	18:05:40
1	Ba 233.527†	26.6	26.6	0.2645	ug/L	0.2645	ppb	18:05:40
1	Be 313.107†	-3432.2	150.8	0.0686	ug/L	0.0686	ppb	18:05:20
1	Cd 226.502†	-89.2	68.1	1.0362	ug/L	1.0362	ppb	18:05:40
1	Co 228.616†	-38.9	7.5	0.2065	ug/L	0.2065	ppb	18:05:40
1	Cr 267.716†	109.4	55.3	0.7588	ug/L	0.7588	ppb	18:05:40
1	Cu 324.752†	6442.4	153.4	0.5178	ug/L	0.5178	ppb	18:05:20
1	Mn 257.610†	483.2	78.6	0.1083	ug/L	0.1083	ppb	18:05:40
1	Mo 202.031†	22.4	9.1	0.8379	ug/L	0.8379	ppb	18:05:40
1	Ni 231.604†	61.1	-0.3	-0.0098	ug/L	-0.0098	ppb	18:05:40
1	P 214.914†	174.8	8.4	6.6581	ug/L	6.6581	ppb	18:05:40
1	Pb 220.353†	-13.4	30.4	4.9889	ug/L	4.9889	ppb	18:05:40
1	S 181.975 Axial†	27.3	-3.8	-7.2599	ug/L	-7.2599	ppb	18:05:40
1	Sb 206.836†	37.2	14.0	6.0756	ug/L	6.0756	ppb	18:05:40
1	Se 196.026†	-17.6	3.3	2.9326	ug/L	2.9326	ppb	18:05:40
1	Si 251.611†	555.8	73.0	2.8442	ug/L	2.8442	ppb	18:05:40
1	Sn 189.927†	18.6	10.6	2.5162	ug/L	2.5162	ppb	18:05:40
1	Ti 334.940†	-840.8	97.7	0.1630	ug/L	0.1630	ppb	18:05:20
1	Tl 190.801†	-20.9	5.3	2.1866	ug/L	2.1866	ppb	18:05:40
1	U 409.014†	-1849.0	145.2	4.4040	ug/L	4.4040	ppb	18:05:20
1	V 292.402†	-1213.1	-6.3	-0.0355	ug/L	-0.0355	ppb	18:05:20
1	Zn 213.857†	651.2	132.0	1.6815	ug/L	1.6815	ppb	18:05:40
1	SiO2†	568.4	86.6	7.2506	ug/L	7.2506	ppb	18:06:51
2	Sc Radial	3220.7	3220.7	101	%			18:04:48
2	Y RADIAL	2630.2	2630.2	100.1	%			18:04:48
2	Al 396.153Radial†	-60.4	1.9	4.1114	ug/L	4.1114	ppb	18:04:48
2	Ca 317.933Radial†	14.9	2.4	9.8541	ug/L	9.8541	ppb	18:04:48
2	Fe 238.204 Radial†	8.1	-1.4	-40.593	ug/L	-40.593	ppb	18:04:48
2	K 766.490 Radial†	2451.4	412.5	201.51	ug/L	201.51	ppb	18:04:28
2	Mg 279.077 IEC†	-0.0	-1.7	-180.99	ug/L	-180.99	ppb	18:04:48
2	Na 589.592 Radial†	-634.4	101.4	32.071	ug/L	32.071	ppb	18:04:28
2	Sr 421.552†	28.1	-6.7	-0.0645	ug/L	-0.0645	ppb	18:04:28
2	Sc 361.383	798262.6	798262.6	100.80	%			18:05:45
2	Y 371.029	681956.8	681956.8	100.64	%			18:05:45
2	Ag 328.068†	190.6	57.8	0.2956	ug/L	0.2956	ppb	18:05:45
2	As 188.979†	-4.3	14.5	8.5111	ug/L	8.5111	ppb	18:06:05
2	B 249.677†	531.1	904.2	26.318	ug/L	26.318	ppb	18:06:05
2	Ba 233.527†	29.0	29.1	0.2865	ug/L	0.2865	ppb	18:06:05
2	Be 313.107†	-3496.2	73.3	0.0333	ug/L	0.0333	ppb	18:05:45
2	Cd 226.502†	-88.3	68.7	1.0515	ug/L	1.0515	ppb	18:06:05
2	Co 228.616†	-34.1	12.1	0.3338	ug/L	0.3338	ppb	18:06:05
2	Cr 267.716†	69.8	16.4	0.2247	ug/L	0.2247	ppb	18:06:05
2	Cu 324.752†	6380.4	118.1	0.3980	ug/L	0.3980	ppb	18:05:45
2	Mn 257.610†	440.4	38.1	0.0560	ug/L	0.0560	ppb	18:06:05
2	Mo 202.031†	16.3	3.1	0.2836	ug/L	0.2836	ppb	18:06:05
2	Ni 231.604†	62.9	1.8	0.0602	ug/L	0.0602	ppb	18:06:05

2	P 214.914†	170.7	5.0	4.0051	ug/L	4.0051 ppb	18:06:05
2	Pb 220.353†	-9.0	34.7	5.7000	ug/L	5.7000 ppb	18:06:05
2	S 181.975 Axial†	27.5	-3.5	-6.7256	ug/L	-6.7256 ppb	18:06:05
2	Sb 206.836†	45.9	22.8	9.8572	ug/L	9.8572 ppb	18:06:05
2	Se 196.026†	-9.5	11.3	9.5567	ug/L	9.5567 ppb	18:06:05
2	Si 251.611†	570.6	90.0	3.5168	ug/L	3.5168 ppb	18:06:05
2	Sn 189.927†	20.8	12.8	3.0569	ug/L	3.0569 ppb	18:06:05
2	Ti 334.940†	-910.8	24.8	0.0615	ug/L	0.0615 ppb	18:05:45
2	Tl 190.801†	-15.2	10.9	4.4761	ug/L	4.4761 ppb	18:06:05
2	U 409.014†	-2066.9	-78.5	-2.3813	ug/L	-2.3813 ppb	18:05:45
2	V 292.402†	-1204.1	-2.3	-0.0169	ug/L	-0.0169 ppb	18:05:45
2	Zn 213.857†	636.8	120.4	1.5452	ug/L	1.5452 ppb	18:06:05
2	SiO2†	560.6	81.2	6.8101	ug/L	6.8101 ppb	18:07:11
3	Sc Radial	3231.4	3231.4	101	%		18:05:13
3	Y RADIAL	2643.6	2643.6	100.6	%		18:05:13
3	Al 396.153Radial†	-60.5	2.0	4.3874	ug/L	4.3874 ppb	18:05:13
3	Ca 317.933Radial†	9.0	-3.5	-14.721	ug/L	-14.721 ppb	18:05:13
3	Fe 238.204 Radial†	6.4	-3.2	-90.928	ug/L	-90.928 ppb	18:05:13
3	K 766.490 Radial†	2495.2	447.8	218.77	ug/L	218.77 ppb	18:04:53
3	Mg 279.077 IEC†	-1.5	-3.2	-331.69	ug/L	-331.69 ppb	18:05:13
3	Na 589.592 Radial†	-645.7	92.3	29.203	ug/L	29.203 ppb	18:04:53
3	Sr 421.552†	63.7	28.5	0.2749	ug/L	0.2749 ppb	18:04:53
3	Sc 361.383	797964.2	797964.2	100.76	%		18:06:10
3	Y 371.029	682101.6	682101.6	100.66	%		18:06:10
3	Ag 328.068†	224.9	91.9	0.4561	ug/L	0.4561 ppb	18:06:10
3	As 188.979†	-2.6	16.2	9.4899	ug/L	9.4899 ppb	18:06:30
3	B 249.677†	519.7	893.1	26.004	ug/L	26.004 ppb	18:06:30
3	Ba 233.527†	34.0	34.1	0.3344	ug/L	0.3344 ppb	18:06:30
3	Be 313.107†	-3534.5	33.9	0.0158	ug/L	0.0158 ppb	18:06:10
3	Cd 226.502†	-100.6	56.4	0.8705	ug/L	0.8705 ppb	18:06:30
3	Co 228.616†	-51.0	-4.7	-0.1296	ug/L	-0.1296 ppb	18:06:30
3	Cr 267.716†	86.6	33.1	0.4488	ug/L	0.4488 ppb	18:06:30
3	Cu 324.752†	6479.3	218.6	0.7314	ug/L	0.7314 ppb	18:06:10
3	Mn 257.610†	442.2	40.0	0.0599	ug/L	0.0599 ppb	18:06:30
3	Mo 202.031†	13.2	0.1	0.0006	ug/L	0.0006 ppb	18:06:30
3	Ni 231.604†	74.3	13.1	0.4388	ug/L	0.4388 ppb	18:06:30
3	P 214.914†	175.7	10.1	8.0102	ug/L	8.0102 ppb	18:06:30
3	Pb 220.353†	-14.1	29.6	4.8763	ug/L	4.8763 ppb	18:06:30
3	S 181.975 Axial†	34.7	3.7	6.9712	ug/L	6.9712 ppb	18:06:30
3	Sb 206.836†	44.0	20.9	9.0017	ug/L	9.0017 ppb	18:06:30
3	Se 196.026†	-17.2	3.6	2.8362	ug/L	2.8362 ppb	18:06:30
3	Si 251.611†	561.2	80.9	3.1620	ug/L	3.1620 ppb	18:06:30
3	Sn 189.927†	14.4	6.5	1.5535	ug/L	1.5535 ppb	18:06:30
3	Ti 334.940†	-827.9	106.8	0.2148	ug/L	0.2148 ppb	18:06:10
3	Tl 190.801†	-15.0	11.1	4.5764	ug/L	4.5764 ppb	18:06:30
3	U 409.014†	-1860.0	126.0	3.8376	ug/L	3.8376 ppb	18:06:10
3	V 292.402†	-1202.3	-1.0	0.0056	ug/L	0.0056 ppb	18:06:10
3	Zn 213.857†	629.6	113.4	1.4607	ug/L	1.4607 ppb	18:06:30
3	SiO2†	582.4	103.0	8.6510	ug/L	8.6510 ppb	18:07:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	799259.6	100.92	%	0.251				0.25%
Sc Radial	3226.5	101	%	0.2				0.17%
Y 371.029	683123.0	100.81	%	0.280				0.28%
Y RADIAL	2636.9	100.4	%	0.25				0.25%
Ag 328.068†	74.8	0.3858	ug/L	0.08206	0.3858	ppb	0.08206	21.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	1.5	3.1336	ug/L	1.93747	3.1336	ppb	1.93747	61.83%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	16.6	9.7118	ug/L	1.32567	9.7118	ppb	1.32567	13.65%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	901.6	26.241	ug/L	0.2096	26.241	ppb	0.2096	0.80%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	29.9	0.2951	ug/L	0.03575	0.2951	ppb	0.03575	12.11%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	86.0	0.0392	ug/L	0.02691	0.0392	ppb	0.02691	68.61%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.3	-5.2400	ug/L	13.21411	-5.2400	ppb	13.21411	252.18%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                64.4      0.9861 ug/L       0.10034      0.9861 ppb        0.10034  10.18%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                 4.9      0.1369 ug/L       0.23941      0.1369 ppb        0.23941 174.92%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                34.9      0.4774 ug/L       0.26821      0.4774 ppb        0.26821  56.18%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               163.4      0.5491 ug/L       0.16889      0.5491 ppb        0.16889  30.76%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.1     -30.455 ug/L       66.1266     -30.455 ppb        66.1266 217.13%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         475.7      232.38 ug/L        39.468      232.38 ppb         39.468  16.98%
   QC value greater than the upper limit for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -1.3     -135.77 ug/L       222.014     -135.77 ppb        222.014 163.52%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                52.2      0.0748 ug/L       0.02913      0.0748 ppb        0.02913  38.97%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                 4.1      0.3740 ug/L       0.42591      0.3740 ppb        0.42591 113.87%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        102.7      32.505 ug/L        3.5384      32.505 ppb         3.5384  10.89%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.9      0.1631 ug/L       0.24139      0.1631 ppb        0.24139 148.03%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  7.8      6.2245 ug/L       2.03744      6.2245 ppb        2.03744  32.73%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                31.6      5.1884 ug/L       0.44660      5.1884 ppb        0.44660   8.61%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.2     -2.3381 ug/L       8.06652     -2.3381 ppb        8.06652 345.00%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                19.2      8.3115 ug/L       1.98300      8.3115 ppb        1.98300  23.86%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 6.1      5.1085 ug/L       3.85258      5.1085 ppb        3.85258  75.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                81.3      3.1743 ug/L       0.33647      3.1743 ppb        0.33647  10.60%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                10.0      2.3756 ug/L       0.76151      2.3756 ppb        0.76151  32.06%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                15.4      0.1479 ug/L       0.18509      0.1479 ppb        0.18509 125.17%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                76.4      0.1464 ug/L       0.07800      0.1464 ppb        0.07800  53.27%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 9.1      3.7464 ug/L       1.35174      3.7464 ppb        1.35174  36.08%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 64.2      1.9534 ug/L       3.76465      1.9534 ppb        3.76465 192.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                 -3.2     -0.0156 ug/L       0.02060     -0.0156 ppb        0.02060 132.00%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†               121.9      1.5625 ug/L       0.11142      1.5625 ppb        0.11142   7.13%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      90.2      7.5706 ug/L       0.96128      7.5706 ppb        0.96128  12.70%
   QC value within limits for SiO2  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Analysis Begun

Start Time: 3/10/2010 18:15:20 **Plasma On Time:** 3/8/2010 08:27:38
Logged In Analyst: Optima3 **Technique:** ICP Continuous
Spectrometer Model: Optima 5300 DV, S/N 077C7090601 **Autosampler Model:** S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif
Batch ID:
Results Data Set: 031010
Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded
Method Name: General Eng.2AX **Method Last Saved:** 3/10/2010 15:33:04
IEC File: 011110.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	Yes
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	Yes
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
Si 251.611	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	Sc Radial	Yes
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
Y RADIAL	Lin, Calc Int	Peak Area	Radial	n/a	n/a
SiO2	Lin Thru 0	Peak Area	Axial	Sc 361.383	Yes

Sequence No.: 1 **Autosampler Location:** 7
Sample ID: CCV **Date Collected:** 3/10/2010 18:15:21
Analyst: **Data Type:** Original
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3320.2	3320.2	104	%			18:17:34
1	Y RADIAL	2690.9	2690.9	102.4	%			18:17:34
1	Al 396.153Radial†	2242.7	2226.6	4793.8	ug/L	4793.8	ppb	18:17:14

1	Ca 317.933Radial†	1285.7	1228.5	5132.8 ug/L	5132.8 ppb	18:17:34
1	Fe 238.204 Radial†	189.8	173.7	5014.0 ug/L	5014.0 ppb	18:17:34
1	K 766.490 Radial†	12873.0	10398.1	5073.8 ug/L	5073.8 ppb	18:17:14
1	Mg 279.077 IEC†	53.9	50.4	5210.9 ug/L	5210.9 ppb	18:17:34
1	Na 589.592 Radial†	29813.3	29507.6	9334.6 ug/L	9334.6 ppb	18:17:14
1	Sr 421.552†	52432.3	50571.6	486.97 ug/L	486.97 ppb	18:17:14
1	Sc 361.383	850750.2	850750.2	107.42 %		18:18:31
1	Y 371.029	718366.4	718366.4	106.01 %		18:18:31
1	Ag 328.068†	100975.7	93867.2	500.77 ug/L	500.77 ppb	18:18:36
1	As 188.979†	888.4	845.8	499.65 ug/L	499.65 ppb	18:18:56
1	B 249.677†	18233.2	17350.6	502.65 ug/L	502.65 ppb	18:18:36
1	Ba 233.527†	54001.5	50270.3	498.97 ug/L	498.97 ppb	18:18:36
1	Be 313.107†	1186732.6	1108273.6	502.36 ug/L	502.36 ppb	18:18:31
1	Cd 226.502†	35101.4	32832.3	500.74 ug/L	500.74 ppb	18:18:36
1	Co 228.616†	19854.2	18528.2	511.28 ug/L	511.28 ppb	18:18:36
1	Cr 267.716†	39168.7	36409.4	500.54 ug/L	500.54 ppb	18:18:36
1	Cu 324.752†	163316.4	145819.6	492.47 ug/L	492.47 ppb	18:18:36
1	Mn 257.610†	379947.9	353295.4	488.91 ug/L	488.91 ppb	18:18:36
1	Mo 202.031†	5862.5	5444.4	497.67 ug/L	497.67 ppb	18:18:56
1	Ni 231.604†	16507.8	15306.5	511.35 ug/L	511.35 ppb	18:18:36
1	P 214.914†	3490.6	3085.1	2380.5 ug/L	2380.5 ppb	18:18:56
1	Pb 220.353†	3241.4	3061.1	503.50 ug/L	503.50 ppb	18:18:56
1	S 181.975 Axial†	585.7	514.4	981.72 ug/L	981.72 ppb	18:18:56
1	Sb 206.836†	1262.0	1152.1	512.76 ug/L	512.76 ppb	18:18:56
1	Se 196.026†	604.0	583.0	514.95 ug/L	514.95 ppb	18:18:56
1	Si 251.611†	68428.6	63224.2	2465.7 ug/L	2465.7 ppb	18:18:36
1	Sn 189.927†	2255.6	2091.9	498.81 ug/L	498.81 ppb	18:18:56
1	Ti 334.940†	291086.2	271901.2	487.57 ug/L	487.57 ppb	18:18:36
1	Tl 190.801†	1270.0	1208.3	500.23 ug/L	500.23 ppb	18:18:56
1	U 409.014†	15882.7	16757.3	507.30 ug/L	507.30 ppb	18:18:36
1	V 292.402†	63829.9	60611.6	503.26 ug/L	503.26 ppb	18:18:36
1	Zn 213.857†	42516.3	39067.1	495.06 ug/L	495.06 ppb	18:18:36
1	SiO2†	67843.4	62680.5	5252.5 ug/L	5252.5 ppb	18:20:03
2	Sc Radial	3350.6	3350.6	105 %		18:17:59
2	Y RADIAL	2721.8	2721.8	103.6 %		18:17:59
2	Al 396.153Radial†	2238.4	2202.9	4742.3 ug/L	4742.3 ppb	18:17:39
2	Ca 317.933Radial†	1296.9	1227.9	5130.3 ug/L	5130.3 ppb	18:17:59
2	Fe 238.204 Radial†	191.8	173.9	5021.1 ug/L	5021.1 ppb	18:17:59
2	K 766.490 Radial†	12820.1	10234.5	4994.0 ug/L	4994.0 ppb	18:17:39
2	Mg 279.077 IEC†	53.9	49.8	5156.0 ug/L	5156.0 ppb	18:17:59
2	Na 589.592 Radial†	29467.8	28915.7	9147.4 ug/L	9147.4 ppb	18:17:39
2	Sr 421.552†	51520.4	49239.6	474.15 ug/L	474.15 ppb	18:17:39
2	Sc 361.383	847016.5	847016.5	106.95 %		18:19:02
2	Y 371.029	716019.2	716019.2	105.66 %		18:19:02
2	Ag 328.068†	101555.4	94823.6	505.87 ug/L	505.87 ppb	18:19:07
2	As 188.979†	898.3	858.7	507.24 ug/L	507.24 ppb	18:19:27
2	B 249.677†	18365.3	17548.9	508.41 ug/L	508.41 ppb	18:19:07
2	Ba 233.527†	54402.6	50867.0	504.89 ug/L	504.89 ppb	18:19:07
2	Be 313.107†	1182644.5	1109321.1	502.84 ug/L	502.84 ppb	18:19:02
2	Cd 226.502†	35341.0	33200.3	506.36 ug/L	506.36 ppb	18:19:07
2	Co 228.616†	19935.1	18685.3	515.60 ug/L	515.60 ppb	18:19:07
2	Cr 267.716†	39419.1	36804.3	505.96 ug/L	505.96 ppb	18:19:07
2	Cu 324.752†	164400.0	147503.0	498.16 ug/L	498.16 ppb	18:19:07
2	Mn 257.610†	382215.9	356975.1	494.01 ug/L	494.01 ppb	18:19:07
2	Mo 202.031†	5841.6	5448.9	498.08 ug/L	498.08 ppb	18:19:27
2	Ni 231.604†	16523.1	15388.5	514.09 ug/L	514.09 ppb	18:19:07
2	P 214.914†	3469.1	3079.3	2374.8 ug/L	2374.8 ppb	18:19:27
2	Pb 220.353†	3213.9	3048.7	501.45 ug/L	501.45 ppb	18:19:27
2	S 181.975 Axial†	582.0	513.4	979.73 ug/L	979.73 ppb	18:19:27
2	Sb 206.836†	1266.3	1161.2	516.68 ug/L	516.68 ppb	18:19:27
2	Se 196.026†	600.3	581.9	514.07 ug/L	514.07 ppb	18:19:27
2	Si 251.611†	68904.8	63950.2	2494.1 ug/L	2494.1 ppb	18:19:07
2	Sn 189.927†	2241.4	2087.9	497.85 ug/L	497.85 ppb	18:19:27
2	Ti 334.940†	292830.5	274726.6	492.64 ug/L	492.64 ppb	18:19:07
2	Tl 190.801†	1276.0	1219.0	504.71 ug/L	504.71 ppb	18:19:27
2	U 409.014†	15892.6	16831.7	509.55 ug/L	509.55 ppb	18:19:07
2	V 292.402†	64308.6	61321.2	509.07 ug/L	509.07 ppb	18:19:07
2	Zn 213.857†	42771.1	39479.8	500.31 ug/L	500.31 ppb	18:19:07
2	SiO2†	68661.1	63723.5	5340.1 ug/L	5340.1 ppb	18:20:08
3	Sc Radial	3333.2	3333.2	104 %		18:18:24
3	Y RADIAL	2705.0	2705.0	102.9 %		18:18:24

3	Al 396.153Radial†	2277.3	2251.4	4847.1 ug/L	4847.1 ppb	18:18:04
3	Ca 317.933Radial†	1289.9	1227.6	5129.3 ug/L	5129.3 ppb	18:18:24
3	Fe 238.204 Radial†	191.1	174.3	5030.7 ug/L	5030.7 ppb	18:18:24
3	K 766.490 Radial†	12944.6	10418.4	5083.8 ug/L	5083.8 ppb	18:18:04
3	Mg 279.077 IEC†	50.4	46.7	4835.8 ug/L	4835.8 ppb	18:18:24
3	Na 589.592 Radial†	29941.4	29518.7	9338.1 ug/L	9338.1 ppb	18:18:04
3	Sr 421.552†	52446.1	50387.7	485.20 ug/L	485.20 ppb	18:18:04
3	Sc 361.383	844128.7	844128.7	106.59 %		18:19:32
3	Y 371.029	713545.1	713545.1	105.30 %		18:19:32
3	Ag 328.068†	100848.0	94484.6	504.07 ug/L	504.07 ppb	18:19:38
3	As 188.979†	900.0	863.2	509.85 ug/L	509.85 ppb	18:19:58
3	B 249.677†	18240.2	17490.3	506.70 ug/L	506.70 ppb	18:19:38
3	Ba 233.527†	54177.5	50829.9	504.52 ug/L	504.52 ppb	18:19:38
3	Be 313.107†	1178522.9	1109237.0	502.80 ug/L	502.80 ppb	18:19:32
3	Cd 226.502†	35108.7	33095.4	504.75 ug/L	504.75 ppb	18:19:38
3	Co 228.616†	19895.6	18712.0	516.35 ug/L	516.35 ppb	18:19:38
3	Cr 267.716†	39128.9	36658.0	503.95 ug/L	503.95 ppb	18:19:38
3	Cu 324.752†	163284.9	146982.6	496.40 ug/L	496.40 ppb	18:19:38
3	Mn 257.610†	380726.7	356800.5	493.78 ug/L	493.78 ppb	18:19:38
3	Mo 202.031†	5871.7	5495.8	502.36 ug/L	502.36 ppb	18:19:58
3	Ni 231.604†	16471.9	15393.4	514.25 ug/L	514.25 ppb	18:19:38
3	P 214.914†	3506.0	3125.0	2411.9 ug/L	2411.9 ppb	18:19:58
3	Pb 220.353†	3267.2	3109.0	511.37 ug/L	511.37 ppb	18:19:58
3	S 181.975 Axial†	583.5	516.6	985.85 ug/L	985.85 ppb	18:19:58
3	Sb 206.836†	1275.5	1174.0	522.35 ug/L	522.35 ppb	18:19:58
3	Se 196.026†	611.2	594.1	524.55 ug/L	524.55 ppb	18:19:58
3	Si 251.611†	68631.2	63914.0	2492.7 ug/L	2492.7 ppb	18:19:38
3	Sn 189.927†	2264.6	2116.9	504.75 ug/L	504.75 ppb	18:19:58
3	Ti 334.940†	290909.9	273861.3	491.12 ug/L	491.12 ppb	18:19:38
3	Tl 190.801†	1278.2	1225.2	507.21 ug/L	507.21 ppb	18:19:58
3	U 409.014†	15739.2	16738.7	506.73 ug/L	506.73 ppb	18:19:38
3	V 292.402†	63823.1	61071.3	507.08 ug/L	507.08 ppb	18:19:38
3	Zn 213.857†	42660.5	39512.9	500.74 ug/L	500.74 ppb	18:19:38
3	SiO2†	68828.7	64100.3	5371.6 ug/L	5371.6 ppb	18:20:13

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	847298.5	106.99	%	0.419				0.39%
Sc Radial	3334.7	104	%	0.5				0.46%
Y 371.029	715976.9	105.66	%	0.356				0.34%
Y RADIAL	2705.9	103.0	%	0.59				0.57%
Ag 328.068†	94391.8	503.57	ug/L	2.584	503.57	ppb	2.584	0.51%
QC value within limits for Ag 328.068 Recovery = 100.71%								
Al 396.153Radial†	2227.0	4794.4	ug/L	52.42	4794.4	ppb	52.42	1.09%
QC value within limits for Al 396.153Radial Recovery = 95.89%								
As 188.979†	855.9	505.58	ug/L	5.297	505.58	ppb	5.297	1.05%
QC value within limits for As 188.979 Recovery = 101.12%								
B 249.677†	17463.3	505.92	ug/L	2.957	505.92	ppb	2.957	0.58%
QC value within limits for B 249.677 Recovery = 101.18%								
Ba 233.527†	50655.7	502.80	ug/L	3.316	502.80	ppb	3.316	0.66%
QC value within limits for Ba 233.527 Recovery = 100.56%								
Be 313.107†	1108943.9	502.67	ug/L	0.269	502.67	ppb	0.269	0.05%
QC value within limits for Be 313.107 Recovery = 100.53%								
Ca 317.933Radial†	1228.0	5130.8	ug/L	1.80	5130.8	ppb	1.80	0.04%
QC value within limits for Ca 317.933Radial Recovery = 102.62%								
Cd 226.502†	33042.6	503.95	ug/L	2.893	503.95	ppb	2.893	0.57%
QC value within limits for Cd 226.502 Recovery = 100.79%								
Co 228.616†	18641.8	514.41	ug/L	2.739	514.41	ppb	2.739	0.53%
QC value within limits for Co 228.616 Recovery = 102.88%								
Cr 267.716†	36623.9	503.48	ug/L	2.744	503.48	ppb	2.744	0.55%
QC value within limits for Cr 267.716 Recovery = 100.70%								
Cu 324.752†	146768.4	495.68	ug/L	2.911	495.68	ppb	2.911	0.59%
QC value within limits for Cu 324.752 Recovery = 99.14%								
Fe 238.204 Radial†	173.9	5021.9	ug/L	8.36	5021.9	ppb	8.36	0.17%
QC value within limits for Fe 238.204 Radial Recovery = 100.44%								
K 766.490 Radial†	10350.3	5050.5	ug/L	49.22	5050.5	ppb	49.22	0.97%
QC value within limits for K 766.490 Radial Recovery = 101.01%								
Mg 279.077 IEC†	49.0	5067.6	ug/L	202.61	5067.6	ppb	202.61	4.00%
QC value within limits for Mg 279.077 IEC Recovery = 101.35%								

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/10/2010 18:22:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3227.3	3227.3	101	%			18:24:36
1	Y RADIAL	2633.8	2633.8	100.2	%			18:24:36
1	Al 396.153Radial†	-62.3	0.2	0.4027	ug/L	0.4027	ppb	18:24:36
1	Ca 317.933Radial†	9.8	-2.8	-11.501	ug/L	-11.501	ppb	18:24:36
1	Fe 238.204 Radial†	11.9	2.3	66.432	ug/L	66.432	ppb	18:24:36
1	K 766.490 Radial†	2235.2	192.8	94.195	ug/L	94.195	ppb	18:24:16
1	Mg 279.077 IEC†	0.4	-1.3	-135.94	ug/L	-135.94	ppb	18:24:36
1	Na 589.592 Radial†	-686.5	51.0	16.126	ug/L	16.126	ppb	18:24:16
1	Sr 421.552†	31.7	-3.2	-0.0303	ug/L	-0.0303	ppb	18:24:16
1	Sc 361.383	800872.2	800872.2	101.12	%			18:25:33
1	Y 371.029	684513.5	684513.5	101.01	%			18:25:33
1	Ag 328.068†	149.5	16.5	0.1056	ug/L	0.1056	ppb	18:25:33
1	As 188.979†	-10.7	8.2	4.8474	ug/L	4.8474	ppb	18:25:53
1	B 249.677†	165.5	540.9	15.730	ug/L	15.730	ppb	18:25:53
1	Ba 233.527†	30.2	30.1	0.3002	ug/L	0.3002	ppb	18:25:53
1	Be 313.107†	-3466.2	114.2	0.0519	ug/L	0.0519	ppb	18:25:33
1	Cd 226.502†	-114.1	43.4	0.6565	ug/L	0.6565	ppb	18:25:53
1	Co 228.616†	-39.6	6.7	0.1855	ug/L	0.1855	ppb	18:25:53
1	Cr 267.716†	83.7	29.9	0.4120	ug/L	0.4120	ppb	18:25:53
1	Cu 324.752†	6395.8	112.7	0.3822	ug/L	0.3822	ppb	18:25:33
1	Mn 257.610†	442.0	38.2	0.0649	ug/L	0.0649	ppb	18:25:53
1	Mo 202.031†	15.9	2.7	0.2546	ug/L	0.2546	ppb	18:25:53
1	Ni 231.604†	73.0	11.6	0.3875	ug/L	0.3875	ppb	18:25:53
1	P 214.914†	171.0	4.8	3.7495	ug/L	3.7495	ppb	18:25:53
1	Pb 220.353†	-30.7	13.3	2.1704	ug/L	2.1704	ppb	18:25:53
1	S 181.975 Axial†	27.6	-3.5	-6.6644	ug/L	-6.6644	ppb	18:25:53
1	Sb 206.836†	32.4	9.3	4.0214	ug/L	4.0214	ppb	18:25:53
1	Se 196.026†	-21.4	-0.5	-0.2581	ug/L	-0.2581	ppb	18:25:53
1	Si 251.611†	513.7	31.9	1.2431	ug/L	1.2431	ppb	18:25:53
1	Sn 189.927†	13.3	5.3	1.2627	ug/L	1.2627	ppb	18:25:53
1	Ti 334.940†	-880.8	57.4	0.1108	ug/L	0.1108	ppb	18:25:33
1	Tl 190.801†	-25.1	1.2	0.4857	ug/L	0.4857	ppb	18:25:53
1	U 409.014†	-1881.8	111.2	3.3687	ug/L	3.3687	ppb	18:25:33
1	V 292.402†	-1202.7	2.9	0.0215	ug/L	0.0215	ppb	18:25:33
1	Zn 213.857†	639.3	120.8	1.5321	ug/L	1.5321	ppb	18:25:53
1	SiO2†	517.0	36.3	3.0397	ug/L	3.0397	ppb	18:27:04
2	Sc Radial	3212.2	3212.2	100	%			18:25:01
2	Y RADIAL	2626.4	2626.4	99.96	%			18:25:01
2	Al 396.153Radial†	-58.9	3.3	7.0798	ug/L	7.0798	ppb	18:25:01
2	Ca 317.933Radial†	16.2	3.6	15.174	ug/L	15.174	ppb	18:25:01
2	Fe 238.204 Radial†	8.7	-0.8	-23.955	ug/L	-23.955	ppb	18:25:01
2	K 766.490 Radial†	2254.7	222.6	108.76	ug/L	108.76	ppb	18:24:41
2	Mg 279.077 IEC†	2.0	0.3	29.523	ug/L	29.523	ppb	18:25:01
2	Na 589.592 Radial†	-683.6	50.7	16.023	ug/L	16.023	ppb	18:24:41
2	Sr 421.552†	22.4	-12.3	-0.1184	ug/L	-0.1184	ppb	18:24:41
2	Sc 361.383	805773.8	805773.8	101.74	%			18:25:58
2	Y 371.029	689268.2	689268.2	101.72	%			18:25:58
2	Ag 328.068†	126.2	-7.3	-0.0466	ug/L	-0.0466	ppb	18:25:58
2	As 188.979†	-16.4	2.7	1.6009	ug/L	1.6009	ppb	18:26:18
2	B 249.677†	135.6	510.5	14.860	ug/L	14.860	ppb	18:26:18
2	Ba 233.527†	20.3	20.2	0.1999	ug/L	0.1999	ppb	18:26:18
2	Be 313.107†	-3485.7	115.9	0.0525	ug/L	0.0525	ppb	18:25:58
2	Cd 226.502†	-114.2	44.0	0.6748	ug/L	0.6748	ppb	18:26:18
2	Co 228.616†	-45.6	1.1	0.0293	ug/L	0.0293	ppb	18:26:18
2	Cr 267.716†	95.0	40.5	0.5551	ug/L	0.5551	ppb	18:26:18
2	Cu 324.752†	6400.3	78.7	0.2635	ug/L	0.2635	ppb	18:25:58
2	Mn 257.610†	472.0	65.1	0.0864	ug/L	0.0864	ppb	18:26:18
2	Mo 202.031†	7.7	-5.5	-0.5052	ug/L	-0.5052	ppb	18:26:18
2	Ni 231.604†	66.7	4.9	0.1636	ug/L	0.1636	ppb	18:26:18

2	P 214.914†	169.4	2.1	1.6886 ug/L	1.6886 ppb	18:26:18
2	Pb 220.353†	-44.4	0.0	0.0076 ug/L	0.0076 ppb	18:26:18
2	S 181.975 Axial†	29.8	-1.5	-2.8657 ug/L	-2.8657 ppb	18:26:18
2	Sb 206.836†	28.9	5.6	2.4129 ug/L	2.4129 ppb	18:26:18
2	Se 196.026†	-19.5	1.5	1.2117 ug/L	1.2117 ppb	18:26:18
2	Si 251.611†	511.9	27.0	1.0629 ug/L	1.0629 ppb	18:26:18
2	Sn 189.927†	6.9	-1.0	-0.2287 ug/L	-0.2287 ppb	18:26:18
2	Ti 334.940†	-917.1	27.0	0.0471 ug/L	0.0471 ppb	18:25:58
2	Tl 190.801†	-21.9	4.5	1.8339 ug/L	1.8339 ppb	18:26:18
2	U 409.014†	-1952.1	53.4	1.6246 ug/L	1.6246 ppb	18:25:58
2	V 292.402†	-1189.0	23.7	0.1936 ug/L	0.1936 ppb	18:25:58
2	Zn 213.857†	638.6	116.2	1.4891 ug/L	1.4891 ppb	18:26:18
2	SiO2†	504.0	20.3	1.7203 ug/L	1.7203 ppb	18:27:24
3	Sc Radial	3194.8	3194.8	99.7 %		18:25:27
3	Y RADIAL	2604.3	2604.3	99.12 %		18:25:27
3	Al 396.153Radial†	-52.3	9.5	20.620 ug/L	20.620 ppb	18:25:27
3	Ca 317.933Radial†	15.6	3.1	13.089 ug/L	13.089 ppb	18:25:27
3	Fe 238.204 Radial†	8.7	-0.8	-23.088 ug/L	-23.088 ppb	18:25:27
3	K 766.490 Radial†	2242.0	222.2	108.55 ug/L	108.55 ppb	18:25:06
3	Mg 279.077 IEC†	3.0	1.3	139.22 ug/L	139.22 ppb	18:25:27
3	Na 589.592 Radial†	-689.1	41.4	13.091 ug/L	13.091 ppb	18:25:06
3	Sr 421.552†	54.0	19.5	0.1875 ug/L	0.1875 ppb	18:25:06
3	Sc 361.383	804978.2	804978.2	101.64 %		18:26:24
3	Y 371.029	687861.3	687861.3	101.51 %		18:26:24
3	Ag 328.068†	125.5	-7.9	-0.0469 ug/L	-0.0469 ppb	18:26:24
3	As 188.979†	-22.7	-3.5	-2.0507 ug/L	-2.0507 ppb	18:26:44
3	B 249.677†	135.5	510.5	14.861 ug/L	14.861 ppb	18:26:44
3	Ba 233.527†	14.5	14.6	0.1436 ug/L	0.1436 ppb	18:26:44
3	Be 313.107†	-3362.7	233.6	0.1061 ug/L	0.1061 ppb	18:26:24
3	Cd 226.502†	-119.4	38.8	0.5936 ug/L	0.5936 ppb	18:26:44
3	Co 228.616†	-41.1	5.4	0.1500 ug/L	0.1500 ppb	18:26:44
3	Cr 267.716†	93.2	38.8	0.5333 ug/L	0.5333 ppb	18:26:44
3	Cu 324.752†	6472.9	156.3	0.5278 ug/L	0.5278 ppb	18:26:24
3	Mn 257.610†	466.8	60.4	0.0755 ug/L	0.0755 ppb	18:26:44
3	Mo 202.031†	14.7	1.4	0.1264 ug/L	0.1264 ppb	18:26:44
3	Ni 231.604†	69.3	7.5	0.2522 ug/L	0.2522 ppb	18:26:44
3	P 214.914†	175.9	8.8	6.9549 ug/L	6.9549 ppb	18:26:44
3	Pb 220.353†	-22.6	21.4	3.5264 ug/L	3.5264 ppb	18:26:44
3	S 181.975 Axial†	31.1	-0.2	-0.4665 ug/L	-0.4665 ppb	18:26:44
3	Sb 206.836†	33.8	10.5	4.5075 ug/L	4.5075 ppb	18:26:44
3	Se 196.026†	-16.9	4.1	3.4215 ug/L	3.4215 ppb	18:26:44
3	Si 251.611†	507.5	23.2	0.9048 ug/L	0.9048 ppb	18:26:44
3	Sn 189.927†	8.0	0.1	0.0320 ug/L	0.0320 ppb	18:26:44
3	Ti 334.940†	-821.1	120.6	0.2074 ug/L	0.2074 ppb	18:26:24
3	Tl 190.801†	-22.8	3.6	1.4662 ug/L	1.4662 ppb	18:26:44
3	U 409.014†	-2078.2	-72.6	-2.2031 ug/L	-2.2031 ppb	18:26:24
3	V 292.402†	-1200.2	11.4	0.0969 ug/L	0.0969 ppb	18:26:24
3	Zn 213.857†	647.3	125.4	1.6056 ug/L	1.6056 ppb	18:26:44
3	SiO2†	510.3	27.0	2.2651 ug/L	2.2651 ppb	18:27:44

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	803874.7	101.50	%	0.332				0.33%
Sc Radial	3211.4	100	%	0.5				0.51%
Y 371.029	687214.3	101.41	%	0.360				0.36%
Y RADIAL	2621.5	99.77	%	0.584				0.59%
Ag 328.068†	0.5	0.0040	ug/L	0.08799	0.0040	ppb	0.08799	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	4.3	9.3674	ug/L	10.30069	9.3674	ppb	10.30069	109.96%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	2.5	1.4659	ug/L	3.45102	1.4659	ppb	3.45102	235.42%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	520.7	15.150	ug/L	0.5022	15.150	ppb	0.5022	3.31%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	21.6	0.2146	ug/L	0.07934	0.2146	ppb	0.07934	36.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	154.6	0.0702	ug/L	0.03114	0.0702	ppb	0.03114	44.36%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.3	5.5873	ug/L	14.83543	5.5873	ppb	14.83543	265.52%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              42.1      0.6416 ug/L       0.04261      0.6416 ppb        0.04261   6.64%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               4.4      0.1216 ug/L       0.08189      0.1216 ppb        0.08189  67.35%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              36.4      0.5001 ug/L       0.07711      0.5001 ppb        0.07711  15.42%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             115.9      0.3911 ug/L       0.13238      0.3911 ppb        0.13238  33.84%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†        0.2      6.4631 ug/L      51.93633      6.4631 ppb       51.93633 803.58%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       212.6      103.84 ug/L         8.350      103.84 ppb          8.350   8.04%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†           0.1      10.935 ug/L      138.5216      10.935 ppb       138.5216 >999.9%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              54.5      0.0756 ug/L       0.01076      0.0756 ppb        0.01076  14.24%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.5     -0.0414 ug/L       0.40674     -0.0414 ppb        0.40674 982.27%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       47.7      15.080 ug/L        1.7234      15.080 ppb         1.7234  11.43%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.0      0.2678 ug/L       0.11275      0.2678 ppb        0.11275  42.11%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                5.2      4.1310 ug/L       2.65380      4.1310 ppb        2.65380  64.24%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†              11.6      1.9015 ug/L       1.77477      1.9015 ppb        1.77477  93.34%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.7     -3.3322 ug/L       3.12518     -3.3322 ppb        3.12518  93.79%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               8.5      3.6473 ug/L       1.09627      3.6473 ppb        1.09627  30.06%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               1.7      1.4583 ug/L       1.85215      1.4583 ppb        1.85215 127.00%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              27.4      1.0703 ug/L       0.16930      1.0703 ppb        0.16930  15.82%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               1.5      0.3553 ug/L       0.79657      0.3553 ppb        0.79657 224.18%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               1.3      0.0129 ug/L       0.15749      0.0129 ppb        0.15749 >999.9%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              68.3      0.1218 ug/L       0.08070      0.1218 ppb        0.08070  66.26%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               3.1      1.2619 ug/L       0.69691      1.2619 ppb        0.69691  55.23%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               30.7      0.9301 ug/L       2.85008      0.9301 ppb        2.85008 306.43%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               12.7      0.1040 ug/L       0.08624      0.1040 ppb        0.08624  82.91%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†             120.8      1.5422 ug/L       0.05890      1.5422 ppb        0.05890   3.82%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    27.9      2.3417 ug/L       0.66300      2.3417 ppb        0.66300  28.31%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: LR1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 36
Date Collected: 3/10/2010 18:29:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3299.0	3299.0	103	%			18:32:08
1	Y RADIAL	2712.7	2712.7	103.2	%			18:32:08
1	Al 396.153Radial†	-74.5	-10.3	-21.194	ug/L	-21.194	ppb	18:32:08
1	Ca 317.933Radial†	14.7	1.8	7.4376	ug/L	7.4376	ppb	18:32:08
1	Fe 238.204 Radial†	13699.8	13298.2	382750	ug/L	382750	ppb	18:31:48
1	K 766.490 Radial†	2176.8	87.9	42.957	ug/L	42.957	ppb	18:31:48
1	Mg 279.077 IEC†	5.3	3.5	-42.139	ug/L	-42.139	ppb	18:32:08
1	Na 589.592 Radial†	-672.8	79.0	24.999	ug/L	24.999	ppb	18:31:48
1	Sr 421.552†	61.3	24.9	0.2397	ug/L	0.2397	ppb	18:31:48
1	Sc 361.383	835088.3	835088.3	105.45	%			18:33:05
1	Y 371.029	711830.1	711830.1	105.05	%			18:33:05
1	Ag 328.068†	-22917.5	-21865.4	2.6053	ug/L	2.6053	ppb	18:33:05
1	As 188.979†	-166.5	-139.1	8.2483	ug/L	8.2483	ppb	18:33:25
1	B 249.677†	2101.6	2370.3	6.7745	ug/L	6.7745	ppb	18:33:05
1	Ba 233.527†	-1508.5	-1430.3	-2.3917	ug/L	-2.3917	ppb	18:33:05
1	Be 313.107†	-3526.8	197.3	0.0891	ug/L	0.0891	ppb	18:33:05
1	Cd 226.502†	2743.7	2758.3	2.5543	ug/L	2.5543	ppb	18:33:05
1	Co 228.616†	600.0	614.9	11.376	ug/L	11.376	ppb	18:33:25
1	Cr 267.716†	-464.3	-493.2	8.9876	ug/L	8.9876	ppb	18:33:25
1	Cu 324.752†	538.8	-5701.0	0.9689	ug/L	0.9689	ppb	18:33:05
1	Mn 257.610†	-30454.8	-29281.0	-2.7097	ug/L	-2.7097	ppb	18:33:05
1	Mo 202.031†	-268.8	-267.9	5.2444	ug/L	5.2444	ppb	18:33:05
1	Ni 231.604†	152.9	84.4	2.8116	ug/L	2.8116	ppb	18:33:25
1	P 214.914†	583.1	388.6	7.4665	ug/L	7.4665	ppb	18:33:25
1	Pb 220.353†	200.0	233.3	-16.242	ug/L	-16.242	ppb	18:33:25
1	S 181.975 Axial†	47.7	14.4	27.499	ug/L	27.499	ppb	18:33:25
1	Sb 206.836†	16.5	-7.1	-7.7157	ug/L	-7.7157	ppb	18:33:25
1	Se 196.026†	-1529.8	-1430.1	-165.96	ug/L	-165.96	ppb	18:33:25
1	Si 251.611†	-427.2	-881.2	-34.152	ug/L	-34.152	ppb	18:33:05
1	Sn 189.927†	-8.2	-15.5	-25.673	ug/L	-25.673	ppb	18:33:25
1	Ti 334.940†	-997.7	-17.8	-0.0860	ug/L	-0.0860	ppb	18:33:05
1	Tl 190.801†	-29.0	-1.6	-1.0208	ug/L	-1.0208	ppb	18:33:25
1	U 409.014†	150.1	2114.4	20.606	ug/L	20.606	ppb	18:33:05
1	V 292.402†	6012.0	6893.8	0.5226	ug/L	0.5226	ppb	18:33:05
1	Zn 213.857†	4194.3	3466.3	-12.930	ug/L	-12.930	ppb	18:33:25
1	SiO2†	-287.4	-747.6	-62.144	ug/L	-62.144	ppb	18:34:23
2	Sc Radial	3315.3	3315.3	103	%			18:32:33
2	Y RADIAL	2728.0	2728.0	103.8	%			18:32:33
2	Al 396.153Radial†	-68.0	-3.7	-6.6133	ug/L	-6.6133	ppb	18:32:33
2	Ca 317.933Radial†	17.3	4.2	17.677	ug/L	17.677	ppb	18:32:33
2	Fe 238.204 Radial†	13500.8	13040.4	375330	ug/L	375330	ppb	18:32:13
2	K 766.490 Radial†	2171.1	71.9	35.158	ug/L	35.158	ppb	18:32:13
2	Mg 279.077 IEC†	7.3	5.4	165.53	ug/L	165.53	ppb	18:32:33
2	Na 589.592 Radial†	-710.2	46.1	14.585	ug/L	14.585	ppb	18:32:13
2	Sr 421.552†	60.2	23.6	0.2270	ug/L	0.2270	ppb	18:32:13
2	Sc 361.383	836336.8	836336.8	105.60	%			18:33:31
2	Y 371.029	712288.5	712288.5	105.11	%			18:33:31
2	Ag 328.068†	-22982.1	-21894.1	0.1606	ug/L	0.1606	ppb	18:33:31
2	As 188.979†	-169.9	-142.0	4.8042	ug/L	4.8042	ppb	18:33:51
2	B 249.677†	2072.6	2339.9	7.0948	ug/L	7.0948	ppb	18:33:31
2	Ba 233.527†	-1536.6	-1454.8	-2.8587	ug/L	-2.8587	ppb	18:33:31
2	Be 313.107†	-3511.1	217.1	0.0982	ug/L	0.0982	ppb	18:33:31
2	Cd 226.502†	2757.9	2767.9	3.4673	ug/L	3.4673	ppb	18:33:31
2	Co 228.616†	599.6	613.7	11.440	ug/L	11.440	ppb	18:33:51
2	Cr 267.716†	-459.9	-488.3	8.7512	ug/L	8.7512	ppb	18:33:51
2	Cu 324.752†	600.8	-5643.0	0.7718	ug/L	0.7718	ppb	18:33:31
2	Mn 257.610†	-30156.0	-28955.0	-2.9999	ug/L	-2.9999	ppb	18:33:31
2	Mo 202.031†	-319.7	-315.8	0.2962	ug/L	0.2962	ppb	18:33:31
2	Ni 231.604†	147.4	79.0	2.6308	ug/L	2.6308	ppb	18:33:51

2	P 214.914†	585.0	389.7	14.243 ug/L	14.243 ppb	18:33:51
2	Pb 220.353†	210.1	242.6	-13.675 ug/L	-13.675 ppb	18:33:51
2	S 181.975 Axial†	47.1	13.8	26.437 ug/L	26.437 ppb	18:33:51
2	Sb 206.836†	17.6	-6.0	-7.2590 ug/L	-7.2590 ppb	18:33:51
2	Se 196.026†	-1521.1	-1419.7	-177.54 ug/L	-177.54 ppb	18:33:51
2	Si 251.611†	-410.6	-864.9	-33.460 ug/L	-33.460 ppb	18:33:31
2	Sn 189.927†	-10.3	-17.5	-25.714 ug/L	-25.714 ppb	18:33:51
2	Ti 334.940†	-977.7	2.6	-0.0644 ug/L	-0.0644 ppb	18:33:31
2	Tl 190.801†	-23.3	3.9	1.2203 ug/L	1.2203 ppb	18:33:51
2	U 409.014†	155.3	2119.1	21.595 ug/L	21.595 ppb	18:33:31
2	V 292.402†	6119.3	6986.9	2.3084 ug/L	2.3084 ppb	18:33:31
2	Zn 213.857†	4189.0	3455.3	-11.959 ug/L	-11.959 ppb	18:33:51
2	SiO2†	-495.2	-944.0	-78.523 ug/L	-78.523 ppb	18:34:28
3	Sc Radial	3327.0	3327.0	104 %		18:32:58
3	Y RADIAL	2725.1	2725.1	103.7 %		18:32:58
3	Al 396.153Radial†	-70.6	-6.0	-11.709 ug/L	-11.709 ppb	18:32:58
3	Ca 317.933Radial†	14.4	1.4	5.9621 ug/L	5.9621 ppb	18:32:58
3	Fe 238.204 Radial†	13732.8	13217.8	380430 ug/L	380430 ppb	18:32:38
3	K 766.490 Radial†	2149.7	44.0	21.512 ug/L	21.512 ppb	18:32:38
3	Mg 279.077 IEC†	4.6	2.7	-114.70 ug/L	-114.70 ppb	18:32:58
3	Na 589.592 Radial†	-662.4	94.6	29.917 ug/L	29.917 ppb	18:32:38
3	Sr 421.552†	68.9	31.7	0.3051 ug/L	0.3051 ppb	18:32:38
3	Sc 361.383	841109.2	841109.2	106.21 %		18:33:57
3	Y 371.029	716378.6	716378.6	105.72 %		18:33:57
3	Ag 328.068†	-23034.0	-21819.5	2.1337 ug/L	2.1337 ppb	18:33:57
3	As 188.979†	-162.8	-134.5	10.421 ug/L	10.421 ppb	18:34:17
3	B 249.677†	2188.5	2437.8	9.1149 ug/L	9.1149 ppb	18:33:57
3	Ba 233.527†	-1631.0	-1535.4	-3.5041 ug/L	-3.5041 ppb	18:33:57
3	Be 313.107†	-3561.7	188.4	0.0853 ug/L	0.0853 ppb	18:33:57
3	Cd 226.502†	2779.2	2773.1	3.0191 ug/L	3.0191 ppb	18:33:57
3	Co 228.616†	606.8	617.2	11.472 ug/L	11.472 ppb	18:34:17
3	Cr 267.716†	-471.5	-496.7	8.8447 ug/L	8.8447 ppb	18:34:17
3	Cu 324.752†	585.4	-5660.8	0.9844 ug/L	0.9844 ppb	18:33:57
3	Mn 257.610†	-30722.5	-29326.3	-2.9979 ug/L	-2.9979 ppb	18:33:57
3	Mo 202.031†	-282.8	-279.3	4.0238 ug/L	4.0238 ppb	18:33:57
3	Ni 231.604†	160.5	90.5	3.0161 ug/L	3.0161 ppb	18:34:17
3	P 214.914†	579.1	380.9	3.0828 ug/L	3.0828 ppb	18:34:17
3	Pb 220.353†	177.0	210.3	-19.684 ug/L	-19.684 ppb	18:34:17
3	S 181.975 Axial†	54.0	20.1	38.307 ug/L	38.307 ppb	18:34:17
3	Sb 206.836†	17.8	-6.0	-7.2923 ug/L	-7.2923 ppb	18:34:17
3	Se 196.026†	-1517.1	-1407.8	-153.23 ug/L	-153.23 ppb	18:34:17
3	Si 251.611†	-457.8	-907.1	-35.151 ug/L	-35.151 ppb	18:33:57
3	Sn 189.927†	-23.2	-29.6	-28.892 ug/L	-28.892 ppb	18:34:17
3	Ti 334.940†	-946.7	37.0	0.0200 ug/L	0.0200 ppb	18:33:57
3	Tl 190.801†	-38.7	-10.5	-4.6755 ug/L	-4.6755 ppb	18:34:17
3	U 409.014†	15.9	1987.1	17.001 ug/L	17.001 ppb	18:33:57
3	V 292.402†	5996.2	6838.2	0.3804 ug/L	0.3804 ppb	18:33:57
3	Zn 213.857†	4165.7	3410.9	-13.295 ug/L	-13.295 ppb	18:34:17
3	SiO2†	-432.1	-881.9	-73.397 ug/L	-73.397 ppb	18:34:33

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	837511.5	105.75	%	0.401				0.38%
Sc Radial	3313.8	103	%	0.4				0.43%
Y 371.029	713499.1	105.29	%	0.370				0.35%
Y RADIAL	2721.9	103.6	%	0.31				0.30%
Ag 328.068†	-21859.7	1.6332	ug/L	1.29693	1.6332	ppb	1.29693	79.41%
Al 396.153Radial†	-6.7	-13.172	ug/L	7.3997	-13.172	ppb	7.3997	56.18%
As 188.979†	-138.5	7.8245	ug/L	2.83239	7.8245	ppb	2.83239	36.20%
B 249.677†	2382.7	7.6614	ug/L	1.26893	7.6614	ppb	1.26893	16.56%
Ba 233.527†	-1473.5	-2.9181	ug/L	0.55859	-2.9181	ppb	0.55859	19.14%
Be 313.107†	200.9	0.0909	ug/L	0.00660	0.0909	ppb	0.00660	7.26%
Ca 317.933Radial†	2.5	10.359	ug/L	6.3804	10.359	ppb	6.3804	61.59%
Cd 226.502†	2766.4	3.0136	ug/L	0.45652	3.0136	ppb	0.45652	15.15%
Co 228.616†	615.3	11.429	ug/L	0.0487	11.429	ppb	0.0487	0.43%
Cr 267.716†	-492.7	8.8612	ug/L	0.11906	8.8612	ppb	0.11906	1.34%
Cu 324.752†	-5668.3	0.9084	ug/L	0.11850	0.9084	ppb	0.11850	13.05%
Fe 238.204 Radial†	13185.5	379500	ug/L	3797.6	379500	ppb	3797.6	1.00%
K 766.490 Radial†	67.9	33.209	ug/L	10.8547	33.209	ppb	10.8547	32.69%

Mg 279.077 IEC†	3.9	2.8938	ug/L	145.44150	2.8938	ppb	145.44150 >999.9%
Mn 257.610†	-29187.4	-2.9025	ug/L	0.16700	-2.9025	ppb	0.16700 5.75%
Mo 202.031†	-287.7	3.1882	ug/L	2.57779	3.1882	ppb	2.57779 80.86%
Na 589.592 Radial†	73.2	23.167	ug/L	7.8285	23.167	ppb	7.8285 33.79%
Ni 231.604†	84.7	2.8195	ug/L	0.19276	2.8195	ppb	0.19276 6.84%
P 214.914†	386.4	8.2642	ug/L	5.62290	8.2642	ppb	5.62290 68.04%
Pb 220.353†	228.8	-16.533	ug/L	3.0152	-16.533	ppb	3.0152 18.24%
S 181.975 Axial†	16.1	30.748	ug/L	6.5681	30.748	ppb	6.5681 21.36%
Sb 206.836†	-6.4	-7.4223	ug/L	0.25461	-7.4223	ppb	0.25461 3.43%
Se 196.026†	-1419.2	-165.58	ug/L	12.157	-165.58	ppb	12.157 7.34%
Si 251.611†	-884.4	-34.255	ug/L	0.8505	-34.255	ppb	0.8505 2.48%
Sn 189.927†	-20.9	-26.760	ug/L	1.8466	-26.760	ppb	1.8466 6.90%
Sr 421.552†	26.7	0.2573	ug/L	0.04189	0.2573	ppb	0.04189 16.28%
Ti 334.940†	7.3	-0.0435	ug/L	0.05601	-0.0435	ppb	0.05601 128.87%
Tl 190.801†	-2.7	-1.4920	ug/L	2.97604	-1.4920	ppb	2.97604 199.47%
U 409.014†	2073.5	19.734	ug/L	2.4178	19.734	ppb	2.4178 12.25%
V 292.402†	6906.3	1.0705	ug/L	1.07448	1.0705	ppb	1.07448 100.37%
Zn 213.857†	3444.2	-12.728	ug/L	0.6903	-12.728	ppb	0.6903 5.42%
SiO2†	-857.8	-71.355	ug/L	8.3784	-71.355	ppb	8.3784 11.74%

Sequence No.: 4
Sample ID: LR2
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 37
Date Collected: 3/10/2010 18:36:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3242.4	3242.4	101	%			18:38:57
1	Y RADIAL	2656.6	2656.6	101.1	%			18:38:57
1	Al 396.153Radial†	-66.3	-3.5	-7.6666	ug/L	-7.6666	ppb	18:38:57
1	Ca 317.933Radial†	17.8	5.1	21.446	ug/L	21.446	ppb	18:38:57
1	Fe 238.204 Radial†	6.8	-2.8	-79.692	ug/L	-79.692	ppb	18:38:57
1	K 766.490 Radial†	2131.8	80.2	39.196	ug/L	39.196	ppb	18:38:37
1	Mg 279.077 IEC†	1.2	-0.6	-58.351	ug/L	-58.351	ppb	18:38:57
1	Na 589.592 Radial†	-777.0	-35.3	-11.166	ug/L	-11.166	ppb	18:38:37
1	Sr 421.552†	30.4	-4.6	-0.0448	ug/L	-0.0448	ppb	18:38:37
1	Sc 361.383	828242.6	828242.6	104.58	%			18:39:54
1	Y 371.029	708739.1	708739.1	104.59	%			18:39:54
1	Ag 328.068†	211.6	71.0	0.3608	ug/L	0.3608	ppb	18:39:59
1	As 188.979†	-17.4	2.2	1.2486	ug/L	1.2486	ppb	18:40:19
1	B 249.677†	-141.7	241.7	7.0616	ug/L	7.0616	ppb	18:40:19
1	Ba 233.527†	1063128.1	1016562.8	10065	ug/L	10065	ppb	18:39:54
1	Be 313.107†	-3535.6	161.2	0.0729	ug/L	0.0729	ppb	18:39:59
1	Cd 226.502†	-126.1	35.7	0.5511	ug/L	0.5511	ppb	18:40:19
1	Co 228.616†	-230.6	-174.6	0.0297	ug/L	0.0297	ppb	18:40:19
1	Cr 267.716†	95.5	38.5	0.5292	ug/L	0.5292	ppb	18:40:19
1	Cu 324.752†	6413.7	-79.2	-0.2652	ug/L	-0.2652	ppb	18:39:59
1	Mn 257.610†	445.3	26.9	0.0318	ug/L	0.0318	ppb	18:40:19
1	Mo 202.031†	13.8	0.2	0.0124	ug/L	0.0124	ppb	18:40:19
1	Ni 231.604†	78.1	14.0	0.4719	ug/L	0.4719	ppb	18:40:19
1	P 214.914†	165.1	-6.4	-5.0322	ug/L	-5.0322	ppb	18:40:19
1	Pb 220.353†	-32.8	12.3	2.0266	ug/L	2.0266	ppb	18:40:19
1	S 181.975 Axial†	33.8	1.5	2.8828	ug/L	2.8828	ppb	18:40:19
1	Sb 206.836†	25.2	1.4	0.6293	ug/L	0.6293	ppb	18:40:19
1	Se 196.026†	-19.7	1.8	1.3421	ug/L	1.3421	ppb	18:40:19
1	Si 251.611†	497.6	-0.3	-0.0136	ug/L	-0.0136	ppb	18:40:19
1	Sn 189.927†	19.3	10.7	2.5510	ug/L	2.5510	ppb	18:40:19
1	Ti 334.940†	-966.1	4.6	0.0208	ug/L	0.0208	ppb	18:39:59
1	Tl 190.801†	-27.9	-0.7	-0.2854	ug/L	-0.2854	ppb	18:40:19
1	U 409.014†	-2458.2	-378.4	-11.486	ug/L	-11.486	ppb	18:39:59
1	V 292.402†	-1251.7	-4.6	-0.0490	ug/L	-0.0490	ppb	18:39:59
1	Zn 213.857†	596.7	59.2	0.7663	ug/L	0.7663	ppb	18:40:19
1	SiO2†	494.9	-1.8	-0.1495	ug/L	-0.1495	ppb	18:41:40
2	Sc Radial	3296.6	3296.6	103	%			18:39:22
2	Y RADIAL	2701.0	2701.0	102.8	%			18:39:22
2	Al 396.153Radial†	-64.4	-0.6	-1.1689	ug/L	-1.1689	ppb	18:39:22
2	Ca 317.933Radial†	22.9	9.8	40.927	ug/L	40.927	ppb	18:39:22
2	Fe 238.204 Radial†	8.6	-1.1	-31.939	ug/L	-31.939	ppb	18:39:22
2	K 766.490 Radial†	2168.7	81.4	39.766	ug/L	39.766	ppb	18:39:02
2	Mg 279.077 IEC†	1.1	-0.6	-63.060	ug/L	-63.060	ppb	18:39:22
2	Na 589.592 Radial†	-702.0	50.3	15.900	ug/L	15.900	ppb	18:39:02
2	Sr 421.552†	37.1	1.4	0.0135	ug/L	0.0135	ppb	18:39:02
2	Sc 361.383	834419.7	834419.7	105.36	%			18:40:24
2	Y 371.029	712949.5	712949.5	105.21	%			18:40:24
2	Ag 328.068†	144.2	5.5	0.0297	ug/L	0.0297	ppb	18:40:29
2	As 188.979†	-13.1	6.4	3.7219	ug/L	3.7219	ppb	18:40:49
2	B 249.677†	-139.0	245.3	7.1587	ug/L	7.1587	ppb	18:40:49
2	Ba 233.527†	1072584.0	1018012.1	10079	ug/L	10079	ppb	18:40:24
2	Be 313.107†	-3546.4	176.0	0.0799	ug/L	0.0799	ppb	18:40:29
2	Cd 226.502†	-117.7	44.5	0.6801	ug/L	0.6801	ppb	18:40:49
2	Co 228.616†	-240.6	-182.5	-0.1840	ug/L	-0.1840	ppb	18:40:49
2	Cr 267.716†	54.2	-1.4	-0.0154	ug/L	-0.0154	ppb	18:40:49
2	Cu 324.752†	6400.4	-137.2	-0.4579	ug/L	-0.4579	ppb	18:40:29
2	Mn 257.610†	456.6	34.5	0.0472	ug/L	0.0472	ppb	18:40:49
2	Mo 202.031†	5.8	-7.5	-0.6855	ug/L	-0.6855	ppb	18:40:49
2	Ni 231.604†	68.3	4.2	0.1432	ug/L	0.1432	ppb	18:40:49

2	P 214.914†	181.3	7.8	6.3466 ug/L	6.3466 ppb	18:40:49
2	Pb 220.353†	-14.3	30.1	4.9374 ug/L	4.9374 ppb	18:40:49
2	S 181.975 Axial†	28.9	-3.4	-6.4427 ug/L	-6.4427 ppb	18:40:49
2	Sb 206.836†	23.9	-0.0	-0.0322 ug/L	-0.0322 ppb	18:40:49
2	Se 196.026†	-16.7	4.8	4.0380 ug/L	4.0380 ppb	18:40:49
2	Si 251.611†	520.0	17.4	0.6898 ug/L	0.6898 ppb	18:40:49
2	Sn 189.927†	6.5	-1.6	-0.3726 ug/L	-0.3726 ppb	18:40:49
2	Ti 334.940†	-902.9	71.5	0.1445 ug/L	0.1445 ppb	18:40:29
2	Tl 190.801†	-25.5	1.8	0.7548 ug/L	0.7548 ppb	18:40:49
2	U 409.014†	-2528.3	-427.6	-12.985 ug/L	-12.985 ppb	18:40:29
2	V 292.402†	-1250.8	5.1	0.0104 ug/L	0.0104 ppb	18:40:29
2	Zn 213.857†	610.8	68.4	0.8790 ug/L	0.8790 ppb	18:40:49
2	SiO2†	520.9	19.4	1.6492 ug/L	1.6492 ppb	18:42:00
3	Sc Radial	3288.2	3288.2	103 %		18:39:47
3	Y RADIAL	2689.8	2689.8	102.4 %		18:39:47
3	Al 396.153Radial†	-69.7	-5.9	-12.849 ug/L	-12.849 ppb	18:39:47
3	Ca 317.933Radial†	20.4	7.4	31.106 ug/L	31.106 ppb	18:39:47
3	Fe 238.204 Radial†	10.1	0.3	9.5900 ug/L	9.5900 ppb	18:39:47
3	K 766.490 Radial†	2237.6	154.0	75.221 ug/L	75.221 ppb	18:39:27
3	Mg 279.077 IEC†	1.1	-0.7	-69.271 ug/L	-69.271 ppb	18:39:47
3	Na 589.592 Radial†	-727.5	23.7	7.4886 ug/L	7.4886 ppb	18:39:27
3	Sr 421.552†	55.4	19.4	0.1864 ug/L	0.1864 ppb	18:39:27
3	Sc 361.383	829105.7	829105.7	104.69 %		18:40:55
3	Y 371.029	709316.5	709316.5	104.67 %		18:40:55
3	Ag 328.068†	209.1	68.4	0.3708 ug/L	0.3708 ppb	18:41:00
3	As 188.979†	-8.9	10.3	6.0621 ug/L	6.0621 ppb	18:41:20
3	B 249.677†	-134.8	248.4	7.2427 ug/L	7.2427 ppb	18:41:20
3	Ba 233.527†	1062914.4	1015300.4	10052 ug/L	10052 ppb	18:40:55
3	Be 313.107†	-3605.2	98.2	0.0444 ug/L	0.0444 ppb	18:41:00
3	Cd 226.502†	-117.6	44.0	0.6683 ug/L	0.6683 ppb	18:41:20
3	Co 228.616†	-236.3	-179.9	-0.1211 ug/L	-0.1211 ppb	18:41:20
3	Cr 267.716†	76.5	20.2	0.2806 ug/L	0.2806 ppb	18:41:20
3	Cu 324.752†	6395.6	-102.9	-0.3421 ug/L	-0.3421 ppb	18:41:00
3	Mn 257.610†	425.8	7.9	0.0147 ug/L	0.0147 ppb	18:41:20
3	Mo 202.031†	21.3	7.3	0.6655 ug/L	0.6655 ppb	18:41:20
3	Ni 231.604†	78.2	14.1	0.4752 ug/L	0.4752 ppb	18:41:20
3	P 214.914†	173.2	1.1	0.9555 ug/L	0.9555 ppb	18:41:20
3	Pb 220.353†	-36.4	8.9	1.4644 ug/L	1.4644 ppb	18:41:20
3	S 181.975 Axial†	28.5	-3.6	-6.7800 ug/L	-6.7800 ppb	18:41:20
3	Sb 206.836†	25.9	2.0	0.8750 ug/L	0.8750 ppb	18:41:20
3	Se 196.026†	-14.4	6.9	5.9647 ug/L	5.9647 ppb	18:41:20
3	Si 251.611†	513.6	14.4	0.5567 ug/L	0.5567 ppb	18:41:20
3	Sn 189.927†	3.9	-4.0	-0.9570 ug/L	-0.9570 ppb	18:41:20
3	Ti 334.940†	-968.7	3.1	0.0191 ug/L	0.0191 ppb	18:41:00
3	Tl 190.801†	-17.0	9.7	4.0191 ug/L	4.0191 ppb	18:41:20
3	U 409.014†	-2366.2	-288.1	-8.7528 ug/L	-8.7528 ppb	18:41:00
3	V 292.402†	-1305.9	-55.2	-0.4623 ug/L	-0.4623 ppb	18:41:00
3	Zn 213.857†	589.6	51.8	0.6590 ug/L	0.6590 ppb	18:41:20
3	SiO2†	523.2	24.7	2.0583 ug/L	2.0583 ppb	18:42:20

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	830589.3	104.88	%	0.422				0.40%
Sc Radial	3275.8	102	%	0.9				0.89%
Y 371.029	710335.0	104.82	%	0.337				0.32%
Y RADIAL	2682.5	102.1	%	0.88				0.86%
Ag 328.068†	48.3	0.2538	ug/L	0.19409	0.2538	ppb	0.19409	76.48%
Al 396.153Radial†	-3.3	-7.2281	ug/L	5.85228	-7.2281	ppb	5.85228	80.97%
As 188.979†	6.3	3.6775	ug/L	2.40705	3.6775	ppb	2.40705	65.45%
B 249.677†	245.2	7.1543	ug/L	0.09062	7.1543	ppb	0.09062	1.27%
Ba 233.527†	1016625.1	10066	ug/L	13.4	10066	ppb	13.4	0.13%
Be 313.107†	145.1	0.0657	ug/L	0.01879	0.0657	ppb	0.01879	28.59%
Ca 317.933Radial†	7.5	31.159	ug/L	9.7405	31.159	ppb	9.7405	31.26%
Cd 226.502†	41.4	0.6332	ug/L	0.07131	0.6332	ppb	0.07131	11.26%
Co 228.616†	-179.0	-0.0918	ug/L	0.10986	-0.0918	ppb	0.10986	119.65%
Cr 267.716†	19.1	0.2648	ug/L	0.27266	0.2648	ppb	0.27266	102.97%
Cu 324.752†	-106.4	-0.3551	ug/L	0.09700	-0.3551	ppb	0.09700	27.32%
Fe 238.204 Radial†	-1.2	-34.014	ug/L	44.6773	-34.014	ppb	44.6773	131.35%
K 766.490 Radial†	105.2	51.394	ug/L	20.6365	51.394	ppb	20.6365	40.15%

Mg 279.077 IEC†	-0.6	-63.561	ug/L	5.4774	-63.561	ppb	5.4774 8.62%
Mn 257.610†	23.1	0.0312	ug/L	0.01626	0.0312	ppb	0.01626 52.05%
Mo 202.031†	-0.0	-0.0025	ug/L	0.67560	-0.0025	ppb	0.67560 >999.9%
Na 589.592 Radial†	12.9	4.0740	ug/L	13.85234	4.0740	ppb	13.85234 340.02%
Ni 231.604†	10.8	0.3634	ug/L	0.19072	0.3634	ppb	0.19072 52.48%
P 214.914†	0.8	0.7566	ug/L	5.69201	0.7566	ppb	5.69201 752.28%
Pb 220.353†	17.1	2.8094	ug/L	1.86415	2.8094	ppb	1.86415 66.35%
S 181.975 Axial†	-1.8	-3.4466	ug/L	5.48406	-3.4466	ppb	5.48406 159.11%
Sb 206.836†	1.1	0.4907	ug/L	0.46923	0.4907	ppb	0.46923 95.63%
Se 196.026†	4.5	3.7816	ug/L	2.32197	3.7816	ppb	2.32197 61.40%
Si 251.611†	10.5	0.4110	ug/L	0.37370	0.4110	ppb	0.37370 90.93%
Sn 189.927†	1.7	0.4071	ug/L	1.87949	0.4071	ppb	1.87949 461.67%
Sr 421.552†	5.4	0.0517	ug/L	0.12024	0.0517	ppb	0.12024 232.57%
Ti 334.940†	26.4	0.0615	ug/L	0.07193	0.0615	ppb	0.07193 117.02%
Tl 190.801†	3.6	1.4962	ug/L	2.24598	1.4962	ppb	2.24598 150.11%
U 409.014†	-364.7	-11.075	ug/L	2.1459	-11.075	ppb	2.1459 19.38%
V 292.402†	-18.2	-0.1670	ug/L	0.25750	-0.1670	ppb	0.25750 154.22%
Zn 213.857†	59.8	0.7681	ug/L	0.11004	0.7681	ppb	0.11004 14.33%
SiO2†	14.1	1.1860	ug/L	1.17452	1.1860	ppb	1.17452 99.03%

Sequence No.: 5
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 3/10/2010 18:44:32
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3350.1	3350.1	105	%			18:46:44
1	Y RADIAL	2718.9	2718.9	103.5	%			18:46:44
1	Al 396.153Radial†	2287.2	2249.8	4844.1	ug/L	4844.1	ppb	18:46:24
1	Ca 317.933Radial†	1282.4	1214.2	5073.0	ug/L	5073.0	ppb	18:46:44
1	Fe 238.204 Radial†	191.1	173.4	5004.5	ug/L	5004.5	ppb	18:46:44
1	K 766.490 Radial†	12852.7	10267.7	5010.3	ug/L	5010.3	ppb	18:46:24
1	Mg 279.077 IEC†	53.8	49.8	5149.5	ug/L	5149.5	ppb	18:46:44
1	Na 589.592 Radial†	29085.5	28554.6	9033.1	ug/L	9033.1	ppb	18:46:24
1	Sr 421.552†	51763.3	49479.9	476.46	ug/L	476.46	ppb	18:46:24
1	Sc 361.383	854038.2	854038.2	107.84	%			18:47:41
1	Y 371.029	721390.4	721390.4	106.46	%			18:47:41
1	Ag 328.068†	99828.1	92441.0	493.19	ug/L	493.19	ppb	18:47:46
1	As 188.979†	890.7	844.8	498.95	ug/L	498.95	ppb	18:48:06
1	B 249.677†	17758.3	16844.8	487.95	ug/L	487.95	ppb	18:47:46
1	Ba 233.527†	53731.1	49826.1	494.56	ug/L	494.56	ppb	18:47:46
1	Be 313.107†	1186547.3	1103848.8	500.34	ug/L	500.34	ppb	18:47:41
1	Cd 226.502†	34850.7	32474.0	495.27	ug/L	495.27	ppb	18:47:46
1	Co 228.616†	19674.9	18290.8	504.74	ug/L	504.74	ppb	18:47:46
1	Cr 267.716†	38753.8	35884.3	493.32	ug/L	493.32	ppb	18:47:46
1	Cu 324.752†	160965.0	143053.8	483.14	ug/L	483.14	ppb	18:47:46
1	Mn 257.610†	376361.4	348607.9	482.43	ug/L	482.43	ppb	18:47:46
1	Mo 202.031†	5853.0	5414.6	494.95	ug/L	494.95	ppb	18:48:06
1	Ni 231.604†	16308.4	15062.4	503.19	ug/L	503.19	ppb	18:47:46
1	P 214.914†	3478.1	3061.0	2363.0	ug/L	2363.0	ppb	18:48:06
1	Pb 220.353†	3213.6	3023.7	497.37	ug/L	497.37	ppb	18:48:06
1	S 181.975 Axial†	589.1	515.5	983.70	ug/L	983.70	ppb	18:48:06
1	Sb 206.836†	1252.9	1139.1	507.00	ug/L	507.00	ppb	18:48:06
1	Se 196.026†	604.8	581.5	513.67	ug/L	513.67	ppb	18:48:06
1	Si 251.611†	67590.6	62201.9	2425.8	ug/L	2425.8	ppb	18:47:46
1	Sn 189.927†	2229.6	2059.7	491.13	ug/L	491.13	ppb	18:48:06
1	Ti 334.940†	287702.2	267719.9	480.07	ug/L	480.07	ppb	18:47:46
1	Tl 190.801†	1273.8	1207.2	499.75	ug/L	499.75	ppb	18:48:06
1	U 409.014†	15593.5	16432.2	497.45	ug/L	497.45	ppb	18:47:46
1	V 292.402†	63086.1	59693.2	495.69	ug/L	495.69	ppb	18:47:46
1	Zn 213.857†	42173.7	38597.0	489.11	ug/L	489.11	ppb	18:47:46
1	SiO2†	68149.8	62721.5	5256.0	ug/L	5256.0	ppb	18:49:13
2	Sc Radial	3343.3	3343.3	104	%			18:47:09
2	Y RADIAL	2709.2	2709.2	103.1	%			18:47:09
2	Al 396.153Radial†	2226.2	2195.8	4727.1	ug/L	4727.1	ppb	18:46:49
2	Ca 317.933Radial†	1284.3	1218.5	5091.1	ug/L	5091.1	ppb	18:47:09
2	Fe 238.204 Radial†	190.7	173.3	5003.3	ug/L	5003.3	ppb	18:47:09
2	K 766.490 Radial†	12795.9	10238.2	4995.9	ug/L	4995.9	ppb	18:46:49
2	Mg 279.077 IEC†	56.5	52.4	5423.2	ug/L	5423.2	ppb	18:47:09
2	Na 589.592 Radial†	28914.7	28447.5	8999.3	ug/L	8999.3	ppb	18:46:49
2	Sr 421.552†	50981.7	48831.6	470.22	ug/L	470.22	ppb	18:46:49
2	Sc 361.383	852903.4	852903.4	107.69	%			18:48:12
2	Y 371.029	721415.0	721415.0	106.46	%			18:48:12
2	Ag 328.068†	102288.0	94848.4	505.99	ug/L	505.99	ppb	18:48:17
2	As 188.979†	889.6	844.9	499.11	ug/L	499.11	ppb	18:48:37
2	B 249.677†	18338.0	17405.0	504.23	ug/L	504.23	ppb	18:48:17
2	Ba 233.527†	54732.1	50821.9	504.44	ug/L	504.44	ppb	18:48:17
2	Be 313.107†	1186275.2	1105060.1	500.91	ug/L	500.91	ppb	18:48:12
2	Cd 226.502†	35335.7	32967.3	502.80	ug/L	502.80	ppb	18:48:17
2	Co 228.616†	19950.7	18571.2	512.46	ug/L	512.46	ppb	18:48:17
2	Cr 267.716†	39406.0	36537.7	502.30	ug/L	502.30	ppb	18:48:17
2	Cu 324.752†	165772.7	147716.6	498.87	ug/L	498.87	ppb	18:48:17
2	Mn 257.610†	383782.1	355962.8	492.59	ug/L	492.59	ppb	18:48:17
2	Mo 202.031†	5891.5	5457.5	498.87	ug/L	498.87	ppb	18:48:37
2	Ni 231.604†	16639.7	15390.2	514.15	ug/L	514.15	ppb	18:48:17

2	P 214.914†	3513.0	3097.7	2389.4 ug/L	2389.4 ppb	18:48:37
2	Pb 220.353†	3243.8	3055.7	502.60 ug/L	502.60 ppb	18:48:37
2	S 181.975 Axial†	596.4	523.0	998.11 ug/L	998.11 ppb	18:48:37
2	Sb 206.836†	1265.6	1152.5	512.94 ug/L	512.94 ppb	18:48:37
2	Se 196.026†	608.1	585.3	516.91 ug/L	516.91 ppb	18:48:37
2	Si 251.611†	69391.1	63957.2	2494.4 ug/L	2494.4 ppb	18:48:17
2	Sn 189.927†	2256.2	2087.2	497.67 ug/L	497.67 ppb	18:48:37
2	Ti 334.940†	294606.3	274485.7	492.18 ug/L	492.18 ppb	18:48:17
2	Tl 190.801†	1285.1	1219.2	504.79 ug/L	504.79 ppb	18:48:37
2	U 409.014†	16162.1	16979.4	514.05 ug/L	514.05 ppb	18:48:17
2	V 292.402†	64620.5	61195.8	508.08 ug/L	508.08 ppb	18:48:17
2	Zn 213.857†	42946.0	39366.2	498.86 ug/L	498.86 ppb	18:48:17
2	SiO2†	68267.0	62914.4	5272.1 ug/L	5272.1 ppb	18:49:18
3	Sc Radial	3319.3	3319.3	104 %		18:47:34
3	Y RADIAL	2691.1	2691.1	102.4 %		18:47:34
3	Al 396.153Radial†	2169.6	2156.6	4642.4 ug/L	4642.4 ppb	18:47:14
3	Ca 317.933Radial†	1285.4	1228.5	5132.9 ug/L	5132.9 ppb	18:47:34
3	Fe 238.204 Radial†	190.5	174.4	5035.5 ug/L	5035.5 ppb	18:47:34
3	K 766.490 Radial†	12764.1	10296.2	5024.3 ug/L	5024.3 ppb	18:47:14
3	Mg 279.077 IEC†	51.9	48.4	5008.7 ug/L	5008.7 ppb	18:47:34
3	Na 589.592 Radial†	28264.3	28019.8	8864.0 ug/L	8864.0 ppb	18:47:14
3	Sr 421.552†	49958.9	48197.2	464.11 ug/L	464.11 ppb	18:47:14
3	Sc 361.383	861715.1	861715.1	108.81 %		18:48:43
3	Y 371.029	728237.3	728237.3	107.47 %		18:48:43
3	Ag 328.068†	101432.6	93091.0	496.65 ug/L	496.65 ppb	18:48:48
3	As 188.979†	907.6	853.0	503.80 ug/L	503.80 ppb	18:49:08
3	B 249.677†	18093.9	17006.6	492.65 ug/L	492.65 ppb	18:48:48
3	Ba 233.527†	54561.8	50145.7	497.73 ug/L	497.73 ppb	18:48:48
3	Be 313.107†	1198306.2	1104853.3	500.80 ug/L	500.80 ppb	18:48:43
3	Cd 226.502†	35295.7	32595.0	497.11 ug/L	497.11 ppb	18:48:48
3	Co 228.616†	19930.8	18363.4	506.74 ug/L	506.74 ppb	18:48:48
3	Cr 267.716†	39249.2	36019.4	495.18 ug/L	495.18 ppb	18:48:48
3	Cu 324.752†	163898.9	144420.4	487.75 ug/L	487.75 ppb	18:48:48
3	Mn 257.610†	381838.1	350532.0	485.10 ug/L	485.10 ppb	18:48:48
3	Mo 202.031†	5904.3	5413.4	494.84 ug/L	494.84 ppb	18:49:08
3	Ni 231.604†	16569.0	15167.2	506.70 ug/L	506.70 ppb	18:48:48
3	P 214.914†	3527.7	3077.8	2375.5 ug/L	2375.5 ppb	18:49:08
3	Pb 220.353†	3259.9	3039.7	499.95 ug/L	499.95 ppb	18:49:08
3	S 181.975 Axial†	600.5	521.0	994.38 ug/L	994.38 ppb	18:49:08
3	Sb 206.836†	1260.6	1135.9	505.60 ug/L	505.60 ppb	18:49:08
3	Se 196.026†	616.8	587.5	518.85 ug/L	518.85 ppb	18:49:08
3	Si 251.611†	68815.0	62768.8	2448.0 ug/L	2448.0 ppb	18:48:48
3	Sn 189.927†	2247.6	2057.9	490.70 ug/L	490.70 ppb	18:49:08
3	Ti 334.940†	292041.6	269331.2	482.98 ug/L	482.98 ppb	18:48:48
3	Tl 190.801†	1292.6	1214.0	502.56 ug/L	502.56 ppb	18:49:08
3	U 409.014†	15881.9	16568.5	501.58 ug/L	501.58 ppb	18:48:48
3	V 292.402†	64122.1	60124.1	499.21 ug/L	499.21 ppb	18:48:48
3	Zn 213.857†	42813.6	38836.7	492.15 ug/L	492.15 ppb	18:48:48
3	SiO2†	69010.9	62949.9	5275.2 ug/L	5275.2 ppb	18:49:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	856218.9	108.11	%	0.605				0.56%
Sc Radial	3337.6	104	%	0.5				0.48%
Y 371.029	723680.9	106.79	%	0.582				0.55%
Y RADIAL	2706.4	103.0	%	0.54				0.52%
Ag 328.068†	93460.2	498.61	ug/L	6.620	498.61	ppb	6.620	1.33%
QC value within limits for Ag 328.068 Recovery = 99.72%								
Al 396.153Radial†	2200.8	4737.9	ug/L	101.30	4737.9	ppb	101.30	2.14%
QC value within limits for Al 396.153Radial Recovery = 94.76%								
As 188.979†	847.5	500.62	ug/L	2.756	500.62	ppb	2.756	0.55%
QC value within limits for As 188.979 Recovery = 100.12%								
B 249.677†	17085.5	494.94	ug/L	8.380	494.94	ppb	8.380	1.69%
QC value within limits for B 249.677 Recovery = 98.99%								
Ba 233.527†	50264.6	498.91	ug/L	5.048	498.91	ppb	5.048	1.01%
QC value within limits for Ba 233.527 Recovery = 99.78%								
Be 313.107†	1104587.4	500.68	ug/L	0.305	500.68	ppb	0.305	0.06%
QC value within limits for Be 313.107 Recovery = 100.14%								
Ca 317.933Radial†	1220.4	5099.0	ug/L	30.75	5099.0	ppb	30.75	0.60%

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   QC value within limits for Ca 317.933Radial  Recovery = 101.98%
Cd 226.502†            32678.8      498.40 ug/L         3.928      498.40 ppb          3.928   0.79%
   QC value within limits for Cd 226.502  Recovery = 99.68%
Co 228.616†            18408.5      507.98 ug/L         4.007      507.98 ppb          4.007   0.79%
   QC value within limits for Co 228.616  Recovery = 101.60%
Cr 267.716†            36147.1      496.93 ug/L         4.740      496.93 ppb          4.740   0.95%
   QC value within limits for Cr 267.716  Recovery = 99.39%
Cu 324.752†           145063.6      489.92 ug/L         8.091      489.92 ppb          8.091   1.65%
   QC value within limits for Cu 324.752  Recovery = 97.98%
Fe 238.204 Radial†       173.7      5014.5 ug/L        18.25      5014.5 ppb          18.25   0.36%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.29%
K 766.490 Radial†      10267.4      5010.2 ug/L        14.17      5010.2 ppb          14.17   0.28%
   QC value within limits for K 766.490 Radial  Recovery = 100.20%
Mg 279.077 IEC†           50.2      5193.8 ug/L       210.77      5193.8 ppb         210.77   4.06%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.88%
Mn 257.610†           351700.9      486.71 ug/L         5.268      486.71 ppb          5.268   1.08%
   QC value within limits for Mn 257.610  Recovery = 97.34%
Mo 202.031†             5428.5      496.22 ug/L         2.296      496.22 ppb          2.296   0.46%
   QC value within limits for Mo 202.031  Recovery = 99.24%
Na 589.592 Radial†     28340.6      8965.5 ug/L        89.51      8965.5 ppb          89.51   1.00%
   QC value less than the lower limit for Na 589.592 Radial  Recovery = 89.65%
Ni 231.604†            15206.6      508.01 ug/L         5.594      508.01 ppb          5.594   1.10%
   QC value within limits for Ni 231.604  Recovery = 101.60%
P 214.914†              3078.8      2376.0 ug/L        13.18      2376.0 ppb          13.18   0.55%
   QC value within limits for P 214.914  Recovery = 95.04%
Pb 220.353†             3039.7      499.98 ug/L         2.616      499.98 ppb          2.616   0.52%
   QC value within limits for Pb 220.353  Recovery = 100.00%
S 181.975 Axial†         519.8      992.06 ug/L         7.479      992.06 ppb          7.479   0.75%
   QC value within limits for S 181.975 Axial  Recovery = 99.21%
Sb 206.836†             1142.5      508.51 ug/L         3.893      508.51 ppb          3.893   0.77%
   QC value within limits for Sb 206.836  Recovery = 101.70%
Se 196.026†              584.8      516.48 ug/L         2.618      516.48 ppb          2.618   0.51%
   QC value within limits for Se 196.026  Recovery = 103.30%
Si 251.611†            62975.9      2456.1 ug/L        35.00      2456.1 ppb          35.00   1.42%
   QC value within limits for Si 251.611  Recovery = 98.24%
Sn 189.927†             2068.3      493.17 ug/L         3.909      493.17 ppb          3.909   0.79%
   QC value within limits for Sn 189.927  Recovery = 98.63%
Sr 421.552†            48836.2      470.26 ug/L         6.177      470.26 ppb          6.177   1.31%
   QC value within limits for Sr 421.552  Recovery = 94.05%
Ti 334.940†           270512.3      485.08 ug/L         6.319      485.08 ppb          6.319   1.30%
   QC value within limits for Ti 334.940  Recovery = 97.02%
Tl 190.801†             1213.5      502.37 ug/L         2.529      502.37 ppb          2.529   0.50%
   QC value within limits for Tl 190.801  Recovery = 100.47%
U 409.014†             16660.0      504.36 ug/L         8.642      504.36 ppb          8.642   1.71%
   QC value within limits for U 409.014  Recovery = 100.87%
V 292.402†             60337.7      500.99 ug/L         6.382      500.99 ppb          6.382   1.27%
   QC value within limits for V 292.402  Recovery = 100.20%
Zn 213.857†            38933.3      493.37 ug/L         4.988      493.37 ppb          4.988   1.01%
   QC value within limits for Zn 213.857  Recovery = 98.67%
SiO2†                  62861.9      5267.8 ug/L        10.30      5267.8 ppb          10.30   0.20%
   QC value within limits for SiO2  Recovery = 98.51%
QC Failed.  Continue with analysis.
```

Sequence No.: 6
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 3/10/2010 18:51:34
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3255.4	3255.4	102	%			18:53:47
1	Y RADIAL	2664.0	2664.0	101.4	%			18:53:47
1	Al 396.153Radial†	-70.6	-7.5	-16.157	ug/L	-16.157	ppb	18:53:47
1	Ca 317.933Radial†	11.8	-0.9	-3.6232	ug/L	-3.6232	ppb	18:53:47
1	Fe 238.204 Radial†	10.4	0.7	20.775	ug/L	20.775	ppb	18:53:47
1	K 766.490 Radial†	2050.3	-8.4	-4.1152	ug/L	-4.1152	ppb	18:53:27
1	Mg 279.077 IEC†	0.2	-1.6	-161.39	ug/L	-161.39	ppb	18:53:47
1	Na 589.592 Radial†	-762.9	-18.3	-5.8028	ug/L	-5.8028	ppb	18:53:27
1	Sr 421.552†	9.2	-25.6	-0.2462	ug/L	-0.2462	ppb	18:53:27
1	Sc 361.383	804661.9	804661.9	101.60	%			18:54:43
1	Y 371.029	687615.5	687615.5	101.47	%			18:54:43
1	Ag 328.068†	122.8	-10.4	-0.0512	ug/L	-0.0512	ppb	18:54:43
1	As 188.979†	-12.7	6.3	3.7041	ug/L	3.7041	ppb	18:55:03
1	B 249.677†	-28.8	348.9	10.149	ug/L	10.149	ppb	18:55:03
1	Ba 233.527†	88.2	87.1	0.8624	ug/L	0.8624	ppb	18:55:03
1	Be 313.107†	-3481.2	115.6	0.0525	ug/L	0.0525	ppb	18:54:43
1	Cd 226.502†	-141.1	17.3	0.2627	ug/L	0.2627	ppb	18:55:03
1	Co 228.616†	-32.0	14.4	0.3970	ug/L	0.3970	ppb	18:55:03
1	Cr 267.716†	94.2	39.9	0.5479	ug/L	0.5479	ppb	18:55:03
1	Cu 324.752†	6202.3	-107.6	-0.3628	ug/L	-0.3628	ppb	18:54:43
1	Mn 257.610†	399.1	-6.1	0.0003	ug/L	0.0003	ppb	18:55:03
1	Mo 202.031†	16.0	2.7	0.2477	ug/L	0.2477	ppb	18:55:03
1	Ni 231.604†	63.3	1.7	0.0578	ug/L	0.0578	ppb	18:55:03
1	P 214.914†	168.1	1.2	1.0037	ug/L	1.0037	ppb	18:55:03
1	Pb 220.353†	-32.3	11.9	1.9432	ug/L	1.9432	ppb	18:55:03
1	S 181.975 Axial†	34.3	3.0	5.6515	ug/L	5.6515	ppb	18:55:03
1	Sb 206.836†	30.1	6.9	2.9872	ug/L	2.9872	ppb	18:55:03
1	Se 196.026†	-21.6	-0.6	-0.4415	ug/L	-0.4415	ppb	18:55:03
1	Si 251.611†	542.1	57.4	2.2414	ug/L	2.2414	ppb	18:55:03
1	Sn 189.927†	18.4	10.3	2.4536	ug/L	2.4536	ppb	18:55:03
1	Ti 334.940†	-889.7	52.8	0.1066	ug/L	0.1066	ppb	18:54:43
1	Tl 190.801†	-26.1	0.2	0.1002	ug/L	0.1002	ppb	18:55:03
1	U 409.014†	-1961.1	41.9	1.2688	ug/L	1.2688	ppb	18:54:43
1	V 292.402†	-1252.8	-40.7	-0.3343	ug/L	-0.3343	ppb	18:54:43
1	Zn 213.857†	537.6	17.7	0.2232	ug/L	0.2232	ppb	18:55:03
1	SiO2†	560.0	76.2	6.3920	ug/L	6.3920	ppb	18:56:14
2	Sc Radial	3243.2	3243.2	101	%			18:54:12
2	Y RADIAL	2642.9	2642.9	100.6	%			18:54:12
2	Al 396.153Radial†	-59.7	3.0	6.5363	ug/L	6.5363	ppb	18:54:12
2	Ca 317.933Radial†	10.7	-2.0	-8.1781	ug/L	-8.1781	ppb	18:54:12
2	Fe 238.204 Radial†	6.0	-3.5	-100.88	ug/L	-100.88	ppb	18:54:12
2	K 766.490 Radial†	2115.3	63.4	30.992	ug/L	30.992	ppb	18:53:52
2	Mg 279.077 IEC†	0.8	-0.9	-93.142	ug/L	-93.142	ppb	18:54:12
2	Na 589.592 Radial†	-752.9	-11.3	-3.5678	ug/L	-3.5678	ppb	18:53:52
2	Sr 421.552†	30.6	-4.4	-0.0423	ug/L	-0.0423	ppb	18:53:52
2	Sc 361.383	809783.5	809783.5	102.25	%			18:55:09
2	Y 371.029	693166.7	693166.7	102.29	%			18:55:09
2	Ag 328.068†	204.1	68.3	0.3340	ug/L	0.3340	ppb	18:55:09
2	As 188.979†	-15.2	4.0	2.3246	ug/L	2.3246	ppb	18:55:29
2	B 249.677†	-71.2	307.6	8.9681	ug/L	8.9681	ppb	18:55:29
2	Ba 233.527†	91.2	89.5	0.8842	ug/L	0.8842	ppb	18:55:29
2	Be 313.107†	-3477.9	140.5	0.0637	ug/L	0.0637	ppb	18:55:09
2	Cd 226.502†	-150.4	9.1	0.1495	ug/L	0.1495	ppb	18:55:29
2	Co 228.616†	-38.4	8.3	0.2285	ug/L	0.2285	ppb	18:55:29
2	Cr 267.716†	103.9	48.8	0.6669	ug/L	0.6669	ppb	18:55:29
2	Cu 324.752†	6318.6	-32.4	-0.1139	ug/L	-0.1139	ppb	18:55:09
2	Mn 257.610†	425.6	17.4	0.0179	ug/L	0.0179	ppb	18:55:29
2	Mo 202.031†	7.0	-6.2	-0.5755	ug/L	-0.5755	ppb	18:55:29
2	Ni 231.604†	75.4	13.1	0.4387	ug/L	0.4387	ppb	18:55:29

2	P 214.914†	168.2	0.1	0.2254 ug/L	0.2254 ppb	18:55:29
2	Pb 220.353†	-30.2	14.1	2.3326 ug/L	2.3326 ppb	18:55:29
2	S 181.975 Axial†	33.7	2.1	4.0931 ug/L	4.0931 ppb	18:55:29
2	Sb 206.836†	36.8	13.2	5.6861 ug/L	5.6861 ppb	18:55:29
2	Se 196.026†	-17.7	3.4	2.6157 ug/L	2.6157 ppb	18:55:29
2	Si 251.611†	554.2	65.9	2.5821 ug/L	2.5821 ppb	18:55:29
2	Sn 189.927†	12.8	4.7	1.1283 ug/L	1.1283 ppb	18:55:29
2	Ti 334.940†	-900.0	48.2	0.0935 ug/L	0.0935 ppb	18:55:09
2	Tl 190.801†	-26.8	-0.2	-0.0847 ug/L	-0.0847 ppb	18:55:29
2	U 409.014†	-2075.0	-57.2	-1.7285 ug/L	-1.7285 ppb	18:55:09
2	V 292.402†	-1167.6	50.4	0.4142 ug/L	0.4142 ppb	18:55:09
2	Zn 213.857†	534.7	11.6	0.1605 ug/L	0.1605 ppb	18:55:29
2	SiO2†	551.0	63.8	5.3771 ug/L	5.3771 ppb	18:56:34
3	Sc Radial	3223.1	3223.1	101 %		18:54:37
3	Y RADIAL	2625.3	2625.3	99.92 %		18:54:37
3	Al 396.153Radial†	-56.9	5.5	11.851 ug/L	11.851 ppb	18:54:37
3	Ca 317.933Radial†	10.6	-1.9	-7.9227 ug/L	-7.9227 ppb	18:54:37
3	Fe 238.204 Radial†	8.5	-1.0	-29.482 ug/L	-29.482 ppb	18:54:37
3	K 766.490 Radial†	2110.1	71.4	34.854 ug/L	34.854 ppb	18:54:17
3	Mg 279.077 IEC†	1.5	-0.2	-23.309 ug/L	-23.309 ppb	18:54:37
3	Na 589.592 Radial†	-683.3	53.3	16.856 ug/L	16.856 ppb	18:54:17
3	Sr 421.552†	17.7	-17.0	-0.1640 ug/L	-0.1640 ppb	18:54:17
3	Sc 361.383	811201.1	811201.1	102.43 %		18:55:34
3	Y 371.029	693644.8	693644.8	102.36 %		18:55:34
3	Ag 328.068†	184.4	48.7	0.2473 ug/L	0.2473 ppb	18:55:34
3	As 188.979†	-12.5	6.7	3.9014 ug/L	3.9014 ppb	18:55:54
3	B 249.677†	-65.8	313.0	9.1109 ug/L	9.1109 ppb	18:55:54
3	Ba 233.527†	97.6	95.5	0.9442 ug/L	0.9442 ppb	18:55:54
3	Be 313.107†	-3391.8	230.5	0.1046 ug/L	0.1046 ppb	18:55:34
3	Cd 226.502†	-118.9	40.2	0.6165 ug/L	0.6165 ppb	18:55:54
3	Co 228.616†	-22.2	24.2	0.6688 ug/L	0.6688 ppb	18:55:54
3	Cr 267.716†	141.0	84.8	1.1627 ug/L	1.1627 ppb	18:55:54
3	Cu 324.752†	6258.8	-101.6	-0.3451 ug/L	-0.3451 ppb	18:55:34
3	Mn 257.610†	729.0	312.8	0.4307 ug/L	0.4307 ppb	18:55:54
3	Mo 202.031†	16.5	3.1	0.2775 ug/L	0.2775 ppb	18:55:54
3	Ni 231.604†	60.7	-1.3	-0.0448 ug/L	-0.0448 ppb	18:55:54
3	P 214.914†	173.1	4.7	3.8571 ug/L	3.8571 ppb	18:55:54
3	Pb 220.353†	-36.1	8.4	1.3861 ug/L	1.3861 ppb	18:55:54
3	S 181.975 Axial†	35.9	4.3	8.1296 ug/L	8.1296 ppb	18:55:54
3	Sb 206.836†	29.8	6.3	2.7552 ug/L	2.7552 ppb	18:55:54
3	Se 196.026†	-15.7	5.3	4.4851 ug/L	4.4851 ppb	18:55:54
3	Si 251.611†	608.7	118.2	4.6174 ug/L	4.6174 ppb	18:55:54
3	Sn 189.927†	15.3	7.1	1.6972 ug/L	1.6972 ppb	18:55:54
3	Ti 334.940†	-853.7	94.9	0.1705 ug/L	0.1705 ppb	18:55:34
3	Tl 190.801†	-22.6	3.9	1.5911 ug/L	1.5911 ppb	18:55:54
3	U 409.014†	-2003.0	16.6	0.5051 ug/L	0.5051 ppb	18:55:34
3	V 292.402†	-1272.0	-49.5	-0.3976 ug/L	-0.3976 ppb	18:55:34
3	Zn 213.857†	584.3	59.0	0.7604 ug/L	0.7604 ppb	18:55:54
3	SiO2†	553.0	64.8	5.4379 ug/L	5.4379 ppb	18:56:54

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	808548.8	102.09	%	0.434				0.43%
Sc Radial	3240.6	101	%	0.5				0.50%
Y 371.029	691475.7	102.04	%	0.495				0.48%
Y RADIAL	2644.0	100.6	%	0.74				0.73%
Ag 328.068†	35.5	0.1767	ug/L	0.20207	0.1767	ppb	0.20207	114.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	0.3	0.7436	ug/L	14.87538	0.7436	ppb	14.87538	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	5.7	3.3101	ug/L	0.85908	3.3101	ppb	0.85908	25.95%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	323.2	9.4093	ug/L	0.64451	9.4093	ppb	0.64451	6.85%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	90.7	0.8970	ug/L	0.04237	0.8970	ppb	0.04237	4.72%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	162.2	0.0736	ug/L	0.02743	0.0736	ppb	0.02743	37.26%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	-1.6	-6.5747	ug/L	2.55924	-6.5747	ppb	2.55924	38.93%

```
   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                22.2      0.3429 ug/L       0.24359      0.3429 ppb        0.24359  71.04%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                15.6      0.4314 ug/L       0.22215      0.4314 ppb        0.22215  51.49%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                57.8      0.7925 ug/L       0.32611      0.7925 ppb        0.32611  41.15%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†               -80.5     -0.2739 ug/L       0.13889     -0.2739 ppb        0.13889  50.70%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.3    -36.529 ug/L       61.1327     -36.529 ppb        61.1327 167.36%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          42.1      20.577 ug/L       21.4711      20.577 ppb        21.4711 104.35%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.9    -92.614 ug/L       69.0420     -92.614 ppb        69.0420  74.55%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               108.1      0.1496 ug/L       0.24359      0.1496 ppb        0.24359 162.79%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -0.2     -0.0168 ug/L       0.48411     -0.0168 ppb        0.48411 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†          7.9      2.4952 ug/L      12.48710      2.4952 ppb       12.48710 500.44%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                 4.5      0.1505 ug/L       0.25474      0.1505 ppb        0.25474 169.21%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                  2.0      1.6954 ug/L       1.91210      1.6954 ppb        1.91210 112.78%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                11.5      1.8873 ug/L       0.47570      1.8873 ppb        0.47570  25.21%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†            3.1      5.9581 ug/L       2.03566      5.9581 ppb        2.03566  34.17%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 8.8      3.8095 ug/L       1.62933      3.8095 ppb        1.62933  42.77%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 2.7      2.2198 ug/L       2.48707      2.2198 ppb        2.48707 112.04%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                80.5      3.1470 ug/L       1.28481      3.1470 ppb        1.28481  40.83%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 7.4      1.7597 ug/L       0.66486      1.7597 ppb        0.66486  37.78%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†               -15.7     -0.1508 ug/L       0.10259     -0.1508 ppb        0.10259  68.02%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                65.3      0.1235 ug/L       0.04118      0.1235 ppb        0.04118  33.33%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 1.3      0.5355 ug/L       0.91879      0.5355 ppb        0.91879 171.56%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                  0.4      0.0151 ug/L       1.55755      0.0151 ppb        1.55755 >999.9%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -13.3     -0.1059 ug/L       0.45152     -0.1059 ppb        0.45152 426.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                29.4      0.3814 ug/L       0.32973      0.3814 ppb        0.32973  86.46%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      68.3      5.7357 ug/L       0.56922      5.7357 ppb        0.56922   9.92%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

==========

Analysis Begun

Start Time: 3/10/2010 19:06:40 **Plasma On Time: 3/8/2010 08:27:38**
Logged In Analyst: Optima3 **Technique: ICP Continuous**
Spectrometer Model: Optima 5300 DV, S/N 077C7090601Autosampler Model: S10

Sample Information File: C:\pe\Optima3\Sample Information\031010.sif
Batch ID:
Results Data Set: 031010
Results Library: C:\pe\Optima3\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: CCV **Date Collected: 3/10/2010 19:06:42**
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.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3379.3	3379.3	105	%			19:08:54
1	Y RADIAL	2765.9	2765.9	105.3	%			19:08:54
1	Al 396.153Radial†	2288.4	2232.1	4806.0	ug/L	4806.0	ppb	19:08:34
1	Ca 317.933Radial†	1288.5	1209.4	5053.3	ug/L	5053.3	ppb	19:08:54
1	Fe 238.204 Radial†	189.6	170.3	4916.9	ug/L	4916.9	ppb	19:08:54
1	K 766.490 Radial†	12550.7	9875.2	4818.4	ug/L	4818.4	ppb	19:08:34
1	Mg 279.077 IEC†	53.7	49.2	5088.6	ug/L	5088.6	ppb	19:08:54
1	Na 589.592 Radial†	30275.8	29443.2	9314.3	ug/L	9314.3	ppb	19:08:34
1	Sr 421.552†	52870.4	50102.4	482.46	ug/L	482.46	ppb	19:08:34
1	Sc 361.383	855221.9	855221.9	107.99	%			19:09:51
1	Y 371.029	722794.6	722794.6	106.66	%			19:09:51
1	Ag 328.068†	100423.7	92864.5	495.41	ug/L	495.41	ppb	19:09:56
1	As 188.979†	884.7	838.1	495.07	ug/L	495.07	ppb	19:10:16
1	B 249.677†	17826.3	16885.0	489.14	ug/L	489.14	ppb	19:09:56
1	Ba 233.527†	53766.1	49789.6	494.20	ug/L	494.20	ppb	19:09:56
1	Be 313.107†	1173886.2	1090601.2	494.35	ug/L	494.35	ppb	19:09:51
1	Cd 226.502†	34847.7	32426.5	494.55	ug/L	494.55	ppb	19:09:56
1	Co 228.616†	19691.7	18281.1	504.46	ug/L	504.46	ppb	19:09:56
1	Cr 267.716†	38808.1	35884.8	493.32	ug/L	493.32	ppb	19:09:56
1	Cu 324.752†	162420.8	144195.3	486.99	ug/L	486.99	ppb	19:09:56
1	Mn 257.610†	384187.1	355371.7	491.78	ug/L	491.78	ppb	19:09:51
1	Mo 202.031†	5817.0	5373.7	491.20	ug/L	491.20	ppb	19:10:16
1	Ni 231.604†	16371.0	15099.5	504.43	ug/L	504.43	ppb	19:09:56
1	P 214.914†	3481.6	3059.8	2361.3	ug/L	2361.3	ppb	19:10:16
1	Pb 220.353†	3213.2	3019.2	496.63	ug/L	496.63	ppb	19:10:16
1	S 181.975 Axial†	578.7	505.1	963.95	ug/L	963.95	ppb	19:10:16
1	Sb 206.836†	1241.8	1127.2	501.83	ug/L	501.83	ppb	19:10:16
1	Se 196.026†	605.0	581.0	512.96	ug/L	512.96	ppb	19:10:16
1	Si 251.611†	67993.4	62488.1	2437.0	ug/L	2437.0	ppb	19:09:56
1	Sn 189.927†	2232.7	2059.7	491.13	ug/L	491.13	ppb	19:10:16
1	Ti 334.940†	288850.4	268413.9	481.32	ug/L	481.32	ppb	19:09:56
1	Tl 190.801†	1266.4	1198.7	496.29	ug/L	496.29	ppb	19:10:16
1	U 409.014†	15500.7	16326.2	494.24	ug/L	494.24	ppb	19:09:56
1	V 292.402†	63314.0	59823.3	496.71	ug/L	496.71	ppb	19:09:56
1	Zn 213.857†	42280.1	38641.5	489.68	ug/L	489.68	ppb	19:09:56
1	SiO2†	68034.3	62527.1	5239.8	ug/L	5239.8	ppb	19:11:24
2	Sc Radial	3391.2	3391.2	106	%			19:09:19
2	Y RADIAL	2759.2	2759.2	105.0	%			19:09:19
2	Al 396.153Radial†	2297.3	2232.9	4807.5	ug/L	4807.5	ppb	19:08:59
2	Ca 317.933Radial†	1286.2	1203.0	5026.2	ug/L	5026.2	ppb	19:09:19
2	Fe 238.204 Radial†	191.6	171.6	4954.6	ug/L	4954.6	ppb	19:09:19
2	K 766.490 Radial†	12849.3	10115.5	4935.8	ug/L	4935.8	ppb	19:08:59
2	Mg 279.077 IEC†	54.9	50.2	5194.2	ug/L	5194.2	ppb	19:09:19
2	Na 589.592 Radial†	30174.1	29246.1	9251.9	ug/L	9251.9	ppb	19:08:59
2	Sr 421.552†	53134.7	50175.7	483.16	ug/L	483.16	ppb	19:08:59
2	Sc 361.383	853153.5	853153.5	107.73	%			19:10:22
2	Y 371.029	721473.1	721473.1	106.47	%			19:10:22

2	Ag 328.068†	100838.0	93474.5	498.66 ug/L	498.66 ppb	19:10:27
2	As 188.979†	901.2	855.4	505.23 ug/L	505.23 ppb	19:10:47
2	B 249.677†	17872.2	16967.7	491.53 ug/L	491.53 ppb	19:10:27
2	Ba 233.527†	54000.3	50127.7	497.55 ug/L	497.55 ppb	19:10:27
2	Be 313.107†	1171319.4	1090854.0	494.47 ug/L	494.47 ppb	19:10:22
2	Cd 226.502†	34827.4	32485.9	495.46 ug/L	495.46 ppb	19:10:27
2	Co 228.616†	19712.8	18344.8	506.22 ug/L	506.22 ppb	19:10:27
2	Cr 267.716†	39002.6	36152.5	497.00 ug/L	497.00 ppb	19:10:27
2	Cu 324.752†	163232.3	145313.3	490.76 ug/L	490.76 ppb	19:10:27
2	Mn 257.610†	383195.2	355313.5	491.70 ug/L	491.70 ppb	19:10:22
2	Mo 202.031†	5859.1	5425.9	495.97 ug/L	495.97 ppb	19:10:47
2	Ni 231.604†	16360.0	15126.1	505.32 ug/L	505.32 ppb	19:10:27
2	P 214.914†	3484.1	3069.9	2368.7 ug/L	2368.7 ppb	19:10:47
2	Pb 220.353†	3197.0	3011.4	495.35 ug/L	495.35 ppb	19:10:47
2	S 181.975 Axial†	584.6	511.9	976.82 ug/L	976.82 ppb	19:10:47
2	Sb 206.836†	1244.1	1132.2	504.07 ug/L	504.07 ppb	19:10:47
2	Se 196.026†	601.9	579.4	511.73 ug/L	511.73 ppb	19:10:47
2	Si 251.611†	68230.8	62861.2	2451.6 ug/L	2451.6 ppb	19:10:27
2	Sn 189.927†	2237.3	2069.0	493.34 ug/L	493.34 ppb	19:10:47
2	Ti 334.940†	290547.7	270638.0	485.29 ug/L	485.29 ppb	19:10:27
2	Tl 190.801†	1273.2	1207.8	500.08 ug/L	500.08 ppb	19:10:47
2	U 409.014†	15972.8	16799.3	508.59 ug/L	508.59 ppb	19:10:27
2	V 292.402†	63682.6	60307.5	500.76 ug/L	500.76 ppb	19:10:27
2	Zn 213.857†	42349.6	38800.9	491.70 ug/L	491.70 ppb	19:10:27
2	SiO2†	68042.4	62687.4	5253.1 ug/L	5253.1 ppb	19:11:29
3	Sc Radial	3379.2	3379.2	105 %		19:09:44
3	Y RADIAL	2766.0	2766.0	105.3 %		19:09:44
3	Al 396.153Radial†	2311.9	2254.5	4854.3 ug/L	4854.3 ppb	19:09:24
3	Ca 317.933Radial†	1294.5	1215.1	5076.9 ug/L	5076.9 ppb	19:09:44
3	Fe 238.204 Radial†	192.0	172.6	4982.9 ug/L	4982.9 ppb	19:09:44
3	K 766.490 Radial†	12780.1	10093.1	4924.8 ug/L	4924.8 ppb	19:09:24
3	Mg 279.077 IEC†	54.3	49.8	5149.4 ug/L	5149.4 ppb	19:09:44
3	Na 589.592 Radial†	30531.0	29686.0	9391.1 ug/L	9391.1 ppb	19:09:24
3	Sr 421.552†	53491.0	50692.4	488.14 ug/L	488.14 ppb	19:09:24
3	Sc 361.383	853984.2	853984.2	107.83 %		19:10:53
3	Y 371.029	722305.1	722305.1	106.59 %		19:10:53
3	Ag 328.068†	99304.8	91961.6	490.63 ug/L	490.63 ppb	19:10:58
3	As 188.979†	887.8	842.1	497.38 ug/L	497.38 ppb	19:11:18
3	B 249.677†	17580.0	16680.5	483.19 ug/L	483.19 ppb	19:10:58
3	Ba 233.527†	53254.1	49386.9	490.20 ug/L	490.20 ppb	19:10:58
3	Be 313.107†	1175232.4	1093425.2	495.62 ug/L	495.62 ppb	19:10:53
3	Cd 226.502†	34453.4	32107.5	489.68 ug/L	489.68 ppb	19:10:58
3	Co 228.616†	19485.1	18115.9	499.92 ug/L	499.92 ppb	19:10:58
3	Cr 267.716†	38472.4	35625.5	489.76 ug/L	489.76 ppb	19:10:58
3	Cu 324.752†	160103.3	142264.1	480.47 ug/L	480.47 ppb	19:10:58
3	Mn 257.610†	383229.7	354999.5	491.27 ug/L	491.27 ppb	19:10:53
3	Mo 202.031†	5836.2	5399.4	493.55 ug/L	493.55 ppb	19:11:18
3	Ni 231.604†	16187.1	14950.9	499.47 ug/L	499.47 ppb	19:10:58
3	P 214.914†	3467.3	3051.2	2355.7 ug/L	2355.7 ppb	19:11:18
3	Pb 220.353†	3203.0	3014.0	495.79 ug/L	495.79 ppb	19:11:18
3	S 181.975 Axial†	588.5	515.0	982.72 ug/L	982.72 ppb	19:11:18
3	Sb 206.836†	1242.2	1129.3	502.73 ug/L	502.73 ppb	19:11:18
3	Se 196.026†	608.2	584.7	516.36 ug/L	516.36 ppb	19:11:18
3	Si 251.611†	67239.2	61880.0	2413.2 ug/L	2413.2 ppb	19:10:58
3	Sn 189.927†	2223.3	2054.1	489.78 ug/L	489.78 ppb	19:11:18
3	Ti 334.940†	285781.6	265955.6	476.91 ug/L	476.91 ppb	19:10:58
3	Tl 190.801†	1265.4	1199.4	496.60 ug/L	496.60 ppb	19:11:18
3	U 409.014†	15535.9	16379.7	495.86 ug/L	495.86 ppb	19:10:58
3	V 292.402†	62642.2	59285.2	492.33 ug/L	492.33 ppb	19:10:58
3	Zn 213.857†	41748.8	38205.5	484.14 ug/L	484.14 ppb	19:10:58
3	SiO2†	68657.2	63196.1	5295.9 ug/L	5295.9 ppb	19:11:34

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	854119.9	107.85	%	0.131				0.12%
Sc Radial	3383.2	106	%	0.2				0.20%
Y 371.029	722190.9	106.57	%	0.099				0.09%
Y RADIAL	2763.7	105.2	%	0.15				0.14%
Ag 328.068†	92766.9	494.90	ug/L	4.043	494.90	ppb	4.043	0.82%

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   QC value within limits for Ag 328.068  Recovery = 98.98%
Al 396.153Radial†       2239.8      4822.6 ug/L         27.46      4822.6 ppb          27.46   0.57%
   QC value within limits for Al 396.153Radial  Recovery = 96.45%
As 188.979†              845.2      499.23 ug/L         5.325      499.23 ppb          5.325   1.07%
   QC value within limits for As 188.979  Recovery = 99.85%
B 249.677†             16844.4      487.95 ug/L         4.295      487.95 ppb          4.295   0.88%
   QC value within limits for B 249.677  Recovery = 97.59%
Ba 233.527†            49768.0      493.98 ug/L         3.681      493.98 ppb          3.681   0.75%
   QC value within limits for Ba 233.527  Recovery = 98.80%
Be 313.107†          1091626.8      494.81 ug/L         0.699      494.81 ppb          0.699   0.14%
   QC value within limits for Be 313.107  Recovery = 98.96%
Ca 317.933Radial†       1209.2      5052.1 ug/L         25.35      5052.1 ppb          25.35   0.50%
   QC value within limits for Ca 317.933Radial  Recovery = 101.04%
Cd 226.502†            32339.9      493.23 ug/L         3.109      493.23 ppb          3.109   0.63%
   QC value within limits for Cd 226.502  Recovery = 98.65%
Co 228.616†            18247.3      503.53 ug/L         3.254      503.53 ppb          3.254   0.65%
   QC value within limits for Co 228.616  Recovery = 100.71%
Cr 267.716†            35887.6      493.36 ug/L         3.620      493.36 ppb          3.620   0.73%
   QC value within limits for Cr 267.716  Recovery = 98.67%
Cu 324.752†           143924.2      486.07 ug/L         5.206      486.07 ppb          5.206   1.07%
   QC value within limits for Cu 324.752  Recovery = 97.21%
Fe 238.204 Radial†       171.5      4951.5 ug/L         33.11      4951.5 ppb          33.11   0.67%
   QC value within limits for Fe 238.204 Radial  Recovery = 99.03%
K 766.490 Radial†      10027.9      4893.0 ug/L         64.85      4893.0 ppb          64.85   1.33%
   QC value within limits for K 766.490 Radial  Recovery = 97.86%
Mg 279.077 IEC†           49.7      5144.1 ug/L         53.01      5144.1 ppb          53.01   1.03%
   QC value within limits for Mg 279.077 IEC  Recovery = 102.88%
Mn 257.610†           355228.2      491.58 ug/L         0.274      491.58 ppb          0.274   0.06%
   QC value within limits for Mn 257.610  Recovery = 98.32%
Mo 202.031†             5399.6      493.58 ug/L         2.384      493.58 ppb          2.384   0.48%
   QC value within limits for Mo 202.031  Recovery = 98.72%
Na 589.592 Radial†     29458.4      9319.1 ug/L         69.71      9319.1 ppb          69.71   0.75%
   QC value within limits for Na 589.592 Radial  Recovery = 93.19%
Ni 231.604†            15058.8      503.08 ug/L         3.154      503.08 ppb          3.154   0.63%
   QC value within limits for Ni 231.604  Recovery = 100.62%
P 214.914†              3060.3      2361.9 ug/L          6.52      2361.9 ppb           6.52   0.28%
   QC value within limits for P 214.914  Recovery = 94.48%
Pb 220.353†             3014.9      495.93 ug/L         0.649      495.93 ppb          0.649   0.13%
   QC value within limits for Pb 220.353  Recovery = 99.19%
S 181.975 Axial†         510.7      974.50 ug/L         9.597      974.50 ppb          9.597   0.98%
   QC value within limits for S 181.975 Axial  Recovery = 97.45%
Sb 206.836†             1129.6      502.88 ug/L         1.127      502.88 ppb          1.127   0.22%
   QC value within limits for Sb 206.836  Recovery = 100.58%
Se 196.026†              581.7      513.69 ug/L         2.395      513.69 ppb          2.395   0.47%
   QC value within limits for Se 196.026  Recovery = 102.74%
Si 251.611†            62409.8      2434.0 ug/L         19.35      2434.0 ppb          19.35   0.80%
   QC value within limits for Si 251.611  Recovery = 97.36%
Sn 189.927†             2060.9      491.42 ug/L         1.794      491.42 ppb          1.794   0.37%
   QC value within limits for Sn 189.927  Recovery = 98.28%
Sr 421.552†            50323.5      484.58 ug/L         3.096      484.58 ppb          3.096   0.64%
   QC value within limits for Sr 421.552  Recovery = 96.92%
Ti 334.940†           268335.8      481.18 ug/L         4.192      481.18 ppb          4.192   0.87%
   QC value within limits for Ti 334.940  Recovery = 96.24%
Tl 190.801†             1202.0      497.66 ug/L         2.103      497.66 ppb          2.103   0.42%
   QC value within limits for Tl 190.801  Recovery = 99.53%
U 409.014†             16501.7      499.57 ug/L         7.861      499.57 ppb          7.861   1.57%
   QC value within limits for U 409.014  Recovery = 99.91%
V 292.402†             59805.3      496.60 ug/L         4.215      496.60 ppb          4.215   0.85%
   QC value within limits for V 292.402  Recovery = 99.32%
Zn 213.857†            38549.3      488.51 ug/L         3.919      488.51 ppb          3.919   0.80%
   QC value within limits for Zn 213.857  Recovery = 97.70%
SiO2†                  62803.5      5262.9 ug/L         29.33      5262.9 ppb          29.33   0.56%
   QC value within limits for SiO2  Recovery = 98.42%
All analyte(s) passed QC.
```

Sequence No.: 2
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 19:13:44
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3280.2	3280.2	102	%			19:15:56
1	Y RADIAL	2683.2	2683.2	102.1	%			19:15:56
1	Al 396.153Radial†	-63.8	-0.3	-0.7001	ug/L	-0.7001	ppb	19:15:56
1	Ca 317.933Radial†	11.3	-1.5	-6.1998	ug/L	-6.1998	ppb	19:15:56
1	Fe 238.204 Radial†	8.2	-1.5	-42.221	ug/L	-42.221	ppb	19:15:56
1	K 766.490 Radial†	2066.9	-7.4	-3.6231	ug/L	-3.6231	ppb	19:15:36
1	Mg 279.077 IEC†	-0.3	-2.0	-209.17	ug/L	-209.17	ppb	19:15:56
1	Na 589.592 Radial†	-715.1	34.0	10.752	ug/L	10.752	ppb	19:15:36
1	Sr 421.552†	30.2	-5.2	-0.0498	ug/L	-0.0498	ppb	19:15:36
1	Sc 361.383	821830.6	821830.6	103.77	%			19:16:53
1	Y 371.029	702015.8	702015.8	103.60	%			19:16:53
1	Ag 328.068†	231.5	91.8	0.4734	ug/L	0.4734	ppb	19:16:58
1	As 188.979†	-26.1	-6.3	-3.6907	ug/L	-3.6907	ppb	19:17:18
1	B 249.677†	-141.1	241.3	7.0276	ug/L	7.0276	ppb	19:16:58
1	Ba 233.527†	66.7	64.6	0.6392	ug/L	0.6392	ppb	19:17:18
1	Be 313.107†	-3548.1	122.7	0.0557	ug/L	0.0557	ppb	19:16:58
1	Cd 226.502†	-132.1	29.0	0.4467	ug/L	0.4467	ppb	19:17:18
1	Co 228.616†	-44.4	3.1	0.0844	ug/L	0.0844	ppb	19:17:18
1	Cr 267.716†	80.0	24.2	0.3304	ug/L	0.3304	ppb	19:16:58
1	Cu 324.752†	6342.2	-100.2	-0.3419	ug/L	-0.3419	ppb	19:16:58
1	Mn 257.610†	423.8	9.5	0.0175	ug/L	0.0175	ppb	19:16:58
1	Mo 202.031†	11.9	-1.5	-0.1430	ug/L	-0.1430	ppb	19:17:18
1	Ni 231.604†	69.3	6.2	0.2076	ug/L	0.2076	ppb	19:17:18
1	P 214.914†	167.7	-2.7	-2.0685	ug/L	-2.0685	ppb	19:17:18
1	Pb 220.353†	-28.0	16.7	2.7437	ug/L	2.7437	ppb	19:17:18
1	S 181.975 Axial†	27.1	-4.7	-8.8984	ug/L	-8.8984	ppb	19:17:18
1	Sb 206.836†	23.2	-0.4	-0.1674	ug/L	-0.1674	ppb	19:17:18
1	Se 196.026†	-19.0	2.4	1.9033	ug/L	1.9033	ppb	19:17:18
1	Si 251.611†	479.6	-13.9	-0.5411	ug/L	-0.5411	ppb	19:17:18
1	Sn 189.927†	12.3	4.1	0.9704	ug/L	0.9704	ppb	19:17:18
1	Ti 334.940†	-906.7	54.7	0.1133	ug/L	0.1133	ppb	19:16:58
1	Tl 190.801†	-27.1	-0.2	-0.0658	ug/L	-0.0658	ppb	19:17:18
1	U 409.014†	-1970.5	73.2	2.2272	ug/L	2.2272	ppb	19:16:53
1	V 292.402†	-1186.8	48.6	0.4025	ug/L	0.4025	ppb	19:16:58
1	Zn 213.857†	605.8	72.3	0.9309	ug/L	0.9309	ppb	19:17:18
1	SiO2†	498.0	4.9	0.4150	ug/L	0.4150	ppb	19:18:38
2	Sc Radial	3261.4	3261.4	102	%			19:16:21
2	Y RADIAL	2677.5	2677.5	101.9	%			19:16:21
2	Al 396.153Radial†	-54.5	8.5	18.322	ug/L	18.322	ppb	19:16:21
2	Ca 317.933Radial†	14.9	2.1	8.8864	ug/L	8.8864	ppb	19:16:21
2	Fe 238.204 Radial†	9.2	-0.5	-13.802	ug/L	-13.802	ppb	19:16:21
2	K 766.490 Radial†	2113.9	50.4	24.615	ug/L	24.615	ppb	19:16:01
2	Mg 279.077 IEC†	2.6	0.9	92.726	ug/L	92.726	ppb	19:16:21
2	Na 589.592 Radial†	-757.2	-11.4	-3.6063	ug/L	-3.6063	ppb	19:16:01
2	Sr 421.552†	19.0	-15.9	-0.1537	ug/L	-0.1537	ppb	19:16:01
2	Sc 361.383	814780.0	814780.0	102.88	%			19:17:23
2	Y 371.029	697370.5	697370.5	102.91	%			19:17:23
2	Ag 328.068†	105.3	-28.9	-0.1609	ug/L	-0.1609	ppb	19:17:28
2	As 188.979†	-14.3	5.0	2.8995	ug/L	2.8995	ppb	19:17:48
2	B 249.677†	-160.7	221.0	6.4338	ug/L	6.4338	ppb	19:17:28
2	Ba 233.527†	43.5	42.6	0.4206	ug/L	0.4206	ppb	19:17:48
2	Be 313.107†	-3551.0	90.3	0.0411	ug/L	0.0411	ppb	19:17:28
2	Cd 226.502†	-137.9	22.2	0.3415	ug/L	0.3415	ppb	19:17:48
2	Co 228.616†	-42.9	4.2	0.1155	ug/L	0.1155	ppb	19:17:48
2	Cr 267.716†	95.1	39.6	0.5418	ug/L	0.5418	ppb	19:17:28
2	Cu 324.752†	6315.4	-73.4	-0.2499	ug/L	-0.2499	ppb	19:17:28
2	Mn 257.610†	411.6	1.2	-0.0035	ug/L	-0.0035	ppb	19:17:28
2	Mo 202.031†	12.5	-0.9	-0.0823	ug/L	-0.0823	ppb	19:17:48
2	Ni 231.604†	73.9	11.2	0.3735	ug/L	0.3735	ppb	19:17:48

2	P 214.914†	166.8	-2.2	-1.6926 ug/L	-1.6926 ppb	19:17:48
2	Pb 220.353†	-43.3	1.6	0.2700 ug/L	0.2700 ppb	19:17:48
2	S 181.975 Axial†	22.4	-9.0	-17.259 ug/L	-17.259 ppb	19:17:48
2	Sb 206.836†	29.0	5.4	2.3558 ug/L	2.3558 ppb	19:17:48
2	Se 196.026†	-6.5	14.4	12.277 ug/L	12.277 ppb	19:17:48
2	Si 251.611†	488.7	-1.1	-0.0432 ug/L	-0.0432 ppb	19:17:48
2	Sn 189.927†	13.1	4.9	1.1683 ug/L	1.1683 ppb	19:17:48
2	Ti 334.940†	-895.6	57.9	0.0964 ug/L	0.0964 ppb	19:17:28
2	Tl 190.801†	-23.8	2.8	1.1701 ug/L	1.1701 ppb	19:17:48
2	U 409.014†	-1954.4	72.3	2.1977 ug/L	2.1977 ppb	19:17:23
2	V 292.402†	-1264.7	-37.1	-0.2970 ug/L	-0.2970 ppb	19:17:28
2	Zn 213.857†	611.0	82.5	1.0549 ug/L	1.0549 ppb	19:17:48
2	SiO2†	508.6	19.3	1.6217 ug/L	1.6217 ppb	19:18:58
3	Sc Radial	3264.7	3264.7	102 %		19:16:46
3	Y RADIAL	2659.8	2659.8	101.2 %		19:16:46
3	Al 396.153Radial†	-63.6	-0.4	-0.9011 ug/L	-0.9011 ppb	19:16:46
3	Ca 317.933Radial†	15.1	2.3	9.6209 ug/L	9.6209 ppb	19:16:46
3	Fe 238.204 Radial†	7.5	-2.1	-60.503 ug/L	-60.503 ppb	19:16:46
3	K 766.490 Radial†	2045.3	-19.1	-9.3151 ug/L	-9.3151 ppb	19:16:26
3	Mg 279.077 IEC†	1.0	-0.7	-74.089 ug/L	-74.089 ppb	19:16:46
3	Na 589.592 Radial†	-733.7	12.5	3.9456 ug/L	3.9456 ppb	19:16:26
3	Sr 421.552†	30.5	-4.7	-0.0454 ug/L	-0.0454 ppb	19:16:26
3	Sc 361.383	812683.0	812683.0	102.62 %		19:17:53
3	Y 371.029	695196.8	695196.8	102.59 %		19:17:53
3	Ag 328.068†	189.1	53.0	0.2596 ug/L	0.2596 ppb	19:17:58
3	As 188.979†	-19.9	-0.6	-0.3366 ug/L	-0.3366 ppb	19:18:18
3	B 249.677†	-157.6	223.7	6.5184 ug/L	6.5184 ppb	19:17:58
3	Ba 233.527†	61.5	60.2	0.5928 ug/L	0.5928 ppb	19:18:18
3	Be 313.107†	-3612.9	21.1	0.0099 ug/L	0.0099 ppb	19:17:58
3	Cd 226.502†	-139.2	20.6	0.3203 ug/L	0.3203 ppb	19:18:18
3	Co 228.616†	-41.3	5.6	0.1562 ug/L	0.1562 ppb	19:18:18
3	Cr 267.716†	106.3	50.8	0.6935 ug/L	0.6935 ppb	19:17:58
3	Cu 324.752†	6396.6	21.6	0.0693 ug/L	0.0693 ppb	19:17:58
3	Mn 257.610†	412.1	2.7	0.0008 ug/L	0.0008 ppb	19:17:58
3	Mo 202.031†	16.5	3.0	0.2717 ug/L	0.2717 ppb	19:18:18
3	Ni 231.604†	70.7	8.3	0.2759 ug/L	0.2759 ppb	19:18:18
3	P 214.914†	170.2	1.6	1.3042 ug/L	1.3042 ppb	19:18:18
3	Pb 220.353†	-42.8	2.0	0.3317 ug/L	0.3317 ppb	19:18:18
3	S 181.975 Axial†	36.5	4.7	9.0457 ug/L	9.0457 ppb	19:18:18
3	Sb 206.836†	31.4	7.9	3.3919 ug/L	3.3919 ppb	19:18:18
3	Se 196.026†	-19.2	2.0	1.5173 ug/L	1.5173 ppb	19:18:18
3	Si 251.611†	481.5	-6.9	-0.2734 ug/L	-0.2734 ppb	19:18:18
3	Sn 189.927†	12.3	4.2	1.0121 ug/L	1.0121 ppb	19:18:18
3	Ti 334.940†	-857.1	93.2	0.1740 ug/L	0.1740 ppb	19:17:58
3	Tl 190.801†	-25.3	1.3	0.5448 ug/L	0.5448 ppb	19:18:18
3	U 409.014†	-2007.9	15.4	0.4719 ug/L	0.4719 ppb	19:17:53
3	V 292.402†	-1293.0	-67.7	-0.5433 ug/L	-0.5433 ppb	19:17:58
3	Zn 213.857†	608.5	81.6	1.0506 ug/L	1.0506 ppb	19:18:18
3	SiO2†	481.5	-5.8	-0.4948 ug/L	-0.4948 ppb	19:19:18

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	816431.2	103.09	%	0.605				0.59%
Sc Radial	3268.8	102	%	0.3				0.31%
Y 371.029	698194.3	103.03	%	0.514				0.50%
Y RADIAL	2673.5	101.8	%	0.46				0.46%
Ag 328.068†	38.6	0.1907	ug/L	0.32270	0.1907	ppb	0.32270	169.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.6	5.5736	ug/L	11.04094	5.5736	ppb	11.04094	198.09%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-0.6	-0.3760	ug/L	3.29530	-0.3760	ppb	3.29530	876.51%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	228.6	6.6599	ug/L	0.32117	6.6599	ppb	0.32117	4.82%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	55.8	0.5509	ug/L	0.11515	0.5509	ppb	0.11515	20.90%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	78.0	0.0356	ug/L	0.02339	0.0356	ppb	0.02339	65.75%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.0	4.1025	ug/L	8.92962	4.1025	ppb	8.92962	217.66%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              23.9      0.3695 ug/L       0.06772      0.3695 ppb        0.06772  18.33%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               4.3      0.1187 ug/L       0.03604      0.1187 ppb        0.03604  30.36%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              38.2      0.5219 ug/L       0.18233      0.5219 ppb        0.18233  34.94%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -50.7     -0.1742 ug/L       0.21586     -0.1742 ppb        0.21586 123.93%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -1.3     -38.842 ug/L       23.5331     -38.842 ppb        23.5331  60.59%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†         8.0      3.8923 ug/L      18.17073      3.8923 ppb       18.17073 466.84%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.6     -63.511 ug/L      151.2254     -63.511 ppb       151.2254 238.11%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†               4.5      0.0049 ug/L       0.01111      0.0049 ppb        0.01111 224.64%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.2      0.0155 ug/L       0.22396      0.0155 ppb        0.22396 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       11.7      3.6971 ug/L       7.18242      3.6971 ppb        7.18242 194.27%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               8.5      0.2857 ug/L       0.08341      0.2857 ppb        0.08341  29.20%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†               -1.1     -0.8190 ug/L       1.84830     -0.8190 ppb        1.84830 225.69%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               6.8      1.1151 ug/L       1.41072      1.1151 ppb        1.41072 126.51%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -3.0     -5.7040 ug/L      13.44017     -5.7040 ppb       13.44017 235.63%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               4.3      1.8601 ug/L       1.83073      1.8601 ppb        1.83073  98.42%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               6.2      5.2324 ug/L       6.10359      5.2324 ppb        6.10359 116.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              -7.3     -0.2859 ug/L       0.24920     -0.2859 ppb        0.24920  87.16%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               4.4      1.0503 ug/L       0.10434      1.0503 ppb        0.10434   9.93%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -8.6     -0.0830 ug/L       0.06125     -0.0830 ppb        0.06125  73.81%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              68.6      0.1279 ug/L       0.04082      0.1279 ppb        0.04082  31.92%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               1.3      0.5497 ug/L       0.61793      0.5497 ppb        0.61793 112.41%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               53.6      1.6323 ug/L       1.00501      1.6323 ppb        1.00501  61.57%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†              -18.7     -0.1459 ug/L       0.49068     -0.1459 ppb        0.49068 336.25%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              78.8      1.0121 ug/L       0.07042      1.0121 ppb        0.07042   6.96%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                     6.1      0.5140 ug/L       1.06167      0.5140 ppb        1.06167 206.57%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 3
Sample ID: 1202046565|954668|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 38
Date Collected: 3/10/2010 19:21:28
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046565|954668|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3345.7	3345.7	104	%			19:23:41
1	Y RADIAL	2751.4	2751.4	104.7	%			19:23:41
1	Al 396.153Radial†	-61.4	3.2	6.9919	ug/L	6.9919	ppb	19:23:41
1	Ca 317.933Radial†	12.8	-0.2	-1.0226	ug/L	-1.0226	ppb	19:23:41
1	Fe 238.204 Radial†	7.4	-2.4	-68.170	ug/L	-68.170	ppb	19:23:41
1	K 766.490 Radial†	1927.5	-180.5	-88.190	ug/L	-88.190	ppb	19:23:21
1	Mg 279.077 IEC†	-0.8	-2.5	-260.23	ug/L	-260.23	ppb	19:23:41
1	Na 589.592 Radial†	-695.4	66.5	21.043	ug/L	21.043	ppb	19:23:21
1	Sr 421.552†	14.5	-20.8	-0.2001	ug/L	-0.2001	ppb	19:23:21
1	Sc 361.383	826777.3	826777.3	104.40	%			19:24:38
1	Y 371.029	705847.3	705847.3	104.16	%			19:24:38
1	Ag 328.068†	92.8	-42.4	-0.2483	ug/L	-0.2483	ppb	19:24:43
1	As 188.979†	-30.2	-10.1	-5.9304	ug/L	-5.9304	ppb	19:25:03
1	B 249.677†	-261.9	126.3	3.6874	ug/L	3.6874	ppb	19:24:43
1	Ba 233.527†	38.3	37.0	0.3661	ug/L	0.3661	ppb	19:25:03
1	Be 313.107†	-3542.9	148.2	0.0675	ug/L	0.0675	ppb	19:24:43
1	Cd 226.502†	-138.0	24.0	0.3752	ug/L	0.3752	ppb	19:25:03
1	Co 228.616†	-45.1	2.7	0.0744	ug/L	0.0744	ppb	19:25:03
1	Cr 267.716†	87.5	31.0	0.4215	ug/L	0.4215	ppb	19:24:43
1	Cu 324.752†	6200.1	-272.9	-0.9295	ug/L	-0.9295	ppb	19:24:43
1	Mn 257.610†	532.3	111.0	0.1574	ug/L	0.1574	ppb	19:24:43
1	Mo 202.031†	13.8	0.2	0.0122	ug/L	0.0122	ppb	19:25:03
1	Ni 231.604†	72.3	8.6	0.2889	ug/L	0.2889	ppb	19:25:03
1	P 214.914†	173.7	2.1	1.9364	ug/L	1.9364	ppb	19:25:03
1	Pb 220.353†	-39.8	5.5	0.9182	ug/L	0.9182	ppb	19:25:03
1	S 181.975 Axial†	34.0	1.8	3.3864	ug/L	3.3864	ppb	19:25:03
1	Sb 206.836†	42.4	17.9	7.6929	ug/L	7.6929	ppb	19:25:03
1	Se 196.026†	-22.4	-0.8	-0.8753	ug/L	-0.8753	ppb	19:25:03
1	Si 251.611†	729.3	222.4	8.6966	ug/L	8.6966	ppb	19:25:03
1	Sn 189.927†	10.1	1.9	0.4492	ug/L	0.4492	ppb	19:25:03
1	Ti 334.940†	-838.5	125.2	0.2424	ug/L	0.2424	ppb	19:24:43
1	Tl 190.801†	-25.8	1.3	0.5178	ug/L	0.5178	ppb	19:25:03
1	U 409.014†	-1805.0	243.1	7.3898	ug/L	7.3898	ppb	19:24:38
1	V 292.402†	-1124.4	115.2	0.9630	ug/L	0.9630	ppb	19:24:43
1	Zn 213.857†	677.9	137.9	1.7740	ug/L	1.7740	ppb	19:25:03
1	SiO2†	750.0	243.4	20.445	ug/L	20.445	ppb	19:26:23
2	Sc Radial	3336.1	3336.1	104	%			19:24:06
2	Y RADIAL	2722.7	2722.7	103.6	%			19:24:06
2	Al 396.153Radial†	-58.0	6.3	13.633	ug/L	13.633	ppb	19:24:06
2	Ca 317.933Radial†	10.6	-2.3	-9.5178	ug/L	-9.5178	ppb	19:24:06
2	Fe 238.204 Radial†	7.7	-2.0	-58.906	ug/L	-58.906	ppb	19:24:06
2	K 766.490 Radial†	2155.0	43.4	21.202	ug/L	21.202	ppb	19:23:46
2	Mg 279.077 IEC†	-0.1	-1.8	-190.09	ug/L	-190.09	ppb	19:24:06
2	Na 589.592 Radial†	-767.2	-4.4	-1.3838	ug/L	-1.3838	ppb	19:23:46
2	Sr 421.552†	11.4	-23.7	-0.2283	ug/L	-0.2283	ppb	19:23:46
2	Sc 361.383	823638.3	823638.3	104.00	%			19:25:08
2	Y 371.029	703546.0	703546.0	103.82	%			19:25:08
2	Ag 328.068†	221.4	81.6	0.4107	ug/L	0.4107	ppb	19:25:13
2	As 188.979†	-26.7	-6.8	-3.9958	ug/L	-3.9958	ppb	19:25:33
2	B 249.677†	-223.4	162.5	4.7378	ug/L	4.7378	ppb	19:25:13
2	Ba 233.527†	44.1	42.7	0.4211	ug/L	0.4211	ppb	19:25:33
2	Be 313.107†	-3615.0	65.9	0.0301	ug/L	0.0301	ppb	19:25:13
2	Cd 226.502†	-139.1	22.5	0.3514	ug/L	0.3514	ppb	19:25:33
2	Co 228.616†	-43.9	3.7	0.1042	ug/L	0.1042	ppb	19:25:33
2	Cr 267.716†	35.8	-18.4	-0.2569	ug/L	-0.2569	ppb	19:25:13
2	Cu 324.752†	6272.1	-181.1	-0.6172	ug/L	-0.6172	ppb	19:25:13
2	Mn 257.610†	490.8	73.1	0.1031	ug/L	0.1031	ppb	19:25:13
2	Mo 202.031†	19.8	6.0	0.5404	ug/L	0.5404	ppb	19:25:33
2	Ni 231.604†	104.1	39.5	1.3193	ug/L	1.3193	ppb	19:25:33

2	P 214.914†	177.9	6.8	5.5892 ug/L	5.5892 ppb	19:25:33
2	Pb 220.353†	-36.4	8.7	1.4409 ug/L	1.4409 ppb	19:25:33
2	S 181.975 Axial†	31.8	-0.3	-0.5265 ug/L	-0.5265 ppb	19:25:33
2	Sb 206.836†	37.8	13.6	5.8570 ug/L	5.8570 ppb	19:25:33
2	Se 196.026†	-14.9	6.3	5.2473 ug/L	5.2473 ppb	19:25:33
2	Si 251.611†	727.1	223.1	8.7141 ug/L	8.7141 ppb	19:25:33
2	Sn 189.927†	3.2	-4.7	-1.1184 ug/L	-1.1184 ppb	19:25:33
2	Ti 334.940†	-892.0	70.7	0.1392 ug/L	0.1392 ppb	19:25:13
2	Tl 190.801†	-27.6	-0.6	-0.2364 ug/L	-0.2364 ppb	19:25:33
2	U 409.014†	-1897.2	147.9	4.4985 ug/L	4.4985 ppb	19:25:08
2	V 292.402†	-1245.9	-5.7	-0.0259 ug/L	-0.0259 ppb	19:25:13
2	Zn 213.857†	691.6	153.6	1.9663 ug/L	1.9663 ppb	19:25:33
2	SiO2†	771.6	266.9	22.406 ug/L	22.406 ppb	19:26:44
3	Sc Radial	3336.1	3336.1	104 %		19:24:31
3	Y RADIAL	2752.4	2752.4	104.8 %		19:24:31
3	Al 396.153Radial†	-54.5	9.7	20.980 ug/L	20.980 ppb	19:24:31
3	Ca 317.933Radial†	16.1	3.0	12.524 ug/L	12.524 ppb	19:24:31
3	Fe 238.204 Radial†	9.7	-0.1	-4.0646 ug/L	-4.0646 ppb	19:24:31
3	K 766.490 Radial†	2029.6	-77.1	-37.673 ug/L	-37.673 ppb	19:24:11
3	Mg 279.077 IEC†	1.8	-0.0	-1.4271 ug/L	-1.4271 ppb	19:24:31
3	Na 589.592 Radial†	-758.9	3.7	1.1564 ug/L	1.1564 ppb	19:24:11
3	Sr 421.552†	16.1	-19.1	-0.1844 ug/L	-0.1844 ppb	19:24:11
3	Sc 361.383	826810.8	826810.8	104.40 %		19:25:38
3	Y 371.029	706053.3	706053.3	104.19 %		19:25:38
3	Ag 328.068†	238.6	97.2	0.5134 ug/L	0.5134 ppb	19:25:43
3	As 188.979†	-14.9	4.6	2.6658 ug/L	2.6658 ppb	19:26:03
3	B 249.677†	-218.2	168.2	4.8962 ug/L	4.8962 ppb	19:25:43
3	Ba 233.527†	42.5	41.0	0.4069 ug/L	0.4069 ppb	19:26:03
3	Be 313.107†	-3688.5	8.8	0.0043 ug/L	0.0043 ppb	19:25:43
3	Cd 226.502†	-155.5	7.3	0.1129 ug/L	0.1129 ppb	19:26:03
3	Co 228.616†	-48.7	-0.8	-0.0215 ug/L	-0.0215 ppb	19:26:03
3	Cr 267.716†	129.6	71.3	0.9776 ug/L	0.9776 ppb	19:25:43
3	Cu 324.752†	6367.7	-112.7	-0.3824 ug/L	-0.3824 ppb	19:25:43
3	Mn 257.610†	550.6	128.6	0.1775 ug/L	0.1775 ppb	19:25:43
3	Mo 202.031†	12.4	-1.1	-0.1022 ug/L	-0.1022 ppb	19:26:03
3	Ni 231.604†	78.4	14.5	0.4851 ug/L	0.4851 ppb	19:26:03
3	P 214.914†	172.5	0.9	0.8236 ug/L	0.8236 ppb	19:26:03
3	Pb 220.353†	-30.1	14.9	2.4452 ug/L	2.4452 ppb	19:26:03
3	S 181.975 Axial†	32.5	0.3	0.6486 ug/L	0.6486 ppb	19:26:03
3	Sb 206.836†	30.5	6.5	2.7938 ug/L	2.7938 ppb	19:26:03
3	Se 196.026†	-16.7	4.7	4.0068 ug/L	4.0068 ppb	19:26:03
3	Si 251.611†	730.0	223.1	8.7240 ug/L	8.7240 ppb	19:26:03
3	Sn 189.927†	8.0	-0.1	-0.0289 ug/L	-0.0289 ppb	19:26:03
3	Ti 334.940†	-902.3	64.1	0.1152 ug/L	0.1152 ppb	19:25:43
3	Tl 190.801†	-27.0	0.1	0.0510 ug/L	0.0510 ppb	19:26:03
3	U 409.014†	-1960.9	93.8	2.8479 ug/L	2.8479 ppb	19:25:38
3	V 292.402†	-1187.5	54.9	0.4535 ug/L	0.4535 ppb	19:25:43
3	Zn 213.857†	689.2	148.7	1.9008 ug/L	1.9008 ppb	19:26:03
3	SiO2†	781.3	273.3	22.964 ug/L	22.964 ppb	19:27:04

Mean Data: 1202046565|954668|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	825742.1	104.26	%	0.230				0.22%
Sc Radial	3339.3	104	%	0.2				0.17%
Y 371.029	705148.9	104.06	%	0.205				0.20%
Y RADIAL	2742.2	104.4	%	0.64				0.61%
Ag 328.068†	45.5	0.2253	ug/L	0.41332	0.2253	ppb	0.41332	183.47%
Al 396.153Radial†	6.4	13.868	ug/L	6.9971	13.868	ppb	6.9971	50.45%
As 188.979†	-4.1	-2.4201	ug/L	4.50953	-2.4201	ppb	4.50953	186.33%
B 249.677†	152.3	4.4405	ug/L	0.65695	4.4405	ppb	0.65695	14.79%
Ba 233.527†	40.2	0.3980	ug/L	0.02851	0.3980	ppb	0.02851	7.16%
Be 313.107†	74.3	0.0340	ug/L	0.03182	0.0340	ppb	0.03182	93.69%
Ca 317.933Radial†	0.2	0.6610	ug/L	11.11669	0.6610	ppb	11.11669	>999.9%
Cd 226.502†	18.0	0.2798	ug/L	0.14507	0.2798	ppb	0.14507	51.84%
Co 228.616†	1.9	0.0524	ug/L	0.06566	0.0524	ppb	0.06566	125.35%
Cr 267.716†	28.0	0.3808	ug/L	0.61826	0.3808	ppb	0.61826	162.38%
Cu 324.752†	-188.9	-0.6430	ug/L	0.27448	-0.6430	ppb	0.27448	42.68%
Fe 238.204 Radial†	-1.5	-43.713	ug/L	34.6480	-43.713	ppb	34.6480	79.26%
K 766.490 Radial†	-71.4	-34.887	ug/L	54.7492	-34.887	ppb	54.7492	156.93%

Mg 279.077 IEC†	-1.5	-150.58	ug/L	133.847	-150.58	ppb	133.847 88.89%
Mn 257.610†	104.2	0.1460	ug/L	0.03849	0.1460	ppb	0.03849 26.37%
Mo 202.031†	1.7	0.1501	ug/L	0.34277	0.1501	ppb	0.34277 228.31%
Na 589.592 Radial†	21.9	6.9386	ug/L	12.28085	6.9386	ppb	12.28085 176.99%
Ni 231.604†	20.9	0.6978	ug/L	0.54711	0.6978	ppb	0.54711 78.41%
P 214.914†	3.3	2.7831	ug/L	2.49305	2.7831	ppb	2.49305 89.58%
Pb 220.353†	9.7	1.6014	ug/L	0.77606	1.6014	ppb	0.77606 48.46%
S 181.975 Axial†	0.6	1.1695	ug/L	2.00780	1.1695	ppb	2.00780 171.68%
Sb 206.836†	12.7	5.4479	ug/L	2.47503	5.4479	ppb	2.47503 45.43%
Se 196.026†	3.4	2.7929	ug/L	3.23677	2.7929	ppb	3.23677 115.89%
Si 251.611†	222.9	8.7116	ug/L	0.01388	8.7116	ppb	0.01388 0.16%
Sn 189.927†	-1.0	-0.2327	ug/L	0.80341	-0.2327	ppb	0.80341 345.25%
Sr 421.552†	-21.2	-0.2043	ug/L	0.02228	-0.2043	ppb	0.02228 10.91%
Ti 334.940†	86.7	0.1656	ug/L	0.06758	0.1656	ppb	0.06758 40.82%
Tl 190.801†	0.3	0.1108	ug/L	0.38062	0.1108	ppb	0.38062 343.52%
U 409.014†	161.6	4.9121	ug/L	2.29899	4.9121	ppb	2.29899 46.80%
V 292.402†	54.8	0.4636	ug/L	0.49452	0.4636	ppb	0.49452 106.68%
Zn 213.857†	146.8	1.8804	ug/L	0.09776	1.8804	ppb	0.09776 5.20%
SiO2†	261.2	21.938	ug/L	1.3232	21.938	ppb	1.3232 6.03%

Sequence No.: 4
Sample ID: 1202046566|954668|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 39
Date Collected: 3/10/2010 19:29:14
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046566|954668|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3440.3	3440.3	107	%			19:31:27
1	Y RADIAL	2792.4	2792.4	106.3	%			19:31:27
1	Al 396.153Radial†	2267.6	2174.3	4681.4	ug/L	4681.4	ppb	19:31:07
1	Ca 317.933Radial†	1249.3	1151.2	4810.1	ug/L	4810.1	ppb	19:31:27
1	Fe 238.204 Radial†	185.0	162.8	4701.4	ug/L	4701.4	ppb	19:31:27
1	K 766.490 Radial†	12451.1	9571.4	4672.0	ug/L	4672.0	ppb	19:31:07
1	Mg 279.077 IEC†	52.3	47.0	4862.7	ug/L	4862.7	ppb	19:31:27
1	Na 589.592 Radial†	14556.4	14291.7	4521.1	ug/L	4521.1	ppb	19:31:07
1	Sr 421.552†	52233.6	48620.4	468.18	ug/L	468.18	ppb	19:31:07
1	Sc 361.383	868482.3	868482.3	109.66	%			19:32:24
1	Y 371.029	734690.4	734690.4	108.42	%			19:32:24
1	Ag 328.068†	96551.2	87913.3	469.06	ug/L	469.06	ppb	19:32:29
1	As 188.979†	877.6	819.1	483.86	ug/L	483.86	ppb	19:32:49
1	B 249.677†	17450.9	16290.7	471.95	ug/L	471.95	ppb	19:32:29
1	Ba 233.527†	53352.1	48651.8	482.91	ug/L	482.91	ppb	19:32:29
1	Be 313.107†	1154346.4	1056185.2	478.76	ug/L	478.76	ppb	19:32:24
1	Cd 226.502†	33762.4	30944.1	471.96	ug/L	471.96	ppb	19:32:29
1	Co 228.616†	18947.4	17323.9	478.04	ug/L	478.04	ppb	19:32:29
1	Cr 267.716†	38524.6	35077.6	482.22	ug/L	482.22	ppb	19:32:29
1	Cu 324.752†	164485.8	143781.9	485.57	ug/L	485.57	ppb	19:32:29
1	Mn 257.610†	382750.6	348629.7	482.44	ug/L	482.44	ppb	19:32:24
1	Mo 202.031†	5750.8	5231.1	478.16	ug/L	478.16	ppb	19:32:49
1	Ni 231.604†	16332.4	14832.8	495.54	ug/L	495.54	ppb	19:32:29
1	P 214.914†	924.9	679.1	450.60	ug/L	450.60	ppb	19:32:49
1	Pb 220.353†	3125.0	2893.3	475.95	ug/L	475.95	ppb	19:32:49
1	S 181.975 Axial†	2840.4	2559.3	4887.7	ug/L	4887.7	ppb	19:32:49
1	Sb 206.836†	1294.6	1157.8	514.62	ug/L	514.62	ppb	19:32:49
1	Se 196.026†	613.4	580.1	511.53	ug/L	511.53	ppb	19:32:49
1	Si 251.611†	133444.9	121211.7	4733.1	ug/L	4733.1	ppb	19:32:29
1	Sn 189.927†	2240.1	2034.9	485.19	ug/L	485.19	ppb	19:32:49
1	Ti 334.940†	288116.4	263660.4	472.78	ug/L	472.78	ppb	19:32:29
1	Tl 190.801†	1273.4	1187.1	491.56	ug/L	491.56	ppb	19:32:49
1	U 409.014†	16449.6	16972.3	513.91	ug/L	513.91	ppb	19:32:29
1	V 292.402†	63587.6	59177.5	491.31	ug/L	491.31	ppb	19:32:29
1	Zn 213.857†	42122.2	37899.7	480.28	ug/L	480.28	ppb	19:32:29
1	SiO2†	134520.5	122193.6	10253	ug/L	10253	ppb	19:33:57
2	Sc Radial	3404.3	3404.3	106	%			19:31:52
2	Y RADIAL	2767.0	2767.0	105.3	%			19:31:52
2	Al 396.153Radial†	2234.3	2165.2	4661.8	ug/L	4661.8	ppb	19:31:32
2	Ca 317.933Radial†	1241.2	1155.9	4829.5	ug/L	4829.5	ppb	19:31:52
2	Fe 238.204 Radial†	184.4	164.1	4737.2	ug/L	4737.2	ppb	19:31:52
2	K 766.490 Radial†	12425.5	9669.7	4720.0	ug/L	4720.0	ppb	19:31:32
2	Mg 279.077 IEC†	52.8	48.0	4962.5	ug/L	4962.5	ppb	19:31:52
2	Na 589.592 Radial†	14241.5	14138.5	4472.7	ug/L	4472.7	ppb	19:31:32
2	Sr 421.552†	51323.8	48277.7	464.88	ug/L	464.88	ppb	19:31:32
2	Sc 361.383	870816.2	870816.2	109.96	%			19:32:55
2	Y 371.029	737679.8	737679.8	108.86	%			19:32:55
2	Ag 328.068†	96102.8	87269.5	465.65	ug/L	465.65	ppb	19:33:00
2	As 188.979†	873.9	813.6	480.60	ug/L	480.60	ppb	19:33:20
2	B 249.677†	17365.0	16169.9	468.45	ug/L	468.45	ppb	19:33:00
2	Ba 233.527†	53053.0	48249.4	478.92	ug/L	478.92	ppb	19:33:00
2	Be 313.107†	1154984.1	1053944.0	477.74	ug/L	477.74	ppb	19:32:55
2	Cd 226.502†	33530.0	30650.2	467.47	ug/L	467.47	ppb	19:33:00
2	Co 228.616†	18771.5	17117.6	472.35	ug/L	472.35	ppb	19:33:00
2	Cr 267.716†	38408.1	34877.4	479.47	ug/L	479.47	ppb	19:33:00
2	Cu 324.752†	163590.8	142565.9	481.47	ug/L	481.47	ppb	19:33:00
2	Mn 257.610†	382071.3	347076.5	480.30	ug/L	480.30	ppb	19:32:55
2	Mo 202.031†	5745.7	5212.4	476.46	ug/L	476.46	ppb	19:33:20
2	Ni 231.604†	16279.9	14745.1	492.61	ug/L	492.61	ppb	19:33:00

2	P 214.914†	915.1	667.9	442.39 ug/L	442.39 ppb	19:33:20
2	Pb 220.353†	3123.5	2884.3	474.46 ug/L	474.46 ppb	19:33:20
2	S 181.975 Axial†	2848.3	2559.6	4888.3 ug/L	4888.3 ppb	19:33:20
2	Sb 206.836†	1294.0	1154.1	512.95 ug/L	512.95 ppb	19:33:20
2	Se 196.026†	598.9	565.3	499.01 ug/L	499.01 ppb	19:33:20
2	Si 251.611†	132503.8	120029.7	4686.9 ug/L	4686.9 ppb	19:33:00
2	Sn 189.927†	2235.0	2024.8	482.79 ug/L	482.79 ppb	19:33:20
2	Ti 334.940†	286584.4	261563.0	469.01 ug/L	469.01 ppb	19:33:00
2	Tl 190.801†	1271.5	1182.4	489.58 ug/L	489.58 ppb	19:33:20
2	U 409.014†	16187.6	16693.9	505.46 ug/L	505.46 ppb	19:33:00
2	V 292.402†	63329.6	58787.5	488.07 ug/L	488.07 ppb	19:33:00
2	Zn 213.857†	41929.0	37620.9	476.74 ug/L	476.74 ppb	19:33:00
2	SiO2†	132661.8	120174.4	10083 ug/L	10083 ppb	19:34:02
3	Sc Radial	3431.6	3431.6	107 %		19:32:17
3	Y RADIAL	2795.0	2795.0	106.4 %		19:32:17
3	Al 396.153Radial†	2263.1	2175.4	4683.8 ug/L	4683.8 ppb	19:31:57
3	Ca 317.933Radial†	1257.4	1161.7	4853.9 ug/L	4853.9 ppb	19:32:17
3	Fe 238.204 Radial†	187.3	165.4	4775.9 ug/L	4775.9 ppb	19:32:17
3	K 766.490 Radial†	12257.9	9420.3	4598.2 ug/L	4598.2 ppb	19:31:57
3	Mg 279.077 IEC†	51.9	46.7	4834.9 ug/L	4834.9 ppb	19:32:17
3	Na 589.592 Radial†	14374.5	14156.1	4478.2 ug/L	4478.2 ppb	19:31:57
3	Sr 421.552†	51865.9	48400.0	466.06 ug/L	466.06 ppb	19:31:57
3	Sc 361.383	867565.3	867565.3	109.55 %		19:33:26
3	Y 371.029	734513.4	734513.4	108.39 %		19:33:26
3	Ag 328.068†	96489.6	87950.1	469.27 ug/L	469.27 ppb	19:33:31
3	As 188.979†	871.1	814.0	480.85 ug/L	480.85 ppb	19:33:52
3	B 249.677†	17381.2	16243.8	470.59 ug/L	470.59 ppb	19:33:31
3	Ba 233.527†	53064.2	48440.4	480.82 ug/L	480.82 ppb	19:33:31
3	Be 313.107†	1152877.7	1055957.1	478.66 ug/L	478.66 ppb	19:33:26
3	Cd 226.502†	33614.6	30841.6	470.39 ug/L	470.39 ppb	19:33:31
3	Co 228.616†	18788.5	17197.2	474.55 ug/L	474.55 ppb	19:33:31
3	Cr 267.716†	38328.8	34936.0	480.28 ug/L	480.28 ppb	19:33:31
3	Cu 324.752†	164323.4	143792.2	485.61 ug/L	485.61 ppb	19:33:31
3	Mn 257.610†	382199.2	348495.2	482.27 ug/L	482.27 ppb	19:33:26
3	Mo 202.031†	5736.1	5223.2	477.45 ug/L	477.45 ppb	19:33:52
3	Ni 231.604†	16267.6	14789.4	494.09 ug/L	494.09 ppb	19:33:31
3	P 214.914†	929.3	684.0	454.52 ug/L	454.52 ppb	19:33:52
3	Pb 220.353†	3119.4	2891.2	475.59 ug/L	475.59 ppb	19:33:52
3	S 181.975 Axial†	2837.8	2559.7	4888.4 ug/L	4888.4 ppb	19:33:52
3	Sb 206.836†	1292.9	1157.5	514.45 ug/L	514.45 ppb	19:33:52
3	Se 196.026†	605.8	573.7	506.28 ug/L	506.28 ppb	19:33:52
3	Si 251.611†	133015.7	120948.5	4722.8 ug/L	4722.8 ppb	19:33:31
3	Sn 189.927†	2238.4	2035.6	485.35 ug/L	485.35 ppb	19:33:52
3	Ti 334.940†	286885.0	262814.0	471.27 ug/L	471.27 ppb	19:33:31
3	Tl 190.801†	1270.8	1186.1	491.13 ug/L	491.13 ppb	19:33:52
3	U 409.014†	16223.2	16781.6	508.11 ug/L	508.11 ppb	19:33:31
3	V 292.402†	63236.3	58918.1	489.15 ug/L	489.15 ppb	19:33:31
3	Zn 213.857†	41957.1	37789.5	478.87 ug/L	478.87 ppb	19:33:31
3	SiO2†	132889.7	120834.5	10139 ug/L	10139 ppb	19:34:07

Mean Data: 1202046566|954668|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	868954.6	109.72	%	0.212				0.19%
Sc Radial	3425.4	107	%	0.6				0.55%
Y 371.029	735627.9	108.56	%	0.263				0.24%
Y RADIAL	2784.8	106.0	%	0.59				0.55%
Ag 328.068†	87710.9	467.99	ug/L	2.032	467.99	ppb	2.032	0.43%
Al 396.153Radial†	2171.6	4675.7	ug/L	12.07	4675.7	ppb	12.07	0.26%
As 188.979†	815.6	481.77	ug/L	1.812	481.77	ppb	1.812	0.38%
B 249.677†	16234.8	470.33	ug/L	1.767	470.33	ppb	1.767	0.38%
Ba 233.527†	48447.2	480.88	ug/L	1.996	480.88	ppb	1.996	0.42%
Be 313.107†	1055362.1	478.39	ug/L	0.562	478.39	ppb	0.562	0.12%
Ca 317.933Radial†	1156.3	4831.2	ug/L	21.99	4831.2	ppb	21.99	0.46%
Cd 226.502†	30812.0	469.94	ug/L	2.278	469.94	ppb	2.278	0.48%
Co 228.616†	17212.9	474.98	ug/L	2.870	474.98	ppb	2.870	0.60%
Cr 267.716†	34963.7	480.66	ug/L	1.412	480.66	ppb	1.412	0.29%
Cu 324.752†	143380.0	484.22	ug/L	2.380	484.22	ppb	2.380	0.49%
Fe 238.204 Radial†	164.1	4738.2	ug/L	37.26	4738.2	ppb	37.26	0.79%
K 766.490 Radial†	9553.8	4663.4	ug/L	61.39	4663.4	ppb	61.39	1.32%

Mg 279.077 IEC†	47.2	4886.7 ug/L	67.06	4886.7 ppb	67.06	1.37%
Mn 257.610†	348067.1	481.67 ug/L	1.193	481.67 ppb	1.193	0.25%
Mo 202.031†	5222.2	477.36 ug/L	0.855	477.36 ppb	0.855	0.18%
Na 589.592 Radial†	14195.5	4490.7 ug/L	26.53	4490.7 ppb	26.53	0.59%
Ni 231.604†	14789.1	494.08 ug/L	1.464	494.08 ppb	1.464	0.30%
P 214.914†	677.0	449.17 ug/L	6.189	449.17 ppb	6.189	1.38%
Pb 220.353†	2889.6	475.33 ug/L	0.776	475.33 ppb	0.776	0.16%
S 181.975 Axial†	2559.5	4888.1 ug/L	0.38	4888.1 ppb	0.38	0.01%
Sb 206.836†	1156.5	514.01 ug/L	0.919	514.01 ppb	0.919	0.18%
Se 196.026†	573.0	505.61 ug/L	6.288	505.61 ppb	6.288	1.24%
Si 251.611†	120729.9	4714.3 ug/L	24.25	4714.3 ppb	24.25	0.51%
Sn 189.927†	2031.8	484.44 ug/L	1.436	484.44 ppb	1.436	0.30%
Sr 421.552†	48432.7	466.38 ug/L	1.673	466.38 ppb	1.673	0.36%
Ti 334.940†	262679.2	471.02 ug/L	1.894	471.02 ppb	1.894	0.40%
Tl 190.801†	1185.2	490.76 ug/L	1.038	490.76 ppb	1.038	0.21%
U 409.014†	16815.9	509.16 ug/L	4.323	509.16 ppb	4.323	0.85%
V 292.402†	58961.0	489.51 ug/L	1.647	489.51 ppb	1.647	0.34%
Zn 213.857†	37770.1	478.63 ug/L	1.786	478.63 ppb	1.786	0.37%
SiO2†	121067.5	10158 ug/L	86.5	10158 ppb	86.5	0.85%

Sequence No.: 9
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/10/2010 20:04:53
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3383.3	3383.3	106	%			20:07:05
1	Y RADIAL	2783.9	2783.9	106.0	%			20:07:05
1	Al 396.153Radial†	2327.3	2266.3	4880.1	ug/L	4880.1	ppb	20:06:45
1	Ca 317.933Radial†	1293.5	1212.7	5067.0	ug/L	5067.0	ppb	20:07:05
1	Fe 238.204 Radial†	200.0	180.0	5194.3	ug/L	5194.3	ppb	20:07:05
1	K 766.490 Radial†	12565.1	9874.8	4818.0	ug/L	4818.0	ppb	20:06:45
1	Mg 279.077 IEC†	54.5	50.0	5168.7	ug/L	5168.7	ppb	20:07:05
1	Na 589.592 Radial†	32144.4	31179.2	9863.4	ug/L	9863.4	ppb	20:06:45
1	Sr 421.552†	54792.1	51863.4	499.41	ug/L	499.41	ppb	20:06:45
1	Sc 361.383	865774.3	865774.3	109.32	%			20:08:02
1	Y 371.029	733265.8	733265.8	108.21	%			20:08:02
1	Ag 328.068†	99861.1	91216.4	486.73	ug/L	486.73	ppb	20:08:08
1	As 188.979†	891.9	834.7	493.04	ug/L	493.04	ppb	20:08:28
1	B 249.677†	17427.8	16319.3	472.66	ug/L	472.66	ppb	20:08:08
1	Ba 233.527†	53468.0	48910.1	485.48	ug/L	485.48	ppb	20:08:08
1	Be 313.107†	1186462.8	1088856.1	493.54	ug/L	493.54	ppb	20:08:02
1	Cd 226.502†	34559.7	31769.7	484.50	ug/L	484.50	ppb	20:08:08
1	Co 228.616†	19529.4	17910.4	494.24	ug/L	494.24	ppb	20:08:08
1	Cr 267.716†	38629.0	35282.9	485.06	ug/L	485.06	ppb	20:08:08
1	Cu 324.752†	161358.1	141390.0	477.53	ug/L	477.53	ppb	20:08:08
1	Mn 257.610†	386763.3	353392.0	489.07	ug/L	489.07	ppb	20:08:02
1	Mo 202.031†	5864.8	5351.8	489.23	ug/L	489.23	ppb	20:08:28
1	Ni 231.604†	16221.1	14777.6	493.68	ug/L	493.68	ppb	20:08:08
1	P 214.914†	3480.8	3019.8	2330.8	ug/L	2330.8	ppb	20:08:28
1	Pb 220.353†	3214.4	2984.0	490.84	ug/L	490.84	ppb	20:08:28
1	S 181.975 Axial†	586.2	505.4	964.49	ug/L	964.49	ppb	20:08:28
1	Sb 206.836†	1252.2	1122.7	499.74	ug/L	499.74	ppb	20:08:28
1	Se 196.026†	616.0	584.2	516.48	ug/L	516.48	ppb	20:08:28
1	Si 251.611†	67604.2	61364.7	2393.2	ug/L	2393.2	ppb	20:08:08
1	Sn 189.927†	2232.4	2034.3	485.07	ug/L	485.07	ppb	20:08:28
1	Ti 334.940†	287465.7	263887.1	473.20	ug/L	473.20	ppb	20:08:08
1	Tl 190.801†	1275.7	1192.9	493.90	ug/L	493.90	ppb	20:08:28
1	U 409.014†	15592.0	16234.8	491.45	ug/L	491.45	ppb	20:08:08
1	V 292.402†	63073.4	58888.6	488.99	ug/L	488.99	ppb	20:08:08
1	Zn 213.857†	42072.5	37974.3	481.19	ug/L	481.19	ppb	20:08:08
1	SiO2†	68330.2	62029.9	5198.1	ug/L	5198.1	ppb	20:09:35
2	Sc Radial	3412.8	3412.8	106	%			20:07:30
2	Y RADIAL	2788.6	2788.6	106.1	%			20:07:30
2	Al 396.153Radial†	2377.5	2294.5	4940.6	ug/L	4940.6	ppb	20:07:10
2	Ca 317.933Radial†	1293.8	1202.4	5023.7	ug/L	5023.7	ppb	20:07:30
2	Fe 238.204 Radial†	194.8	173.5	5007.7	ug/L	5007.7	ppb	20:07:30
2	K 766.490 Radial†	12547.4	9755.0	4759.5	ug/L	4759.5	ppb	20:07:10
2	Mg 279.077 IEC†	55.5	50.4	5215.9	ug/L	5215.9	ppb	20:07:30
2	Na 589.592 Radial†	32195.5	30963.3	9795.2	ug/L	9795.2	ppb	20:07:10
2	Sr 421.552†	55151.8	51751.5	498.34	ug/L	498.34	ppb	20:07:10
2	Sc 361.383	855383.6	855383.6	108.01	%			20:08:33
2	Y 371.029	723955.5	723955.5	106.83	%			20:08:33
2	Ag 328.068†	101998.3	94304.8	503.09	ug/L	503.09	ppb	20:08:39
2	As 188.979†	891.0	843.8	498.47	ug/L	498.47	ppb	20:08:59
2	B 249.677†	17966.6	17011.8	492.79	ug/L	492.79	ppb	20:08:39
2	Ba 233.527†	54452.5	50415.7	500.41	ug/L	500.41	ppb	20:08:39
2	Be 313.107†	1176405.1	1092727.8	495.33	ug/L	495.33	ppb	20:08:33
2	Cd 226.502†	35216.8	32762.1	499.67	ug/L	499.67	ppb	20:08:39
2	Co 228.616†	19970.0	18535.3	511.47	ug/L	511.47	ppb	20:08:39
2	Cr 267.716†	39323.6	36355.3	499.79	ug/L	499.79	ppb	20:08:39
2	Cu 324.752†	165142.3	146686.6	495.40	ug/L	495.40	ppb	20:08:39
2	Mn 257.610†	383963.7	355097.6	491.41	ug/L	491.41	ppb	20:08:33
2	Mo 202.031†	5870.3	5422.0	495.62	ug/L	495.62	ppb	20:08:59
2	Ni 231.604†	16538.0	15251.2	509.50	ug/L	509.50	ppb	20:08:39

2	P 214.914†	3496.0	3072.5	2369.8 ug/L	2369.8 ppb	20:08:59
2	Pb 220.353†	3216.2	3021.4	497.02 ug/L	497.02 ppb	20:08:59
2	S 181.975 Axial†	590.0	515.5	983.65 ug/L	983.65 ppb	20:08:59
2	Sb 206.836†	1251.2	1135.7	505.54 ug/L	505.54 ppb	20:08:59
2	Se 196.026†	613.4	588.6	519.76 ug/L	519.76 ppb	20:08:59
2	Si 251.611†	69025.9	63432.2	2473.9 ug/L	2473.9 ppb	20:08:39
2	Sn 189.927†	2229.9	2056.8	490.42 ug/L	490.42 ppb	20:08:59
2	Ti 334.940†	293143.8	272338.4	488.34 ug/L	488.34 ppb	20:08:39
2	Tl 190.801†	1262.0	1194.4	494.55 ug/L	494.55 ppb	20:08:59
2	U 409.014†	16012.1	16797.0	508.51 ug/L	508.51 ppb	20:08:39
2	V 292.402†	64270.6	60697.8	503.94 ug/L	503.94 ppb	20:08:39
2	Zn 213.857†	42843.9	39156.1	496.21 ug/L	496.21 ppb	20:08:39
2	SiO2†	67197.9	61740.8	5173.6 ug/L	5173.6 ppb	20:09:40
3	Sc Radial	3387.2	3387.2	106 %		20:07:55
3	Y RADIAL	2784.6	2784.6	106.0 %		20:07:55
3	Al 396.153Radial†	2322.3	2259.1	4864.5 ug/L	4864.5 ppb	20:07:35
3	Ca 317.933Radial†	1288.7	1206.7	5041.8 ug/L	5041.8 ppb	20:07:55
3	Fe 238.204 Radial†	192.4	172.5	4981.2 ug/L	4981.2 ppb	20:07:55
3	K 766.490 Radial†	12521.7	9820.0	4791.3 ug/L	4791.3 ppb	20:07:35
3	Mg 279.077 IEC†	54.6	49.9	5168.5 ug/L	5168.5 ppb	20:07:55
3	Na 589.592 Radial†	31785.7	30804.6	9744.9 ug/L	9744.9 ppb	20:07:35
3	Sr 421.552†	54565.8	51589.3	496.77 ug/L	496.77 ppb	20:07:35
3	Sc 361.383	860869.3	860869.3	108.70 %		20:09:05
3	Y 371.029	728841.3	728841.3	107.56 %		20:09:05
3	Ag 328.068†	100949.7	92738.3	494.76 ug/L	494.76 ppb	20:09:10
3	As 188.979†	881.4	829.7	490.16 ug/L	490.16 ppb	20:09:30
3	B 249.677†	17685.5	16647.2	482.22 ug/L	482.22 ppb	20:09:10
3	Ba 233.527†	53786.2	49481.4	491.15 ug/L	491.15 ppb	20:09:10
3	Be 313.107†	1177578.1	1086866.4	492.66 ug/L	492.66 ppb	20:09:05
3	Cd 226.502†	34879.8	32244.2	491.76 ug/L	491.76 ppb	20:09:10
3	Co 228.616†	19670.8	18142.2	500.63 ug/L	500.63 ppb	20:09:10
3	Cr 267.716†	38885.7	35720.5	491.07 ug/L	491.07 ppb	20:09:10
3	Cu 324.752†	163056.9	143793.8	485.63 ug/L	485.63 ppb	20:09:10
3	Mn 257.610†	384006.3	352871.5	488.33 ug/L	488.33 ppb	20:09:05
3	Mo 202.031†	5841.4	5360.8	490.04 ug/L	490.04 ppb	20:09:30
3	Ni 231.604†	16304.7	14939.1	499.07 ug/L	499.07 ppb	20:09:10
3	P 214.914†	3451.1	3010.6	2322.0 ug/L	2322.0 ppb	20:09:30
3	Pb 220.353†	3205.0	2992.1	492.19 ug/L	492.19 ppb	20:09:30
3	S 181.975 Axial†	593.3	515.0	982.87 ug/L	982.87 ppb	20:09:30
3	Sb 206.836†	1254.0	1130.9	503.29 ug/L	503.29 ppb	20:09:30
3	Se 196.026†	603.7	576.0	508.93 ug/L	508.93 ppb	20:09:30
3	Si 251.611†	68160.4	62228.7	2426.9 ug/L	2426.9 ppb	20:09:10
3	Sn 189.927†	2223.2	2037.4	485.81 ug/L	485.81 ppb	20:09:30
3	Ti 334.940†	289848.6	267577.5	479.81 ug/L	479.81 ppb	20:09:10
3	Tl 190.801†	1267.0	1191.6	493.36 ug/L	493.36 ppb	20:09:30
3	U 409.014†	15818.4	16524.3	500.25 ug/L	500.25 ppb	20:09:10
3	V 292.402†	63708.5	59801.5	496.52 ug/L	496.52 ppb	20:09:10
3	Zn 213.857†	42361.8	38459.8	487.38 ug/L	487.38 ppb	20:09:10
3	SiO2†	68326.4	62382.5	5227.7 ug/L	5227.7 ppb	20:09:45

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	860675.7	108.68	%	0.656				0.60%
Sc Radial	3394.4	106	%	0.5				0.47%
Y 371.029	728687.6	107.53	%	0.687				0.64%
Y RADIAL	2785.7	106.0	%	0.10				0.09%
Ag 328.068†	92753.2	494.86	ug/L	8.182	494.86	ppb	8.182	1.65%
QC value within limits for Ag 328.068 Recovery = 98.97%								
Al 396.153Radial†	2273.3	4895.1	ug/L	40.22	4895.1	ppb	40.22	0.82%
QC value within limits for Al 396.153Radial Recovery = 97.90%								
As 188.979†	836.1	493.89	ug/L	4.221	493.89	ppb	4.221	0.85%
QC value within limits for As 188.979 Recovery = 98.78%								
B 249.677†	16659.4	482.56	ug/L	10.072	482.56	ppb	10.072	2.09%
QC value within limits for B 249.677 Recovery = 96.51%								
Ba 233.527†	49602.4	492.35	ug/L	7.539	492.35	ppb	7.539	1.53%
QC value within limits for Ba 233.527 Recovery = 98.47%								
Be 313.107†	1089483.4	493.84	ug/L	1.360	493.84	ppb	1.360	0.28%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	1207.3	5044.2	ug/L	21.73	5044.2	ppb	21.73	0.43%

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   QC value within limits for Ca 317.933Radial  Recovery = 100.88%
Cd 226.502†            32258.7      491.98 ug/L         7.587      491.98 ppb          7.587   1.54%
   QC value within limits for Cd 226.502  Recovery = 98.40%
Co 228.616†            18195.9      502.11 ug/L         8.709      502.11 ppb          8.709   1.73%
   QC value within limits for Co 228.616  Recovery = 100.42%
Cr 267.716†            35786.2      491.98 ug/L         7.406      491.98 ppb          7.406   1.51%
   QC value within limits for Cr 267.716  Recovery = 98.40%
Cu 324.752†           143956.8      486.19 ug/L         8.948      486.19 ppb          8.948   1.84%
   QC value within limits for Cu 324.752  Recovery = 97.24%
Fe 238.204 Radial†       175.3      5061.1 ug/L        116.18      5061.1 ppb        116.18   2.30%
   QC value within limits for Fe 238.204 Radial  Recovery = 101.22%
K 766.490 Radial†       9816.6      4789.6 ug/L         29.27      4789.6 ppb          29.27   0.61%
   QC value within limits for K 766.490 Radial  Recovery = 95.79%
Mg 279.077 IEC†           50.1      5184.4 ug/L         27.30      5184.4 ppb          27.30   0.53%
   QC value within limits for Mg 279.077 IEC  Recovery = 103.69%
Mn 257.610†           353787.0      489.60 ug/L         1.607      489.60 ppb          1.607   0.33%
   QC value within limits for Mn 257.610  Recovery = 97.92%
Mo 202.031†            5378.2      491.63 ug/L         3.482      491.63 ppb          3.482   0.71%
   QC value within limits for Mo 202.031  Recovery = 98.33%
Na 589.592 Radial†     30982.4      9801.2 ug/L         59.48      9801.2 ppb          59.48   0.61%
   QC value within limits for Na 589.592 Radial  Recovery = 98.01%
Ni 231.604†            14989.3      500.75 ug/L         8.043      500.75 ppb          8.043   1.61%
   QC value within limits for Ni 231.604  Recovery = 100.15%
P 214.914†              3034.3      2340.9 ug/L         25.43      2340.9 ppb          25.43   1.09%
   QC value within limits for P 214.914  Recovery = 93.64%
Pb 220.353†             2999.2      493.35 ug/L         3.252      493.35 ppb          3.252   0.66%
   QC value within limits for Pb 220.353  Recovery = 98.67%
S 181.975 Axial†         512.0      977.00 ug/L        10.844      977.00 ppb         10.844   1.11%
   QC value within limits for S 181.975 Axial  Recovery = 97.70%
Sb 206.836†             1129.8      502.86 ug/L         2.925      502.86 ppb          2.925   0.58%
   QC value within limits for Sb 206.836  Recovery = 100.57%
Se 196.026†              582.9      515.06 ug/L         5.551      515.06 ppb          5.551   1.08%
   QC value within limits for Se 196.026  Recovery = 103.01%
Si 251.611†            62341.9      2431.3 ug/L         40.56      2431.3 ppb          40.56   1.67%
   QC value within limits for Si 251.611  Recovery = 97.25%
Sn 189.927†             2042.8      487.10 ug/L         2.900      487.10 ppb          2.900   0.60%
   QC value within limits for Sn 189.927  Recovery = 97.42%
Sr 421.552†            51734.7      498.17 ug/L         1.327      498.17 ppb          1.327   0.27%
   QC value within limits for Sr 421.552  Recovery = 99.63%
Ti 334.940†           267934.3      480.45 ug/L         7.589      480.45 ppb          7.589   1.58%
   QC value within limits for Ti 334.940  Recovery = 96.09%
Tl 190.801†             1193.0      493.94 ug/L         0.592      493.94 ppb          0.592   0.12%
   QC value within limits for Tl 190.801  Recovery = 98.79%
U 409.014†             16518.7      500.07 ug/L         8.533      500.07 ppb          8.533   1.71%
   QC value within limits for U 409.014  Recovery = 100.01%
V 292.402†             59796.0      496.48 ug/L         7.477      496.48 ppb          7.477   1.51%
   QC value within limits for V 292.402  Recovery = 99.30%
Zn 213.857†            38530.1      488.26 ug/L         7.548      488.26 ppb          7.548   1.55%
   QC value within limits for Zn 213.857  Recovery = 97.65%
SiO2†                  62051.0      5199.8 ug/L         27.07      5199.8 ppb          27.07   0.52%
   QC value within limits for SiO2  Recovery = 97.24%
All analyte(s) passed QC.
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Sequence No.: 10
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 20:11:55
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3314.5	3314.5	103	%			20:14:07
1	Y RADIAL	2707.0	2707.0	103.0	%			20:14:07
1	Al 396.153Radial†	-74.0	-9.6	-20.695	ug/L	-20.695	ppb	20:14:07
1	Ca 317.933Radial†	14.5	1.6	6.5896	ug/L	6.5896	ppb	20:14:07
1	Fe 238.204 Radial†	9.2	-0.6	-17.506	ug/L	-17.506	ppb	20:14:07
1	K 766.490 Radial†	1961.6	-130.1	-63.543	ug/L	-63.543	ppb	20:13:47
1	Mg 279.077 IEC†	2.5	0.7	69.887	ug/L	69.887	ppb	20:14:07
1	Na 589.592 Radial†	-766.1	-8.1	-2.5618	ug/L	-2.5618	ppb	20:13:47
1	Sr 421.552†	17.0	-18.2	-0.1755	ug/L	-0.1755	ppb	20:13:47
1	Sc 361.383	814835.6	814835.6	102.89	%			20:15:04
1	Y 371.029	697428.4	697428.4	102.92	%			20:15:04
1	Ag 328.068†	171.1	34.9	0.1774	ug/L	0.1774	ppb	20:15:04
1	As 188.979†	-19.5	-0.1	-0.0853	ug/L	-0.0853	ppb	20:15:24
1	B 249.677†	-227.3	156.4	4.5522	ug/L	4.5522	ppb	20:15:24
1	Ba 233.527†	59.4	58.0	0.5742	ug/L	0.5742	ppb	20:15:24
1	Be 313.107†	-3397.0	240.3	0.1088	ug/L	0.1088	ppb	20:15:04
1	Cd 226.502†	-136.0	24.0	0.3693	ug/L	0.3693	ppb	20:15:24
1	Co 228.616†	-34.3	12.6	0.3464	ug/L	0.3464	ppb	20:15:24
1	Cr 267.716†	76.4	21.4	0.2914	ug/L	0.2914	ppb	20:15:24
1	Cu 324.752†	6432.3	39.7	0.1310	ug/L	0.1310	ppb	20:15:04
1	Mn 257.610†	458.9	47.1	0.0606	ug/L	0.0606	ppb	20:15:24
1	Mo 202.031†	11.9	-1.5	-0.1388	ug/L	-0.1388	ppb	20:15:24
1	Ni 231.604†	69.4	6.8	0.2278	ug/L	0.2278	ppb	20:15:24
1	P 214.914†	168.7	-0.4	-0.3223	ug/L	-0.3223	ppb	20:15:24
1	Pb 220.353†	-33.2	11.4	1.8746	ug/L	1.8746	ppb	20:15:24
1	S 181.975 Axial†	26.8	-4.8	-9.1028	ug/L	-9.1028	ppb	20:15:24
1	Sb 206.836†	37.8	14.0	5.9756	ug/L	5.9756	ppb	20:15:24
1	Se 196.026†	-16.5	4.6	3.8904	ug/L	3.8904	ppb	20:15:24
1	Si 251.611†	489.3	-0.6	-0.0200	ug/L	-0.0200	ppb	20:15:24
1	Sn 189.927†	2.9	-5.0	-1.1887	ug/L	-1.1887	ppb	20:15:24
1	Ti 334.940†	-914.7	39.4	0.0639	ug/L	0.0639	ppb	20:15:04
1	Tl 190.801†	-21.7	4.8	1.9899	ug/L	1.9899	ppb	20:15:24
1	U 409.014†	-1890.7	134.4	4.0836	ug/L	4.0836	ppb	20:15:04
1	V 292.402†	-1198.7	27.2	0.2322	ug/L	0.2322	ppb	20:15:04
1	Zn 213.857†	613.1	84.5	1.0814	ug/L	1.0814	ppb	20:15:24
1	SiO2†	507.0	17.7	1.4947	ug/L	1.4947	ppb	20:16:35
2	Sc Radial	3273.6	3273.6	102	%			20:14:32
2	Y RADIAL	2686.0	2686.0	102.2	%			20:14:32
2	Al 396.153Radial†	-54.9	8.3	17.992	ug/L	17.992	ppb	20:14:32
2	Ca 317.933Radial†	11.9	-0.8	-3.4916	ug/L	-3.4916	ppb	20:14:32
2	Fe 238.204 Radial†	10.4	0.7	19.743	ug/L	19.743	ppb	20:14:32
2	K 766.490 Radial†	2109.0	37.8	18.487	ug/L	18.487	ppb	20:14:12
2	Mg 279.077 IEC†	1.8	0.1	7.7848	ug/L	7.7848	ppb	20:14:32
2	Na 589.592 Radial†	-743.6	4.7	1.4733	ug/L	1.4733	ppb	20:14:12
2	Sr 421.552†	41.3	5.8	0.0559	ug/L	0.0559	ppb	20:14:12
2	Sc 361.383	812107.2	812107.2	102.54	%			20:15:29
2	Y 371.029	694344.8	694344.8	102.47	%			20:15:29
2	Ag 328.068†	146.7	11.7	0.0647	ug/L	0.0647	ppb	20:15:29
2	As 188.979†	-17.2	2.1	1.2215	ug/L	1.2215	ppb	20:15:49
2	B 249.677†	-223.5	159.3	4.6315	ug/L	4.6315	ppb	20:15:49
2	Ba 233.527†	56.9	55.8	0.5536	ug/L	0.5536	ppb	20:15:49
2	Be 313.107†	-3509.4	119.6	0.0544	ug/L	0.0544	ppb	20:15:29
2	Cd 226.502†	-136.6	23.1	0.3511	ug/L	0.3511	ppb	20:15:49
2	Co 228.616†	-43.9	3.1	0.0834	ug/L	0.0834	ppb	20:15:49
2	Cr 267.716†	103.1	47.7	0.6539	ug/L	0.6539	ppb	20:15:49
2	Cu 324.752†	6376.3	6.2	0.0189	ug/L	0.0189	ppb	20:15:29
2	Mn 257.610†	475.6	65.0	0.0915	ug/L	0.0915	ppb	20:15:49
2	Mo 202.031†	7.5	-5.7	-0.5189	ug/L	-0.5189	ppb	20:15:49
2	Ni 231.604†	61.4	-0.7	-0.0231	ug/L	-0.0231	ppb	20:15:49

2	P 214.914†	177.7	9.0	7.2060 ug/L	7.2060 ppb	20:15:49
2	Pb 220.353†	-34.1	10.4	1.7112 ug/L	1.7112 ppb	20:15:49
2	S 181.975 Axial†	32.0	0.4	0.8163 ug/L	0.8163 ppb	20:15:49
2	Sb 206.836†	31.2	7.7	3.3230 ug/L	3.3230 ppb	20:15:49
2	Se 196.026†	-14.6	6.4	5.5469 ug/L	5.5469 ppb	20:15:49
2	Si 251.611†	476.7	-11.2	-0.4324 ug/L	-0.4324 ppb	20:15:49
2	Sn 189.927†	13.3	5.1	1.2238 ug/L	1.2238 ppb	20:15:49
2	Ti 334.940†	-879.3	70.9	0.1234 ug/L	0.1234 ppb	20:15:29
2	Tl 190.801†	-23.3	3.2	1.3221 ug/L	1.3221 ppb	20:15:49
2	U 409.014†	-1831.3	186.2	5.6509 ug/L	5.6509 ppb	20:15:29
2	V 292.402†	-1194.1	27.8	0.2283 ug/L	0.2283 ppb	20:15:29
2	Zn 213.857†	612.8	86.2	1.1002 ug/L	1.1002 ppb	20:15:49
2	SiO2†	500.4	12.9	1.0986 ug/L	1.0986 ppb	20:16:55
3	Sc Radial	3336.2	3336.2	104 %		20:14:57
3	Y RADIAL	2727.4	2727.4	103.8 %		20:14:57
3	Al 396.153Radial†	-55.7	8.5	18.395 ug/L	18.395 ppb	20:14:57
3	Ca 317.933Radial†	14.6	1.6	6.5142 ug/L	6.5142 ppb	20:14:57
3	Fe 238.204 Radial†	8.1	-1.7	-50.232 ug/L	-50.232 ppb	20:14:57
3	K 766.490 Radial†	2057.3	-50.5	-24.666 ug/L	-24.666 ppb	20:14:37
3	Mg 279.077 IEC†	0.5	-1.2	-124.81 ug/L	-124.81 ppb	20:14:57
3	Na 589.592 Radial†	-781.7	-18.2	-5.7612 ug/L	-5.7612 ppb	20:14:37
3	Sr 421.552†	28.2	-7.5	-0.0723 ug/L	-0.0723 ppb	20:14:37
3	Sc 361.383	805433.6	805433.6	101.70 %		20:15:54
3	Y 371.029	689940.8	689940.8	101.82 %		20:15:54
3	Ag 328.068†	200.2	65.5	0.3360 ug/L	0.3360 ppb	20:15:54
3	As 188.979†	-20.6	-1.4	-0.8379 ug/L	-0.8379 ppb	20:16:14
3	B 249.677†	-244.4	136.9	3.9912 ug/L	3.9912 ppb	20:16:14
3	Ba 233.527†	57.2	56.6	0.5596 ug/L	0.5596 ppb	20:16:14
3	Be 313.107†	-3450.7	148.9	0.0676 ug/L	0.0676 ppb	20:15:54
3	Cd 226.502†	-141.6	17.0	0.2638 ug/L	0.2638 ppb	20:16:14
3	Co 228.616†	-35.4	11.1	0.3064 ug/L	0.3064 ppb	20:16:14
3	Cr 267.716†	78.8	24.6	0.3376 ug/L	0.3376 ppb	20:16:14
3	Cu 324.752†	6204.8	-110.9	-0.3757 ug/L	-0.3757 ppb	20:15:54
3	Mn 257.610†	451.0	44.6	0.0618 ug/L	0.0618 ppb	20:16:14
3	Mo 202.031†	11.9	-1.3	-0.1261 ug/L	-0.1261 ppb	20:16:14
3	Ni 231.604†	67.3	5.5	0.1850 ug/L	0.1850 ppb	20:16:14
3	P 214.914†	163.0	-4.0	-3.1385 ug/L	-3.1385 ppb	20:16:14
3	Pb 220.353†	-43.8	0.6	0.1132 ug/L	0.1132 ppb	20:16:14
3	S 181.975 Axial†	32.8	1.4	2.7298 ug/L	2.7298 ppb	20:16:14
3	Sb 206.836†	20.8	-2.3	-1.0094 ug/L	-1.0094 ppb	20:16:14
3	Se 196.026†	-21.6	-0.6	-0.6287 ug/L	-0.6287 ppb	20:16:14
3	Si 251.611†	498.6	14.1	0.5540 ug/L	0.5540 ppb	20:16:14
3	Sn 189.927†	0.9	-6.9	-1.6358 ug/L	-1.6358 ppb	20:16:14
3	Ti 334.940†	-872.3	70.7	0.1390 ug/L	0.1390 ppb	20:15:54
3	Tl 190.801†	-21.1	5.2	2.1489 ug/L	2.1489 ppb	20:16:14
3	U 409.014†	-2100.3	-93.1	-2.8234 ug/L	-2.8234 ppb	20:15:54
3	V 292.402†	-1151.1	60.4	0.4925 ug/L	0.4925 ppb	20:15:54
3	Zn 213.857†	600.1	78.6	1.0127 ug/L	1.0127 ppb	20:16:14
3	SiO2†	498.7	15.4	1.2945 ug/L	1.2945 ppb	20:17:15

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	810792.2	102.38	%	0.611				0.60%
Sc Radial	3308.1	103	%	1.0				0.96%
Y 371.029	693904.7	102.40	%	0.555				0.54%
Y RADIAL	2706.8	103.0	%	0.79				0.76%
Ag 328.068†	37.4	0.1927	ug/L	0.13632	0.1927	ppb	0.13632	70.75%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	2.4	5.2308	ug/L	22.45296	5.2308	ppb	22.45296	429.25%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	0.2	0.0994	ug/L	1.04207	0.0994	ppb	1.04207	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	150.8	4.3917	ug/L	0.34906	4.3917	ppb	0.34906	7.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	56.8	0.5625	ug/L	0.01055	0.5625	ppb	0.01055	1.88%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	169.6	0.0770	ug/L	0.02841	0.0770	ppb	0.02841	36.92%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	0.8	3.2041	ug/L	5.79876	3.2041	ppb	5.79876	180.98%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†              21.4      0.3281 ug/L       0.05639      0.3281 ppb        0.05639  17.19%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†               8.9      0.2454 ug/L       0.14174      0.2454 ppb        0.14174  57.76%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              31.2      0.4276 ug/L       0.19734      0.4276 ppb        0.19734  46.14%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†             -21.7     -0.0753 ug/L       0.26612     -0.0753 ppb        0.26612 353.55%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†       -0.6     -15.998 ug/L       35.0115     -15.998 ppb        35.0115 218.84%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†       -47.6     -23.241 ug/L       41.0338     -23.241 ppb        41.0338 176.56%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†          -0.2     -15.712 ug/L       99.4521     -15.712 ppb        99.4521 632.95%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†              52.2      0.0713 ug/L       0.01752      0.0713 ppb        0.01752  24.57%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -2.8     -0.2613 ug/L       0.22323     -0.2613 ppb        0.22323  85.44%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†       -7.2     -2.2832 ug/L       3.62527     -2.2832 ppb        3.62527 158.78%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†               3.9      0.1299 ug/L       0.13422      0.1299 ppb        0.13422 103.30%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                1.5      1.2484 ug/L       5.34811      1.2484 ppb        5.34811 428.40%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†               7.5      1.2330 ug/L       0.97324      1.2330 ppb        0.97324  78.93%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†         -1.0     -1.8523 ug/L       6.35162     -1.8523 ppb        6.35162 342.91%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†               6.5      2.7630 ug/L       3.52599      2.7630 ppb        3.52599 127.61%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.5      2.9362 ug/L       3.19648      2.9362 ppb        3.19648 108.87%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               0.8      0.0339 ug/L       0.49543      0.0339 ppb        0.49543 >999.9%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.2     -0.5336 ug/L       1.53824     -0.5336 ppb        1.53824 288.29%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†              -6.6     -0.0640 ug/L       0.11593     -0.0640 ppb        0.11593 181.21%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†              60.3      0.1088 ug/L       0.03961      0.1088 ppb        0.03961  36.42%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               4.4      1.8203 ug/L       0.43870      1.8203 ppb        0.43870  24.10%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†               75.8      2.3037 ug/L       4.50881      2.3037 ppb        4.50881 195.72%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†               38.5      0.3177 ug/L       0.15144      0.3177 ppb        0.15144  47.67%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†              83.1      1.0648 ug/L       0.04603      1.0648 ppb        0.04603   4.32%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                    15.3      1.2959 ug/L       0.19805      1.2959 ppb        0.19805  15.28%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 11
Sample ID: 247182001|954668|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 44
Date Collected: 3/10/2010 20:19:24
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 247182001|954668|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3352.9	3352.9	105	%			20:21:37
1	Y RADIAL	2730.4	2730.4	103.9	%			20:21:37
1	Al 396.153Radial†	-56.1	8.4	18.133	ug/L	18.133	ppb	20:21:37
1	Ca 317.933Radial†	157.2	137.7	575.54	ug/L	575.54	ppb	20:21:37
1	Fe 238.204 Radial†	9.3	-0.6	-18.309	ug/L	-18.309	ppb	20:21:37
1	K 766.490 Radial†	2334.2	204.3	99.530	ug/L	99.530	ppb	20:21:17
1	Mg 279.077 IEC†	1.0	-0.8	-77.647	ug/L	-77.647	ppb	20:21:37
1	Na 589.592 Radial†	-164.8	575.1	181.92	ug/L	181.92	ppb	20:21:17
1	Sr 421.552†	74.2	36.2	0.3448	ug/L	0.3448	ppb	20:21:17
1	Sc 361.383	824879.0	824879.0	104.16	%			20:22:34
1	Y 371.029	704029.2	704029.2	103.89	%			20:22:34
1	Ag 328.068†	163.1	25.3	0.1198	ug/L	0.1198	ppb	20:22:34
1	As 188.979†	-14.6	4.8	2.8222	ug/L	2.8222	ppb	20:22:54
1	B 249.677†	613.5	966.3	28.123	ug/L	28.123	ppb	20:22:54
1	Ba 233.527†	84.4	81.3	0.8058	ug/L	0.8058	ppb	20:22:54
1	Be 313.107†	-3560.6	123.4	0.0562	ug/L	0.0562	ppb	20:22:34
1	Cd 226.502†	-149.3	12.9	0.1994	ug/L	0.1994	ppb	20:22:54
1	Co 228.616†	-35.8	11.5	0.3156	ug/L	0.3156	ppb	20:22:54
1	Cr 267.716†	90.0	33.6	0.4594	ug/L	0.4594	ppb	20:22:54
1	Cu 324.752†	7292.0	789.1	2.6614	ug/L	2.6614	ppb	20:22:34
1	Mn 257.610†	768.3	338.8	0.4699	ug/L	0.4699	ppb	20:22:54
1	Mo 202.031†	5.5	-7.8	-0.7036	ug/L	-0.7036	ppb	20:22:54
1	Ni 231.604†	72.1	8.6	0.2873	ug/L	0.2873	ppb	20:22:54
1	P 214.914†	178.3	6.8	4.9516	ug/L	4.9516	ppb	20:22:54
1	Pb 220.353†	-36.6	8.5	1.4105	ug/L	1.4105	ppb	20:22:54
1	S 181.975 Axial†	35.8	3.6	6.8776	ug/L	6.8776	ppb	20:22:54
1	Sb 206.836†	44.0	19.6	8.3394	ug/L	8.3394	ppb	20:22:54
1	Se 196.026†	-13.3	7.9	6.7326	ug/L	6.7326	ppb	20:22:54
1	Si 251.611†	41070.7	38955.8	1523.1	ug/L	1523.1	ppb	20:22:34
1	Sn 189.927†	-4.6	-12.3	-2.8155	ug/L	-2.8155	ppb	20:22:54
1	Ti 334.940†	-857.4	105.2	0.2699	ug/L	0.2699	ppb	20:22:34
1	Tl 190.801†	-13.7	12.8	5.2637	ug/L	5.2637	ppb	20:22:54
1	U 409.014†	-1887.5	159.9	4.8567	ug/L	4.8567	ppb	20:22:34
1	V 292.402†	-1145.5	92.5	0.7580	ug/L	0.7580	ppb	20:22:34
1	Zn 213.857†	927.1	378.7	4.8411	ug/L	4.8411	ppb	20:22:54
1	SiO2†	41249.6	39128.7	3287.4	ug/L	3287.4	ppb	20:23:50
2	Sc Radial	3356.1	3356.1	105	%			20:22:02
2	Y RADIAL	2738.4	2738.4	104.2	%			20:22:02
2	Al 396.153Radial†	-53.5	11.0	23.749	ug/L	23.749	ppb	20:22:02
2	Ca 317.933Radial†	157.1	137.5	574.47	ug/L	574.47	ppb	20:22:02
2	Fe 238.204 Radial†	7.4	-2.4	-70.434	ug/L	-70.434	ppb	20:22:02
2	K 766.490 Radial†	2440.9	304.0	148.25	ug/L	148.25	ppb	20:21:42
2	Mg 279.077 IEC†	-0.9	-2.5	-261.40	ug/L	-261.40	ppb	20:22:02
2	Na 589.592 Radial†	-117.0	620.9	196.43	ug/L	196.43	ppb	20:21:42
2	Sr 421.552†	82.6	44.2	0.4213	ug/L	0.4213	ppb	20:21:42
2	Sc 361.383	834060.2	834060.2	105.32	%			20:22:59
2	Y 371.029	712497.4	712497.4	105.14	%			20:22:59
2	Ag 328.068†	225.0	82.3	0.4059	ug/L	0.4059	ppb	20:22:59
2	As 188.979†	-18.7	1.1	0.6192	ug/L	0.6192	ppb	20:23:19
2	B 249.677†	605.6	952.2	27.722	ug/L	27.722	ppb	20:23:19
2	Ba 233.527†	94.1	89.7	0.8877	ug/L	0.8877	ppb	20:23:19
2	Be 313.107†	-3534.2	186.1	0.0846	ug/L	0.0846	ppb	20:22:59
2	Cd 226.502†	-134.6	28.5	0.4432	ug/L	0.4432	ppb	20:23:19
2	Co 228.616†	-36.2	11.5	0.3174	ug/L	0.3174	ppb	20:23:19
2	Cr 267.716†	89.9	32.5	0.4423	ug/L	0.4423	ppb	20:23:19
2	Cu 324.752†	7374.2	790.1	2.6615	ug/L	2.6615	ppb	20:22:59
2	Mn 257.610†	767.6	330.0	0.4602	ug/L	0.4602	ppb	20:23:19
2	Mo 202.031†	7.2	-6.2	-0.5648	ug/L	-0.5648	ppb	20:23:19
2	Ni 231.604†	79.7	15.1	0.5034	ug/L	0.5034	ppb	20:23:19

2	P 214.914†	171.5	-1.4	-1.6442 ug/L	-1.6442 ppb	20:23:19
2	Pb 220.353†	-39.4	6.2	1.0426 ug/L	1.0426 ppb	20:23:19
2	S 181.975 Axial†	39.0	6.2	11.839 ug/L	11.839 ppb	20:23:19
2	Sb 206.836†	37.3	12.7	5.4122 ug/L	5.4122 ppb	20:23:19
2	Se 196.026†	-22.2	-0.4	-0.5004 ug/L	-0.5004 ppb	20:23:19
2	Si 251.611†	41365.4	38801.6	1517.0 ug/L	1517.0 ppb	20:22:59
2	Sn 189.927†	1.7	-6.2	-1.3604 ug/L	-1.3604 ppb	20:23:19
2	Ti 334.940†	-852.0	119.4	0.3099 ug/L	0.3099 ppb	20:22:59
2	Tl 190.801†	-26.7	0.6	0.2665 ug/L	0.2665 ppb	20:23:19
2	U 409.014†	-1882.5	184.6	5.6144 ug/L	5.6144 ppb	20:22:59
2	V 292.402†	-1137.1	112.6	0.9301 ug/L	0.9301 ppb	20:22:59
2	Zn 213.857†	913.3	355.8	4.5547 ug/L	4.5547 ppb	20:23:19
2	SiO2†	41357.8	38795.5	3259.4 ug/L	3259.4 ppb	20:23:55
3	Sc Radial	3356.1	3356.1	105 %		20:22:27
3	Y RADIAL	2735.0	2735.0	104.1 %		20:22:27
3	Al 396.153Radial†	-68.0	-3.0	-6.3794 ug/L	-6.3794 ppb	20:22:27
3	Ca 317.933Radial†	160.9	141.2	589.78 ug/L	589.78 ppb	20:22:27
3	Fe 238.204 Radial†	8.8	-1.1	-31.847 ug/L	-31.847 ppb	20:22:27
3	K 766.490 Radial†	2443.1	306.1	149.26 ug/L	149.26 ppb	20:22:07
3	Mg 279.077 IEC†	2.2	0.4	41.851 ug/L	41.851 ppb	20:22:27
3	Na 589.592 Radial†	-110.9	626.7	198.25 ug/L	198.25 ppb	20:22:07
3	Sr 421.552†	70.2	32.4	0.3079 ug/L	0.3079 ppb	20:22:07
3	Sc 361.383	828408.6	828408.6	104.60 %		20:23:25
3	Y 371.029	707520.1	707520.1	104.41 %		20:23:25
3	Ag 328.068†	155.1	17.0	0.0721 ug/L	0.0721 ppb	20:23:25
3	As 188.979†	-24.5	-4.6	-2.6977 ug/L	-2.6977 ppb	20:23:45
3	B 249.677†	602.2	953.0	27.738 ug/L	27.738 ppb	20:23:45
3	Ba 233.527†	86.2	82.7	0.8194 ug/L	0.8194 ppb	20:23:45
3	Be 313.107†	-3489.6	205.9	0.0933 ug/L	0.0933 ppb	20:23:25
3	Cd 226.502†	-134.0	28.1	0.4334 ug/L	0.4334 ppb	20:23:45
3	Co 228.616†	-50.8	-2.7	-0.0751 ug/L	-0.0751 ppb	20:23:45
3	Cr 267.716†	92.8	35.9	0.4908 ug/L	0.4908 ppb	20:23:45
3	Cu 324.752†	7253.4	722.3	2.4362 ug/L	2.4362 ppb	20:23:25
3	Mn 257.610†	772.9	340.0	0.4654 ug/L	0.4654 ppb	20:23:45
3	Mo 202.031†	8.4	-5.0	-0.4503 ug/L	-0.4503 ppb	20:23:45
3	Ni 231.604†	87.5	23.0	0.7703 ug/L	0.7703 ppb	20:23:45
3	P 214.914†	172.1	0.2	-0.2968 ug/L	-0.2968 ppb	20:23:45
3	Pb 220.353†	-37.1	8.2	1.3551 ug/L	1.3551 ppb	20:23:45
3	S 181.975 Axial†	46.2	13.4	25.548 ug/L	25.548 ppb	20:23:45
3	Sb 206.836†	32.8	8.6	3.7023 ug/L	3.7023 ppb	20:23:45
3	Se 196.026†	-19.6	1.9	1.5673 ug/L	1.5673 ppb	20:23:45
3	Si 251.611†	41135.8	38850.0	1518.9 ug/L	1518.9 ppb	20:23:25
3	Sn 189.927†	8.7	0.5	0.2191 ug/L	0.2191 ppb	20:23:45
3	Ti 334.940†	-920.0	48.9	0.1618 ug/L	0.1618 ppb	20:23:25
3	Tl 190.801†	-28.5	-1.3	-0.5246 ug/L	-0.5246 ppb	20:23:45
3	U 409.014†	-1954.8	103.2	3.1379 ug/L	3.1379 ppb	20:23:25
3	V 292.402†	-1167.3	76.3	0.6301 ug/L	0.6301 ppb	20:23:25
3	Zn 213.857†	929.1	376.9	4.8173 ug/L	4.8173 ppb	20:23:45
3	SiO2†	40952.0	38675.4	3249.3 ug/L	3249.3 ppb	20:24:00

Mean Data: 247182001|954668|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	829115.9	104.69	%	0.585				0.56%
Sc Radial	3355.1	105	%	0.1				0.06%
Y 371.029	708015.6	104.48	%	0.628				0.60%
Y RADIAL	2734.6	104.1	%	0.15				0.15%
Ag 328.068†	41.5	0.1993	ug/L	0.18052	0.1993	ppb	0.18052	90.60%
Al 396.153Radial†	5.5	11.834	ug/L	16.0214	11.834	ppb	16.0214	135.38%
As 188.979†	0.4	0.2479	ug/L	2.77859	0.2479	ppb	2.77859	>999.9%
B 249.677†	957.2	27.861	ug/L	0.2269	27.861	ppb	0.2269	0.81%
Ba 233.527†	84.6	0.8376	ug/L	0.04385	0.8376	ppb	0.04385	5.23%
Be 313.107†	171.8	0.0781	ug/L	0.01938	0.0781	ppb	0.01938	24.83%
Ca 317.933Radial†	138.8	579.93	ug/L	8.545	579.93	ppb	8.545	1.47%
Cd 226.502†	23.2	0.3586	ug/L	0.13803	0.3586	ppb	0.13803	38.49%
Co 228.616†	6.8	0.1860	ug/L	0.22607	0.1860	ppb	0.22607	121.55%
Cr 267.716†	34.0	0.4642	ug/L	0.02460	0.4642	ppb	0.02460	5.30%
Cu 324.752†	767.2	2.5864	ug/L	0.13007	2.5864	ppb	0.13007	5.03%
Fe 238.204 Radial†	-1.4	-40.196	ug/L	27.0470	-40.196	ppb	27.0470	67.29%
K 766.490 Radial†	271.4	132.34	ug/L	28.423	132.34	ppb	28.423	21.48%

Mg 279.077 IEC†	-1.0	-99.065	ug/L	152.7564	-99.065	ppb	152.7564 154.20%
Mn 257.610†	336.3	0.4652	ug/L	0.00488	0.4652	ppb	0.00488 1.05%
Mo 202.031†	-6.3	-0.5729	ug/L	0.12685	-0.5729	ppb	0.12685 22.14%
Na 589.592 Radial†	607.6	192.20	ug/L	8.948	192.20	ppb	8.948 4.66%
Ni 231.604†	15.6	0.5203	ug/L	0.24191	0.5203	ppb	0.24191 46.49%
P 214.914†	1.9	1.0035	ug/L	3.48491	1.0035	ppb	3.48491 347.27%
Pb 220.353†	7.7	1.2694	ug/L	0.19837	1.2694	ppb	0.19837 15.63%
S 181.975 Axial†	7.7	14.755	ug/L	9.6705	14.755	ppb	9.6705 65.54%
Sb 206.836†	13.6	5.8179	ug/L	2.34504	5.8179	ppb	2.34504 40.31%
Se 196.026†	3.2	2.5998	ug/L	3.72540	2.5998	ppb	3.72540 143.29%
Si 251.611†	38869.1	1519.7	ug/L	3.08	1519.7	ppb	3.08 0.20%
Sn 189.927†	-6.0	-1.3189	ug/L	1.51770	-1.3189	ppb	1.51770 115.07%
Sr 421.552†	37.6	0.3580	ug/L	0.05789	0.3580	ppb	0.05789 16.17%
Ti 334.940†	91.2	0.2472	ug/L	0.07662	0.2472	ppb	0.07662 30.99%
Tl 190.801†	4.1	1.6685	ug/L	3.13850	1.6685	ppb	3.13850 188.10%
U 409.014†	149.2	4.5364	ug/L	1.26896	4.5364	ppb	1.26896 27.97%
V 292.402†	93.8	0.7727	ug/L	0.15054	0.7727	ppb	0.15054 19.48%
Zn 213.857†	370.4	4.7377	ug/L	0.15894	4.7377	ppb	0.15894 3.35%
SiO2†	38866.5	3265.3	ug/L	19.73	3265.3	ppb	19.73 0.60%

Sequence No.: 13
Sample ID: 1202046567|954668|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 46
Date Collected: 3/10/2010 20:32:58
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046567|954668|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3420.7	3420.7	107	%			20:35:11
1	Y RADIAL	2815.2	2815.2	107.1	%			20:35:11
1	Al 396.153Radial†	-41.4	23.2	50.263	ug/L	50.263	ppb	20:35:11
1	Ca 317.933Radial†	17.4	3.8	15.946	ug/L	15.946	ppb	20:35:11
1	Fe 238.204 Radial†	9.9	-0.2	-6.0293	ug/L	-6.0293	ppb	20:35:11
1	K 766.490 Radial†	2574.5	385.1	188.05	ug/L	188.05	ppb	20:34:51
1	Mg 279.077 IEC†	0.4	-1.3	-137.04	ug/L	-137.04	ppb	20:35:11
1	Na 589.592 Radial†	74.7	802.6	253.91	ug/L	253.91	ppb	20:34:51
1	Sr 421.552†	27.8	-8.6	-0.0826	ug/L	-0.0826	ppb	20:34:51
1	Sc 361.383	842296.1	842296.1	106.36	%			20:36:08
1	Y 371.029	718491.7	718491.7	106.03	%			20:36:08
1	Ag 328.068†	169.9	28.5	0.1469	ug/L	0.1469	ppb	20:36:08
1	As 188.979†	-15.4	4.4	2.5730	ug/L	2.5730	ppb	20:36:28
1	B 249.677†	842.2	1169.1	34.022	ug/L	34.022	ppb	20:36:28
1	Ba 233.527†	43.8	41.4	0.4112	ug/L	0.4112	ppb	20:36:28
1	Be 313.107†	-3528.9	223.9	0.1036	ug/L	0.1036	ppb	20:36:08
1	Cd 226.502†	-140.1	24.6	0.3769	ug/L	0.3769	ppb	20:36:28
1	Co 228.616†	-36.5	11.6	0.3155	ug/L	0.3155	ppb	20:36:28
1	Cr 267.716†	169.8	106.9	1.4655	ug/L	1.4655	ppb	20:36:28
1	Cu 324.752†	6538.2	-64.5	-0.2208	ug/L	-0.2208	ppb	20:36:08
1	Mn 257.610†	1325.3	847.3	1.1768	ug/L	1.1768	ppb	20:36:28
1	Mo 202.031†	8.4	-5.2	-0.4716	ug/L	-0.4716	ppb	20:36:28
1	Ni 231.604†	95.4	29.1	0.9726	ug/L	0.9726	ppb	20:36:28
1	P 214.914†	186.5	11.0	8.8931	ug/L	8.8931	ppb	20:36:28
1	Pb 220.353†	-43.4	2.8	0.4757	ug/L	0.4757	ppb	20:36:28
1	S 181.975 Axial†	42.2	8.9	17.004	ug/L	17.004	ppb	20:36:28
1	Sb 206.836†	17.6	-6.2	-2.6483	ug/L	-2.6483	ppb	20:36:28
1	Se 196.026†	-13.6	7.9	6.7702	ug/L	6.7702	ppb	20:36:28
1	Si 251.611†	56557.7	52702.0	2060.5	ug/L	2060.5	ppb	20:36:08
1	Sn 189.927†	11.6	3.1	0.7383	ug/L	0.7383	ppb	20:36:28
1	Ti 334.940†	-371.4	579.2	1.0496	ug/L	1.0496	ppb	20:36:08
1	Tl 190.801†	-17.5	9.5	3.9051	ug/L	3.9051	ppb	20:36:28
1	U 409.014†	-1926.7	160.5	4.8734	ug/L	4.8734	ppb	20:36:08
1	V 292.402†	-1203.6	60.6	0.4955	ug/L	0.4955	ppb	20:36:08
1	Zn 213.857†	635.2	85.9	1.0937	ug/L	1.0937	ppb	20:36:28
1	SiO2†	56411.5	52565.6	4416.2	ug/L	4416.2	ppb	20:37:24
2	Sc Radial	3433.6	3433.6	107	%			20:35:36
2	Y RADIAL	2831.4	2831.4	107.8	%			20:35:36
2	Al 396.153Radial†	-46.6	18.5	40.112	ug/L	40.112	ppb	20:35:36
2	Ca 317.933Radial†	20.3	6.5	27.031	ug/L	27.031	ppb	20:35:36
2	Fe 238.204 Radial†	10.3	0.1	4.2058	ug/L	4.2058	ppb	20:35:36
2	K 766.490 Radial†	2597.3	397.4	194.05	ug/L	194.05	ppb	20:35:16
2	Mg 279.077 IEC†	1.4	-0.4	-38.923	ug/L	-38.923	ppb	20:35:36
2	Na 589.592 Radial†	77.6	805.1	254.68	ug/L	254.68	ppb	20:35:16
2	Sr 421.552†	20.4	-15.6	-0.1500	ug/L	-0.1500	ppb	20:35:16
2	Sc 361.383	836865.8	836865.8	105.67	%			20:36:33
2	Y 371.029	714454.1	714454.1	105.43	%			20:36:33
2	Ag 328.068†	158.7	18.9	0.0989	ug/L	0.0989	ppb	20:36:33
2	As 188.979†	-22.8	-2.7	-1.5785	ug/L	-1.5785	ppb	20:36:53
2	B 249.677†	863.6	1194.5	34.761	ug/L	34.761	ppb	20:36:53
2	Ba 233.527†	50.2	47.8	0.4745	ug/L	0.4745	ppb	20:36:53
2	Be 313.107†	-3601.3	133.8	0.0627	ug/L	0.0627	ppb	20:36:33
2	Cd 226.502†	-141.0	22.8	0.3490	ug/L	0.3490	ppb	20:36:53
2	Co 228.616†	-53.2	-4.5	-0.1274	ug/L	-0.1274	ppb	20:36:53
2	Cr 267.716†	168.9	107.0	1.4683	ug/L	1.4683	ppb	20:36:53
2	Cu 324.752†	6514.7	-46.9	-0.1603	ug/L	-0.1603	ppb	20:36:33
2	Mn 257.610†	1327.9	857.8	1.1883	ug/L	1.1883	ppb	20:36:53
2	Mo 202.031†	3.6	-9.6	-0.8759	ug/L	-0.8759	ppb	20:36:53
2	Ni 231.604†	90.4	24.9	0.8329	ug/L	0.8329	ppb	20:36:53

2	P 214.914†	173.1	-0.5	-0.3439 ug/L	-0.3439 ppb	20:36:53
2	Pb 220.353†	-36.1	9.5	1.5678 ug/L	1.5678 ppb	20:36:53
2	S 181.975 Axial†	43.2	10.1	19.189 ug/L	19.189 ppb	20:36:53
2	Sb 206.836†	31.5	7.0	2.9990 ug/L	2.9990 ppb	20:36:53
2	Se 196.026†	-17.5	4.1	3.5107 ug/L	3.5107 ppb	20:36:53
2	Si 251.611†	56244.7	52750.9	2062.4 ug/L	2062.4 ppb	20:36:33
2	Sn 189.927†	7.5	-0.7	-0.1571 ug/L	-0.1571 ppb	20:36:53
2	Ti 334.940†	-415.2	535.5	0.9649 ug/L	0.9649 ppb	20:36:33
2	Tl 190.801†	-23.8	3.5	1.4481 ug/L	1.4481 ppb	20:36:53
2	U 409.014†	-1941.3	134.9	4.0943 ug/L	4.0943 ppb	20:36:33
2	V 292.402†	-1215.5	42.0	0.3364 ug/L	0.3364 ppb	20:36:33
2	Zn 213.857†	634.2	88.8	1.1301 ug/L	1.1301 ppb	20:36:53
2	SiO2†	56776.0	53254.8	4474.2 ug/L	4474.2 ppb	20:37:29
3	Sc Radial	3387.9	3387.9	106 %		20:36:01
3	Y RADIAL	2786.9	2786.9	106.1 %		20:36:01
3	Al 396.153Radial†	-52.8	12.1	26.053 ug/L	26.053 ppb	20:36:01
3	Ca 317.933Radial†	18.7	5.2	21.750 ug/L	21.750 ppb	20:36:01
3	Fe 238.204 Radial†	9.8	-0.3	-7.3134 ug/L	-7.3134 ppb	20:36:01
3	K 766.490 Radial†	2599.7	432.3	211.10 ug/L	211.10 ppb	20:35:41
3	Mg 279.077 IEC†	1.8	-0.0	-3.2296 ug/L	-3.2296 ppb	20:36:01
3	Na 589.592 Radial†	160.6	884.5	279.82 ug/L	279.82 ppb	20:35:41
3	Sr 421.552†	41.8	4.9	0.0471 ug/L	0.0471 ppb	20:35:41
3	Sc 361.383	841755.7	841755.7	106.29 %		20:36:58
3	Y 371.029	719275.4	719275.4	106.14 %		20:36:58
3	Ag 328.068†	197.7	54.7	0.2852 ug/L	0.2852 ppb	20:36:58
3	As 188.979†	-18.1	1.8	1.0442 ug/L	1.0442 ppb	20:37:18
3	B 249.677†	855.1	1181.8	34.391 ug/L	34.391 ppb	20:37:18
3	Ba 233.527†	55.6	52.6	0.5212 ug/L	0.5212 ppb	20:37:18
3	Be 313.107†	-3570.3	182.8	0.0849 ug/L	0.0849 ppb	20:36:58
3	Cd 226.502†	-144.7	20.2	0.3094 ug/L	0.3094 ppb	20:37:18
3	Co 228.616†	-35.7	12.3	0.3371 ug/L	0.3371 ppb	20:37:18
3	Cr 267.716†	167.9	105.1	1.4415 ug/L	1.4415 ppb	20:37:18
3	Cu 324.752†	6489.0	-106.8	-0.3637 ug/L	-0.3637 ppb	20:36:58
3	Mn 257.610†	1308.1	831.8	1.1499 ug/L	1.1499 ppb	20:37:18
3	Mo 202.031†	19.2	5.0	0.4582 ug/L	0.4582 ppb	20:37:18
3	Ni 231.604†	78.4	13.1	0.4392 ug/L	0.4392 ppb	20:37:18
3	P 214.914†	178.2	3.3	2.7423 ug/L	2.7423 ppb	20:37:18
3	Pb 220.353†	-39.8	6.2	1.0284 ug/L	1.0284 ppb	20:37:18
3	S 181.975 Axial†	41.2	8.0	15.244 ug/L	15.244 ppb	20:37:18
3	Sb 206.836†	22.1	-1.9	-0.8115 ug/L	-0.8115 ppb	20:37:18
3	Se 196.026†	-17.0	4.7	4.0325 ug/L	4.0325 ppb	20:37:18
3	Si 251.611†	56423.1	52609.5	2056.9 ug/L	2056.9 ppb	20:36:58
3	Sn 189.927†	12.5	3.9	0.9371 ug/L	0.9371 ppb	20:37:18
3	Ti 334.940†	-399.2	552.9	0.9922 ug/L	0.9922 ppb	20:36:58
3	Tl 190.801†	-33.6	-5.7	-2.3190 ug/L	-2.3190 ppb	20:37:18
3	U 409.014†	-1929.1	157.1	4.7697 ug/L	4.7697 ppb	20:36:58
3	V 292.402†	-1219.9	44.6	0.3802 ug/L	0.3802 ppb	20:36:58
3	Zn 213.857†	639.7	90.4	1.1555 ug/L	1.1555 ppb	20:37:18
3	SiO2†	55625.1	51859.8	4356.9 ug/L	4356.9 ppb	20:37:34

Mean Data: 1202046567|954668|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	840305.9	106.10	%	0.378				0.36%
Sc Radial	3414.1	107	%	0.7				0.69%
Y 371.029	717407.1	105.87	%	0.382				0.36%
Y RADIAL	2811.2	107.0	%	0.86				0.80%
Ag 328.068†	34.0	0.1770	ug/L	0.09670	0.1770	ppb	0.09670	54.64%
Al 396.153Radial†	17.9	38.809	ug/L	12.1576	38.809	ppb	12.1576	31.33%
As 188.979†	1.1	0.6796	ug/L	2.09965	0.6796	ppb	2.09965	308.97%
B 249.677†	1181.8	34.391	ug/L	0.3697	34.391	ppb	0.3697	1.08%
Ba 233.527†	47.3	0.4689	ug/L	0.05521	0.4689	ppb	0.05521	11.77%
Be 313.107†	180.2	0.0837	ug/L	0.02048	0.0837	ppb	0.02048	24.46%
Ca 317.933Radial†	5.2	21.576	ug/L	5.5446	21.576	ppb	5.5446	25.70%
Cd 226.502†	22.5	0.3451	ug/L	0.03393	0.3451	ppb	0.03393	9.83%
Co 228.616†	6.5	0.1750	ug/L	0.26218	0.1750	ppb	0.26218	149.78%
Cr 267.716†	106.3	1.4584	ug/L	0.01472	1.4584	ppb	0.01472	1.01%
Cu 324.752†	-72.7	-0.2483	ug/L	0.10443	-0.2483	ppb	0.10443	42.06%
Fe 238.204 Radial†	-0.1	-3.0456	ug/L	6.31265	-3.0456	ppb	6.31265	207.27%
K 766.490 Radial†	405.0	197.73	ug/L	11.956	197.73	ppb	11.956	6.05%

Mg 279.077 IEC†	-0.6	-59.730	ug/L	69.2889	-59.730	ppb	69.2889 116.00%
Mn 257.610†	845.6	1.1717	ug/L	0.01972	1.1717	ppb	0.01972 1.68%
Mo 202.031†	-3.2	-0.2965	ug/L	0.68406	-0.2965	ppb	0.68406 230.75%
Na 589.592 Radial†	830.7	262.80	ug/L	14.740	262.80	ppb	14.740 5.61%
Ni 231.604†	22.4	0.7483	ug/L	0.27660	0.7483	ppb	0.27660 36.97%
P 214.914†	4.6	3.7638	ug/L	4.70248	3.7638	ppb	4.70248 124.94%
Pb 220.353†	6.2	1.0239	ug/L	0.54606	1.0239	ppb	0.54606 53.33%
S 181.975 Axial†	9.0	17.146	ug/L	1.9767	17.146	ppb	1.9767 11.53%
Sb 206.836†	-0.4	-0.1536	ug/L	2.88058	-0.1536	ppb	2.88058 >999.9%
Se 196.026†	5.6	4.7711	ug/L	1.75079	4.7711	ppb	1.75079 36.70%
Si 251.611†	52687.5	2059.9	ug/L	2.82	2059.9	ppb	2.82 0.14%
Sn 189.927†	2.1	0.5061	ug/L	0.58290	0.5061	ppb	0.58290 115.17%
Sr 421.552†	-6.4	-0.0619	ug/L	0.10015	-0.0619	ppb	0.10015 161.90%
Ti 334.940†	555.8	1.0022	ug/L	0.04320	1.0022	ppb	0.04320 4.31%
Tl 190.801†	2.4	1.0114	ug/L	3.13496	1.0114	ppb	3.13496 309.96%
U 409.014†	150.9	4.5791	ug/L	0.42309	4.5791	ppb	0.42309 9.24%
V 292.402†	49.0	0.4040	ug/L	0.08220	0.4040	ppb	0.08220 20.35%
Zn 213.857†	88.4	1.1264	ug/L	0.03106	1.1264	ppb	0.03106 2.76%
SiO2†	52560.0	4415.8	ug/L	58.62	4415.8	ppb	58.62 1.33%

Sequence No.: 14
Sample ID: 1202046568|954668|1
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 47
Date Collected: 3/10/2010 20:39:45
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046568|954668|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3442.8	3442.8	107	%			20:41:58
1	Y RADIAL	2823.6	2823.6	107.5	%			20:41:58
1	Al 396.153Radial†	2465.9	2357.2	5076.6	ug/L	5076.6	ppb	20:41:38
1	Ca 317.933Radial†	1316.7	1213.1	5068.6	ug/L	5068.6	ppb	20:41:58
1	Fe 238.204 Radial†	198.7	175.4	5064.6	ug/L	5064.6	ppb	20:41:58
1	K 766.490 Radial†	13469.7	10511.0	5130.6	ug/L	5130.6	ppb	20:41:38
1	Mg 279.077 IEC†	55.9	50.3	5203.8	ug/L	5203.8	ppb	20:41:58
1	Na 589.592 Radial†	17438.4	16964.3	5366.6	ug/L	5366.6	ppb	20:41:38
1	Sr 421.552†	58052.9	54001.0	520.00	ug/L	520.00	ppb	20:41:38
1	Sc 361.383	865814.4	865814.4	109.32	%			20:42:56
1	Y 371.029	731153.0	731153.0	107.90	%			20:42:56
1	Ag 328.068†	99489.3	90872.0	484.92	ug/L	484.92	ppb	20:43:01
1	As 188.979†	899.9	842.0	497.45	ug/L	497.45	ppb	20:43:21
1	B 249.677†	19001.5	17758.0	514.54	ug/L	514.54	ppb	20:43:01
1	Ba 233.527†	55223.5	50513.5	501.40	ug/L	501.40	ppb	20:43:01
1	Be 313.107†	1194119.2	1095809.1	496.72	ug/L	496.72	ppb	20:42:56
1	Cd 226.502†	34826.0	32011.8	488.23	ug/L	488.23	ppb	20:43:01
1	Co 228.616†	19621.7	17994.0	496.53	ug/L	496.53	ppb	20:43:01
1	Cr 267.716†	40018.9	36552.7	502.50	ug/L	502.50	ppb	20:43:01
1	Cu 324.752†	169862.0	149161.7	503.75	ug/L	503.75	ppb	20:43:01
1	Mn 257.610†	389929.9	356272.1	493.04	ug/L	493.04	ppb	20:43:01
1	Mo 202.031†	5925.5	5407.1	494.26	ug/L	494.26	ppb	20:43:21
1	Ni 231.604†	16933.2	15428.3	515.43	ug/L	515.43	ppb	20:43:01
1	P 214.914†	948.1	702.9	466.10	ug/L	466.10	ppb	20:43:21
1	Pb 220.353†	3223.4	2992.1	492.22	ug/L	492.22	ppb	20:43:21
1	S 181.975 Axial†	2929.6	2648.9	5058.8	ug/L	5058.8	ppb	20:43:21
1	Sb 206.836†	1332.0	1195.7	531.46	ug/L	531.46	ppb	20:43:21
1	Se 196.026†	617.4	585.4	517.25	ug/L	517.25	ppb	20:43:21
1	Si 251.611†	194109.8	177077.2	6917.1	ug/L	6917.1	ppb	20:43:01
1	Sn 189.927†	2306.7	2102.1	501.22	ug/L	501.22	ppb	20:43:21
1	Ti 334.940†	297756.9	273288.3	490.04	ug/L	490.04	ppb	20:43:01
1	Tl 190.801†	1282.5	1199.0	496.54	ug/L	496.54	ppb	20:43:21
1	U 409.014†	17045.9	17564.0	531.80	ug/L	531.80	ppb	20:43:01
1	V 292.402†	65832.7	61409.8	509.79	ug/L	509.79	ppb	20:43:01
1	Zn 213.857†	43163.4	38970.4	493.77	ug/L	493.77	ppb	20:43:01
1	SiO2†	193172.5	176220.9	14792	ug/L	14792	ppb	20:44:28
2	Sc Radial	3449.3	3449.3	108	%			20:42:24
2	Y RADIAL	2822.5	2822.5	107.4	%			20:42:24
2	Al 396.153Radial†	2468.0	2354.9	5071.2	ug/L	5071.2	ppb	20:42:03
2	Ca 317.933Radial†	1317.7	1211.7	5062.8	ug/L	5062.8	ppb	20:42:24
2	Fe 238.204 Radial†	198.6	175.0	5052.0	ug/L	5052.0	ppb	20:42:24
2	K 766.490 Radial†	13459.0	10477.4	5114.2	ug/L	5114.2	ppb	20:42:03
2	Mg 279.077 IEC†	53.4	47.9	4958.5	ug/L	4958.5	ppb	20:42:24
2	Na 589.592 Radial†	17375.9	16875.7	5338.6	ug/L	5338.6	ppb	20:42:03
2	Sr 421.552†	58029.3	53877.4	518.81	ug/L	518.81	ppb	20:42:03
2	Sc 361.383	860829.7	860829.7	108.70	%			20:43:26
2	Y 371.029	727892.3	727892.3	107.42	%			20:43:26
2	Ag 328.068†	99554.8	91459.3	488.04	ug/L	488.04	ppb	20:43:32
2	As 188.979†	903.8	850.3	502.34	ug/L	502.34	ppb	20:43:52
2	B 249.677†	19103.6	17952.6	520.21	ug/L	520.21	ppb	20:43:32
2	Ba 233.527†	55138.4	50727.8	503.52	ug/L	503.52	ppb	20:43:32
2	Be 313.107†	1188271.2	1096753.8	497.16	ug/L	497.16	ppb	20:43:26
2	Cd 226.502†	34742.8	32119.7	489.87	ug/L	489.87	ppb	20:43:32
2	Co 228.616†	19485.4	17972.4	495.94	ug/L	495.94	ppb	20:43:32
2	Cr 267.716†	39916.3	36670.2	504.12	ug/L	504.12	ppb	20:43:32
2	Cu 324.752†	170718.6	150849.5	509.45	ug/L	509.45	ppb	20:43:32
2	Mn 257.610†	389130.2	357601.8	494.88	ug/L	494.88	ppb	20:43:32
2	Mo 202.031†	5949.1	5460.1	499.11	ug/L	499.11	ppb	20:43:52
2	Ni 231.604†	16832.5	15425.4	515.33	ug/L	515.33	ppb	20:43:32

2	P 214.914†	945.1	705.2	466.82 ug/L	466.82 ppb	20:43:52
2	Pb 220.353†	3228.6	3014.0	495.82 ug/L	495.82 ppb	20:43:52
2	S 181.975 Axial†	2911.9	2648.1	5057.3 ug/L	5057.3 ppb	20:43:52
2	Sb 206.836†	1333.9	1204.5	535.41 ug/L	535.41 ppb	20:43:52
2	Se 196.026†	608.7	580.7	513.20 ug/L	513.20 ppb	20:43:52
2	Si 251.611†	194224.1	178210.4	6961.3 ug/L	6961.3 ppb	20:43:32
2	Sn 189.927†	2316.6	2123.5	506.31 ug/L	506.31 ppb	20:43:52
2	Ti 334.940†	297989.3	275079.2	493.27 ug/L	493.27 ppb	20:43:32
2	Tl 190.801†	1282.0	1205.4	499.19 ug/L	499.19 ppb	20:43:52
2	U 409.014†	16822.2	17448.5	528.29 ug/L	528.29 ppb	20:43:32
2	V 292.402†	65858.8	61782.5	512.90 ug/L	512.90 ppb	20:43:32
2	Zn 213.857†	43167.5	39202.8	496.74 ug/L	496.74 ppb	20:43:32
2	SiO2†	194347.3	178324.8	14968 ug/L	14968 ppb	20:44:33
3	Sc Radial	3446.0	3446.0	108 %		20:42:49
3	Y RADIAL	2819.1	2819.1	107.3 %		20:42:49
3	Al 396.153Radial†	2463.9	2353.3	5068.1 ug/L	5068.1 ppb	20:42:29
3	Ca 317.933Radial†	1319.1	1214.2	5073.3 ug/L	5073.3 ppb	20:42:49
3	Fe 238.204 Radial†	199.7	176.2	5087.1 ug/L	5087.1 ppb	20:42:49
3	K 766.490 Radial†	13494.9	10522.7	5136.3 ug/L	5136.3 ppb	20:42:29
3	Mg 279.077 IEC†	55.8	50.2	5195.3 ug/L	5195.3 ppb	20:42:49
3	Na 589.592 Radial†	17440.7	16951.3	5362.5 ug/L	5362.5 ppb	20:42:29
3	Sr 421.552†	57882.4	53792.2	517.99 ug/L	517.99 ppb	20:42:29
3	Sc 361.383	869743.3	869743.3	109.82 %		20:43:57
3	Y 371.029	736746.0	736746.0	108.72 %		20:43:57
3	Ag 328.068†	100000.8	90926.8	485.21 ug/L	485.21 ppb	20:44:02
3	As 188.979†	892.6	831.6	491.38 ug/L	491.38 ppb	20:44:22
3	B 249.677†	19279.2	17932.4	519.63 ug/L	519.63 ppb	20:44:02
3	Ba 233.527†	55148.6	50217.1	498.46 ug/L	498.46 ppb	20:44:02
3	Be 313.107†	1200762.7	1096924.4	497.23 ug/L	497.23 ppb	20:43:57
3	Cd 226.502†	34753.2	31801.6	485.01 ug/L	485.01 ppb	20:44:02
3	Co 228.616†	19487.9	17791.1	490.92 ug/L	490.92 ppb	20:44:02
3	Cr 267.716†	40015.8	36384.5	500.19 ug/L	500.19 ppb	20:44:02
3	Cu 324.752†	171526.5	149975.4	506.50 ug/L	506.50 ppb	20:44:02
3	Mn 257.610†	389830.2	354570.1	490.68 ug/L	490.68 ppb	20:44:02
3	Mo 202.031†	5918.4	5376.1	491.44 ug/L	491.44 ppb	20:44:22
3	Ni 231.604†	16863.0	15294.4	510.96 ug/L	510.96 ppb	20:44:02
3	P 214.914†	950.6	701.3	464.24 ug/L	464.24 ppb	20:44:22
3	Pb 220.353†	3223.2	2978.6	489.99 ug/L	489.99 ppb	20:44:22
3	S 181.975 Axial†	2914.6	2623.1	5009.5 ug/L	5009.5 ppb	20:44:22
3	Sb 206.836†	1338.1	1195.7	531.43 ug/L	531.43 ppb	20:44:22
3	Se 196.026†	614.1	579.8	512.54 ug/L	512.54 ppb	20:44:22
3	Si 251.611†	194782.2	176887.4	6909.7 ug/L	6909.7 ppb	20:44:02
3	Sn 189.927†	2327.6	2111.6	503.48 ug/L	503.48 ppb	20:44:22
3	Ti 334.940†	298787.7	272996.5	489.52 ug/L	489.52 ppb	20:44:02
3	Tl 190.801†	1270.2	1182.6	489.79 ug/L	489.79 ppb	20:44:22
3	U 409.014†	17182.7	17618.1	533.44 ug/L	533.44 ppb	20:44:02
3	V 292.402†	66057.0	61342.0	509.19 ug/L	509.19 ppb	20:44:02
3	Zn 213.857†	43206.6	38831.4	492.02 ug/L	492.02 ppb	20:44:02
3	SiO2†	194956.2	177046.9	14861 ug/L	14861 ppb	20:44:39

Mean Data: 1202046568|954668|1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	865462.5	109.28	%	0.564				0.52%
Sc Radial	3446.0	108	%	0.1				0.09%
Y 371.029	731930.4	108.01	%	0.661				0.61%
Y RADIAL	2821.7	107.4	%	0.09				0.08%
Ag 328.068†	91086.0	486.06	ug/L	1.726	486.06	ppb	1.726	0.36%
Al 396.153Radial†	2355.1	5072.0	ug/L	4.27	5072.0	ppb	4.27	0.08%
As 188.979†	841.3	497.05	ug/L	5.492	497.05	ppb	5.492	1.10%
B 249.677†	17881.0	518.12	ug/L	3.118	518.12	ppb	3.118	0.60%
Ba 233.527†	50486.1	501.13	ug/L	2.542	501.13	ppb	2.542	0.51%
Be 313.107†	1096495.8	497.04	ug/L	0.273	497.04	ppb	0.273	0.05%
Ca 317.933Radial†	1213.0	5068.2	ug/L	5.28	5068.2	ppb	5.28	0.10%
Cd 226.502†	31977.7	487.71	ug/L	2.471	487.71	ppb	2.471	0.51%
Co 228.616†	17919.2	494.46	ug/L	3.080	494.46	ppb	3.080	0.62%
Cr 267.716†	36535.8	502.27	ug/L	1.974	502.27	ppb	1.974	0.39%
Cu 324.752†	149995.6	506.57	ug/L	2.851	506.57	ppb	2.851	0.56%
Fe 238.204 Radial†	175.6	5067.9	ug/L	17.77	5067.9	ppb	17.77	0.35%
K 766.490 Radial†	10503.7	5127.0	ug/L	11.50	5127.0	ppb	11.50	0.22%

Mg 279.077 IEC†	49.5	5119.2 ug/L	139.24	5119.2 ppb	139.24	2.72%
Mn 257.610†	356148.0	492.87 ug/L	2.105	492.87 ppb	2.105	0.43%
Mo 202.031†	5414.4	494.94 ug/L	3.877	494.94 ppb	3.877	0.78%
Na 589.592 Radial†	16930.4	5355.9 ug/L	15.15	5355.9 ppb	15.15	0.28%
Ni 231.604†	15382.7	513.91 ug/L	2.554	513.91 ppb	2.554	0.50%
P 214.914†	703.1	465.72 ug/L	1.330	465.72 ppb	1.330	0.29%
Pb 220.353†	2994.9	492.68 ug/L	2.942	492.68 ppb	2.942	0.60%
S 181.975 Axial†	2640.1	5041.9 ug/L	28.01	5041.9 ppb	28.01	0.56%
Sb 206.836†	1198.6	532.77 ug/L	2.291	532.77 ppb	2.291	0.43%
Se 196.026†	582.0	514.33 ug/L	2.551	514.33 ppb	2.551	0.50%
Si 251.611†	177391.7	6929.4 ug/L	27.92	6929.4 ppb	27.92	0.40%
Sn 189.927†	2112.4	503.67 ug/L	2.550	503.67 ppb	2.550	0.51%
Sr 421.552†	53890.2	518.93 ug/L	1.011	518.93 ppb	1.011	0.19%
Ti 334.940†	273788.0	490.94 ug/L	2.034	490.94 ppb	2.034	0.41%
Tl 190.801†	1195.7	495.17 ug/L	4.849	495.17 ppb	4.849	0.98%
U 409.014†	17543.6	531.18 ug/L	2.634	531.18 ppb	2.634	0.50%
V 292.402†	61511.4	510.62 ug/L	1.989	510.62 ppb	1.989	0.39%
Zn 213.857†	39001.5	494.18 ug/L	2.388	494.18 ppb	2.388	0.48%
SiO2†	177197.5	14874 ug/L	89.0	14874 ppb	89.0	0.60%

Sequence No.: 15
Sample ID: 1202046569|954668|5
Analyst: HSC
Initial Sample Wt:
Dilution:

Autosampler Location: 48
Date Collected: 3/10/2010 20:46:50
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: 1202046569|954668|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc.	Calib. Units	Sample Conc.	Sample Units	Analysis Time
1	Sc Radial	3317.1	3317.1	104	%			20:49:03
1	Y RADIAL	2729.2	2729.2	103.9	%			20:49:03
1	Al 396.153Radial†	-50.8	12.9	28.049	ug/L	28.049	ppb	20:49:03
1	Ca 317.933Radial†	22.2	8.9	37.331	ug/L	37.331	ppb	20:49:03
1	Fe 238.204 Radial†	11.5	1.6	46.101	ug/L	46.101	ppb	20:49:03
1	K 766.490 Radial†	2194.5	93.4	45.616	ug/L	45.616	ppb	20:48:43
1	Mg 279.077 IEC†	3.6	1.7	180.44	ug/L	180.44	ppb	20:49:03
1	Na 589.592 Radial†	-694.6	61.6	19.493	ug/L	19.493	ppb	20:48:43
1	Sr 421.552†	23.1	-12.3	-0.1185	ug/L	-0.1185	ppb	20:48:43
1	Sc 361.383	814253.3	814253.3	102.81	%			20:50:00
1	Y 371.029	694652.6	694652.6	102.51	%			20:50:00
1	Ag 328.068†	117.8	-16.7	-0.0772	ug/L	-0.0772	ppb	20:50:00
1	As 188.979†	-18.5	0.8	0.5071	ug/L	0.5071	ppb	20:50:20
1	B 249.677†	1.3	378.5	11.007	ug/L	11.007	ppb	20:50:20
1	Ba 233.527†	68.8	67.2	0.6670	ug/L	0.6670	ppb	20:50:20
1	Be 313.107†	-3461.0	175.7	0.0808	ug/L	0.0808	ppb	20:50:00
1	Cd 226.502†	-141.5	18.6	0.2802	ug/L	0.2802	ppb	20:50:20
1	Co 228.616†	-34.8	12.0	0.3280	ug/L	0.3280	ppb	20:50:20
1	Cr 267.716†	113.7	57.8	0.7940	ug/L	0.7940	ppb	20:50:20
1	Cu 324.752†	6431.8	43.7	0.1486	ug/L	0.1486	ppb	20:50:00
1	Mn 257.610†	650.4	233.8	0.3205	ug/L	0.3205	ppb	20:50:20
1	Mo 202.031†	6.0	-7.2	-0.6503	ug/L	-0.6503	ppb	20:50:20
1	Ni 231.604†	79.9	17.1	0.5729	ug/L	0.5729	ppb	20:50:20
1	P 214.914†	169.6	0.6	0.4534	ug/L	0.4534	ppb	20:50:20
1	Pb 220.353†	-48.8	-3.8	-0.6196	ug/L	-0.6196	ppb	20:50:20
1	S 181.975 Axial†	30.2	-1.4	-2.7254	ug/L	-2.7254	ppb	20:50:20
1	Sb 206.836†	24.2	0.8	0.3165	ug/L	0.3165	ppb	20:50:20
1	Se 196.026†	-18.3	2.9	2.6111	ug/L	2.6111	ppb	20:50:20
1	Si 251.611†	11364.7	10577.5	413.56	ug/L	413.56	ppb	20:50:00
1	Sn 189.927†	10.0	1.9	0.4547	ug/L	0.4547	ppb	20:50:20
1	Ti 334.940†	-616.3	329.0	0.5789	ug/L	0.5789	ppb	20:50:00
1	Tl 190.801†	-16.3	10.1	4.1543	ug/L	4.1543	ppb	20:50:20
1	U 409.014†	-1930.0	94.9	2.8763	ug/L	2.8763	ppb	20:50:00
1	V 292.402†	-1221.2	4.5	0.0289	ug/L	0.0289	ppb	20:50:00
1	Zn 213.857†	629.4	100.8	1.2781	ug/L	1.2781	ppb	20:50:20
1	SiO2†	11496.3	10706.6	899.52	ug/L	899.52	ppb	20:51:16
2	Sc Radial	3305.5	3305.5	103	%			20:49:28
2	Y RADIAL	2709.3	2709.3	103.1	%			20:49:28
2	Al 396.153Radial†	-60.1	3.7	7.9926	ug/L	7.9926	ppb	20:49:28
2	Ca 317.933Radial†	16.3	3.3	13.765	ug/L	13.765	ppb	20:49:28
2	Fe 238.204 Radial†	8.0	-1.7	-48.503	ug/L	-48.503	ppb	20:49:28
2	K 766.490 Radial†	2226.1	131.5	64.233	ug/L	64.233	ppb	20:49:08
2	Mg 279.077 IEC†	1.7	-0.0	-3.9478	ug/L	-3.9478	ppb	20:49:28
2	Na 589.592 Radial†	-660.2	92.6	29.295	ug/L	29.295	ppb	20:49:08
2	Sr 421.552†	30.6	-5.0	-0.0483	ug/L	-0.0483	ppb	20:49:08
2	Sc 361.383	816880.8	816880.8	103.15	%			20:50:25
2	Y 371.029	697309.6	697309.6	102.90	%			20:50:25
2	Ag 328.068†	177.2	40.4	0.1947	ug/L	0.1947	ppb	20:50:25
2	As 188.979†	-14.6	4.6	2.7144	ug/L	2.7144	ppb	20:50:45
2	B 249.677†	-13.0	364.7	10.619	ug/L	10.619	ppb	20:50:45
2	Ba 233.527†	58.2	56.7	0.5607	ug/L	0.5607	ppb	20:50:45
2	Be 313.107†	-3529.9	119.7	0.0551	ug/L	0.0551	ppb	20:50:25
2	Cd 226.502†	-143.3	17.3	0.2709	ug/L	0.2709	ppb	20:50:45
2	Co 228.616†	-38.8	8.2	0.2272	ug/L	0.2272	ppb	20:50:45
2	Cr 267.716†	89.9	34.3	0.4663	ug/L	0.4663	ppb	20:50:45
2	Cu 324.752†	6427.1	19.1	0.0582	ug/L	0.0582	ppb	20:50:25
2	Mn 257.610†	640.7	222.3	0.3029	ug/L	0.3029	ppb	20:50:45
2	Mo 202.031†	15.2	1.7	0.1558	ug/L	0.1558	ppb	20:50:45
2	Ni 231.604†	74.0	11.1	0.3713	ug/L	0.3713	ppb	20:50:45

2	P 214.914†	169.9	0.4	0.3628 ug/L	0.3628 ppb	20:50:45
2	Pb 220.353†	-45.5	-0.4	-0.0642 ug/L	-0.0642 ppb	20:50:45
2	S 181.975 Axial†	29.6	-2.1	-4.0856 ug/L	-4.0856 ppb	20:50:45
2	Sb 206.836†	24.7	1.2	0.5292 ug/L	0.5292 ppb	20:50:45
2	Se 196.026†	-20.0	1.3	1.0005 ug/L	1.0005 ppb	20:50:45
2	Si 251.611†	11377.3	10554.2	412.63 ug/L	412.63 ppb	20:50:25
2	Sn 189.927†	6.4	-1.6	-0.3797 ug/L	-0.3797 ppb	20:50:45
2	Ti 334.940†	-714.0	236.1	0.4226 ug/L	0.4226 ppb	20:50:25
2	Tl 190.801†	-21.2	5.4	2.2118 ug/L	2.2118 ppb	20:50:45
2	U 409.014†	-1802.9	224.2	6.8136 ug/L	6.8136 ppb	20:50:25
2	V 292.402†	-1197.2	31.6	0.2807 ug/L	0.2807 ppb	20:50:25
2	Zn 213.857†	624.2	93.7	1.2038 ug/L	1.2038 ppb	20:50:45
2	SiO2†	11299.5	10479.8	880.45 ug/L	880.45 ppb	20:51:21
3	Sc Radial	3304.2	3304.2	103 %		20:49:53
3	Y RADIAL	2719.0	2719.0	103.5 %		20:49:53
3	Al 396.153Radial†	-51.1	12.5	27.030 ug/L	27.030 ppb	20:49:53
3	Ca 317.933Radial†	13.9	1.0	4.3255 ug/L	4.3255 ppb	20:49:53
3	Fe 238.204 Radial†	9.0	-0.7	-20.739 ug/L	-20.739 ppb	20:49:53
3	K 766.490 Radial†	2153.2	61.6	30.076 ug/L	30.076 ppb	20:49:33
3	Mg 279.077 IEC†	0.1	-1.7	-170.87 ug/L	-170.87 ppb	20:49:53
3	Na 589.592 Radial†	-566.0	183.7	58.107 ug/L	58.107 ppb	20:49:33
3	Sr 421.552†	57.4	21.0	0.2026 ug/L	0.2026 ppb	20:49:33
3	Sc 361.383	821438.1	821438.1	103.72 %		20:50:50
3	Y 371.029	701680.0	701680.0	103.55 %		20:50:50
3	Ag 328.068†	173.2	35.6	0.1820 ug/L	0.1820 ppb	20:50:50
3	As 188.979†	-22.9	-3.2	-1.8792 ug/L	-1.8792 ppb	20:51:10
3	B 249.677†	-7.5	370.0	10.770 ug/L	10.770 ppb	20:51:10
3	Ba 233.527†	61.4	59.5	0.5901 ug/L	0.5901 ppb	20:51:10
3	Be 313.107†	-3399.0	264.9	0.1209 ug/L	0.1209 ppb	20:50:50
3	Cd 226.502†	-150.8	10.9	0.1693 ug/L	0.1693 ppb	20:51:10
3	Co 228.616†	-33.2	13.9	0.3812 ug/L	0.3812 ppb	20:51:10
3	Cr 267.716†	88.4	32.4	0.4434 ug/L	0.4434 ppb	20:51:10
3	Cu 324.752†	6529.3	83.1	0.2772 ug/L	0.2772 ppb	20:50:50
3	Mn 257.610†	642.3	220.4	0.3098 ug/L	0.3098 ppb	20:51:10
3	Mo 202.031†	10.3	-3.1	-0.2883 ug/L	-0.2883 ppb	20:51:10
3	Ni 231.604†	73.4	10.2	0.3399 ug/L	0.3399 ppb	20:51:10
3	P 214.914†	161.1	-9.0	-7.2620 ug/L	-7.2620 ppb	20:51:10
3	Pb 220.353†	-34.6	10.3	1.6974 ug/L	1.6974 ppb	20:51:10
3	S 181.975 Axial†	24.3	-7.4	-14.139 ug/L	-14.139 ppb	20:51:10
3	Sb 206.836†	23.5	-0.1	-0.0468 ug/L	-0.0468 ppb	20:51:10
3	Se 196.026†	-21.5	-0.0	-0.0516 ug/L	-0.0516 ppb	20:51:10
3	Si 251.611†	11418.9	10533.1	411.81 ug/L	411.81 ppb	20:50:50
3	Sn 189.927†	5.5	-2.5	-0.5955 ug/L	-0.5955 ppb	20:51:10
3	Ti 334.940†	-674.6	278.0	0.5112 ug/L	0.5112 ppb	20:50:50
3	Tl 190.801†	-21.1	5.6	2.3128 ug/L	2.3128 ppb	20:51:10
3	U 409.014†	-1904.8	135.6	4.1200 ug/L	4.1200 ppb	20:50:50
3	V 292.402†	-1144.3	89.0	0.7322 ug/L	0.7322 ppb	20:50:50
3	Zn 213.857†	640.2	105.8	1.3538 ug/L	1.3538 ppb	20:51:10
3	SiO2†	11220.2	10342.6	868.93 ug/L	868.93 ppb	20:51:26

Mean Data: 1202046569|954668|5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Sc 361.383	817524.1	103.23	%	0.459				0.44%
Sc Radial	3308.9	103	%	0.2				0.21%
Y 371.029	697880.8	102.99	%	0.524				0.51%
Y RADIAL	2719.1	103.5	%	0.38				0.37%
Ag 328.068†	19.8	0.0998	ug/L	0.15345	0.0998	ppb	0.15345	153.72%
Al 396.153Radial†	9.7	21.024	ug/L	11.2968	21.024	ppb	11.2968	53.73%
As 188.979†	0.8	0.4474	ug/L	2.29739	0.4474	ppb	2.29739	513.46%
B 249.677†	371.1	10.799	ug/L	0.1954	10.799	ppb	0.1954	1.81%
Ba 233.527†	61.1	0.6059	ug/L	0.05489	0.6059	ppb	0.05489	9.06%
Be 313.107†	186.7	0.0856	ug/L	0.03318	0.0856	ppb	0.03318	38.76%
Ca 317.933Radial†	4.4	18.474	ug/L	16.9990	18.474	ppb	16.9990	92.02%
Cd 226.502†	15.6	0.2401	ug/L	0.06156	0.2401	ppb	0.06156	25.63%
Co 228.616†	11.4	0.3122	ug/L	0.07824	0.3122	ppb	0.07824	25.06%
Cr 267.716†	41.5	0.5679	ug/L	0.19612	0.5679	ppb	0.19612	34.53%
Cu 324.752†	48.6	0.1613	ug/L	0.11004	0.1613	ppb	0.11004	68.22%
Fe 238.204 Radial†	-0.3	-7.7137	ug/L	48.62853	-7.7137	ppb	48.62853	630.41%
K 766.490 Radial†	95.5	46.642	ug/L	17.1016	46.642	ppb	17.1016	36.67%

Mg 279.077 IEC†	0.0	1.8725	ug/L	175.72763	1.8725	ppb	175.72763 >999.9%
Mn 257.610†	225.5	0.3110	ug/L	0.00886	0.3110	ppb	0.00886 2.85%
Mo 202.031†	-2.9	-0.2610	ug/L	0.40375	-0.2610	ppb	0.40375 154.72%
Na 589.592 Radial†	112.6	35.632	ug/L	20.0718	35.632	ppb	20.0718 56.33%
Ni 231.604†	12.8	0.4280	ug/L	0.12641	0.4280	ppb	0.12641 29.53%
P 214.914†	-2.6	-2.1486	ug/L	4.42852	-2.1486	ppb	4.42852 206.11%
Pb 220.353†	2.0	0.3379	ug/L	1.20971	0.3379	ppb	1.20971 358.06%
S 181.975 Axial†	-3.7	-6.9833	ug/L	6.23417	-6.9833	ppb	6.23417 89.27%
Sb 206.836†	0.6	0.2663	ug/L	0.29129	0.2663	ppb	0.29129 109.39%
Se 196.026†	1.4	1.1867	ug/L	1.34107	1.1867	ppb	1.34107 113.01%
Si 251.611†	10554.9	412.67	ug/L	0.871	412.67	ppb	0.871 0.21%
Sn 189.927†	-0.7	-0.1735	ug/L	0.55467	-0.1735	ppb	0.55467 319.69%
Sr 421.552†	1.3	0.0119	ug/L	0.16884	0.0119	ppb	0.16884 >999.9%
Ti 334.940†	281.1	0.5042	ug/L	0.07837	0.5042	ppb	0.07837 15.54%
Tl 190.801†	7.0	2.8930	ug/L	1.09349	2.8930	ppb	1.09349 37.80%
U 409.014†	151.6	4.6033	ug/L	2.01266	4.6033	ppb	2.01266 43.72%
V 292.402†	41.7	0.3473	ug/L	0.35636	0.3473	ppb	0.35636 102.62%
Zn 213.857†	100.1	1.2786	ug/L	0.07501	1.2786	ppb	0.07501 5.87%
SiO2†	10509.7	882.96	ug/L	15.448	882.96	ppb	15.448 1.75%

Sequence No.: 16
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 3/10/2010 20:53:37
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3384.7	3384.7	106	%			20:55:49
1	Y RADIAL	2762.0	2762.0	105.1	%			20:55:49
1	Al 396.153Radial†	2291.7	2231.7	4805.0	ug/L	4805.0	ppb	20:55:28
1	Ca 317.933Radial†	1294.3	1212.9	5067.7	ug/L	5067.7	ppb	20:55:49
1	Fe 238.204 Radial†	192.6	172.9	4990.5	ug/L	4990.5	ppb	20:55:49
1	K 766.490 Radial†	12683.0	9981.3	4870.2	ug/L	4870.2	ppb	20:55:28
1	Mg 279.077 IEC†	54.6	50.0	5176.2	ug/L	5176.2	ppb	20:55:49
1	Na 589.592 Radial†	31130.1	30205.8	9555.5	ug/L	9555.5	ppb	20:55:28
1	Sr 421.552†	53889.0	50986.0	490.96	ug/L	490.96	ppb	20:55:28
1	Sc 361.383	855310.1	855310.1	108.00	%			20:56:46
1	Y 371.029	722593.2	722593.2	106.63	%			20:56:46
1	Ag 328.068†	99027.4	91562.0	488.51	ug/L	488.51	ppb	20:56:51
1	As 188.979†	890.3	843.2	498.01	ug/L	498.01	ppb	20:57:11
1	B 249.677†	17431.1	16517.3	478.45	ug/L	478.45	ppb	20:56:51
1	Ba 233.527†	53085.5	49154.2	487.89	ug/L	487.89	ppb	20:56:51
1	Be 313.107†	1171476.4	1088257.8	493.27	ug/L	493.27	ppb	20:56:46
1	Cd 226.502†	34461.9	32065.9	489.04	ug/L	489.04	ppb	20:56:51
1	Co 228.616†	19392.0	18001.7	496.77	ug/L	496.77	ppb	20:56:51
1	Cr 267.716†	38382.8	35487.3	487.86	ug/L	487.86	ppb	20:56:51
1	Cu 324.752†	159608.7	141576.0	478.15	ug/L	478.15	ppb	20:56:51
1	Mn 257.610†	383665.4	354852.0	491.07	ug/L	491.07	ppb	20:56:46
1	Mo 202.031†	5839.1	5393.7	493.03	ug/L	493.03	ppb	20:57:11
1	Ni 231.604†	16115.7	14861.6	496.49	ug/L	496.49	ppb	20:56:51
1	P 214.914†	3471.9	3050.5	2355.6	ug/L	2355.6	ppb	20:57:11
1	Pb 220.353†	3216.0	3021.4	497.00	ug/L	497.00	ppb	20:57:11
1	S 181.975 Axial†	580.0	506.3	966.11	ug/L	966.11	ppb	20:57:11
1	Sb 206.836†	1253.8	1138.2	506.58	ug/L	506.58	ppb	20:57:11
1	Se 196.026†	603.8	579.8	512.17	ug/L	512.17	ppb	20:57:11
1	Si 251.611†	67123.3	61676.0	2405.3	ug/L	2405.3	ppb	20:56:51
1	Sn 189.927†	2235.9	2062.5	491.78	ug/L	491.78	ppb	20:57:11
1	Ti 334.940†	284624.5	264473.4	474.25	ug/L	474.25	ppb	20:56:51
1	Tl 190.801†	1275.3	1206.8	499.63	ug/L	499.63	ppb	20:57:11
1	U 409.014†	15384.3	16217.0	490.92	ug/L	490.92	ppb	20:56:51
1	V 292.402†	62443.0	59010.6	490.07	ug/L	490.07	ppb	20:56:51
1	Zn 213.857†	41780.3	38174.7	483.76	ug/L	483.76	ppb	20:56:51
1	SiO2†	68131.5	62610.6	5246.7	ug/L	5246.7	ppb	20:58:19
2	Sc Radial	3374.8	3374.8	105	%			20:56:14
2	Y RADIAL	2766.3	2766.3	105.3	%			20:56:14
2	Al 396.153Radial†	2315.0	2260.2	4866.7	ug/L	4866.7	ppb	20:55:54
2	Ca 317.933Radial†	1284.4	1207.2	5043.7	ug/L	5043.7	ppb	20:56:14
2	Fe 238.204 Radial†	195.8	176.5	5094.2	ug/L	5094.2	ppb	20:56:14
2	K 766.490 Radial†	12485.9	9829.4	4796.0	ug/L	4796.0	ppb	20:55:54
2	Mg 279.077 IEC†	54.1	49.6	5135.2	ug/L	5135.2	ppb	20:56:14
2	Na 589.592 Radial†	30824.0	30001.5	9490.9	ug/L	9490.9	ppb	20:55:54
2	Sr 421.552†	53537.0	50801.5	489.19	ug/L	489.19	ppb	20:55:54
2	Sc 361.383	852315.2	852315.2	107.62	%			20:57:17
2	Y 371.029	721310.1	721310.1	106.44	%			20:57:17
2	Ag 328.068†	100212.2	92985.2	496.10	ug/L	496.10	ppb	20:57:22
2	As 188.979†	889.8	845.7	499.51	ug/L	499.51	ppb	20:57:42
2	B 249.677†	17662.2	16788.8	486.31	ug/L	486.31	ppb	20:57:22
2	Ba 233.527†	53482.8	49696.1	493.28	ug/L	493.28	ppb	20:57:22
2	Be 313.107†	1169609.7	1090334.8	494.23	ug/L	494.23	ppb	20:57:17
2	Cd 226.502†	34669.7	32371.1	493.69	ug/L	493.69	ppb	20:57:22
2	Co 228.616†	19561.2	18222.0	502.83	ug/L	502.83	ppb	20:57:22
2	Cr 267.716†	38687.5	35895.3	493.47	ug/L	493.47	ppb	20:57:22
2	Cu 324.752†	161953.3	144273.8	487.26	ug/L	487.26	ppb	20:57:22
2	Mn 257.610†	382262.4	354796.6	491.00	ug/L	491.00	ppb	20:57:17
2	Mo 202.031†	5816.8	5391.9	492.88	ug/L	492.88	ppb	20:57:42
2	Ni 231.604†	16230.7	15020.9	501.81	ug/L	501.81	ppb	20:57:22

2	P 214.914†	3437.3	3029.6	2336.9 ug/L	2336.9 ppb	20:57:42
2	Pb 220.353†	3200.1	3017.2	496.30 ug/L	496.30 ppb	20:57:42
2	S 181.975 Axial†	572.3	501.0	956.06 ug/L	956.06 ppb	20:57:42
2	Sb 206.836†	1253.9	1142.4	508.38 ug/L	508.38 ppb	20:57:42
2	Se 196.026†	604.7	582.6	514.83 ug/L	514.83 ppb	20:57:42
2	Si 251.611†	67757.5	62483.7	2436.9 ug/L	2436.9 ppb	20:57:22
2	Sn 189.927†	2227.5	2061.9	491.65 ug/L	491.65 ppb	20:57:42
2	Ti 334.940†	287712.8	268269.0	481.05 ug/L	481.05 ppb	20:57:22
2	Tl 190.801†	1266.2	1202.5	497.88 ug/L	497.88 ppb	20:57:42
2	U 409.014†	15722.1	16580.9	501.95 ug/L	501.95 ppb	20:57:22
2	V 292.402†	63147.5	59868.4	497.09 ug/L	497.09 ppb	20:57:22
2	Zn 213.857†	42160.7	38664.0	489.96 ug/L	489.96 ppb	20:57:22
2	SiO2†	68615.7	63282.2	5303.2 ug/L	5303.2 ppb	20:58:24
3	Sc Radial	3377.3	3377.3	105 %		20:56:39
3	Y RADIAL	2755.5	2755.5	104.9 %		20:56:39
3	Al 396.153Radial†	2296.4	2241.0	4825.1 ug/L	4825.1 ppb	20:56:19
3	Ca 317.933Radial†	1292.3	1213.7	5071.1 ug/L	5071.1 ppb	20:56:39
3	Fe 238.204 Radial†	192.0	172.7	4985.0 ug/L	4985.0 ppb	20:56:39
3	K 766.490 Radial†	12611.2	9939.3	4849.7 ug/L	4849.7 ppb	20:56:19
3	Mg 279.077 IEC†	56.5	51.9	5369.7 ug/L	5369.7 ppb	20:56:39
3	Na 589.592 Radial†	30800.9	29957.7	9477.0 ug/L	9477.0 ppb	20:56:19
3	Sr 421.552†	53399.1	50632.6	487.56 ug/L	487.56 ppb	20:56:19
3	Sc 361.383	854165.3	854165.3	107.85 %		20:57:48
3	Y 371.029	723249.1	723249.1	106.73 %		20:57:48
3	Ag 328.068†	100157.7	92732.9	494.73 ug/L	494.73 ppb	20:57:53
3	As 188.979†	891.3	845.2	499.25 ug/L	499.25 ppb	20:58:13
3	B 249.677†	17653.1	16744.9	485.05 ug/L	485.05 ppb	20:57:53
3	Ba 233.527†	53553.7	49654.2	492.86 ug/L	492.86 ppb	20:57:53
3	Be 313.107†	1171824.3	1090034.1	494.09 ug/L	494.09 ppb	20:57:48
3	Cd 226.502†	34718.5	32346.6	493.33 ug/L	493.33 ppb	20:57:53
3	Co 228.616†	19624.7	18241.6	503.37 ug/L	503.37 ppb	20:57:53
3	Cr 267.716†	38722.9	35850.3	492.85 ug/L	492.85 ppb	20:57:53
3	Cu 324.752†	161744.7	143754.5	485.50 ug/L	485.50 ppb	20:57:53
3	Mn 257.610†	382526.6	354272.2	490.26 ug/L	490.26 ppb	20:57:48
3	Mo 202.031†	5818.1	5381.4	491.91 ug/L	491.91 ppb	20:58:13
3	Ni 231.604†	16273.2	15027.6	502.03 ug/L	502.03 ppb	20:57:53
3	P 214.914†	3448.4	3032.9	2340.0 ug/L	2340.0 ppb	20:58:13
3	Pb 220.353†	3196.3	3007.3	494.67 ug/L	494.67 ppb	20:58:13
3	S 181.975 Axial†	582.0	508.8	971.04 ug/L	971.04 ppb	20:58:13
3	Sb 206.836†	1248.3	1134.6	504.98 ug/L	504.98 ppb	20:58:13
3	Se 196.026†	604.7	581.4	513.49 ug/L	513.49 ppb	20:58:13
3	Si 251.611†	67851.5	62434.5	2434.9 ug/L	2434.9 ppb	20:57:53
3	Sn 189.927†	2220.9	2051.4	489.15 ug/L	489.15 ppb	20:58:13
3	Ti 334.940†	287821.2	267790.5	480.18 ug/L	480.18 ppb	20:57:53
3	Tl 190.801†	1264.4	1198.3	496.15 ug/L	496.15 ppb	20:58:13
3	U 409.014†	15588.8	16425.6	497.25 ug/L	497.25 ppb	20:57:53
3	V 292.402†	63138.7	59733.2	495.98 ug/L	495.98 ppb	20:57:53
3	Zn 213.857†	42249.5	38661.5	489.95 ug/L	489.95 ppb	20:57:53
3	SiO2†	68401.6	62945.6	5274.9 ug/L	5274.9 ppb	20:58:29

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	853930.2	107.82	%	0.191				0.18%
Sc Radial	3379.0	105	%	0.2				0.15%
Y 371.029	722384.1	106.60	%	0.146				0.14%
Y RADIAL	2761.3	105.1	%	0.21				0.20%
Ag 328.068†	92426.7	493.11	ug/L	4.049	493.11	ppb	4.049	0.82%
QC value within limits for Ag 328.068 Recovery = 98.62%								
Al 396.153Radial†	2244.3	4832.3	ug/L	31.49	4832.3	ppb	31.49	0.65%
QC value within limits for Al 396.153Radial Recovery = 96.65%								
As 188.979†	844.7	498.92	ug/L	0.802	498.92	ppb	0.802	0.16%
QC value within limits for As 188.979 Recovery = 99.78%								
B 249.677†	16683.7	483.27	ug/L	4.225	483.27	ppb	4.225	0.87%
QC value within limits for B 249.677 Recovery = 96.65%								
Ba 233.527†	49501.5	491.34	ug/L	2.994	491.34	ppb	2.994	0.61%
QC value within limits for Ba 233.527 Recovery = 98.27%								
Be 313.107†	1089542.2	493.86	ug/L	0.516	493.86	ppb	0.516	0.10%
QC value within limits for Be 313.107 Recovery = 98.77%								
Ca 317.933Radial†	1211.3	5060.8	ug/L	14.93	5060.8	ppb	14.93	0.30%

```
   QC value within limits for Ca 317.933Radial  Recovery = 101.22%
Cd 226.502†            32261.2      492.02 ug/L         2.587      492.02 ppb          2.587   0.53%
   QC value within limits for Cd 226.502  Recovery = 98.40%
Co 228.616†            18155.1      500.99 ug/L         3.667      500.99 ppb          3.667   0.73%
   QC value within limits for Co 228.616  Recovery = 100.20%
Cr 267.716†            35744.3      491.40 ug/L         3.076      491.40 ppb          3.076   0.63%
   QC value within limits for Cr 267.716  Recovery = 98.28%
Cu 324.752†           143201.4      483.64 ug/L         4.834      483.64 ppb          4.834   1.00%
   QC value within limits for Cu 324.752  Recovery = 96.73%
Fe 238.204 Radial†       174.0      5023.2 ug/L        61.55      5023.2 ppb         61.55   1.23%
   QC value within limits for Fe 238.204 Radial  Recovery = 100.46%
K 766.490 Radial†       9916.7      4838.6 ug/L        38.31      4838.6 ppb         38.31   0.79%
   QC value within limits for K 766.490 Radial  Recovery = 96.77%
Mg 279.077 IEC†          50.5      5227.0 ug/L       125.24      5227.0 ppb        125.24   2.40%
   QC value within limits for Mg 279.077 IEC  Recovery = 104.54%
Mn 257.610†           354640.3      490.77 ug/L         0.450      490.77 ppb          0.450   0.09%
   QC value within limits for Mn 257.610  Recovery = 98.15%
Mo 202.031†             5389.0      492.61 ug/L         0.610      492.61 ppb          0.610   0.12%
   QC value within limits for Mo 202.031  Recovery = 98.52%
Na 589.592 Radial†     30055.0      9507.8 ug/L        41.88      9507.8 ppb         41.88   0.44%
   QC value within limits for Na 589.592 Radial  Recovery = 95.08%
Ni 231.604†            14970.0      500.11 ug/L         3.138      500.11 ppb          3.138   0.63%
   QC value within limits for Ni 231.604  Recovery = 100.02%
P 214.914†              3037.7      2344.2 ug/L         9.99      2344.2 ppb          9.99   0.43%
   QC value within limits for P 214.914  Recovery = 93.77%
Pb 220.353†             3015.3      495.99 ug/L         1.195      495.99 ppb          1.195   0.24%
   QC value within limits for Pb 220.353  Recovery = 99.20%
S 181.975 Axial†         505.4      964.40 ug/L         7.631      964.40 ppb          7.631   0.79%
   QC value within limits for S 181.975 Axial  Recovery = 96.44%
Sb 206.836†             1138.4      506.65 ug/L         1.702      506.65 ppb          1.702   0.34%
   QC value within limits for Sb 206.836  Recovery = 101.33%
Se 196.026†              581.3      513.50 ug/L         1.328      513.50 ppb          1.328   0.26%
   QC value within limits for Se 196.026  Recovery = 102.70%
Si 251.611†            62198.0      2425.7 ug/L        17.71      2425.7 ppb         17.71   0.73%
   QC value within limits for Si 251.611  Recovery = 97.03%
Sn 189.927†             2058.6      490.86 ug/L         1.482      490.86 ppb          1.482   0.30%
   QC value within limits for Sn 189.927  Recovery = 98.17%
Sr 421.552†            50806.7      489.24 ug/L         1.702      489.24 ppb          1.702   0.35%
   QC value within limits for Sr 421.552  Recovery = 97.85%
Ti 334.940†           266844.3      478.50 ug/L         3.701      478.50 ppb          3.701   0.77%
   QC value within limits for Ti 334.940  Recovery = 95.70%
Tl 190.801†             1202.6      497.89 ug/L         1.742      497.89 ppb          1.742   0.35%
   QC value within limits for Tl 190.801  Recovery = 99.58%
U 409.014†             16407.8      496.71 ug/L         5.535      496.71 ppb          5.535   1.11%
   QC value within limits for U 409.014  Recovery = 99.34%
V 292.402†             59537.4      494.38 ug/L         3.775      494.38 ppb          3.775   0.76%
   QC value within limits for V 292.402  Recovery = 98.88%
Zn 213.857†            38500.1      487.89 ug/L         3.574      487.89 ppb          3.574   0.73%
   QC value within limits for Zn 213.857  Recovery = 97.58%
SiO2†                  62946.1      5274.9 ug/L        28.21      5274.9 ppb         28.21   0.53%
   QC value within limits for SiO2  Recovery = 98.64%
All analyte(s) passed QC.
```

Sequence No.: 17
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 3/10/2010 21:00:39
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Replicate Data: CCB

Rep1#	Analyte	Net Intensity	Corrected Intensity	Conc.	Calib. Units	Conc.	Sample Units	Analysis Time
1	Sc Radial	3239.9	3239.9	101	%			21:02:50
1	Y RADIAL	2650.2	2650.2	100.9	%			21:02:50
1	Al 396.153Radial†	-57.7	5.0	10.754	ug/L	10.754	ppb	21:02:50
1	Ca 317.933Radial†	14.2	1.6	6.6290	ug/L	6.6290	ppb	21:02:50
1	Fe 238.204 Radial†	8.3	-1.3	-37.610	ug/L	-37.610	ppb	21:02:50
1	K 766.490 Radial†	2101.3	51.7	25.277	ug/L	25.277	ppb	21:02:30
1	Mg 279.077 IEC†	0.1	-1.7	-171.28	ug/L	-171.28	ppb	21:02:50
1	Na 589.592 Radial†	-755.7	-14.8	-4.6972	ug/L	-4.6972	ppb	21:02:30
1	Sr 421.552†	39.3	4.3	0.0410	ug/L	0.0410	ppb	21:02:30
1	Sc 361.383	795522.1	795522.1	100.45	%			21:03:47
1	Y 371.029	679550.9	679550.9	100.28	%			21:03:47
1	Ag 328.068†	38.8	-92.7	-0.4977	ug/L	-0.4977	ppb	21:03:47
1	As 188.979†	-22.4	-3.5	-2.0655	ug/L	-2.0655	ppb	21:04:07
1	B 249.677†	-172.2	205.8	5.9941	ug/L	5.9941	ppb	21:04:07
1	Ba 233.527†	41.1	41.2	0.4069	ug/L	0.4069	ppb	21:04:07
1	Be 313.107†	-3423.5	133.7	0.0605	ug/L	0.0605	ppb	21:03:47
1	Cd 226.502†	-139.8	17.1	0.2635	ug/L	0.2635	ppb	21:04:07
1	Co 228.616†	-39.0	7.1	0.1966	ug/L	0.1966	ppb	21:04:07
1	Cr 267.716†	57.8	4.7	0.0651	ug/L	0.0651	ppb	21:04:07
1	Cu 324.752†	6268.2	28.2	0.0962	ug/L	0.0962	ppb	21:03:47
1	Mn 257.610†	436.1	35.3	0.0521	ug/L	0.0521	ppb	21:04:07
1	Mo 202.031†	14.4	1.3	0.1132	ug/L	0.1132	ppb	21:04:07
1	Ni 231.604†	80.9	19.9	0.6644	ug/L	0.6644	ppb	21:04:07
1	P 214.914†	163.2	-1.8	-1.4536	ug/L	-1.4536	ppb	21:04:07
1	Pb 220.353†	-35.8	8.0	1.3208	ug/L	1.3208	ppb	21:04:07
1	S 181.975 Axial†	32.5	1.5	2.9067	ug/L	2.9067	ppb	21:04:07
1	Sb 206.836†	32.4	9.6	4.1260	ug/L	4.1260	ppb	21:04:07
1	Se 196.026†	-20.8	0.0	-0.0836	ug/L	-0.0836	ppb	21:04:07
1	Si 251.611†	497.6	19.3	0.7534	ug/L	0.7534	ppb	21:04:07
1	Sn 189.927†	11.8	3.9	0.9332	ug/L	0.9332	ppb	21:04:07
1	Ti 334.940†	-914.4	18.1	0.0497	ug/L	0.0497	ppb	21:03:47
1	Tl 190.801†	-16.1	10.0	4.1030	ug/L	4.1030	ppb	21:04:07
1	U 409.014†	-2165.4	-183.7	-5.5751	ug/L	-5.5751	ppb	21:03:47
1	V 292.402†	-1170.8	26.7	0.2116	ug/L	0.2116	ppb	21:03:47
1	Zn 213.857†	624.7	110.5	1.4143	ug/L	1.4143	ppb	21:04:07
1	SiO2†	498.6	21.4	1.7923	ug/L	1.7923	ppb	21:05:18
2	Sc Radial	3221.0	3221.0	101	%			21:03:15
2	Y RADIAL	2631.0	2631.0	100.1	%			21:03:15
2	Al 396.153Radial†	-54.7	7.6	16.373	ug/L	16.373	ppb	21:03:15
2	Ca 317.933Radial†	12.7	0.1	0.5551	ug/L	0.5551	ppb	21:03:15
2	Fe 238.204 Radial†	6.5	-3.0	-86.233	ug/L	-86.233	ppb	21:03:15
2	K 766.490 Radial†	2167.3	129.6	63.309	ug/L	63.309	ppb	21:02:55
2	Mg 279.077 IEC†	2.0	0.3	26.581	ug/L	26.581	ppb	21:03:15
2	Na 589.592 Radial†	-745.6	-9.1	-2.8890	ug/L	-2.8890	ppb	21:02:55
2	Sr 421.552†	13.0	-21.7	-0.2087	ug/L	-0.2087	ppb	21:02:55
2	Sc 361.383	809505.8	809505.8	102.21	%			21:04:12
2	Y 371.029	692070.0	692070.0	102.13	%			21:04:12
2	Ag 328.068†	217.6	81.6	0.3994	ug/L	0.3994	ppb	21:04:12
2	As 188.979†	-23.3	-4.0	-2.3629	ug/L	-2.3629	ppb	21:04:33
2	B 249.677†	-187.4	193.9	5.6551	ug/L	5.6551	ppb	21:04:33
2	Ba 233.527†	41.5	40.9	0.4012	ug/L	0.4012	ppb	21:04:33
2	Be 313.107†	-3473.2	144.0	0.0657	ug/L	0.0657	ppb	21:04:12
2	Cd 226.502†	-138.3	21.0	0.3300	ug/L	0.3300	ppb	21:04:33
2	Co 228.616†	-23.1	23.3	0.6422	ug/L	0.6422	ppb	21:04:33
2	Cr 267.716†	86.7	32.0	0.4326	ug/L	0.4326	ppb	21:04:33
2	Cu 324.752†	6371.5	21.5	0.0650	ug/L	0.0650	ppb	21:04:12
2	Mn 257.610†	473.4	64.3	0.0793	ug/L	0.0793	ppb	21:04:33
2	Mo 202.031†	10.9	-2.4	-0.2228	ug/L	-0.2228	ppb	21:04:33
2	Ni 231.604†	75.8	13.6	0.4532	ug/L	0.4532	ppb	21:04:33

2	P 214.914†	161.7	-6.2	-4.8699 ug/L	-4.8699 ppb	21:04:33
2	Pb 220.353†	-30.8	13.5	2.2310 ug/L	2.2310 ppb	21:04:33
2	S 181.975 Axial†	26.3	-5.1	-9.7597 ug/L	-9.7597 ppb	21:04:33
2	Sb 206.836†	31.4	8.0	3.4493 ug/L	3.4493 ppb	21:04:33
2	Se 196.026†	-17.2	3.9	3.0863 ug/L	3.0863 ppb	21:04:33
2	Si 251.611†	502.3	15.3	0.5996 ug/L	0.5996 ppb	21:04:33
2	Sn 189.927†	16.3	8.2	1.9474 ug/L	1.9474 ppb	21:04:33
2	Ti 334.940†	-812.3	133.7	0.2352 ug/L	0.2352 ppb	21:04:12
2	Tl 190.801†	-22.1	4.4	1.8009 ug/L	1.8009 ppb	21:04:33
2	U 409.014†	-1833.2	178.6	5.4338 ug/L	5.4338 ppb	21:04:12
2	V 292.402†	-1279.5	-59.5	-0.4678 ug/L	-0.4678 ppb	21:04:12
2	Zn 213.857†	600.4	76.0	0.9824 ug/L	0.9824 ppb	21:04:33
2	SiO2†	498.3	12.5	1.0531 ug/L	1.0531 ppb	21:05:38
3	Sc Radial	3210.5	3210.5	100 %		21:03:40
3	Y RADIAL	2632.6	2632.6	100.2 %		21:03:40
3	Al 396.153Radial†	-64.5	-2.3	-5.0316 ug/L	-5.0316 ppb	21:03:40
3	Ca 317.933Radial†	16.2	3.7	15.269 ug/L	15.269 ppb	21:03:40
3	Fe 238.204 Radial†	8.4	-1.1	-31.735 ug/L	-31.735 ppb	21:03:40
3	K 766.490 Radial†	2081.0	50.5	24.680 ug/L	24.680 ppb	21:03:20
3	Mg 279.077 IEC†	1.2	-0.5	-56.023 ug/L	-56.023 ppb	21:03:40
3	Na 589.592 Radial†	-773.8	-39.8	-12.592 ug/L	-12.592 ppb	21:03:20
3	Sr 421.552†	32.6	-2.1	-0.0201 ug/L	-0.0201 ppb	21:03:20
3	Sc 361.383	804868.9	804868.9	101.63 %		21:04:38
3	Y 371.029	688268.7	688268.7	101.57 %		21:04:38
3	Ag 328.068†	250.8	115.4	0.5978 ug/L	0.5978 ppb	21:04:38
3	As 188.979†	-19.9	-0.7	-0.4314 ug/L	-0.4314 ppb	21:04:58
3	B 249.677†	-195.1	185.3	5.3973 ug/L	5.3973 ppb	21:04:58
3	Ba 233.527†	69.1	68.3	0.6753 ug/L	0.6753 ppb	21:04:58
3	Be 313.107†	-3515.5	82.7	0.0377 ug/L	0.0377 ppb	21:04:38
3	Cd 226.502†	-141.2	17.3	0.2682 ug/L	0.2682 ppb	21:04:58
3	Co 228.616†	-31.7	14.7	0.4043 ug/L	0.4043 ppb	21:04:58
3	Cr 267.716†	89.6	35.4	0.4820 ug/L	0.4820 ppb	21:04:58
3	Cu 324.752†	6308.5	-4.6	-0.0200 ug/L	-0.0200 ppb	21:04:38
3	Mn 257.610†	479.0	72.5	0.0994 ug/L	0.0994 ppb	21:04:58
3	Mo 202.031†	5.0	-8.1	-0.7463 ug/L	-0.7463 ppb	21:04:58
3	Ni 231.604†	66.6	4.9	0.1635 ug/L	0.1635 ppb	21:04:58
3	P 214.914†	166.7	-0.3	-0.1871 ug/L	-0.1871 ppb	21:04:58
3	Pb 220.353†	-45.1	-0.7	-0.1169 ug/L	-0.1169 ppb	21:04:58
3	S 181.975 Axial†	32.0	0.7	1.2706 ug/L	1.2706 ppb	21:04:58
3	Sb 206.836†	26.0	2.8	1.1791 ug/L	1.1791 ppb	21:04:58
3	Se 196.026†	-19.4	1.6	1.2791 ug/L	1.2791 ppb	21:04:58
3	Si 251.611†	497.1	13.0	0.5167 ug/L	0.5167 ppb	21:04:58
3	Sn 189.927†	3.5	-4.4	-1.0330 ug/L	-1.0330 ppb	21:04:58
3	Ti 334.940†	-880.8	61.8	0.1150 ug/L	0.1150 ppb	21:04:38
3	Tl 190.801†	-21.7	4.6	1.9108 ug/L	1.9108 ppb	21:04:58
3	U 409.014†	-1835.6	165.9	5.0423 ug/L	5.0423 ppb	21:04:38
3	V 292.402†	-1214.4	-2.6	-0.0192 ug/L	-0.0192 ppb	21:04:38
3	Zn 213.857†	609.7	88.5	1.1362 ug/L	1.1362 ppb	21:04:58
3	SiO2†	484.0	1.2	0.1248 ug/L	0.1248 ppb	21:05:58

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Sc 361.383	803298.9	101.43	%	0.899				0.89%
Sc Radial	3223.8	101	%	0.5				0.46%
Y 371.029	686629.9	101.33	%	0.947				0.93%
Y RADIAL	2638.0	100.4	%	0.41				0.40%
Ag 328.068†	34.8	0.1665	ug/L	0.58375	0.1665	ppb	0.58375	350.61%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153Radial†	3.4	7.3653	ug/L	11.09762	7.3653	ppb	11.09762	150.67%
QC value within limits for Al 396.153Radial Recovery = Not calculated								
As 188.979†	-2.7	-1.6200	ug/L	1.03998	-1.6200	ppb	1.03998	64.20%
QC value within limits for As 188.979 Recovery = Not calculated								
B 249.677†	195.0	5.6821	ug/L	0.29932	5.6821	ppb	0.29932	5.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ba 233.527†	50.1	0.4945	ug/L	0.15661	0.4945	ppb	0.15661	31.67%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 313.107†	120.2	0.0546	ug/L	0.01491	0.0546	ppb	0.01491	27.29%
QC value within limits for Be 313.107 Recovery = Not calculated								
Ca 317.933Radial†	1.8	7.4845	ug/L	7.39438	7.4845	ppb	7.39438	98.80%

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   QC value within limits for Ca 317.933Radial  Recovery = Not calculated
Cd 226.502†                18.4      0.2872 ug/L       0.03710      0.2872 ppb        0.03710  12.92%
   QC value within limits for Cd 226.502  Recovery = Not calculated
Co 228.616†                15.0      0.4144 ug/L       0.22299      0.4144 ppb        0.22299  53.82%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†                24.0      0.3265 ug/L       0.22776      0.3265 ppb        0.22776  69.75%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 324.752†                15.0      0.0471 ug/L       0.06011      0.0471 ppb        0.06011 127.67%
   QC value within limits for Cu 324.752  Recovery = Not calculated
Fe 238.204 Radial†         -1.8    -51.859 ug/L       29.9126     -51.859 ppb        29.9126  57.68%
   QC value within limits for Fe 238.204 Radial  Recovery = Not calculated
K 766.490 Radial†          77.3     37.755 ug/L       22.1324      37.755 ppb        22.1324  58.62%
   QC value within limits for K 766.490 Radial  Recovery = Not calculated
Mg 279.077 IEC†            -0.6    -66.907 ug/L       99.3790     -66.907 ppb        99.3790 148.53%
   QC value within limits for Mg 279.077 IEC  Recovery = Not calculated
Mn 257.610†                57.3      0.0769 ug/L       0.02371      0.0769 ppb        0.02371  30.82%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                -3.1    -0.2853 ug/L       0.43314     -0.2853 ppb        0.43314 151.83%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Na 589.592 Radial†        -21.3    -6.7259 ug/L       5.15960     -6.7259 ppb        5.15960  76.71%
   QC value within limits for Na 589.592 Radial  Recovery = Not calculated
Ni 231.604†                12.8      0.4271 ug/L       0.25148      0.4271 ppb        0.25148  58.89%
   QC value within limits for Ni 231.604  Recovery = Not calculated
P 214.914†                 -2.8    -2.1702 ug/L       2.42226     -2.1702 ppb        2.42226 111.61%
   QC value within limits for P 214.914  Recovery = Not calculated
Pb 220.353†                 6.9      1.1450 ug/L       1.18377      1.1450 ppb        1.18377 103.39%
   QC value within limits for Pb 220.353  Recovery = Not calculated
S 181.975 Axial†           -1.0    -1.8608 ug/L       6.88937     -1.8608 ppb        6.88937 370.24%
   QC value within limits for S 181.975 Axial  Recovery = Not calculated
Sb 206.836†                 6.8      2.9181 ug/L       1.54357      2.9181 ppb        1.54357  52.90%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†                 1.8      1.4273 ug/L       1.59011      1.4273 ppb        1.59011 111.41%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†                15.9      0.6232 ug/L       0.12013      0.6232 ppb        0.12013  19.27%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†                 2.6      0.6159 ug/L       1.51532      0.6159 ppb        1.51532 246.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Sr 421.552†                -6.5    -0.0626 ug/L       0.13012     -0.0626 ppb        0.13012 207.90%
   QC value within limits for Sr 421.552  Recovery = Not calculated
Ti 334.940†                71.2      0.1333 ug/L       0.09407      0.1333 ppb        0.09407  70.57%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†                 6.3      2.6049 ug/L       1.29853      2.6049 ppb        1.29853  49.85%
   QC value within limits for Tl 190.801  Recovery = Not calculated
U 409.014†                 53.6      1.6337 ug/L       6.24600      1.6337 ppb        6.24600 382.33%
   QC value within limits for U 409.014  Recovery = Not calculated
V 292.402†                -11.8    -0.0918 ug/L       0.34544     -0.0918 ppb        0.34544 376.31%
   QC value within limits for V 292.402  Recovery = Not calculated
Zn 213.857†                91.7      1.1776 ug/L       0.21890      1.1776 ppb        0.21890  18.59%
   QC value within limits for Zn 213.857  Recovery = Not calculated
SiO2†                      11.7      0.9901 ug/L       0.83553      0.9901 ppb        0.83553  84.39%
   QC value within limits for SiO2  Recovery = Not calculated
All analyte(s) passed QC.
```

ICPMS #5 Daily Performance Report

Sample ID: Sample
Sample Date/Time: Saturday, March 13, 2010 11:40:30
Sample Description:
Method File: c:\elandata\Method\Daily2.mth
Dataset File: c:\elandata\Dataset\default\Sample.721
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	4520.1	4520.115	54.893	1.2
	Mg	24.0	55289.0	55288.987	306.807	0.6
	Co	58.9	87540.8	87540.816	778.664	0.9
	Rh	102.9	177270.7	177270.741	1364.254	0.8
	In	114.9	235704.2	235704.214	1312.845	0.6
	Pb	208.0	251183.7	251183.732	2027.422	0.8
⌈>	Ba	137.9	234485.8	234485.829	1203.459	0.5
⌊	Ba++	69.0	3313.8	0.014	0.000	2.1
⌈>	Ce	139.9	285648.4	285648.387	1073.313	0.4
⌊	CeO	155.9	6640.8	0.023	0.000	1.4
	Bkgd	220.0	14.4	14.400	2.837	19.7

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
7.25	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	6.8	5178.3
Co	59	13	7.5	85693.6
In	115	13	8.8	231500.3

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	579	2050	0.728
Be	9.0	9.0	2041	2075	0.664
Mg	24.0	24.0	5673	2080	0.619
Mg	25.0	25.0	5949	2080	0.670
Mg	26.0	26.0	6144	2080	0.644
Co	58.9	59.0	14191	2110	0.643
Rh	102.9	102.9	24879	2160	0.659
In	114.9	114.9	27793	2180	0.664
Ce	139.9	139.9	33865	2200	0.660
Pb	206.0	206.0	49948	2295	0.623
Pb	207.0	207.0	50171	2240	0.649
Pb	208.0	208.0	50451	2265	0.724
U	238.1	238.1	57731	2275	0.763

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, March 14, 2010 03:27:25
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\Blank.309

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9		ug/L		21	
>	Sc	45		ug/L		481052	
	Mn	55		ug/L		943	
	Cd	111		ug/L		18	
	Cd	114		ug/L		58	
>	In	115		ug/L		187292	
	Sb	121		ug/L		203	
	Sb	123		ug/L		162	
>	Lu	175		ug/L		349684	
	Tl	205		ug/L		800	
	Pb	208		ug/L		609	
	U	238		ug/L		712	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
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					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	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: Sunday, March 14, 2010 03:31:23
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\Ianl er.mth
Dataset File: C:\elandata\Dataset\100313\Standard 1.310

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	10.000	ug/L	1.264	3971	0.009
>	Sc	45		ug/L		461097	461096.533
	Mn	55	10.000	ug/L	0.821	69264	0.148
	Cd	111	10.000	ug/L	1.276	10814	0.061
	Cd	114		ug/L		25186	0.142
>	In	115		ug/L		177250	177250.308
	Sb	121	10.000	ug/L	2.874	36326	0.204
	Sb	123		ug/L		28063	0.157
>	Lu	175		ug/L		331618	331617.806
	Tl	205	10.000	ug/L	0.828	152509	0.458
	Pb	208	10.000	ug/L	2.086	261649	0.787
	U	238	10.000	ug/L	1.019	364891	1.098

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	1.0000
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000
Pb	208	Linear Thru Zero	1.0000
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
	Be	9					
>	Sc	45					
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	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: Sunday, March 14, 2010 03:35:20
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\Standard 2.311

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**99.958**	**ug/L**	1.783	40986	0.082
>	Sc	45		**ug/L**		498349	498349.492
	Mn	55	**99.897**	**ug/L**	1.499	670303	1.343
	Cd	111	**99.988**	**ug/L**	1.122	115397	0.602
	Cd	114		**ug/L**		267117	1.393
>	In	115		**ug/L**		191695	191695.030
	Sb	121	**99.982**	**ug/L**	1.097	384050	2.002
	Sb	123		**ug/L**		298061	1.554
>	Lu	175		**ug/L**		353189	353189.209
	Tl	205	**99.846**	**ug/L**	2.239	1399731	3.961
	Pb	208	**99.885**	**ug/L**	1.938	2492744	7.056
	U	238	**99.792**	**ug/L**	1.328	3205916	9.075

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45					
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115					
	Sb	121					
	Sb	123					
>	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: QC Std 1
Sample Date/Time: Sunday, March 14, 2010 03:39:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 1.312

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**49.752**	**ug/L**	2.373	21712	0.041
>	Sc	45		**ug/L**		529988	529988.293
	Mn	55	**50.724**	**ug/L**	1.107	362505	0.682
	Cd	111	**50.450**	**ug/L**	1.291	62253	0.304
	Cd	114		**ug/L**		145448	0.709
>	In	115		**ug/L**		204944	204944.075
	Sb	121	**52.282**	**ug/L**	1.727	214792	1.047
	Sb	123		**ug/L**		167802	0.818
>	Lu	175		**ug/L**		373682	373681.810
	Tl	205	**50.669**	**ug/L**	1.876	752041	2.010
	Pb	208	**51.844**	**ug/L**	0.832	1369188	3.662
	U	238	**52.016**	**ug/L**	0.633	1768473	4.730

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9	99.505				
>	Sc	45		110.2			
	Mn	55	101.447				
	Cd	111	100.899				
	Cd	114					
>	In	115		109.4			
	Sb	121	104.563				
	Sb	123					
>	Lu	175		106.9			
	Tl	205	101.338				
	Pb	208	103.687				
	U	238	104.031				

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, March 14, 2010 03:43:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 2.313

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.004**	**ug/L**	107.481	22	-0.000
|>	Sc	45		**ug/L**		541603	541602.995
⌊	Mn	55	**-0.002**	**ug/L**	86.475	1044	-0.000
⌈	Cd	111	**0.013**	**ug/L**	39.338	37	0.000
|	Cd	114		**ug/L**		63	-0.000
|>	In	115		**ug/L**		208966	208965.953
|	Sb	121	**0.196**	**ug/L**	4.060	1046	0.004
⌊	Sb	123		**ug/L**		825	0.003
⌈>	Lu	175		**ug/L**		381233	381232.951
|	Tl	205	**0.265**	**ug/L**	11.937	4874	0.011
|	Pb	208	**0.003**	**ug/L**	25.650	741	0.000
⌊	U	238	**0.002**	**ug/L**	90.188	831	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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		112.6			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		111.6			
	Sb	121					
	Sb	123					
>	Lu	175		109.0			
	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: Sunday, March 14, 2010 03:47:16
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 3.314

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.583**	**ug/L**	11.418	269	0.000
>	Sc	45		**ug/L**		514385	514385.204
	Mn	55	**6.767**	**ug/L**	1.155	47809	0.091
	Cd	111	**1.198**	**ug/L**	2.968	1449	0.007
	Cd	114		**ug/L**		3198	0.016
>	In	115		**ug/L**		198176	198175.517
	Sb	121	**3.524**	**ug/L**	0.338	14199	0.071
	Sb	123		**ug/L**		11005	0.055
>	Lu	175		**ug/L**		359478	359478.204
	Tl	205	**1.338**	**ug/L**	2.543	19900	0.053
	Pb	208	**2.437**	**ug/L**	1.654	62502	0.172
	U	238	**0.292**	**ug/L**	0.767	10288	0.027

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9	116.628				
>	Sc	45		106.9			
	Mn	55	135.335				
	Cd	111	119.839				
	Cd	114					
>	In	115		105.8			
	Sb	121	117.456				
	Sb	123					
>	Lu	175		102.8			
	Tl	205	133.819				
	Pb	208	121.849				
	U	238	146.164				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Mn	55	CRDL is out of limits
QC Std 3	Tl	205	CRDL is out of limits
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: Sunday, March 14, 2010 03:51:14
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 4.315

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**0.049**	**ug/L**	28.205	44	0.000
|>	Sc	45		**ug/L**		522058	522057.823
⌊	Mn	55	**5.706**	**ug/L**	1.113	41077	0.077
⌈	Cd	111	**0.450**	**ug/L**	5.694	561	0.003
|	Cd	114		**ug/L**		7065	0.035
|>	In	115		**ug/L**		199933	199932.725
|	Sb	121	**0.109**	**ug/L**	2.048	652	0.002
⌊	Sb	123		**ug/L**		487	0.002
⌈>	Lu	175		**ug/L**		366587	366587.355
|	Tl	205	**0.041**	**ug/L**	8.045	1429	0.002
|	Pb	208	**0.210**	**ug/L**	2.231	6077	0.015
⌊	U	238	**-0.018**	**ug/L**	2.955	158	-0.002

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		108.5			
	Mn	55	98.376				
	Cd	111	101.245				
	Cd	114					
>	In	115		106.7			
	Sb	121					
	Sb	123					
>	Lu	175		104.8			
	Tl	205					
	Pb	208	111.122				
	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 5
Sample Date/Time: Sunday, March 14, 2010 03:55:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 5.316

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**18.370**	**ug/L**	1.189	7807	0.015
>	Sc	45		**ug/L**		515212	515212.434
	Mn	55	**26.582**	**ug/L**	0.616	185165	0.357
	Cd	111	**19.770**	**ug/L**	2.054	24078	0.119
	Cd	114		**ug/L**		62877	0.311
>	In	115		**ug/L**		202222	202222.176
	Sb	121	**21.451**	**ug/L**	0.964	87077	0.430
	Sb	123		**ug/L**		67687	0.334
>	Lu	175		**ug/L**		368484	368483.688
	Tl	205	**20.473**	**ug/L**	1.831	300156	0.812
	Pb	208	**20.560**	**ug/L**	1.440	535861	1.452
	U	238	**22.897**	**ug/L**	0.775	768057	2.082

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9	91.849				
>	Sc	45		107.1			
	Mn	55	103.032				
	Cd	111	96.704				
	Cd	114					
>	In	115		108.0			
	Sb	121	107.253				
	Sb	123					
>	Lu	175		105.4			
	Tl	205	102.367				
	Pb	208	101.837				
	U	238	114.487				

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: Sunday, March 14, 2010 03:59:12
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 6.317

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**46.825**	**ug/L**	1.053	21536	0.039
>	Sc	45		**ug/L**		558525	558524.745
	Mn	55	**49.275**	**ug/L**	0.834	371163	0.663
	Cd	111	**48.399**	**ug/L**	0.503	63454	0.291
	Cd	114		**ug/L**		148557	0.682
>	In	115		**ug/L**		217745	217744.927
	Sb	121	**49.500**	**ug/L**	0.266	216081	0.991
	Sb	123		**ug/L**		168420	0.773
>	Lu	175		**ug/L**		397024	397024.173
	Tl	205	**48.819**	**ug/L**	0.934	769816	1.937
	Pb	208	**48.934**	**ug/L**	0.496	1373146	3.457
	U	238	**48.616**	**ug/L**	0.744	1756162	4.421

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9	93.650				
>	Sc	45		116.1			
	Mn	55	98.550				
	Cd	111	96.799				
	Cd	114					
>	In	115		116.3			
	Sb	121	99.000				
	Sb	123					
>	Lu	175		113.5			
	Tl	205	97.639				
	Pb	208	97.868				
	U	238	97.233				

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 7
Sample Date/Time: Sunday, March 14, 2010 04:03:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\Ianl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 7.318

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.000**	**ug/L**	32748.304	24	0.000
>	Sc	45		**ug/L**		557121	557120.809
	Mn	55	**0.002**	**ug/L**	167.261	1109	0.000
	Cd	111	**0.008**	**ug/L**	136.602	31	0.000
	Cd	114		**ug/L**		72	0.000
>	In	115		**ug/L**		215678	215678.291
	Sb	121	**0.094**	**ug/L**	5.680	640	0.002
	Sb	123		**ug/L**		493	0.001
>	Lu	175		**ug/L**		390976	390976.221
	Tl	205	**0.216**	**ug/L**	11.331	4250	0.009
	Pb	208	**0.001**	**ug/L**	5.818	720	0.000
	U	238	**0.001**	**ug/L**	33.523	845	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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		115.8			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		115.2			
	Sb	121					
	Sb	123					
>	Lu	175		111.8			
	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 8
Sample Date/Time: Sunday, March 14, 2010 04:35:40
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\anl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 8.326

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**48.833**	**ug/L**	2.498	21353	0.040
>	Sc	45		**ug/L**		531078	531078.034
	Mn	55	**50.879**	**ug/L**	1.028	364362	0.684
	Cd	111	**51.506**	**ug/L**	1.444	62363	0.310
	Cd	114		**ug/L**		145248	0.722
>	In	115		**ug/L**		201101	201100.973
	Sb	121	**53.060**	**ug/L**	1.357	213897	1.063
	Sb	123		**ug/L**		165993	0.825
>	Lu	175		**ug/L**		366526	366526.083
	Tl	205	**51.697**	**ug/L**	2.306	752509	2.051
	Pb	208	**52.355**	**ug/L**	1.430	1356206	3.699
	U	238	**51.914**	**ug/L**	1.684	1731083	4.721

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9	97.666				
>	Sc	45		110.4			
	Mn	55	101.758				
	Cd	111	103.013				
	Cd	114					
>	In	115		107.4			
	Sb	121	106.121				
	Sb	123					
>	Lu	175		104.8			
	Tl	205	103.394				
	Pb	208	104.710				
	U	238	103.827				

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, March 14, 2010 04:39:41
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 9.327

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**0.000**	**ug/L**	13562.941	24	0.000
>	Sc	45		**ug/L**		548850	548849.748
	Mn	55	**0.008**	**ug/L**	91.389	1134	0.000
	Cd	111	**0.006**	**ug/L**	64.574	28	0.000
	Cd	114		**ug/L**		68	0.000
>	In	115		**ug/L**		212272	212272.193
	Sb	121	**0.089**	**ug/L**	5.215	609	0.002
	Sb	123		**ug/L**		485	0.001
>	Lu	175		**ug/L**		384279	384278.534
	Tl	205	**0.520**	**ug/L**	2.499	8809	0.021
	Pb	208	**0.002**	**ug/L**	21.349	727	0.000
	U	238	**0.001**	**ug/L**	108.026	801	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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		114.1			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		113.3			
	Sb	121					
	Sb	123					
>	Lu	175		109.9			
	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: 1202046570
Sample Date/Time: Sunday, March 14, 2010 04:43:41
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\1202046570.328

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.012**	**ug/L**	65.355	19	-0.000
>	Sc	45		**ug/L**		547548	547547.856
	Mn	55	**0.206**	**ug/L**	1.204	2587	0.003
	Cd	111	**0.009**	**ug/L**	12.876	30	0.000
	Cd	114		**ug/L**		33	-0.000
>	In	115		**ug/L**		196278	196277.706
	Sb	121	**0.045**	**ug/L**	19.890	390	0.001
	Sb	123		**ug/L**		302	0.001
>	Lu	175		**ug/L**		350575	350575.270
	Tl	205	**0.226**	**ug/L**	7.828	3946	0.009
	Pb	208	**-0.009**	**ug/L**	9.071	376	-0.001
	U	238	**-0.004**	**ug/L**	21.140	584	-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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		113.8			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		104.8			
	Sb	121					
	Sb	123					
>	Lu	175		100.3			
	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

ICPMS#5 - Summary Report

Sample ID: 1202046571
Sample Date/Time: Sunday, March 14, 2010 04:47:39
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\1202046571.329

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**46.531**	**ug/L**	0.445	20718	0.038
>	Sc	45		**ug/L**		540708	540707.858
	Mn	55	**51.256**	**ug/L**	0.769	373684	0.689
	Cd	111	**49.525**	**ug/L**	0.294	59703	0.298
	Cd	114		**ug/L**		140792	0.703
>	In	115		**ug/L**		200213	200213.487
	Sb	121	**53.164**	**ug/L**	0.957	213374	1.065
	Sb	123		**ug/L**		166330	0.830
>	Lu	175		**ug/L**		359875	359875.423
	Tl	205	**44.879**	**ug/L**	3.085	641629	1.780
	Pb	208	**49.676**	**ug/L**	1.968	1263318	3.509
	U	238	**49.761**	**ug/L**	1.602	1629063	4.525

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		112.4			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		106.9			
	Sb	121					
	Sb	123					
>	Lu	175		102.9			
	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 8
Sample Date/Time: Sunday, March 14, 2010 05:07:34
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 8.334

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**47.806**	**ug/L**	1.004	20808	0.039
>	Sc	45		**ug/L**		528572	528571.631
	Mn	55	**49.502**	**ug/L**	0.501	352870	0.666
	Cd	111	**48.487**	**ug/L**	1.433	60108	0.292
	Cd	114		**ug/L**		141535	0.687
>	In	115		**ug/L**		205888	205888.386
	Sb	121	**49.637**	**ug/L**	1.707	204878	0.994
	Sb	123		**ug/L**		159053	0.772
>	Lu	175		**ug/L**		371021	371021.080
	Tl	205	**48.325**	**ug/L**	1.784	712177	1.917
	Pb	208	**50.953**	**ug/L**	0.505	1336188	3.600
	U	238	**50.719**	**ug/L**	0.547	1712068	4.613

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9	95.612				
>	Sc	45		109.9			
	Mn	55	99.004				
	Cd	111	96.974				
	Cd	114					
>	In	115		109.9			
	Sb	121	99.274				
	Sb	123					
>	Lu	175		106.1			
	Tl	205	96.649				
	Pb	208	101.906				
	U	238	101.439				

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, March 14, 2010 05:11:35
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 9.335

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.002	ug/L	715.301	22	-0.000
>	Sc	45		ug/L		529373	529373.160
	Mn	55	0.005	ug/L	64.155	1072	0.000
	Cd	111	0.008	ug/L	42.758	30	0.000
	Cd	114		ug/L		70	0.000
>	In	115		ug/L		202533	202533.063
	Sb	121	0.093	ug/L	8.383	595	0.002
	Sb	123		ug/L		457	0.001
>	Lu	175		ug/L		372172	372171.756
	Tl	205	0.399	ug/L	3.466	6748	0.016
	Pb	208	0.001	ug/L	19.883	672	0.000
	U	238	0.001	ug/L	91.518	790	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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		110.0			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		108.1			
	Sb	121					
	Sb	123					
>	Lu	175		106.4			
	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: 247182001
Sample Date/Time: Sunday, March 14, 2010 05:15:35
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\247182001.336

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**-0.011**	**ug/L**	147.385	18	-0.000
|>	Sc	45		**ug/L**		527636	527636.025
⌊	Mn	55	**0.451**	**ug/L**	1.349	4233	0.006
⌈	Cd	111	**0.002**	**ug/L**	785.907	21	0.000
|	Cd	114		**ug/L**		42	-0.000
|>	In	115		**ug/L**		193672	193672.148
|	Sb	121	**0.023**	**ug/L**	5.351	299	0.000
⌊	Sb	123		**ug/L**		259	0.000
⌈>	Lu	175		**ug/L**		339182	339181.762
|	Tl	205	**0.122**	**ug/L**	3.839	2424	0.005
|	Pb	208	**0.014**	**ug/L**	5.394	927	0.001
⌊	U	238	**-0.008**	**ug/L**	7.760	446	-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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		109.7			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		103.4			
	Sb	121					
	Sb	123					
>	Lu	175		97.0			
	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: 1202046572
Sample Date/Time: Sunday, March 14, 2010 05:23:32
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\lani er.mth
Dataset File: C:\elandata\Dataset\100313\1202046572.338

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.005	ug/L	518.317	21	-0.000
>	Sc	45		ug/L		516092	516092.184
	Mn	55	1.002	ug/L	1.177	7963	0.013
	Cd	111	0.001	ug/L	877.123	20	0.000
	Cd	114		ug/L		38	-0.000
>	In	115		ug/L		186408	186408.027
	Sb	121	-0.020	ug/L	25.567	129	-0.000
	Sb	123		ug/L		100	-0.000
>	Lu	175		ug/L		327053	327052.725
	Tl	205	0.038	ug/L	12.596	1246	0.002
	Pb	208	0.064	ug/L	2.755	2039	0.004
	U	238	-0.017	ug/L	2.024	156	-0.002

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		107.3			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		99.5			
	Sb	121					
	Sb	123					
>	Lu	175		93.5			
	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: 1202046573
Sample Date/Time: Sunday, March 14, 2010 05:27:31
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\1202046573.339

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈	Be	9	**48.002**	**ug/L**	3.501	19925	0.039
|>	Sc	45		**ug/L**		504417	504416.833
⌊	Mn	55	**51.565**	**ug/L**	2.135	350605	0.693
⌈	Cd	111	**10.725**	**ug/L**	3.048	11709	0.065
|	Cd	114		**ug/L**		26829	0.148
|>	In	115		**ug/L**		181188	181187.799
|	Sb	121	**207.942**	**ug/L**	3.428	754197	4.164
⌊	Sb	123		**ug/L**		597994	3.302
⌈>	Lu	175		**ug/L**		315904	315904.090
|	Tl	205	**81.070**	**ug/L**	2.732	1016995	3.216
|	Pb	208	**42.289**	**ug/L**	3.179	943897	2.987
⌊	U	238	**53.884**	**ug/L**	2.461	1548167	4.900

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
U	238	Linear Thru Zero	0.9998

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
	Be	9					
>	Sc	45		104.9			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		96.7			
	Sb	121					
	Sb	123					
>	Lu	175		90.3			
	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

ICPMS#5 - Summary Report

Sample ID: 1202046574
Sample Date/Time: Sunday, March 14, 2010 05:31:31
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 954670|5|baj
Method File: c:\elandata\Method\lanl er.mth
Dataset File: C:\elandata\Dataset\100313\1202046574.340

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**-0.013**	**ug/L**	84.781	17	-0.000
>	Sc	45		**ug/L**		510171	510170.810
	Mn	55	**0.216**	**ug/L**	5.137	2483	0.003
	Cd	111	**-0.001**	**ug/L**	735.040	18	-0.000
	Cd	114		**ug/L**		37	-0.000
>	In	115		**ug/L**		192346	192345.800
	Sb	121	**-0.005**	**ug/L**	172.958	190	-0.000
	Sb	123		**ug/L**		156	-0.000
>	Lu	175		**ug/L**		345236	345235.962
	Tl	205	**1.831**	**ug/L**	4.474	25865	0.073
	Pb	208	**0.004**	**ug/L**	23.980	694	0.000
	U	238	**-0.017**	**ug/L**	1.478	164	-0.002

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		106.1			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		102.7			
	Sb	121					
	Sb	123					
>	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

ICPMS#5 - Summary Report

Sample ID: QC Std 6
Sample Date/Time: Sunday, March 14, 2010 05:35:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\anl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 6.341

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	**48.155**	**ug/L**	0.863	20026	0.040
>	Sc	45		**ug/L**		505061	505060.598
	Mn	55	**49.414**	**ug/L**	0.983	336551	0.664
	Cd	111	**48.324**	**ug/L**	0.426	57416	0.291
	Cd	114		**ug/L**		134194	0.680
>	In	115		**ug/L**		197336	197336.449
	Sb	121	**49.191**	**ug/L**	0.390	194605	0.985
	Sb	123		**ug/L**		151572	0.767
>	Lu	175		**ug/L**		359437	359436.815
	Tl	205	**47.374**	**ug/L**	0.965	676342	1.879
	Pb	208	**50.234**	**ug/L**	1.332	1276145	3.549
	U	238	**50.812**	**ug/L**	0.547	1661610	4.621

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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9	96.311				
>	Sc	45		105.0			
	Mn	55	98.827				
	Cd	111	96.648				
	Cd	114					
>	In	115		105.4			
	Sb	121	98.382				
	Sb	123					
>	Lu	175		102.8			
	Tl	205	94.748				
	Pb	208	100.468				
	U	238	101.624				

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 7
Sample Date/Time: Sunday, March 14, 2010 05:39:32
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\anl er.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 7.342

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
	Be	9	-0.001	ug/L	144.518	21	-0.000
>	Sc	45		ug/L		502918	502917.682
	Mn	55	0.013	ug/L	22.018	1074	0.000
	Cd	111	0.012	ug/L	111.995	34	0.000
	Cd	114		ug/L		66	0.000
>	In	115		ug/L		193160	193159.552
	Sb	121	0.099	ug/L	12.698	592	0.002
	Sb	123		ug/L		445	0.001
>	Lu	175		ug/L		357487	357486.558
	Tl	205	0.989	ug/L	5.631	14835	0.039
	Pb	208	0.002	ug/L	42.926	684	0.000
	U	238	0.001	ug/L	75.794	772	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
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Sb	121	Linear Thru Zero	1.0000
Sb	123	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999
Pb	208	Linear Thru Zero	0.9999
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
	Be	9					
>	Sc	45		104.5			
	Mn	55					
	Cd	111					
	Cd	114					
>	In	115		103.1			
	Sb	121					
	Sb	123					
>	Lu	175		102.2			
	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

ICPMS#5 - Summary Report

Sample ID: Blank
Sample Date/Time: Sunday, March 14, 2010 09:09:48
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\Blank.391

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		497780	
⌊	Mn	55		ug/L		910	
⌈>	Lu	175		ug/L		367254	
⌊	Tl	205		ug/L		3250	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45					
⌊	Mn	55					
⌈>	Lu	175					
⌊	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: Standard 1
Sample Date/Time: Sunday, March 14, 2010 09:12:04
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\Standard 1.392

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		478144	478144.419
	Mn	55	10.000	ug/L	2.421	71057	0.147
>	Lu	175		ug/L		348821	348821.225
	Tl	205	10.000	ug/L	2.050	162500	0.457

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45					
	Mn	55					
>	Lu	175					
	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: Standard 2
Sample Date/Time: Sunday, March 14, 2010 09:14:17
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\Standard 2.393

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		475325	475325.265
⌊	Mn	55	**99.914**	**ug/L**	1.934	642528	1.350
⌈>	Lu	175		**ug/L**		351143	351142.623
⌊	Tl	205	**99.841**	**ug/L**	2.959	1385331	3.937

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45					
⌊	Mn	55					
⌈>	Lu	175					
⌊	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 1
Sample Date/Time: Sunday, March 14, 2010 09:16:31
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 1.394

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		508619	508618.627
⌊	Mn	55	49.773	ug/L	1.384	342990	0.673
⌈>	Lu	175		ug/L		372842	372842.413
⌊	Tl	205	49.794	ug/L	1.958	735346	1.964

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		102.2			
⌊	Mn	55	99.546				
⌈>	Lu	175		101.5			
⌊	Tl	205	99.588				

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, March 14, 2010 09:18:47
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 2.395

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		512635	512635.451
⌊	Mn	55	**0.005**	**ug/L**	62.468	971	0.000
⌈>	Lu	175		**ug/L**		373631	373631.312
⌊	Tl	205	**0.575**	**ug/L**	3.747	11776	0.023

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		103.0			
⌊	Mn	55					
⌈>	Lu	175		101.7			
⌊	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 3
Sample Date/Time: Sunday, March 14, 2010 09:21:03
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 3.396

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		525141	525141.462
	Mn	55	**5.239**	ug/L	1.528	38131	0.071
>	Lu	175		ug/L		387915	387915.388
	Tl	205	**1.211**	ug/L	0.703	21959	0.048

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		105.5			
	Mn	55	104.777				
>	Lu	175		105.6			
	Tl	205	121.113				

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, March 14, 2010 09:23:18
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 4.397

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		471518	471517.922
⌊	Mn	55	5.786	ug/L	3.744	37707	0.078
⌈>	Lu	175		ug/L		352439	352439.101
⌊	Tl	205	0.017	ug/L	45.994	3355	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		94.7			
⌊	Mn	55	99.751				
⌈>	Lu	175		96.0			
⌊	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

ICPMS#5 - Summary Report

Sample ID: QC Std 5
Sample Date/Time: Sunday, March 14, 2010 09:25:33
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 5.398

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		469356	469356.159
⌊	Mn	55	**26.608**	**ug/L**	2.808	169609	0.360
⌈>	Lu	175		**ug/L**		348634	348634.360
⌊	Tl	205	**19.826**	**ug/L**	0.887	275664	0.782

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		94.3			
⌊	Mn	55	103.131				
⌈>	Lu	175		94.9			
⌊	Tl	205	99.132				

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: Sunday, March 14, 2010 09:27:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 6.399

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		506620	506619.821
⌊	Mn	55	48.436	ug/L	3.404	332431	0.655
⌈>	Lu	175		ug/L		371191	371190.815
⌊	Tl	205	47.100	ug/L	3.142	692530	1.857

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		101.8			
⌊	Mn	55	96.872				
⌈>	Lu	175		101.1			
⌊	Tl	205	94.201				

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 7
Sample Date/Time: Sunday, March 14, 2010 09:30:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 7.400

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		529760	529759.739
⌊	Mn	55	0.012	ug/L	28.768	1051	0.000
⌈>	Lu	175		ug/L		373721	373720.607
⌊	Tl	205	0.528	ug/L	1.245	11091	0.021

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		106.4			
⌊	Mn	55					
⌈>	Lu	175		101.8			
⌊	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: 1202046570
Sample Date/Time: Sunday, March 14, 2010 09:32:23
Sample Type:
Sample Description: LANL 6020 MB
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\1202046570.401

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		505547	505546.992
⌊	Mn	55	0.173	ug/L	1.199	2106	0.002
⌈>	Lu	175		ug/L		344379	344379.062
⌊	Tl	205	0.097	ug/L	1.468	4366	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		101.6			
⌊	Mn	55					
⌈>	Lu	175		93.8			
⌊	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: 1202046571
Sample Date/Time: Sunday, March 14, 2010 09:34:37
Sample Type:
Sample Description: LANL 6020 LCS
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\1202046571.402

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		509509	509508.513
⌊	Mn	55	51.099	ug/L	1.568	352751	0.690
⌈>	Lu	175		ug/L		354322	354321.992
⌊	Tl	205	45.013	ug/L	1.090	632006	1.775

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		102.4			
⌊	Mn	55					
⌈>	Lu	175		96.5			
⌊	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, March 14, 2010 09:45:56
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 8.407

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		520332	520332.212
⌊	Mn	55	**49.155**	**ug/L**	0.196	346561	0.664
⌈>	Lu	175		**ug/L**		372713	372713.140
⌊	Tl	205	**46.333**	**ug/L**	1.759	684206	1.827

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		104.5			
⌊	Mn	55	98.310				
⌈>	Lu	175		101.5			
⌊	Tl	205	92.667				

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, March 14, 2010 09:48:13
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 9.408

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		532919	532919.279
⌊	Mn	55	0.017	ug/L	13.295	1094	0.000
⌈>	Lu	175		ug/L		373756	373755.942
⌊	Tl	205	0.697	ug/L	10.854	13588	0.027

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		107.1			
⌊	Mn	55					
⌈>	Lu	175		101.8			
⌊	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: 247182001
Sample Date/Time: Sunday, March 14, 2010 09:50:30
Sample Type:
Sample Description: LANL 6020
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\247182001.409

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		513898	513898.353
⌊	Mn	55	**0.451**	**ug/L**	3.815	4069	0.006
⌈>	Lu	175		**ug/L**		347418	347417.928
⌊	Tl	205	**0.073**	**ug/L**	11.005	4071	0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		103.2			
⌊	Mn	55					
⌈>	Lu	175		94.6			
⌊	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: 1202046572
Sample Date/Time: Sunday, March 14, 2010 09:55:00
Sample Type:
Sample Description: LANL 6020 DUP
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\1202046572.411

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		497320	497320.168
⌊	Mn	55	0.972	ug/L	2.325	7440	0.013
⌈>	Lu	175		ug/L		336336	336336.405
⌊	Tl	205	-0.081	ug/L	15.123	1896	-0.003

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		99.9			
⌊	Mn	55					
⌈>	Lu	175		91.6			
⌊	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: 1202046573
Sample Date/Time: Sunday, March 14, 2010 09:57:16
Sample Type:
Sample Description: LANL 6020 MS
Number of Replicates: 3
Batch ID: 954670|1|baj
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\1202046573.412

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
>	Sc	45		ug/L		513759	513759.387
	Mn	55	50.087	ug/L	3.456	348586	0.677
>	Lu	175		ug/L		345713	345713.042
	Tl	205	74.632	ug/L	1.267	1020420	2.943

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
>	Sc	45		103.2			
	Mn	55					
>	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

ICPMS#5 - Summary Report

Sample ID: 1202046574
Sample Date/Time: Sunday, March 14, 2010 09:59:32
Sample Type:
Sample Description: LANL 6020 SDILT
Number of Replicates: 3
Batch ID: 954670|5|baj
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\1202046574.413

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		ug/L		535796	535795.969
⌊	Mn	55	0.205	ug/L	1.201	2464	0.003
⌈>	Lu	175		ug/L		361177	361177.030
⌊	Tl	205	2.461	ug/L	2.117	38247	0.097

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		107.6			
⌊	Mn	55					
⌈>	Lu	175		98.3			
⌊	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 6
Sample Date/Time: Sunday, March 14, 2010 10:01:49
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 6.414

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		530479	530478.721
⌊	Mn	55	**48.154**	**ug/L**	2.705	346136	0.651
⌈>	Lu	175		**ug/L**		381680	381679.850
⌊	Tl	205	**43.612**	**ug/L**	1.006	659739	1.720

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dif	Duplicate Rel. % Difference
⌈>	Sc	45		106.6			
⌊	Mn	55	96.308				
⌈>	Lu	175		103.9			
⌊	Tl	205	87.223				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Tl	205	CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7
Sample Date/Time: Sunday, March 14, 2010 10:04:06
Sample Type:
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: c:\elandata\Method\mn and tl.mth
Dataset File: C:\elandata\Dataset\100313\QC Std 7.415

Concentration Results

	Analyte	Mass	**Conc. Mean**	**Report Unit**	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
⌈>	Sc	45		**ug/L**		529136	529136.392
⌊	Mn	55	**0.019**	**ug/L**	20.726	1100	0.000
⌈>	Lu	175		**ug/L**		371799	371799.262
⌊	Tl	205	**1.604**	**ug/L**	1.791	26802	0.063

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Mn	55	Linear Thru Zero	1.0000
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	0.9999

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
⌈>	Sc	45		106.3			
⌊	Mn	55					
⌈>	Lu	175		101.2			
⌊	Tl	205					

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

==========
Method Name: WATER
Method Description: 7470A, 245.2, ILM04 ANALYST JXL
Element: Hg

Date: 02/25/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 022510W1.SIF Results Data Set Name: 022510W1

==========
Element: Hg Seq. No.: 36 AS Loc.: 1 Date: 02/25/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0015	0.0015	10:54:34	No
2			0.0014	0.0014	10:55:09	No
Mean:			0.0015			
SD :			0.0001			
%RSD:			5.3762			

Auto-zero performed.

==========
Element: Hg Seq. No.: 37 AS Loc.: 2 Date: 02/25/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0011	0.0026	10:56:32	No
2			0.0011	0.0026	10:57:07	No
Mean:			0.0011			
SD :			0.0000			
%RSD:			2.3514			

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00551
Intercept : 0.00000

==========
Element: Hg Seq. No.: 38 AS Loc.: 3 Date: 02/25/2010
Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0035	0.0049	10:58:31	No
2			0.0033	0.0048	10:59:06	No
Mean:			0.0034			
SD :			0.0001			
%RSD:			3.7263			

[Hg] Standard number 2 applied. [0.500]
Correlation Coefficient: 0.99653 Slope: 0.00682
Intercept : -0.00010

==========
Element: Hg Seq. No.: 39 AS Loc.: 4 Date: 02/25/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0133	0.0148	11:00:31	No
2			0.0133	0.0148	11:01:05	No
Mean:			0.0133			
SD :			0.0000			
%RSD:			0.2404			

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99980 Slope: 0.00670
Intercept : -0.00007

==========
Element: Hg Seq. No.: 40 AS Loc.: 5 Date: 02/25/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0332	0.0346	11:02:31	No
2			0.0330	0.0345	11:03:06	No
Mean:			0.0331			
SD :			0.0001			
%RSD:			0.2985			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99996 Slope: 0.00663
Intercept : -0.00004

==========
Element: Hg Seq. No.: 41 AS Loc.: 6 Date: 02/25/2010
Sample ID: S10

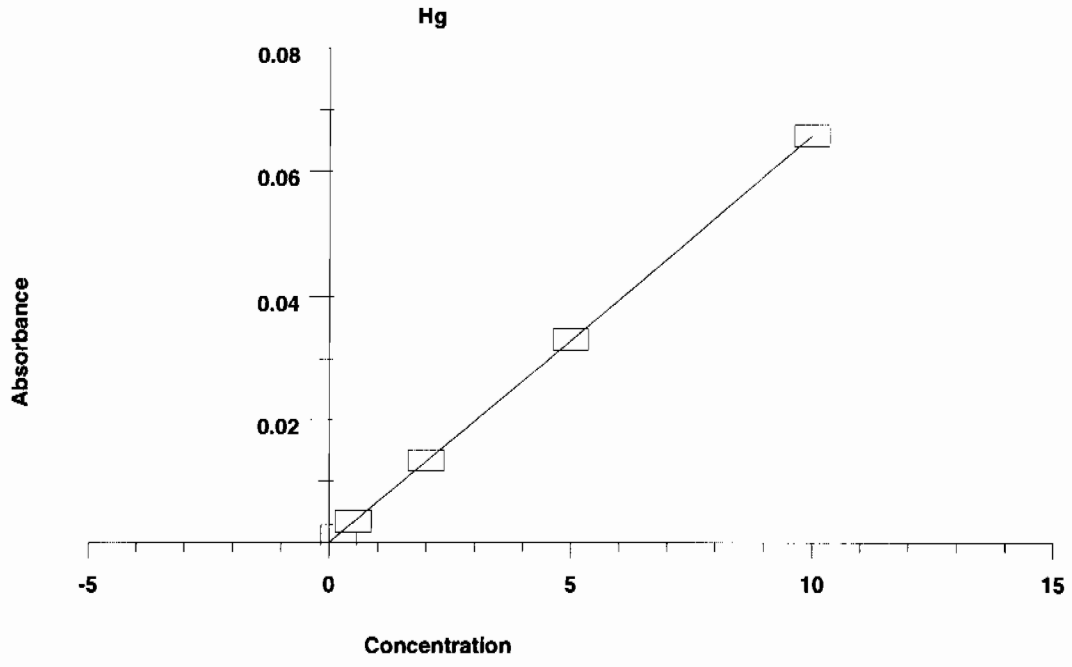
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1			0.0658	0.0673	11:04:33	No
2			0.0657	0.0672	11:05:07	No
Mean:			0.0658			
SD :			0.0001			
%RSD:						

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99998 Slope: 0.00658
Intercept : 0.00002

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0015	---	----	----	----
S0.2	0.0011	0.200	0.165	0.0000	2.4
S0.5	0.0034	0.500	0.510	0.0001	3.7
S2.0	0.0133	2.000	2.019	0.0000	0.2
S5.0	0.0331	5.000	5.024	0.0001	0.3
S10	0.0658	10.000	9.984	0.0001	----

Correlation Coefficient: 0.99998 Slope: 0.00658 Intercept: 0.0000



==========

Element: Hg Seq. No.: 42 AS Loc.: 9 Date: 02/25/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.138	5.138	0.0338	0.0353	11:06:35	No
2	5.110	5.110	0.0337	0.0351	11:07:09	No
Mean:	5.124	5.124	0.0338			
SD :	0.0203	0.0203	0.0001			
%RSD:	0.4	0.4	0.3959			

QC value within specified limits.

==========

Element: Hg Seq. No.: 43 AS Loc.: 10 Date: 02/25/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0015	11:08:31	No
2	-0.010	-0.010	0.0000	0.0014	11:09:06	No
Mean:	-0.002	-0.002	0.0000			
SD :	0.0111	0.0111	0.0001			
%RSD:	647.6	647.6	1145.2686			

QC value within specified limits.

==========

Element: Hg Seq. No.: 44 AS Loc.: 11 Date: 02/25/2010
Sample ID: CRDL

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.258	0.258	0.0017	0.0032	11:10:28	No
2	0.257	0.257	0.0017	0.0032	11:11:03	No
Mean:	0.257	0.257	0.0017			
SD :	0.0012	0.0012	0.0000			
%RSD:	0.4	0.4	0.4436			

QC value within specified limits.

==========

Element: Hg Seq. No.: 45 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	4.949	4.949	0.0326	0.0341	11:12:28	No
2	4.924	4.924	0.0324	0.0339	11:13:03	No
Mean:	4.937	4.937	0.0325			
SD :	0.0175	0.0175	0.0001			
%RSD:	0.4	0.4	0.3545			

QC value within specified limits.

==========

Element: Hg Seq. No.: 46 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.044	0.044	0.0003	0.0018	11:14:31	No
2	0.017	0.017	0.0001	0.0016	11:15:06	No
Mean:	0.031	0.031	0.0002			
SD :	0.0186	0.0186	0.0001			
%RSD:	60.9	60.9	56.0211			

QC value within specified limits.

==========

Element: Hg Seq. No.: 47 AS Loc.: 22 Date: 02/25/2010
Sample ID: 1202051914|i||956984|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.040	0.040	0.0003	0.0018	11:16:31	No
2	0.002	0.002	0.0000	0.0015	11:17:06	No
Mean:	0.021	0.021	0.0002			
SD :	0.0270	0.0270	0.0002			
%RSD:	129.8	129.8	114.9934			

==========

Element: Hg Seq. No.: 48 AS Loc.: 23 Date: 02/25/2010
Sample ID: 1202051915|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.109	2.109	0.0139	0.0154	11:18:30	No
2	2.117	2.117	0.0140	0.0154	11:19:05	No
Mean:	2.113	2.113	0.0139			
SD :	0.0053	0.0053	0.0000			
%RSD:	0.3	0.3	0.2514			

==========

Element: Hg Seq. No.: 49 AS Loc.: 24 Date: 02/25/2010
Sample ID: 247850001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.041	0.041	0.0003	0.0018	11:20:29	No
2	0.023	0.023	0.0002	0.0016	11:21:04	No
Mean:	0.032	0.032	0.0002			
SD :	0.0127	0.0127	0.0001			
%RSD:	40.1	40.1	36.9422			

==========

Element: Hg Seq. No.: 50 AS Loc.: 25 Date: 02/25/2010
Sample ID: 1202051916|i|||DUP

%RSD: 67.0 67.0 31.8435

==========

Element: Hg Seq. No.: 56 AS Loc.: 31 Date: 02/25/2010
Sample ID: 247850005|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.477	0.477	0.0032	0.0046	11:34:35	No
2	0.440	0.440	0.0029	0.0044	11:35:10	No
Mean:	0.459	0.459	0.0030			
SD :	0.0260	0.0260	0.0002			
%RSD:	5.7	5.7	5.6376			

==========

Element: Hg Seq. No.: 57 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.027	5.027	0.0331	0.0346	11:36:37	No
2	5.029	5.029	0.0331	0.0346	11:37:11	No
Mean:	5.028	5.028	0.0331			
SD :	0.0012	0.0012	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 58 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0002	0.0017	11:38:39	No
2	0.004	0.004	0.0000	0.0015	11:39:14	No
Mean:	0.015	0.015	0.0001			
SD :	0.0162	0.0162	0.0001			
%RSD:	105.3	105.3	89.6157			

QC value within specified limits.

==========

Element: Hg Seq. No.: 59 AS Loc.: 32 Date: 02/25/2010
Sample ID: 247850006|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.452	0.452	0.0030	0.0045	11:40:38	No
2	0.437	0.437	0.0029	0.0044	11:41:13	No
Mean:	0.444	0.444	0.0029			
SD :	0.0107	0.0107	0.0001			
%RSD:	2.4	2.4	2.3869			

==========

Element: Hg Seq. No.: 60 AS Loc.: 33 Date: 02/25/2010
Sample ID: 247850007|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0015	11:42:33	No
2	-0.009	-0.009	0.0000	0.0014	11:43:07	No
Mean:	-0.006	-0.006	0.0000			
SD :	0.0034	0.0034	0.0000			
%RSD:	52.8	52.8	91.2736			

==========

Element: Hg Seq. No.: 61 AS Loc.: 34 Date: 02/25/2010
Sample ID: 247850008|i|||

%RSD: 64.2 64.2 73.9600

==========

Element: Hg Seq. No.: 67 AS Loc.: 40 Date: 02/25/2010
Sample ID: 246883001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0015	11:56:13	No
2	-0.011	-0.011	-0.0001	0.0014	11:56:48	No
Mean:	-0.002	-0.002	0.0000			
SD :	0.0131	0.0131	0.0001			
%RSD:	702.5	702.5	1607.0531			

==========

Element: Hg Seq. No.: 68 AS Loc.: 41 Date: 02/25/2010
Sample ID: 246883002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.014	0.014	0.0001	0.0016	11:58:12	No
2	0.010	0.010	0.0001	0.0016	11:58:47	No
Mean:	0.012	0.012	0.0001			
SD :	0.0033	0.0033	0.0000			
%RSD:	27.1	27.1	22.1377			

==========

Element: Hg Seq. No.: 69 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.321	5.321	0.0351	0.0365	12:00:13	No
2	5.286	5.286	0.0348	0.0363	12:00:47	No
Mean:	5.304	5.304	0.0349			
SD :	0.0249	0.0249	0.0002			
%RSD:	0.5	0.5	0.4690			

QC value within specified limits.

==========

Element: Hg Seq. No.: 70 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0002	0.0017	12:02:15	No
2	0.037	0.037	0.0003	0.0017	12:02:50	No
Mean:	0.035	0.035	0.0002			
SD :	0.0030	0.0030	0.0000			
%RSD:	8.6	8.6	8.0146			

QC value within specified limits.

==========

Element: Hg Seq. No.: 71 AS Loc.: 42 Date: 02/25/2010
Sample ID: 246883003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0001	0.0016	12:04:16	No
2	0.019	0.019	0.0001	0.0016	12:04:51	No
Mean:	0.017	0.017	0.0001			
SD :	0.0024	0.0024	0.0000			
%RSD:	14.0	14.0	12.0684			

==========

Element: Hg Seq. No.: 72 AS Loc.: 43 Date: 02/25/2010
Sample ID: 246883004|i|||

%RSD: 36.0 36.0 20.1861

==========

Element: Hg Seq. No.: 78 AS Loc.: 49 Date: 02/25/2010
Sample ID: 247039002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0002	0.0017	12:18:12	No
2	0.010	0.010	0.0001	0.0016	12:18:47	No
Mean:	0.018	0.018	0.0001			
SD :	0.0119	0.0119	0.0001			
%RSD:	64.7	64.7	56.4602			

==========

Element: Hg Seq. No.: 79 AS Loc.: 50 Date: 02/25/2010
Sample ID: 247039003|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.015	0.015	0.0001	0.0016	12:20:07	No
2	0.005	0.005	0.0001	0.0015	12:20:42	No
Mean:	0.010	0.010	0.0001			
SD :	0.0068	0.0068	0.0000			
%RSD:	68.3	68.3	53.8421			

==========

Element: Hg Seq. No.: 80 AS Loc.: 51 Date: 02/25/2010
Sample ID: 247039004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.002	0.002	0.0000	0.0015	12:22:03	No
2	-0.014	-0.014	-0.0001	0.0014	12:22:39	No
Mean:	-0.006	-0.006	0.0000			
SD :	0.0115	0.0115	0.0001			
%RSD:	192.3	192.3	348.5142			

==========

Element: Hg Seq. No.: 81 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.031	5.031	0.0331	0.0346	12:24:03	No
2	5.034	5.034	0.0332	0.0346	12:24:38	No
Mean:	5.032	5.032	0.0332			
SD :	0.0018	0.0018	0.0000			
%RSD:						

QC value within specified limits.

==========

Element: Hg Seq. No.: 82 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.029	0.029	0.0002	0.0017	12:26:06	No
2	0.016	0.016	0.0001	0.0016	12:26:41	No
Mean:	0.022	0.022	0.0002			
SD :	0.0087	0.0087	0.0001			
%RSD:	39.1	39.1	34.9168			

QC value within specified limits.

==========

Element: Hg Seq. No.: 83 AS Loc.: 52 Date: 02/25/2010
Sample ID: 247098001|i|||

%RSD: 78.9 78.9 64.7392

==========

Element: Hg Seq. No.: 89 AS Loc.: 58 Date: 02/25/2010
Sample ID: 247098004|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.006	0.006	0.0001	0.0015	12:39:55	No
2	-0.002	-0.002	0.0000	0.0015	12:40:30	No
Mean:	0.002	0.002	0.0000			
SD :	0.0058	0.0058	0.0000			
%RSD:	251.8	251.8	116.7255			

==========

Element: Hg Seq. No.: 90 AS Loc.: 59 Date: 02/25/2010
Sample ID: 1202052034|i||957034|MB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.027	0.027	0.0002	0.0017	12:41:55	No
2	-0.003	-0.003	0.0000	0.0015	12:42:30	No
Mean:	0.012	0.012	0.0001			
SD :	0.0209	0.0209	0.0001			
%RSD:	176.4	176.4	143.7482			

==========

Element: Hg Seq. No.: 91 AS Loc.: 60 Date: 02/25/2010
Sample ID: 1202052035|i|||LCS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.345	2.345	0.0155	0.0169	12:43:56	No
2	2.330	2.330	0.0154	0.0168	12:44:31	No
Mean:	2.338	2.338	0.0154			
SD :	0.0108	0.0108	0.0001			
%RSD:	0.5	0.5	0.4613			

==========

Element: Hg Seq. No.: 92 AS Loc.: 61 Date: 02/25/2010
Sample ID: 247182001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.004	-0.004	0.0000	0.0015	12:45:57	No
2	-0.003	-0.003	0.0000	0.0015	12:46:31	No
Mean:	-0.003	-0.003	0.0000			
SD :	0.0009	0.0009	0.0000			
%RSD:	27.6	27.6	131.6391			

==========

Element: Hg Seq. No.: 93 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.071	5.071	0.0334	0.0349	12:47:58	No
2	5.094	5.094	0.0336	0.0350	12:48:32	No
Mean:	5.083	5.083	0.0335			
SD :	0.0159	0.0159	0.0001			
%RSD:	0.3	0.3	0.3128			

QC value within specified limits.

==========

Element: Hg Seq. No.: 94 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.006	-0.006	0.0000	0.0015	12:50:00	No
2	-0.002	-0.002	0.0000	0.0015	12:50:35	No
Mean:	-0.004	-0.004	0.0000			
SD :	0.0023	0.0023	0.0000			
%RSD:	57.3	57.3	177.8653			

QC value within specified limits.

==========

Element: Hg Seq. No.: 95 AS Loc.: 62 Date: 02/25/2010
Sample ID: 247192001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.038	-0.038	-0.0002	0.0012	12:52:02	No
2	-0.039	-0.039	-0.0002	0.0012	12:52:37	No
Mean:	-0.039	-0.039	-0.0002			
SD :	0.0013	0.0013	0.0000			
%RSD:	3.2	3.2	3.4875			

==========

Element: Hg Seq. No.: 96 AS Loc.: 63 Date: 02/25/2010
Sample ID: 247250001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.041	-0.041	-0.0003	0.0012	12:54:00	No
2	-0.057	-0.057	-0.0004	0.0011	12:54:35	No
Mean:	-0.049	-0.049	-0.0003			
SD :	0.0115	0.0115	0.0001			
%RSD:	23.5	23.5	24.8640			

==========

Element: Hg Seq. No.: 97 AS Loc.: 64 Date: 02/25/2010
Sample ID: 247250002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.036	-0.036	-0.0002	0.0013	12:55:55	No
2	-0.051	-0.051	-0.0003	0.0012	12:56:30	No
Mean:	-0.043	-0.043	-0.0003			
SD :	0.0105	0.0105	0.0001			
%RSD:	24.2	24.2	25.8362			

==========

Element: Hg Seq. No.: 98 AS Loc.: 65 Date: 02/25/2010
Sample ID: 247256001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.042	-0.042	-0.0003	0.0012	12:57:49	No
2	-0.056	-0.056	-0.0004	0.0011	12:58:25	No
Mean:	-0.049	-0.049	-0.0003			
SD :	0.0103	0.0103	0.0001			
%RSD:	21.0	21.0	22.2172			

==========

Element: Hg Seq. No.: 99 AS Loc.: 66 Date: 02/25/2010
Sample ID: 247256002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.027	-0.027	-0.0002	0.0013	12:59:46	No
2	-0.038	-0.038	-0.0002	0.0012	13:00:21	No
Mean:	-0.032	-0.032	-0.0002			
SD :	0.0077	0.0077	0.0001			

%RSD: 23.7 23.7 25.8136

==========

Element: Hg Seq. No.: 100 AS Loc.: 67 Date: 02/25/2010
Sample ID: 247322001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0000	0.0014	13:01:42	No
2	-0.016	-0.016	-0.0001	0.0014	13:02:16	No
Mean:	-0.012	-0.012	-0.0001			
SD :	0.0051	0.0051	0.0000			
%RSD:	42.3	42.3	54.3606			

==========

Element: Hg Seq. No.: 101 AS Loc.: 68 Date: 02/25/2010
Sample ID: 247322002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.040	-0.040	-0.0002	0.0012	13:03:37	No
2	-0.016	-0.016	-0.0001	0.0014	13:04:11	No
Mean:	-0.028	-0.028	-0.0002			
SD :	0.0170	0.0170	0.0001			
%RSD:	61.5	61.5	68.0719			

==========

Element: Hg Seq. No.: 102 AS Loc.: 69 Date: 02/25/2010
Sample ID: 247335001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0003	0.0012	13:05:33	No
2	-0.033	-0.033	-0.0002	0.0013	13:06:08	No
Mean:	-0.039	-0.039	-0.0002			
SD :	0.0094	0.0094	0.0001			
%RSD:	23.8	23.8	25.4861			

==========

Element: Hg Seq. No.: 103 AS Loc.: 70 Date: 02/25/2010
Sample ID: 247339001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.063	-0.063	-0.0004	0.0011	13:07:30	No
2	-0.074	-0.074	-0.0005	0.0010	13:08:05	No
Mean:	-0.068	-0.068	-0.0004			
SD :	0.0077	0.0077	0.0001			
%RSD:	11.3	11.3	11.7966			

==========

Element: Hg Seq. No.: 104 AS Loc.: 71 Date: 02/25/2010
Sample ID: 247339002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.066	-0.066	-0.0004	0.0011	13:09:28	No
2	-0.070	-0.070	-0.0004	0.0010	13:10:03	No
Mean:	-0.068	-0.068	-0.0004			
SD :	0.0029	0.0029	0.0000			
%RSD:	4.2	4.2	4.3655			

==========

Element: Hg Seq. No.: 105 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	5.211	5.211	0.0343	0.0358	13:11:29	No
2	5.179	5.179	0.0341	0.0356	13:12:04	No
Mean:	5.195	5.195	0.0342			
SD :	0.0223	0.0223	0.0001			
%RSD:	0.4	0.4	0.4289			

QC value within specified limits.

==========

Element: Hg Seq. No.: 106 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.046	-0.046	-0.0003	0.0012	13:13:32	No
2	-0.053	-0.053	-0.0003	0.0011	13:14:07	No
Mean:	-0.050	-0.050	-0.0003			
SD :	0.0052	0.0052	0.0000			
%RSD:	10.6	10.6	11.1757			

QC value within specified limits.

==========

Element: Hg Seq. No.: 107 AS Loc.: 72 Date: 02/25/2010
Sample ID: 247350001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.061	-0.061	-0.0004	0.0011	13:15:32	No
2	-0.057	-0.057	-0.0004	0.0011	13:16:06	No
Mean:	-0.059	-0.059	-0.0004			
SD :	0.0028	0.0028	0.0000			
%RSD:	4.8	4.8	5.0087			

==========

Element: Hg Seq. No.: 108 AS Loc.: 73 Date: 02/25/2010
Sample ID: 247424001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.039	-0.039	-0.0002	0.0012	13:17:30	No
2	-0.037	-0.037	-0.0002	0.0013	13:18:05	No
Mean:	-0.038	-0.038	-0.0002			
SD :	0.0016	0.0016	0.0000			
%RSD:	4.2	4.2	4.5125			

==========

Element: Hg Seq. No.: 109 AS Loc.: 74 Date: 02/25/2010
Sample ID: 247458001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.037	-0.037	-0.0002	0.0013	13:19:29	No
2	-0.043	-0.043	-0.0003	0.0012	13:20:03	No
Mean:	-0.040	-0.040	-0.0002			
SD :	0.0042	0.0042	0.0000			
%RSD:	10.4	10.4	11.1477			

==========

Element: Hg Seq. No.: 110 AS Loc.: 75 Date: 02/25/2010
Sample ID: 247540001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.039	-0.039	-0.0002	0.0012	13:21:27	No
2	-0.061	-0.061	-0.0004	0.0011	13:22:02	No
Mean:	-0.050	-0.050	-0.0003			
SD :	0.0156	0.0156	0.0001			

%RSD: 31.2 31.2 32.9893

==========

Element: Hg Seq. No.: 111 AS Loc.: 76 Date: 02/25/2010
Sample ID: 247548001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.048	-0.048	-0.0003	0.0012	13:23:29	No
2	-0.042	-0.042	-0.0003	0.0012	13:24:04	No
Mean:	-0.045	-0.045	-0.0003			
SD :	0.0045	0.0045	0.0000			
%RSD:	9.9	9.9	10.4989			

==========

Element: Hg Seq. No.: 112 AS Loc.: 77 Date: 02/25/2010
Sample ID: 1202052036|i|||DUP

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.062	-0.062	-0.0004	0.0011	13:25:30	No
2	-0.063	-0.063	-0.0004	0.0011	13:26:05	No
Mean:	-0.062	-0.062	-0.0004			
SD :	0.0003	0.0003	0.0000			
%RSD:	0.5	0.5	0.5072			

==========

Element: Hg Seq. No.: 113 AS Loc.: 78 Date: 02/25/2010
Sample ID: 1202052037|i|||MS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	2.257	2.257	0.0149	0.0164	13:27:27	No
2	2.246	2.246	0.0148	0.0163	13:28:02	No
Mean:	2.252	2.252	0.0148			
SD :	0.0078	0.0078	0.0001			
%RSD:	0.3	0.3	0.3455			

==========

Element: Hg Seq. No.: 114 AS Loc.: 79 Date: 02/25/2010
Sample ID: 1202052041|i|5||SDILT

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.109	-0.109	-0.0007	0.0008	13:29:21	No
2	-0.095	-0.095	-0.0006	0.0009	13:29:56	No
Mean:	-0.102	-0.102	-0.0007			
SD :	0.0094	0.0094	0.0001			
%RSD:	9.3	9.3	9.5254			

==========

Element: Hg Seq. No.: 115 AS Loc.: 80 Date: 02/25/2010
Sample ID: 247548002|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.073	-0.073	-0.0005	0.0010	13:31:16	No
2	-0.037	-0.037	-0.0002	0.0013	13:31:50	No
Mean:	-0.055	-0.055	-0.0003			
SD :	0.0256	0.0256	0.0002			
%RSD:	46.6	46.6	48.9887			

==========

Element: Hg Seq. No.: 116 AS Loc.: 81 Date: 02/25/2010
Sample ID: 247559001|i|||

Repl	SampleConc	StndConc	BlnkCorr	Peak	Time	Peak

#	µg/L	µg/L	Signal	Height		Stored
1	-0.055	-0.055	-0.0003	0.0011	13:33:10	No
2	-0.060	-0.060	-0.0004	0.0011	13:33:46	No
Mean:	-0.057	-0.057	-0.0004			
SD :	0.0031	0.0031	0.0000			
%RSD:	5.4	5.4	5.6309			

==========

Element: Hg Seq. No.: 117 AS Loc.: 7 Date: 02/25/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	5.524	5.524	0.0364	0.0379	13:35:10	No
2	5.556	5.556	0.0366	0.0381	13:35:45	No
Mean:	5.540	5.540	0.0365			
SD :	0.0221	0.0221	0.0001			
%RSD:	0.4	0.4	0.3993			

QC failed, value greater than upper limit for Hg.
Current analysis method being continued.

==========

Element: Hg Seq. No.: 118 AS Loc.: 8 Date: 02/25/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.005	0.005	0.0000	0.0015	13:37:13	No
2	-0.142	-0.142	-0.0009	0.0006	13:37:48	No
Mean:	-0.069	-0.069	-0.0004			
SD :	0.1036	0.1036	0.0007			
%RSD:	151.1	151.1	157.2977			

QC value within specified limits.

==========

Element: Hg Seq. No.: 119 AS Loc.: 82 Date: 02/25/2010
Sample ID: 247560001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	-0.012	-0.012	-0.0001	0.0014	13:39:12	No
2	0.012	0.012	0.0001	0.0016	13:39:47	No
Mean:	0.000	0.000	0.0000			
SD :	0.0172	0.0172	0.0001			
%RSD:	7437	7437	589.4619			

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Element: Hg Seq. No.: 120 AS Loc.: 83 Date: 02/25/2010
Sample ID: 247567001|i|||

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.007	0.007	0.0001	0.0015	13:41:09	No
2	-0.006	-0.006	0.0000	0.0015	13:41:44	No
Mean:	0.000	0.000	0.0000			
SD :	0.0087	0.0087	0.0001			
%RSD:	2194	2194	281.1419			

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Element: Hg Seq. No.: 121 AS Loc.: 84 Date: 02/25/2010
Sample ID: 1202049850|i||956966|TB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Height	Time	Peak Stored
1	0.020	0.020	0.0001	0.0016	13:43:06	No
2	0.028	0.028	0.0002	0.0017	13:43:41	No
Mean:	0.024	0.024	0.0002			

Miscellaneous

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: **957032.0** Verified by:
Analyst: Tara Griffin
Method: SW846 7470A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: No analytical instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202052035	Mercury working intermediate standard for LCS/MS	WHG100224-13	.2	mL
MS	1202052037	Mercury working intermediate standard for LCS/MS	WHG100224-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202052034 MB	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052035 LCS	24-FEB-2010 12:10:00	Water	20	20	1	<2
247182001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247192001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247250001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247250002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247256001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247256002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247322001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247322002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247335001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247339001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247339002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247350001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247424001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247458001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247540001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247548001	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052036 DUP (247548001)	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052037 MS (247548001)	24-FEB-2010 12:10:00	Water	20	20	1	<2
1202052041 SDILT (247548001)	24-FEB-2010 12:10:00	Water	20	20	1	<2
247548002	24-FEB-2010 12:10:00	Water	20	20	1	<2
247559001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247560001	24-FEB-2010 12:10:00	Water	20	20	1	<2
247567001	24-FEB-2010 12:10:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount

Comments:

Prep Logbook

Batch ID: **957032.0** Verified by: _____

Analyst: Tara Griffin

Method: SW846 7470A Prep

Lab SOP: GL-MA-E-010 REV# 23

Instrument: No analytical instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202052035	Mercury working intermediate standard for LCS/MS	WHG100224-13	.2	mL
MS	1202052037	Mercury working intermediate standard for LCS/MS	WHG100224-13	.2	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check

1176183	Sulfuric Acid, Concentrated	1 mL
1255532-C	Hg reducing agent	1 mL
1261483-C	5% Potassium Persulfate	1.5 mL
1274391-1	NITRIC ACID	.5 mL
1274397-C	5% KMnO4 solution	3 mL
WHG100224-01a	Mercury Working 1st Source CAL 0.2/CRA	20 uL
WHG100224-02	Mercury Working 1st Source CAL 0.5	50 uL
WHG100224-03	Mercury Working 1st Source CAL 2.0	200 uL
WHG100224-04	Mercury Working 1st Source CAL 5.0/CCV	500 uL
WHG100224-05	Mercury Working 1st Source CAL 10.0	1 mL
WHG100224-06	Mercury Working 2nd Source 5.0/ICV	500 uL

Digestion Start Date: 24-FEB-10 12:10

Digestion End Date: 24-FEB-10 14:10

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: **954667.0** Verified by:
Analyst: Anthony Green
Method: SW846 3005A
Lab SOP: GL-MA-E-006 REV# 9
Instrument: Metals Manual Instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202046566	Metals Spike Mix I	UI100205-01	.25	mL
LCS	1202046566	Metals Spike Mix II	UI100205-06	.25	mL
MS	1202046568	Metals Spike Mix I	UI100205-01	.25	mL
MS	1202046568	Metals Spike Mix II	UI100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202046565 MB	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046566 LCS	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098001	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098002	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098003	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098004	24-FEB-2010 07:45:00	Water	50	50	1	<2
247182001	24-FEB-2010 07:45:00	Water	50	50	1	<2
247192001	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046567 DUP (247192001)	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046568 MS (247192001)	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046569 SDILT (247192001)	24-FEB-2010 07:45:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
1265209	HYDROCHLORIC ACID	2.5 mL
1268732	Nitric Acid CONC.	1 mL

Comments:

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: **954669.0** Verified by:
Analyst: Anthony Green
Method: SW846 3005A
Lab SOP: GL-MA-E-006 REV# 9
Instrument: Metals Manual Instrument

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202046571	ICP-MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution A).	UI100205-A	.5	mL
LCS	1202046571	MS SPIKE FOR ALL CLIENTS EXCEPT DOE CLIENTS (Solution B).	UI100205-B	.5	mL
MS	1202046573	ICP-MS DOE liquid Spike Solution A	UI090930-A	.5	mL
MS	1202046573	ICP-MS DOE Liquid Spike Solution B	UI090930-B	.5	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202046570 MB	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046571 LCS	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098001	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098002	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098003	24-FEB-2010 07:45:00	Water	50	50	1	<2
247098004	24-FEB-2010 07:45:00	Water	50	50	1	<2
247182001	24-FEB-2010 07:45:00	Water	50	50	1	<2
247192001	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046572 DUP (247192001)	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046573 MS (247192001)	24-FEB-2010 07:45:00	Water	50	50	1	<2
1202046574 SDILT (247192001)	24-FEB-2010 07:45:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount
1265209	HYDROCHLORIC ACID	2.5 mL
1268732	Nitric Acid CONC.	1 mL

Comments:

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:	UI090421-40	**Opened:**	09-OCT-09	**Amount :**	250 mL
Name:	TRACE ICP Na-1000SOUR	**Received:**	21-APR-09	**Catalog Number :**	HP100052-1
Type:	Source Material	**Expires:**	09-OCT-10	**Lot Number :**	0830227
Employee:	Helen Camello			**Solvent :**	1%HNO3
Supplier:	ENVIRONMENTAL EXPRESS				
Description:	Sodium 1000 +/- 3 ug/mL in 1% HNO3				
Comments:	None				

Analyte	Concentration	Analyte	Concentration
Sodium	1000 ug/mL		

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

Standard Logbook

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L S **Received:** 12-JUN-09 **Lot Number :** 1016377
Type: Source Material **Expires:** 12-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: 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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
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: 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 :**	H20/tr HF
Supplier:	ENVIRNMENTAL EXPRESS				
Description:	SILICON 1000mg/L H20/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: 02SI
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: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
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: UI100205-06 **Opened:** 05-FEB-10 **Lot Number :** 1018515
Name: METALSPIKE-2 **Received:** 05-FEB-10
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Titanium	100 ug/mL	Uranium	100 ug/mL
Uranium-235	.72 ug/mL	Uranium-238	99.28 ug/mL
Vanadium	100 ug/mL	Zinc	100 ug/mL

Serial ID: UI100205-A **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
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: UI100205-B **Opened:** 05-FEB-10 **Catalog Number :** 160067-05
Name: ICP-MS ALL OTHER SPIKE **Received:** 05-FEB-10 **Lot Number :** 1018516
Type: Source Material **Expires:** 05-FEB-11
Employee: Francena Armstrong
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

Standard Logbook

Serial ID: UI100217-48 **Opened:** 04-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 17-FEB-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 04-MAR-11 **Lot Number :** 1018878
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: 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

Serial ID: UI100226-40 **Opened:** 26-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD-A **Received:** 25-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 1018981
Employee: Helen Camello **Solvent :** +/-0.5%in2%HNO3
Supplier: 02SI
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

Analyte	Concentration	Analyte	Concentration
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: UI100226-41 **Opened:** 26-FEB-10 **Amount :** 500 mL
Name: ICP HIGH RANGE STD B **Received:** 25-FEB-10 **Catalog Number :** 160211-05-03
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 1018981
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: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMSCalSPIKEB **Received:** 26-FEB-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-104JB
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: UMS100226-02 **Opened:** 26-FEB-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCalSPIKEA **Received:** 26-FEB-10 **Lot Number :** 21-103JB
Type: Source Material **Expires:** 26-FEB-11
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: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCalSPIKEC **Received:** 26-FEB-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 26-FEB-11 **Lot Number :** 21-102JB
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: IHG100224-01 **Opened:** 24-FEB-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 24-FEB-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 25-FEB-10 **Solvent :** 1mL HNO3 + Typel 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: IHG100224-02 **Opened:** 24-FEB-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 25-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: WHG100224-01a **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-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.
IHG100224-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100224-02 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.5 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-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.
IHG100224-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100224-03 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL2.0 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury Working 1st Source CAL 2.0
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100224-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100224-04 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL5.0CCV **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-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.
IHG100224-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Standard Logbook

Serial ID: WHG100224-05 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL10.0 **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-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.
IHG100224-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100224-06 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGWORK5.0ICV **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-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.
IHG100224-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100224-13 **Opened:** 24-FEB-10 **Pipet Id :** Hg1289245
Name: MHGLIQLCSMSSPIKE **Received:** 24-FEB-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 25-FEB-10
Employee: Tara Griffin **Verified:** 20-JUL-07
Supplier: GEL
Description: Mercury working intermediate standard for LCS/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: WI100310-42 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1281689
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.
WI100310-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100310-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100310-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100310-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100310-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100310-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100310-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100310-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100310-43 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1281689
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.
UI090421-40	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: WI100310-44 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1 %HNO3-1281689
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: WI100310-45 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL and 1%HNO3 -1281689
Employee: Helen Camello
Supplier: GEL
Description: TRACE ICP S-10 CALIBRATION STD.
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090421-40	Sodium	1000 ug/mL	10 mL	500 mL	20000 UG/L
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

Serial ID: WI100310-46 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1281689
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: WI100310-47 **Opened:** 10-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 11-MAR-10 **Solvent :** 3%HCL &1%HNO3-1281689
Employee: Helen Camello
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

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: WMS100312-04B **Opened:** 12-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-MAR-10 **Balance Id :** 40245216
Type: Working **Expires:** 13-MAR-10 **Pipet Id :** 1758088
Employee: Rose Jenkins **Solvent :** 2%HNO3/1%HCl- 1281622
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Chromium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Copper	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5	50 mL	100 ug/l

Serial ID: WMS100313-04 **Opened:** 13-MAR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 13-MAR-10 **Balance Id :** 4025216
Type: Working **Expires:** 14-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1281622
Supplier: GEL
Description: ICPMS Calibration Standard (100 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090612-02	Tungsten	10 mg/L	.5 mL	50 mL	100 ug/L
UMS100226-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100226-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100226-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100226-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100226-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100313-04A **Opened:** 13-MAR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 13-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1276824
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100312-04B	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100312-04B	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100312-04B	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100312-04B	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100312-04B	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100312-04B	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100313-05 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 13-MAR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1281622
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

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: WMS100313-06 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 13-MAR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1281622
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

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: WMS100313-07 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 13-MAR-10 **Lot Number :** 1010773
Type: Working **Expires:** 14-MAR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1281622
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: WMS100313-08 **Opened:** 13-MAR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 13-MAR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 14-MAR-10 **Solvent :** 2%HNO3/1%HCl - 1281622
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
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: Hydroxlyamine 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: 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: 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: 1268732 **Opened:** 11-FEB-10 **Lot Number :** H12022 L
Name: I-HNO3 **Received:** 11-FEB-10
Type: Reagent/Solvent **Expires:** 11-FEB-11
Employee: Bryan Davis
Supplier: BAKER
Description: Nitric Acid CONC.

Standard Logbook

Comments: None

Serial ID: 1274391-1 **Opened:** 24-FEB-10 **Instrument Id :** MERCURY
Name: B-HNO3-MER **Received:** 24-FEB-10 **Lot Number :** H44025
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Tara Griffin
Supplier: Mallinckrodt Chemicals
Description: NITRIC ACID
Comments: None

Serial ID: 1274397-C **Opened:** 24-FEB-10 **Balance Id :** BAL-002
Name: B-KMnO4-MER **Received:** 24-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: 1281622 **Opened:** 08-MAR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 08-MAR-10
Type: Reagent/Solvent **Expires:** 15-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

Serial ID: 1281689 **Opened:** 08-MAR-10 **Amount :** 20 L
Name: B-ICP-RINSE SOLN **Received:** 01-MAR-10 **Lot Number :** H04040+G34050
Type: Reagent/Solvent **Expires:** 14-MAR-10 **Solvent :** 3%HCL+1%HNO3
Employee: Helen Camello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1861

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	954516	**Method:**	SW9012A Cyanide and Total
Prep Batch :	954513	**Method:**	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247178001	RE15-10-7904
247178002	RE15-10-7903
247178003	RE15-10-7994
247178004	RE15-10-7997
247178005	RE15-10-7998
247178006	RE15-10-8000
247178007	RE15-10-7999
247178008	RE15-10-7995
247178009	RE15-10-7996
247178010	RE15-10-7993
247178011	RE15-10-8064
1202046146	Method Blank (MB)
1202046147	247172001(RE16-10-2870) Sample Duplicate (DUP)
1202046148	247172002(RE16-10-2869) Sample Duplicate (DUP)
1202046149	247172001(RE16-10-2870) Matrix Spike (MS)
1202046150	247172002(RE16-10-2869) Matrix Spike (MS)
1202046151	247172001(RE16-10-2870) Matrix Spike Duplicate (MSD)
1202046152	247172002(RE16-10-2869) Matrix Spike Duplicate (MSD)
1202046153	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: 247172001 (RE16-10-2870) and 247172002 (RE16-10-2869).

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 RPD between the sample and its duplicate met the acceptance limits.

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: 1202046153 (LCS).

Sample Re-analysis
The following sample was re-analyzed due to instrument failure: 1202046152 (RE16-10-2869).

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:** 13Mar10

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: 10-1861 GEL Work Order: 247178

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

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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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-8064	Project:	LANL01004
Sample ID:	247178011	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	29.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	95.9	353	ug/kg	1	AXC2 02/23/10	1044	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7904	Project:	LANL01004
Sample ID:	247178001	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	10.5%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	73.1	269	ug/kg	1	AXC2 02/23/10	1032	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7903	Project:	LANL01004
Sample ID:	247178002	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	19.4%		

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	74.0	272	ug/kg	1	AXC2	02/23/10	1032	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7994	Project:	LANL01004
Sample ID:	247178003	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	11.1%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.9	260	ug/kg	1	AXC2 02/23/10	1033	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7997	Project:	LANL01004
Sample ID:	247178004	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	23%		

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	83.3	306	ug/kg	1	AXC2	02/23/10	1034	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7998	Project:	LANL01004
Sample ID:	247178005	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	13.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	70.4	259	ug/kg	1	AXC2 02/23/10	1035	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-8000	Project:	LANL01004
Sample ID:	247178006	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	12.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	74.5	274	ug/kg	1	AXC2 02/23/10	1036	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7999	Project:	LANL01004
Sample ID:	247178007	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	17.6%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	82.6	304	ug/kg	1	AXC2 02/23/10	1037	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7995	Project:	LANL01004
Sample ID:	247178008	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	25.8%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	J	84.2	81.8	301	ug/kg	1	AXC2 02/23/10	1038	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

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: March 10, 2010

Client SDG: 10-1861

Client Sample ID:	RE15-10-7996	Project:	LANL01004
Sample ID:	247178009	Client ID:	LANL010
Matrix:	R		
Collect Date:	10-FEB-10 12:00		
Receive Date:	16-FEB-10		
Collector:	Client		
Moisture:	15.3%		

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	75.8	279	ug/kg	1	AXC2 02/23/10	1039	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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

Report Date: March 10, 2010

Client SDG: 10-1861

Client Sample ID: RE15-10-7993
Sample ID: 247178010
Matrix: R
Collect Date: 10-FEB-10 12:00
Receive Date: 16-FEB-10
Collector: Client
Moisture: 19.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "Dry Weight Corrected"										
Cyanide, Total	U	ND	84.8	312	ug/kg	1	AXC2 02/23/10	1039	954516	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1531	954513

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

GEL LABORATORIES LLC

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QC Summary

Report Date: March 10, 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**

Workorder: **247178**

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 954516										
QC1202046147 247172001 DUP										
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	02/23/10 10:22
QC1202046148 247172002 DUP										
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			02/23/10 10:25
QC1202046153 LCS										
Cyanide, Total	67900				50300	ug/kg	74	(32%-157%)		02/23/10 10:20
QC1202046146 MB										
Cyanide, Total				U	250	ug/kg				02/23/10 10:19
QC1202046149 247172001 MS										
Cyanide, Total	5690	U	ND		5620	ug/kg	98.6	(26%-158%)		02/23/10 10:23
QC1202046150 247172002 MS										
Cyanide, Total	5630	U	ND		6020	ug/kg	107	(26%-158%)		02/23/10 10:26
QC1202046151 247172001 MSD										
Cyanide, Total	5690	U	ND		5750	ug/kg	2.40	101 (0%-30%)		02/23/10 10:24
QC1202046152 247172002 MSD										
Cyanide, Total	5850	U	ND		4810	ug/kg	22.4	82.2 (0%-30%)		02/23/10 12:19

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

QC Summary

Workorder: 247178

Parmname	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: 10-MAR-2010 12:21

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-1861

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	**23-FEB-2010 10:14:06**	**OM_2-23-2010_10-03-36**	**149**	**150**	**99.3**	**(90%-110%)**	**Yes**
CCV	23-FEB-2010 10:28:23	OM_2-23-2010_10-03-36	103	100	103	(90%-110%)	Yes
CCV	23-FEB-2010 10:40:48	OM_2-23-2010_10-03-36	104	100	104	(90%-110%)	Yes
CCV	23-FEB-2010 10:53:12	OM_2-23-2010_10-03-36	104	100	104	(90%-110%)	Yes
CCV	23-FEB-2010 12:12:29	OM_2-23-2010_11-19-05	105	100	105	(90%-110%)	Yes
CCV	23-FEB-2010 12:24:58	OM_2-23-2010_11-19-05	105	100	105	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-FEB-2010 10:15:57**	**OM_2-23-2010_10-03-36**	**-1.34**	**10**	**Yes**
CCB	23-FEB-2010 10:30:13	OM_2-23-2010_10-03-36	-1.28	10	Yes
CCB	23-FEB-2010 10:42:39	OM_2-23-2010_10-03-36	-1.27	10	Yes
CCB	23-FEB-2010 10:55:01	OM_2-23-2010_10-03-36	-1.3	10	Yes
CCB	23-FEB-2010 12:14:20	OM_2-23-2010_11-19-05	-1.05	10	Yes
CCB	23-FEB-2010 12:26:48	OM_2-23-2010_11-19-05	-1.23	10	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID: **954513.0** Verified by:
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202046153	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202046149	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202046150	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202046151	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202046152	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202046146 MB	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
1202046153 LCS	22-FEB-2010 15:31:00	Soil	0.25	25	100	>12
247172001	22-FEB-2010 15:31:00	Soil	0.54	25	46.2963	>12
1202046147 DUP (247172001)	22-FEB-2010 15:31:00	Soil	0.54	25	46.2963	>12
1202046149 MS (247172001)	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
1202046151 MSD (247172001)	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
247172002	22-FEB-2010 15:31:00	Soil	0.52	25	48.07692	>12
1202046148 DUP (247172002)	22-FEB-2010 15:31:00	Soil	0.55	25	45.45455	>12
1202046150 MS (247172002)	22-FEB-2010 15:31:00	Soil	0.52	25	48.07692	>12
1202046152 MSD (247172002)	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
247178001	22-FEB-2010 15:31:00	Soil	0.52	25	48.07692	>12
247178002	22-FEB-2010 15:31:00	Soil	0.57	25	43.85965	>12
247178003	22-FEB-2010 15:31:00	Soil	0.54	25	46.2963	>12
247178004	22-FEB-2010 15:31:00	Soil	0.53	25	47.16981	>12
247178005	22-FEB-2010 15:31:00	Soil	0.56	25	44.64286	>12
247178006	22-FEB-2010 15:31:00	Soil	0.52	25	48.07692	>12
247178007	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
247178008	22-FEB-2010 15:31:00	Soil	0.56	25	44.64286	>12
247178009	22-FEB-2010 15:31:00	Soil	0.53	25	47.16981	>12
247178010	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
247178011	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12

Prep Logbook

Batch ID: **954513.0** Verified by:
Analyst: Alan Stanley
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202046153	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202046149	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202046150	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202046151	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202046152	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
247181001	22-FEB-2010 15:31:00	Soil	0.52	25	48.07692	>12
247181002	22-FEB-2010 15:31:00	Soil	0.5	25	50	>12
247187001	22-FEB-2010 15:31:00	Soil	0.58	25	43.10345	>12
247187002	22-FEB-2010 15:31:00	Soil	0.51	25	49.01961	>12
247187003	22-FEB-2010 15:31:00	Soil	0.52	25	48.07692	>12
247197001	22-FEB-2010 15:31:00	Soil	0.51	25	49.01961	>12
247197002	22-FEB-2010 15:31:00	Soil	0.56	25	44.64286	>12

Reagent/Solvent Lot ID	Description	Amount
100210-C	0.25N Sodium Hydroxide Solution	25 mL
1260189-C	50% H2SO4 CN Prep	2.5 mL
1270661-C	Bismuth Nitrate Solution	1.25 mL
1270663-C	0.8N H3NO3S	1.25 mL
1270669-C	51% MgCl2 Soln	1 mL
WCN100222-07	150 ppb CN Distilled ICV Standard	.0375 mL

Comments:

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/23/2010 10:06:57	OM_2-23-2010_10-03-36
150 ppb		1	axc2	2/23/2010 10:07:49	OM_2-23-2010_10-03-36
100 ppb		1	axc2	2/23/2010 10:08:41	OM_2-23-2010_10-03-36
50 ppb		1	axc2	2/23/2010 10:09:34	OM_2-23-2010_10-03-36
10 ppb		1	axc2	2/23/2010 10:10:28	OM_2-23-2010_10-03-36
CRDL 5.0 ppb		1	axc2	2/23/2010 10:11:21	OM_2-23-2010_10-03-36
ICAL-00		1	axc2	2/23/2010 10:12:16	OM_2-23-2010_10-03-36
ICV		1	axc2	2/23/2010 10:14:06	OM_2-23-2010_10-03-36
ICB		1	axc2	2/23/2010 10:15:57	OM_2-23-2010_10-03-36
CRDL		1	axc2	2/23/2010 10:17:46	OM_2-23-2010_10-03-36
1202046146	954516	1	axc2	2/23/2010 10:19:36	OM_2-23-2010_10-03-36
1202046153	954516	25	axc2	2/23/2010 10:20:29	OM_2-23-2010_10-03-36
247172001	954516	1	axc2	2/23/2010 10:21:22	OM_2-23-2010_10-03-36
1202046147	954516	1	axc2	2/23/2010 10:22:15	OM_2-23-2010_10-03-36
1202046149	954516	1	axc2	2/23/2010 10:23:08	OM_2-23-2010_10-03-36
1202046151	954516	1	axc2	2/23/2010 10:24:01	OM_2-23-2010_10-03-36
247172002	954516	1	axc2	2/23/2010 10:24:54	OM_2-23-2010_10-03-36
1202046148	954516	1	axc2	2/23/2010 10:25:46	OM_2-23-2010_10-03-36
1202046150	954516	1	axc2	2/23/2010 10:26:38	OM_2-23-2010_10-03-36
1202046152*	954516	1	axc2	2/23/2010 10:27:31	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:28:23	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:30:13	OM_2-23-2010_10-03-36
247178001	954516	1	axc2	2/23/2010 10:32:01	OM_2-23-2010_10-03-36
247178002	954516	1	axc2	2/23/2010 10:32:53	OM_2-23-2010_10-03-36
247178003	954516	1	axc2	2/23/2010 10:33:45	OM_2-23-2010_10-03-36
247178004	954516	1	axc2	2/23/2010 10:34:37	OM_2-23-2010_10-03-36
247178005	954516	1	axc2	2/23/2010 10:35:28	OM_2-23-2010_10-03-36
247178006	954516	1	axc2	2/23/2010 10:36:22	OM_2-23-2010_10-03-36
247178007	954516	1	axc2	2/23/2010 10:37:16	OM_2-23-2010_10-03-36
247178008	954516	1	axc2	2/23/2010 10:38:10	OM_2-23-2010_10-03-36
247178009	954516	1	axc2	2/23/2010 10:39:03	OM_2-23-2010_10-03-36
247178010	954516	1	axc2	2/23/2010 10:39:56	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:40:48	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:42:39	OM_2-23-2010_10-03-36
247178011	954516	1	axc2	2/23/2010 10:44:28	OM_2-23-2010_10-03-36
247181001	954516	1	axc2	2/23/2010 10:45:20	OM_2-23-2010_10-03-36
247181002	954516	1	axc2	2/23/2010 10:46:14	OM_2-23-2010_10-03-36
247187001	954516	1	axc2	2/23/2010 10:47:06	OM_2-23-2010_10-03-36
247187002	954516	1	axc2	2/23/2010 10:47:58	OM_2-23-2010_10-03-36
247187003	954516	1	axc2	2/23/2010 10:48:51	OM_2-23-2010_10-03-36
247197001	954516	1	axc2	2/23/2010 10:49:43	OM_2-23-2010_10-03-36
247197002	954516	1	axc2	2/23/2010 10:50:35	OM_2-23-2010_10-03-36
1202046124	954512	1	axc2	2/23/2010 10:51:27	OM_2-23-2010_10-03-36
1202046131	954512	25	axc2	2/23/2010 10:52:19	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:53:12	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:55:01	OM_2-23-2010_10-03-36
247108001	954512	1	axc2	2/23/2010 10:56:52	OM_2-23-2010_10-03-36
1202046125	954512	1	axc2	2/23/2010 10:57:45	OM_2-23-2010_10-03-36
1202046127	954512	1	axc2	2/23/2010 10:58:39	OM_2-23-2010_10-03-36
1202046129	954512	1	axc2	2/23/2010 10:59:32	OM_2-23-2010_10-03-36
247108002	954512	1	axc2	2/23/2010 11:00:25	OM_2-23-2010_10-03-36
1202046126	954512	1	axc2	2/23/2010 11:01:19	OM_2-23-2010_10-03-36
1202046128	954512	1	axc2	2/23/2010 11:02:11	OM_2-23-2010_10-03-36
1202046130	954512	1	axc2	2/23/2010 11:03:05	OM_2-23-2010_10-03-36
247108003	954512	1	axc2	2/23/2010 11:03:58	OM_2-23-2010_10-03-36
247108004	954512	1	axc2	2/23/2010 11:04:50	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 11:05:42	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 11:07:33	OM_2-23-2010_10-03-36

247108005*	954512	1	axc2	2/23/2010	11:09:22 OM_2-23-2010_10-03-36
247195001*	954512	1	axc2	2/23/2010	11:10:14 OM_2-23-2010_10-03-36
247195002*	954512	1	axc2	2/23/2010	11:11:05 OM_2-23-2010_10-03-36

Author: axc2 Date : 2/23/2010

Original Run Filename: OM_2-23-2010_10-03-36.OMN created 2/23/2010 10:03:36
Original Run Author's Signature: [axc2]
Current Run Filename: OM_2-23-2010_10-03-36.OMN last modified 2/23/2010 11:12:14
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 Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100223-01	1	S1	200	9.53	2/23/2010@10:06:57			200 ppb
WCN100223-02	1	S2	150	7.13	2/23/2010@10:07:49			150 ppb
WCN100223-03	1	S3	100	4.60	2/23/2010@10:08:41			100 ppb
WCN100223-04	1	S4	50.0	2.53	2/23/2010@10:09:34			50 ppb
WCN100223-05	1	S5	10.0	0.617	2/23/2010@10:10:28			10 ppb
WCN100223-06	1	S6	5.00	0.385	2/23/2010@10:11:21			CRDL 5.0 ppb
WCN100223-08	1	S7	0.00	0.0245	2/23/2010@10:12:16			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99966 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN100223-07	1	S8	149	7.09	2/23/2010@10:14:06			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-0.5 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.5 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100223-08	1	S7	-1.34	0.0341	2/23/2010@10:15:57			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.34 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.34 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN100223-06	1	S6	6.77	0.414	2/23/2010@10:17:46			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	6.77 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	6.77 > 2.50					
		Message	Pass					
		Action	None					
1202046146|954516|MB	1	1	-1.30	0.0360	2/23/2010@10:19:36			
1202046153||LCS	1	2	20.1	1.04	2/23/2010@10:20:29		25.00	
247172001	1	3	-1.33	0.0345	2/23/2010@10:21:22			
1202046147||DUP	1	4	-1.25	0.0384	2/23/2010@10:22:15			
1202046149||MS	1	5	98.6	4.72	2/23/2010@10:23:08			
1202046151||MSD	1	6	101	4.82	2/23/2010@10:24:01			
247172002	1	7	-0.836	0.0578	2/23/2010@10:24:54			
1202046148||DUP	1	8	-1.14	0.0437	2/23/2010@10:25:46			
1202046150||MS	1	9	107	5.10	2/23/2010@10:26:38			
1202046152||MSD	1	10	69.8	3.37	2/23/2010@10:27:31			
WCN100223-03	1	S3	103	4.93	2/23/2010@10:28:23			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.0 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.28	0.0369	2/23/2010@10:30:13			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.28 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.28 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247178001	1	11	-1.02	0.0494	2/23/2010@10:32:01			
247178002	1	12	-1.24	0.0391	2/23/2010@10:32:53			
247178003	1	13	-0.195	0.0879	2/23/2010@10:33:45			
247178004	1	14	-1.18	0.0420	2/23/2010@10:34:37			
247178005	1	15	-1.20	0.0409	2/23/2010@10:35:28			
247178006	1	16	-0.310	0.0825	2/23/2010@10:36:22			
247178007	1	17	-0.592	0.0693	2/23/2010@10:37:16			
247178008	1	18	1.40	0.162	2/23/2010@10:38:10			
247178009	1	19	0.677	0.129	2/23/2010@10:39:03			
247178010	1	20	-0.578	0.0699	2/23/2010@10:39:56			
WCN100223-03	1	S3	104	4.96	2/23/2010@10:40:48			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	3.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.27	0.0375	2/23/2010@10:42:39			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.27 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.27 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247178011	1	21	-1.34	0.0342	2/23/2010@10:44:28			
247181001	1	22	-1.33	0.0348	2/23/2010@10:45:20			
247181002	1	23	-0.741	0.0623	2/23/2010@10:46:14			
247187001	1	24	-1.57	0.0236	2/23/2010@10:47:06			
247187002	1	25	-1.22	0.0399	2/23/2010@10:47:58			
247187003	1	26	-1.40	0.0315	2/23/2010@10:48:51			
247197001	1	27	-1.38	0.0323	2/23/2010@10:49:43			
247197002	1	28	-1.11	0.0450	2/23/2010@10:50:35			
1202046124|954512|MB	1	29	-1.30	0.0361	2/23/2010@10:51:27			
1202046131||LCS	1	30	16.8	0.885	2/23/2010@10:52:19		25.00	
WCN100223-03	1	S3	104	4.98	2/23/2010@10:53:12			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.30	0.0362	2/23/2010@10:55:01			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
Result:			-1.30 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.30 > -5.00					
Message			CCB Passed					
Action			Continue					
247108001	1	31	-1.09	0.0462	2/23/2010@10:56:52			
1202046125||DUP	1	32	-1.54	0.0247	2/23/2010@10:57:45			
1202046127||MS	1	33	81.1	3.90	2/23/2010@10:58:39			
1202046129||MSD	1	34	98.3	4.70	2/23/2010@10:59:32			
247108002	1	35	-1.05	0.0481	2/23/2010@11:00:25			
1202046126||DUP	1	36	-0.928	0.0536	2/23/2010@11:01:19			
1202046128||MS	1	37	95.0	4.55	2/23/2010@11:02:11			
1202046130||MSD	1	38	88.6	4.25	2/23/2010@11:03:05			
247108003	1	39	-1.15	0.0430	2/23/2010@11:03:58			
247108004	1	40	-1.94	0.00601	2/23/2010@11:04:50			
WCN100223-03	1	S3	104	4.96	2/23/2010@11:05:42			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			3.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			3.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100223-08	1	S7	-1.19	0.0415	2/23/2010@11:07:33			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.19 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.19 > -5.00					
Message			CCB Passed					
Action			Continue					
247108005	1	41	-2.02	0.00232	2/23/2010@11:09:22			
247195001	1	42	-1.60	0.0222	2/23/2010@11:10:14			
247195002	1	43	-1.50	0.0270	2/23/2010@11:11:05			

Analyte Properties Table for OM_2-23-2010_10-03-36.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Callibration 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

Author: axc2 Date : 2/23/2010

Channel 1: Current View

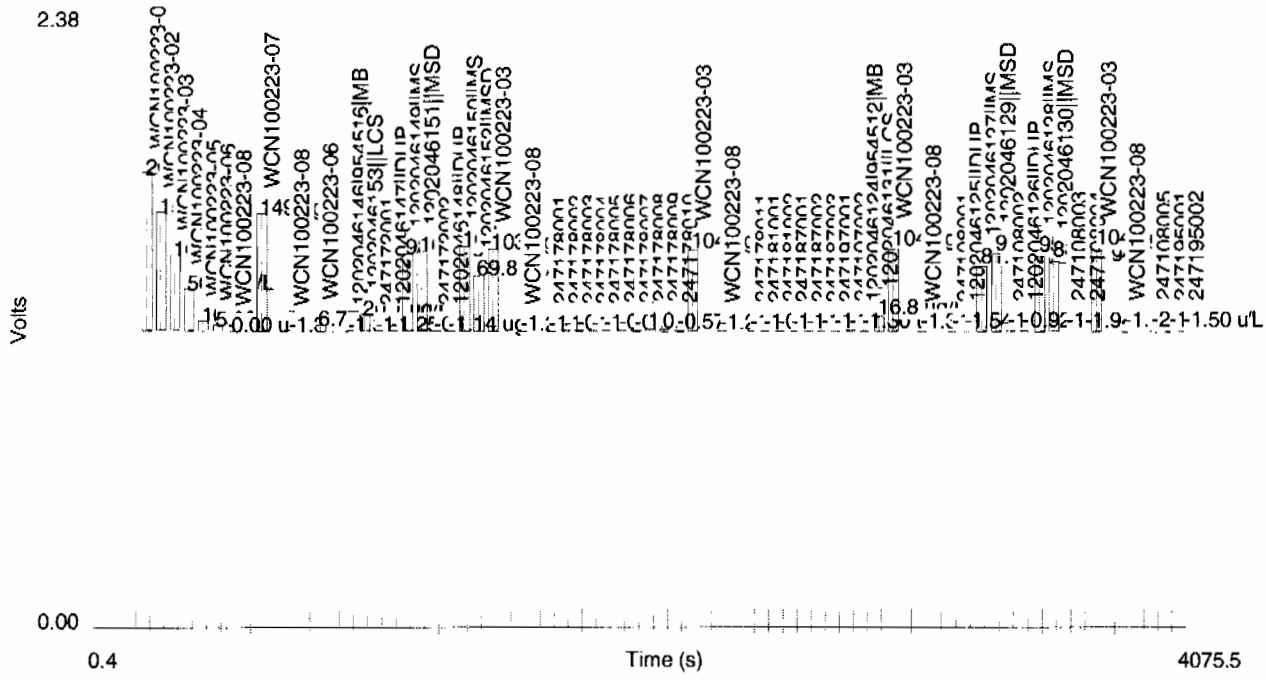
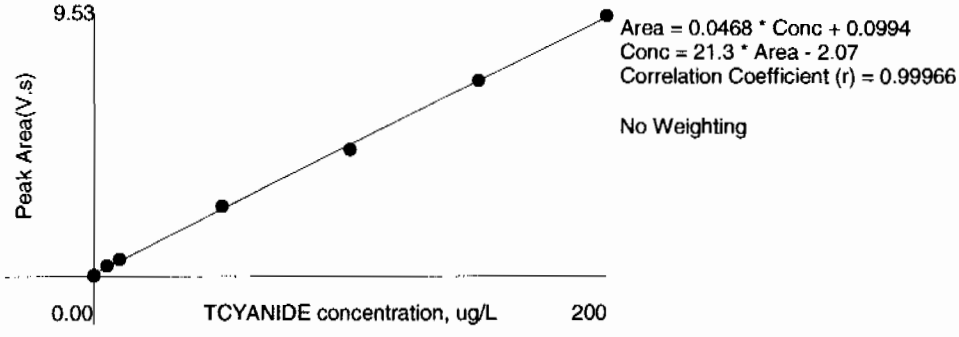


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.53	0.622	-0.6	2/23/2010	10:08:00
2	150	1	7.13	0.468	-0.1	2/23/2010	10:08:52
3	100	1	4.60	0.301	3.8	2/23/2010	10:09:44
4	50.0	1	2.53	0.167	-3.7	2/23/2010	10:10:37
5	10.0	1	0.617	0.0399	-8.7	2/23/2010	10:11:31
6	5.00	1	0.385	0.0238	-15.5	2/23/2010	10:12:24
7	0.00	1	0.0245	0.00128		2/23/2010	10:13:19

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/23/2010 11:22:28	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:24:18	OM_2-23-2010_11-19-05
247108005	954512	1	axc2	2/23/2010 11:26:07	OM_2-23-2010_11-19-05
247195001	954512	1	axc2	2/23/2010 11:26:59	OM_2-23-2010_11-19-05
247195002	954512	1	axc2	2/23/2010 11:27:51	OM_2-23-2010_11-19-05
247195003	954512	1	axc2	2/23/2010 11:28:44	OM_2-23-2010_11-19-05
247195004	954512	1	axc2	2/23/2010 11:29:35	OM_2-23-2010_11-19-05
247195005	954512	1	axc2	2/23/2010 11:30:30	OM_2-23-2010_11-19-05
247195006	954512	1	axc2	2/23/2010 11:31:24	OM_2-23-2010_11-19-05
247195007	954512	1	axc2	2/23/2010 11:32:17	OM_2-23-2010_11-19-05
247195008	954512	1	axc2	2/23/2010 11:33:11	OM_2-23-2010_11-19-05
247195009	954512	1	axc2	2/23/2010 11:34:05	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:34:57	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:36:48	OM_2-23-2010_11-19-05
247195010	954512	1	axc2	2/23/2010 11:38:37	OM_2-23-2010_11-19-05
247195011	954512	1	axc2	2/23/2010 11:39:30	OM_2-23-2010_11-19-05
247195012	954512	1	axc2	2/23/2010 11:40:23	OM_2-23-2010_11-19-05
247195013	954512	1	axc2	2/23/2010 11:41:16	OM_2-23-2010_11-19-05
247195014	954512	1	axc2	2/23/2010 11:42:09	OM_2-23-2010_11-19-05
247195015	954512	1	axc2	2/23/2010 11:43:02	OM_2-23-2010_11-19-05
1202042913	953106	1	axc2	2/23/2010 11:43:55	OM_2-23-2010_11-19-05
1202042920	953106	25	axc2	2/23/2010 11:44:47	OM_2-23-2010_11-19-05
246870010	953106	1	axc2	2/23/2010 11:45:39	OM_2-23-2010_11-19-05
1202042914	953106	1	axc2	2/23/2010 11:46:31	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:47:23	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:49:13	OM_2-23-2010_11-19-05
1202042916	953106	1	axc2	2/23/2010 11:51:03	OM_2-23-2010_11-19-05
1202042918	953106	1	axc2	2/23/2010 11:51:57	OM_2-23-2010_11-19-05
246872001	953106	1	axc2	2/23/2010 11:52:52	OM_2-23-2010_11-19-05
1202042915	953106	1	axc2	2/23/2010 11:53:45	OM_2-23-2010_11-19-05
1202042917	953106	1	axc2	2/23/2010 11:54:39	OM_2-23-2010_11-19-05
1202042919	953106	1	axc2	2/23/2010 11:55:33	OM_2-23-2010_11-19-05
246872002	953106	1	axc2	2/23/2010 11:56:26	OM_2-23-2010_11-19-05
246872003	953106	1	axc2	2/23/2010 11:57:19	OM_2-23-2010_11-19-05
246872004	953106	1	axc2	2/23/2010 11:58:12	OM_2-23-2010_11-19-05
246872005	953106	1	axc2	2/23/2010 11:59:05	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:59:57	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 12:01:48	OM_2-23-2010_11-19-05
246872006	953106	1	axc2	2/23/2010 12:03:37	OM_2-23-2010_11-19-05
246872007	953106	1	axc2	2/23/2010 12:04:30	OM_2-23-2010_11-19-05
246872008	953106	1	axc2	2/23/2010 12:05:22	OM_2-23-2010_11-19-05
246881001	953106	1	axc2	2/23/2010 12:06:14	OM_2-23-2010_11-19-05
246881002	953106	1	axc2	2/23/2010 12:07:07	OM_2-23-2010_11-19-05
246881003	953106	1	axc2	2/23/2010 12:08:01	OM_2-23-2010_11-19-05
246881004	953106	1	axc2	2/23/2010 12:08:55	OM_2-23-2010_11-19-05
246881005	953106	1	axc2	2/23/2010 12:09:49	OM_2-23-2010_11-19-05
246881006	953106	1	axc2	2/23/2010 12:10:43	OM_2-23-2010_11-19-05
246881007	953106	1	axc2	2/23/2010 12:11:37	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 12:12:29	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 12:14:20	OM_2-23-2010_11-19-05
246881008	953106	1	axc2	2/23/2010 12:16:10	OM_2-23-2010_11-19-05
246881009	953106	1	axc2	2/23/2010 12:17:03	OM_2-23-2010_11-19-05
246881010	953106	1	axc2	2/23/2010 12:17:56	OM_2-23-2010_11-19-05
246881011	953106	1	axc2	2/23/2010 12:18:49	OM_2-23-2010_11-19-05
1202046152	954516	1	axc2	2/23/2010 12:19:42	OM_2-23-2010_11-19-05
1202046158	954519	1	axc2	2/23/2010 12:20:35	OM_2-23-2010_11-19-05
1202046165	954519	25	axc2	2/23/2010 12:21:28	OM_2-23-2010_11-19-05
247084001	954519	1	axc2	2/23/2010 12:22:20	OM_2-23-2010_11-19-05

247084002	954519	1	axc2	2/23/2010	12:23:13	OM_2-23-2010_11-19-05
247126001	954519	1	axc2	2/23/2010	12:24:06	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:24:58	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:26:48	OM_2-23-2010_11-19-05
247126002	954519	1	axc2	2/23/2010	12:28:37	OM_2-23-2010_11-19-05
247126003	954519	1	axc2	2/23/2010	12:29:32	OM_2-23-2010_11-19-05
247136001	954519	1	axc2	2/23/2010	12:30:26	OM_2-23-2010_11-19-05
247136002	954519	1	axc2	2/23/2010	12:31:21	OM_2-23-2010_11-19-05
247141001	954519	1	axc2	2/23/2010	12:32:16	OM_2-23-2010_11-19-05
247141002	954519	1	axc2	2/23/2010	12:33:09	OM_2-23-2010_11-19-05
247141003	954519	1	axc2	2/23/2010	12:34:03	OM_2-23-2010_11-19-05
247186001	954519	1	axc2	2/23/2010	12:34:58	OM_2-23-2010_11-19-05
1202046159	954519	1	axc2	2/23/2010	12:35:51	OM_2-23-2010_11-19-05
1202046161	954519	1	axc2	2/23/2010	12:36:44	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:37:37	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:38:31	OM_2-23-2010_11-19-05
1202046163	954519	1	axc2	2/23/2010	12:39:24	OM_2-23-2010_11-19-05
247186002	954519	1	axc2	2/23/2010	12:40:17	OM_2-23-2010_11-19-05
1202046160	954519	1	axc2	2/23/2010	12:41:10	OM_2-23-2010_11-19-05
1202046162	954519	1	axc2	2/23/2010	12:42:03	OM_2-23-2010_11-19-05
1202046164	954519	1	axc2	2/23/2010	12:42:55	OM_2-23-2010_11-19-05
247186003	954519	1	axc2	2/23/2010	12:43:49	OM_2-23-2010_11-19-05
247186004	954519	1	axc2	2/23/2010	12:44:43	OM_2-23-2010_11-19-05
247186005	954519	1	axc2	2/23/2010	12:45:38	OM_2-23-2010_11-19-05
247186006	954519	1	axc2	2/23/2010	12:46:32	OM_2-23-2010_11-19-05
247186007	954519	1	axc2	2/23/2010	12:47:26	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:48:19	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:49:13	OM_2-23-2010_11-19-05
247186008	954519	1	axc2	2/23/2010	12:50:07	OM_2-23-2010_11-19-05
247186009	954519	1	axc2	2/23/2010	12:51:01	OM_2-23-2010_11-19-05
247186010	954519	1	axc2	2/23/2010	12:51:56	OM_2-23-2010_11-19-05
1202046185	954529	1	axc2	2/23/2010	12:52:50	OM_2-23-2010_11-19-05
1202046192	954529	1	axc2	2/23/2010	12:53:43	OM_2-23-2010_11-19-05
246983002	954529	1	axc2	2/23/2010	12:54:37	OM_2-23-2010_11-19-05
247036005	954529	1	axc2	2/23/2010	12:55:30	OM_2-23-2010_11-19-05
1202046186	954529	1	axc2	2/23/2010	12:56:23	OM_2-23-2010_11-19-05
1202046188	954529	1	axc2	2/23/2010	12:57:17	OM_2-23-2010_11-19-05
1202046190	954529	1	axc2	2/23/2010	12:58:09	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:59:01	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:59:56	OM_2-23-2010_11-19-05
247039001	954529	1	axc2	2/23/2010	13:00:48	OM_2-23-2010_11-19-05
247039002	954529	1	axc2	2/23/2010	13:01:43	OM_2-23-2010_11-19-05
247039003	954529	1	axc2	2/23/2010	13:02:39	OM_2-23-2010_11-19-05
247039004	954529	1	axc2	2/23/2010	13:03:33	OM_2-23-2010_11-19-05
247092001	954529	1	axc2	2/23/2010	13:04:27	OM_2-23-2010_11-19-05
247098001	954529	1	axc2	2/23/2010	13:05:21	OM_2-23-2010_11-19-05
247098002	954529	1	axc2	2/23/2010	13:06:15	OM_2-23-2010_11-19-05
247098003	954529	1	axc2	2/23/2010	13:07:10	OM_2-23-2010_11-19-05
247098004	954529	1	axc2	2/23/2010	13:08:04	OM_2-23-2010_11-19-05
247109001	954529	1	axc2	2/23/2010	13:08:58	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:09:50	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:10:44	OM_2-23-2010_11-19-05
247109002	954529	1	axc2	2/23/2010	13:11:38	OM_2-23-2010_11-19-05
1202046187	954529	1	axc2	2/23/2010	13:12:31	OM_2-23-2010_11-19-05
1202046189	954529	1	axc2	2/23/2010	13:13:25	OM_2-23-2010_11-19-05
1202046191	954529	1	axc2	2/23/2010	13:14:18	OM_2-23-2010_11-19-05
247127001	954529	1	axc2	2/23/2010	13:15:11	OM_2-23-2010_11-19-05
247139001	954529	1	axc2	2/23/2010	13:16:04	OM_2-23-2010_11-19-05
247179001	954529	1	axc2	2/23/2010	13:16:59	OM_2-23-2010_11-19-05
247182001	954529	1	axc2	2/23/2010	13:17:54	OM_2-23-2010_11-19-05

247183001	954529	1	axc2	2/23/2010	13:18:48	OM_2-23-2010_11-19-05
247192001	954529	1	axc2	2/23/2010	13:19:43	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:20:35	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:22:26	OM_2-23-2010_11-19-05
1202049704	955981	1	axc2	2/23/2010	13:24:16	OM_2-23-2010_11-19-05
1202049711	955981	1	axc2	2/23/2010	13:25:10	OM_2-23-2010_11-19-05
246941002	955981	1	axc2	2/23/2010	13:26:05	OM_2-23-2010_11-19-05
1202049705	955981	1	axc2	2/23/2010	13:26:59	OM_2-23-2010_11-19-05
1202049707	955981	1	axc2	2/23/2010	13:27:53	OM_2-23-2010_11-19-05
1202049709	955981	1	axc2	2/23/2010	13:28:47	OM_2-23-2010_11-19-05
247203001	955981	1	axc2	2/23/2010	13:29:41	OM_2-23-2010_11-19-05
1202049706	955981	1	axc2	2/23/2010	13:30:34	OM_2-23-2010_11-19-05
1202049708	955981	1	axc2	2/23/2010	13:31:28	OM_2-23-2010_11-19-05
1202049710	955981	1	axc2	2/23/2010	13:32:21	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:33:13	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:35:03	OM_2-23-2010_11-19-05
247204001	955981	1	axc2	2/23/2010	13:36:52	OM_2-23-2010_11-19-05
247244001	955981	1	axc2	2/23/2010	13:37:47	OM_2-23-2010_11-19-05
247250001	955981	1	axc2	2/23/2010	13:38:42	OM_2-23-2010_11-19-05
247250002	955981	1	axc2	2/23/2010	13:39:37	OM_2-23-2010_11-19-05
247256001	955981	1	axc2	2/23/2010	13:40:32	OM_2-23-2010_11-19-05
247256002	955981	1	axc2	2/23/2010	13:41:27	OM_2-23-2010_11-19-05
247273001	955981	1	axc2	2/23/2010	13:42:22	OM_2-23-2010_11-19-05
247322001	955981	1	axc2	2/23/2010	13:43:15	OM_2-23-2010_11-19-05
247322002	955981	1	axc2	2/23/2010	13:44:09	OM_2-23-2010_11-19-05
247335001	955981	1	axc2	2/23/2010	13:45:04	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:45:56	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:47:47	OM_2-23-2010_11-19-05
247339001	955981	1	axc2	2/23/2010	13:49:37	OM_2-23-2010_11-19-05
247339002	955981	1	axc2	2/23/2010	13:50:31	OM_2-23-2010_11-19-05
247350001	955981	1	axc2	2/23/2010	13:51:25	OM_2-23-2010_11-19-05
247434001	955981	1	axc2	2/23/2010	13:52:18	OM_2-23-2010_11-19-05
247434002	955981	1	axc2	2/23/2010	13:53:12	OM_2-23-2010_11-19-05
247559001	955981	1	axc2	2/23/2010	13:54:05	OM_2-23-2010_11-19-05
247560001	955981	1	axc2	2/23/2010	13:55:00	OM_2-23-2010_11-19-05
247567001	955981	1	axc2	2/23/2010	13:55:56	OM_2-23-2010_11-19-05
247273001	955981	2	axc2	2/23/2010	13:56:50	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:57:43	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:59:33	OM_2-23-2010_11-19-05

Author: axc2 Date : 2/23/2010

Original Run Filename: OM_2-23-2010_11-19-05.OMN created 2/23/2010 11:19:05
Original Run Author's Signature: [axc2]
Current Run Filename: OM_2-23-2010_11-19-05.OMN last modified 2/23/2010 14:00:39
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 Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100223-03	1	S3	103	4.91	2/23/2010@11:22:28			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100223-08	1	S7	-1.61	0.0215	2/23/2010@11:24:18			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247108005|954512|	1	41	-2.38	-0.0147	2/23/2010@11:26:07			
247195001	1	42	-1.98	0.00432	2/23/2010@11:26:59			
247195002	1	43	-1.72	0.0166	2/23/2010@11:27:51			
247195003	1	44	-1.17	0.0424	2/23/2010@11:28:44			
247195004	1	45	-0.745	0.0621	2/23/2010@11:29:35			
247195005	1	46	-1.28	0.0369	2/23/2010@11:30:30			
247195006	1	47	-1.56	0.0240	2/23/2010@11:31:24			
247195007	1	48	-1.45	0.0293	2/23/2010@11:32:17			
247195008	1	49	-3.33	-0.0592	2/23/2010@11:33:11			
247195009	1	50	-1.19	0.0412	2/23/2010@11:34:05			
WCN100223-03	1	S3	102	4.89	2/23/2010@11:34:57			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.39	0.0321	2/23/2010@11:36:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.39 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.39 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247195010	1	51	-0.780	0.0605	2/23/2010@11:38:37			
247195011	1	52	-1.91	0.00734	2/23/2010@11:39:30			
247195012	1	53	-1.44	0.0298	2/23/2010@11:40:23			
247195013	1	54	-1.29	0.0368	2/23/2010@11:41:16			
247195014	1	55	-1.40	0.0315	2/23/2010@11:42:09			

247195015	1	56	-1.32	0.0351	2/23/2010@11:43:02			
1202042913|953106|MB	1	57	-1.34	0.0343	2/23/2010@11:43:55			
1202042920||LCS	1	58	20.7	1.07	2/23/2010@11:44:47		25.00	
246870010	1	59	-1.12	0.0447	2/23/2010@11:45:39			
1202042914||DUP	1	60	-1.41	0.0309	2/23/2010@11:46:31			
WCN100223-03	1	S3	103	4.94	2/23/2010@11:47:23			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.29	0.0368	2/23/2010@11:49:13			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.29 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.29 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202042916||MS	1	61	100	4.81	2/23/2010@11:51:03			
1202042918||MSD	1	62	99.6	4.76	2/23/2010@11:51:57			
246872001	1	63	-0.922	0.0539	2/23/2010@11:52:52			
1202042915||DUP	1	64	-0.752	0.0618	2/23/2010@11:53:45			
1202042917||MS	1	65	87.7	4.21	2/23/2010@11:54:39			
1202042919||MSD	1	66	97.7	4.67	2/23/2010@11:55:33			
246872002	1	67	-0.703	0.0641	2/23/2010@11:56:26			
246872003	1	68	-0.152	0.0899	2/23/2010@11:57:19			
246872004	1	69	-2.08	-2.27e-4	2/23/2010@11:58:12			
246872005	1	70	-0.139	0.0905	2/23/2010@11:59:05			
WCN100223-03	1	S3	104	4.98	2/23/2010@11:59:57			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.19	0.0412	2/23/2010@12:01:48			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.19 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.19 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246872006	1	71	-1.15	0.0433	2/23/2010@12:03:37			
246872007	1	72	-1.05	0.0479	2/23/2010@12:04:30			
246872008	1	73	0.643	0.127	2/23/2010@12:05:22			
246881001	1	74	-2.08	-1.94e-4	2/23/2010@12:06:14			
246881002	1	75	-0.602	0.0689	2/23/2010@12:07:07			
246881003	1	76	-0.887	0.0555	2/23/2010@12:08:01			
246881004	1	77	-0.0611	0.0942	2/23/2010@12:08:55			
246881005	1	78	0.768	0.133	2/23/2010@12:09:49			
246881006	1	79	-0.774	0.0608	2/23/2010@12:10:43			
246881007	1	80	-0.623	0.0678	2/23/2010@12:11:37			
WCN100223-03	1	S3	105	5.00	2/23/2010@12:12:29			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								

		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.05	0.0478	2/23/2010@12:14:20			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.05 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.05 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246881008	1	81	-0.812	0.0590	2/23/2010@12:16:10			
246881009	1	82	-0.213	0.0871	2/23/2010@12:17:03			
246881010	1	83	1.65	0.174	2/23/2010@12:17:56			
246881011	1	84	-1.44	0.0294	2/23/2010@12:18:49			
1202046152|954516|MSD	1	10	82.2	3.95	2/23/2010@12:19:42			
1202046158|954519|MB	1	85	-1.23	0.0392	2/23/2010@12:20:35			
1202046165||LCS	1	86	27.6	1.39	2/23/2010@12:21:28		25.00	
247084001	1	87	-0.732	0.0627	2/23/2010@12:22:20			
247084002	1	88	-1.03	0.0489	2/23/2010@12:23:13			
247126001	1	89	-1.40	0.0313	2/23/2010@12:24:06			
WCN100223-03	1	S3	105	5.02	2/23/2010@12:24:58			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					
WCN100223-08	1	S7	-1.23	0.0392	2/23/2010@12:26:48			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.23 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.23 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247126002	1	90	-1.37	0.0329	2/23/2010@12:28:37			
247126003	1	91	-0.806	0.0593	2/23/2010@12:29:32			
247136001	1	92	-0.846	0.0574	2/23/2010@12:30:26			
247136002	1	93	-1.49	0.0274	2/23/2010@12:31:21			
247141001	1	94	-1.44	0.0296	2/23/2010@12:32:16			
247141002	1	95	-1.10	0.0454	2/23/2010@12:33:09			
247141003	1	96	1.05	0.146	2/23/2010@12:34:03			
247186001	1	97	-1.11	0.0450	2/23/2010@12:34:58			
1202046159||DUP	1	98	-0.879	0.0558	2/23/2010@12:35:51			
1202046161||MS	1	99	99.4	4.76	2/23/2010@12:36:44			
WCN100223-03	1	S3	104	4.98	2/23/2010@12:37:37			CCV
		Known Conc:	0.00					
WCN100223-08	1	S7	-1.26	0.0382	2/23/2010@12:38:31			CCB
		Known Conc:	0.00					
1202046163||MSD	1	100	82.4	3.96	2/23/2010@12:39:24			
247186002	1	101	-0.608	0.0685	2/23/2010@12:40:17			
1202046160||DUP	1	102	-1.18	0.0415	2/23/2010@12:41:10			
1202046162||MS	1	103	99.3	4.75	2/23/2010@12:42:03			
1202046164||MSD	1	104	99.5	4.76	2/23/2010@12:42:55			
247186003	1	105	-0.780	0.0605	2/23/2010@12:43:49			
247186004	1	106	0.0465	0.0992	2/23/2010@12:44:43			

247186005	1	107	-0.959	0.0521	2/23/2010@12:45:38			
247186006	1	108	-0.485	0.0743	2/23/2010@12:46:32			
247186007	1	109	-1.06	0.0473	2/23/2010@12:47:26			
WCN100223-03	1	S3	103	4.95	2/23/2010@12:48:19			CCV
	Known Conc:		0.00					
WCN100223-08	1	S7	-1.16	0.0425	2/23/2010@12:49:13			CCB
	Known Conc:		0.00					
247186008	1	110	-1.30	0.0360	2/23/2010@12:50:07			
247186009	1	111	-0.542	0.0716	2/23/2010@12:51:01			
247186010	1	112	-0.994	0.0504	2/23/2010@12:51:56			
1202046185|954529|MB	1	113	-1.55	0.0242	2/23/2010@12:52:50			
1202046192||LCS	1	114	52.8	2.57	2/23/2010@12:53:43			
246983002	1	115	-1.39	0.0319	2/23/2010@12:54:37			
247036005	1	116	0.513	0.121	2/23/2010@12:55:30			
1202046186||DUP	1	117	-1.91	0.00766	2/23/2010@12:56:23			
1202046188||MS	1	118	93.0	4.45	2/23/2010@12:57:17			
1202046190||MSD	1	119	105	5.03	2/23/2010@12:58:09			
WCN100223-03	1	S3	104	4.96	2/23/2010@12:59:01			CCV
	Known Conc:		0.00					
WCN100223-08	1	S7	-1.46	0.0288	2/23/2010@12:59:56			CCB
	Known Conc:		0.00					
247039001	1	120	-1.15	0.0433	2/23/2010@13:00:48			
247039002	1	121	-1.35	0.0338	2/23/2010@13:01:43			
247039003	1	122	-1.24	0.0391	2/23/2010@13:02:39			
247039004	1	123	-1.49	0.0273	2/23/2010@13:03:33			
247092001	1	124	-2.07	2.59e-4	2/23/2010@13:04:27			
247098001	1	125	-2.08	-2.07e-4	2/23/2010@13:05:21			
247098002	1	126	-1.26	0.0378	2/23/2010@13:06:15			
247098003	1	127	-1.54	0.0247	2/23/2010@13:07:10			
247098004	1	128	-1.58	0.0230	2/23/2010@13:08:04			
247109001	1	129	-1.47	0.0281	2/23/2010@13:08:58			
WCN100223-03	1	S3	103	4.94	2/23/2010@13:09:50			CCV
	Known Conc:		0.00					
WCN100223-08	1	S7	-0.806	0.0593	2/23/2010@13:10:44			CCB
	Known Conc:		0.00					
247109002	1	130	-1.40	0.0315	2/23/2010@13:11:38			
1202046187||DUP	1	131	-1.64	0.0200	2/23/2010@13:12:31			
1202046189||MS	1	132	108	5.17	2/23/2010@13:13:25			
1202046191||MSD	1	133	86.4	4.14	2/23/2010@13:14:18			
247127001	1	134	-1.37	0.0327	2/23/2010@13:15:11			
247139001	1	135	-1.34	0.0342	2/23/2010@13:16:04			
247179001	1	136	-2.08	-2.07e-4	2/23/2010@13:16:59			
247182001	1	137	-1.43	0.0303	2/23/2010@13:17:54			
247183001	1	138	-1.38	0.0326	2/23/2010@13:18:48			
247192001	1	139	-1.93	0.00645	2/23/2010@13:19:43			
WCN100223-03	1	S3	104	4.98	2/23/2010@13:20:35			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.2 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100223-08	1	S7	-1.39	0.0321	2/23/2010@13:22:26			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.39 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.39 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202049704|955981|MB	1	140	-2.06	4.71e-4	2/23/2010@13:24:16			
1202049711||LCS	1	141	54.3	2.64	2/23/2010@13:25:10			
246941002	1	142	-1.47	0.0283	2/23/2010@13:26:05			

1202049705||DUP	1	143	-2.02	0.00224	2/23/2010@13:26:59			
1202049707||MS	1	144	108	5.14	2/23/2010@13:27:53			
1202049709||MSD	1	145	115	5.47	2/23/2010@13:28:47			
247203001	1	146	-1.26	0.0380	2/23/2010@13:29:41			
1202049706||DUP	1	147	-2.03	0.00182	2/23/2010@13:30:34			
1202049708||MS	1	148	109	5.22	2/23/2010@13:31:28			
1202049710||MSD	1	149	102	4.89	2/23/2010@13:32:21			
WCN100223-03	1	S3	104	4.99	2/23/2010@13:33:13			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100223-08	1	S7	-1.25	0.0385	2/23/2010@13:35:03			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.25 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.25 > -5.00					
	Message		CCB Passed					
	Action		Continue					
247204001	1	150	3.39	0.256	2/23/2010@13:36:52			
247244001	1	151	2.20	0.200	2/23/2010@13:37:47			
247250001	1	152	-1.65	0.0198	2/23/2010@13:38:42			
247250002	1	153	-1.43	0.0302	2/23/2010@13:39:37			
247256001	1	154	-1.39	0.0317	2/23/2010@13:40:32			
247256002	1	155	-1.28	0.0369	2/23/2010@13:41:27			
247273001	1	156	247	11.7	2/23/2010@13:42:22			
247322001	1	157	-1.24	0.0389	2/23/2010@13:43:15			
247322002	1	158	-1.40	0.0314	2/23/2010@13:44:09			
247335001	1	159	-1.39	0.0318	2/23/2010@13:45:04			
WCN100223-03	1	S3	105	5.01	2/23/2010@13:45:56			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					
WCN100223-08	1	S7	-1.55	0.0242	2/23/2010@13:47:47			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.55 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.55 > -5.00					
	Message		CCB Passed					
	Action		Continue					
247339001	1	160	-1.25	0.0386	2/23/2010@13:49:37			
247339002	1	161	-2.07	1.64e-4	2/23/2010@13:50:31			
247350001	1	162	1.51	0.168	2/23/2010@13:51:25			
247434001	1	163	-1.33	0.0346	2/23/2010@13:52:18			
247434002	1	164	-0.955	0.0523	2/23/2010@13:53:12			
247559001	1	165	-1.30	0.0363	2/23/2010@13:54:05			
247560001	1	166	-1.67	0.0188	2/23/2010@13:55:00			
247567001	1	167	-1.26	0.0379	2/23/2010@13:55:56			
247273001	1	156	131	6.22	2/23/2010@13:56:50		2.00	
WCN100223-03	1	S3	105	5.02	2/23/2010@13:57:43			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					
WCN100223-08	1	S7	-1.21	0.0401	2/23/2010@13:59:33			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.21 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.21 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_2-23-2010_11-19-05.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration 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

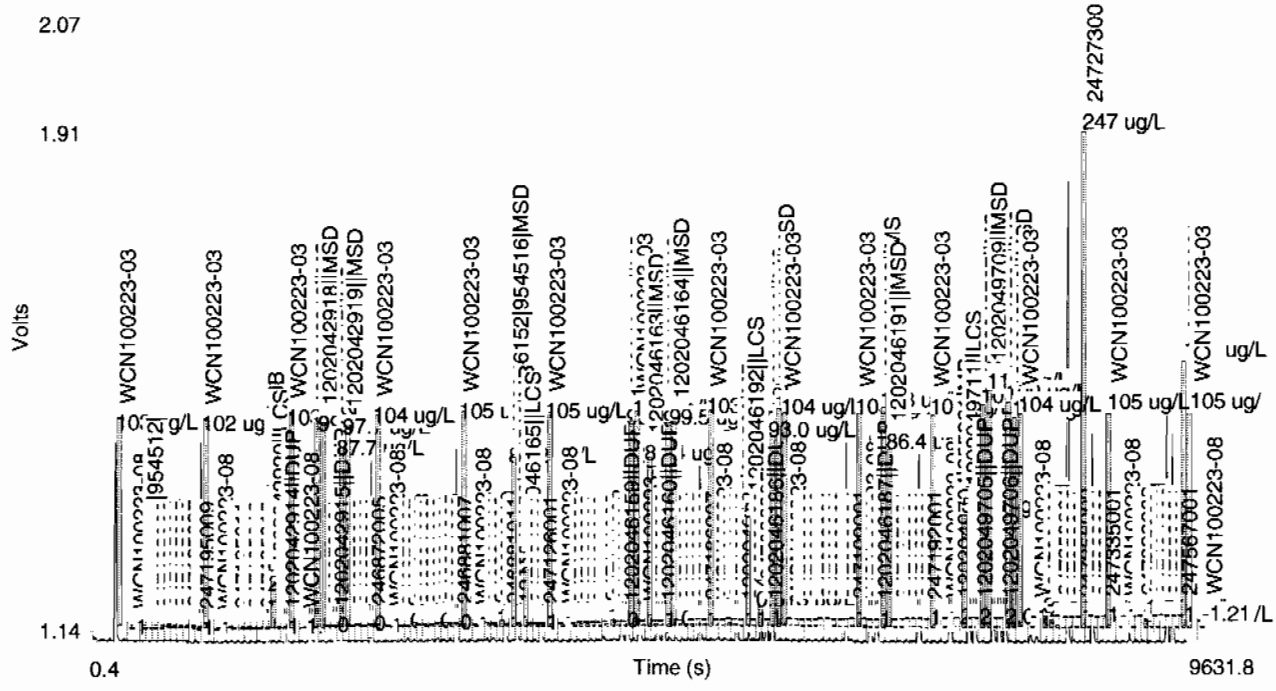
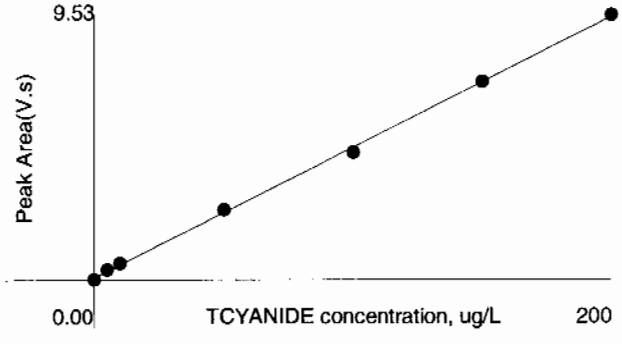


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.53	0.622	-0.6	2/23/2010	10:08:00
2	150	1	7.13	0.468	-0.1	2/23/2010	10:08:52
3	100	1	4.60	0.301	3.8	2/23/2010	10:09:44
4	50.0	1	2.53	0.167	-3.7	2/23/2010	10:10:37
5	10.0	1	0.617	0.0399	-8.7	2/23/2010	10:11:31
6	5.00	1	0.385	0.0238	-15.5	2/23/2010	10:12:24
7	0.00	1	0.0245	0.00128		2/23/2010	10:13:19

Figure 1: TCYANIDE



Area = 0.0468 * Conc + 0.0994
Conc = 21.3 * Area - 2.07
Correlation Coefficient (r) = 0.99966

No Weighting

General Chemistry Analysis

Case Narrative

General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1861-1

Method/Analysis Information

Product:	**Cyanide, Total**		
Analytical Batch:	954529	**Method:**	SW9012A Cyanide and Total
Prep Batch :	954526	**Method:**	SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247182001	RE15-10-8087
1202046185	Method Blank (MB)
1202046186	247036005(CASA-10-9470) Sample Duplicate (DUP)
1202046187	247109002(RE16-10-13118) Sample Duplicate (DUP)
1202046188	247036005(CASA-10-9470) Matrix Spike (MS)
1202046189	247109002(RE16-10-13118) Matrix Spike (MS)
1202046190	247036005(CASA-10-9470) Matrix Spike Duplicate (MSD)
1202046191	247109002(RE16-10-13118) Matrix Spike Duplicate (MSD)
1202046192	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: 247036005 (CASA-10-9470) and 247109002 (RE16-10-13118).

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 relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable. 1202046189 (RE16-10-13118) and 1202046191 (RE16-10-13118).

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. 1202046186 (CASA-10-9470).

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
The following DER was generated for this SDG: 794787 1202046189 (RE16-10-13118) and 1202046191 (RE16-10-13118).

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: 13Mar10

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: 10-1861-1 GEL Work Order: 247182

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, Rm111
Los Alamos, New Mexico 87545
Contact: Ms. Joylene Valdez
Project: **LANL ER Project**

Report Date: March 9, 2010

Client SDG: 10-1861-1

Client Sample ID: RE15-10-8087
Sample ID: 247182001
Matrix: W
Collect Date: 10-FEB-10 12:00
Receive Date: 16-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	AnalystDate	Time	Batch	Method
Flow Injection Analysis										
SW9012A Cyanide, Total "As Received"										
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2 02/23/10	1317	954529	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	02/22/10	1346	954526

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: March 9, 2010

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

Contact: Ms. Joylene Valdez

Workorder: 247182

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date Time
Flow Injection Analysis										
Batch 954529										
QC1202046186 247036005 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A			AXC2	02/23/10 12:56
QC1202046187 247109002 DUP										
Cyanide, Total	U	ND	U	ND	ug/L	N/A				02/23/10 13:12
QC1202046192 LCS										
Cyanide, Total	50.0			52.8	ug/L		106	(90%-110%)		02/23/10 12:53
QC1202046185 MB										
Cyanide, Total			U	5.00	ug/L					02/23/10 12:52
QC1202046188 247036005 MS										
Cyanide, Total	100 U	ND		93.0	ug/L		92.5	(60%-144%)		02/23/10 12:57
QC1202046189 247109002 MS										
Cyanide, Total	100 U	ND		108	ug/L		108	(60%-144%)		02/23/10 13:13
QC1202046190 247036005 MSD										
Cyanide, Total	100 U	ND		105	ug/L	12.1	104	(0%-20%)		02/23/10 12:58
QC1202046191 247109002 MSD										
Cyanide, Total	100 U	ND		86.4	ug/L	22.2*	86.4	(0%-20%)		02/23/10 13:14

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.

QC Summary

Workorder: 247182

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: 09-MAR-2010 08:51

GEL Laboratories LLC
Contract: LANL01004
SDG #: 10-1861-1

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	**23-FEB-2010 10:14:06**	**OM_2-23-2010_10-03-36**	**149**	**150**	**99.3**	**(90%-110%)**	**Yes**
CCV	23-FEB-2010 12:48:19	OM_2-23-2010_11-19-05	103	100	103	(90%-110%)	Yes
CCV	23-FEB-2010 12:59:01	OM_2-23-2010_11-19-05	104	100	104	(90%-110%)	Yes
CCV	23-FEB-2010 13:09:50	OM_2-23-2010_11-19-05	103	100	103	(90%-110%)	Yes
CCV	23-FEB-2010 13:20:35	OM_2-23-2010_11-19-05	104	100	104	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	**23-FEB-2010 10:15:57**	**OM_2-23-2010_10-03-36**	**-1.34**	**10**	**Yes**
CCB	23-FEB-2010 12:49:13	OM_2-23-2010_11-19-05	-1.16	10	Yes
CCB	23-FEB-2010 12:59:56	OM_2-23-2010_11-19-05	-1.46	10	Yes
CCB	23-FEB-2010 13:10:44	OM_2-23-2010_11-19-05	-0.806	10	Yes
CCB	23-FEB-2010 13:22:26	OM_2-23-2010_11-19-05	-1.39	10	Yes

Cyanide, Total

Prep LogBook

Analyst: AXS5 Verified by:_____

Batch: 954526

Lab SOP: GL-GC-E-067 REV# 13

Type	Sample Id	Lot. Id	Spike Amount	Spike Units
LCS	1202046192	URF1269274-02	.0125	mL
MS	1202046188	URF1269274-02	.025	mL
MS	1202046189	URF1269274-02	.025	mL
MSD	1202046190	URF1269274-02	.025	mL
MSD	1202046191	URF1269274-02	.025	mL

Sample Type	Sample ID	Parent Sample ID	Method	Prep Date	Ph	Initial Wt.	Final Volume	Prep Factor	Matrix
MB	1202046185		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
LCS	1202046192		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	246983002		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247036005		EPA 335.4	22-FEB-2010 13:46	>12	25 mL	25 mL	1	GROUND WATER
DUP	1202046186	247036005	EPA 335.4	22-FEB-2010 13:46	>12	25 mL	25 mL	1	GROUND WATER
MS	1202046188	247036005	EPA 335.4	22-FEB-2010 13:46	>12	25 mL	25 mL	1	GROUND WATER
MSD	1202046190	247036005	EPA 335.4	22-FEB-2010 13:46	>12	25 mL	25 mL	1	GROUND WATER
SAMPLE	247039001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247039002		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247039003		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247039004		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247092001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247098001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247098002		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247098003		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247098004		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247109001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247109002		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
DUP	1202046187	247109002	SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
MS	1202046189	247109002	SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
MSD	1202046191	247109002	SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247127001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247139001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247179001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247182001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247183001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER
SAMPLE	247192001		SW846 9010B Prep	22-FEB-2010 13:46	>12	25 mL	25 mL	1	WATER

Prep LogBook

Reagent/Solvent Lot ID	Amount	Description	Comments
100210-C	25 mL	0.25N Sodium Hydroxide Solution	
WCN100222-07	.0375 mL	150 ppb CN Distilled ICV Standard	
1270663-C	1.25 mL	0.8N H3NO3S	
1260189-C	2.5 mL	50% H2SO4 CN Prep	
1270669-C	1 mL	51% MgCl2 Soln	
1270661-C	1.25 mL	Bismuth Nitrate Solution	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	2/23/2010 10:06:57	OM_2-23-2010_10-03-36
150 ppb		1	axc2	2/23/2010 10:07:49	OM_2-23-2010_10-03-36
100 ppb		1	axc2	2/23/2010 10:08:41	OM_2-23-2010_10-03-36
50 ppb		1	axc2	2/23/2010 10:09:34	OM_2-23-2010_10-03-36
10 ppb		1	axc2	2/23/2010 10:10:28	OM_2-23-2010_10-03-36
CRDL 5.0 ppb		1	axc2	2/23/2010 10:11:21	OM_2-23-2010_10-03-36
ICAL-00		1	axc2	2/23/2010 10:12:16	OM_2-23-2010_10-03-36
ICV		1	axc2	2/23/2010 10:14:06	OM_2-23-2010_10-03-36
ICB		1	axc2	2/23/2010 10:15:57	OM_2-23-2010_10-03-36
CRDL		1	axc2	2/23/2010 10:17:46	OM_2-23-2010_10-03-36
1202046146	954516	1	axc2	2/23/2010 10:19:36	OM_2-23-2010_10-03-36
1202046153	954516	25	axc2	2/23/2010 10:20:29	OM_2-23-2010_10-03-36
247172001	954516	1	axc2	2/23/2010 10:21:22	OM_2-23-2010_10-03-36
1202046147	954516	1	axc2	2/23/2010 10:22:15	OM_2-23-2010_10-03-36
1202046149	954516	1	axc2	2/23/2010 10:23:08	OM_2-23-2010_10-03-36
1202046151	954516	1	axc2	2/23/2010 10:24:01	OM_2-23-2010_10-03-36
247172002	954516	1	axc2	2/23/2010 10:24:54	OM_2-23-2010_10-03-36
1202046148	954516	1	axc2	2/23/2010 10:25:46	OM_2-23-2010_10-03-36
1202046150	954516	1	axc2	2/23/2010 10:26:38	OM_2-23-2010_10-03-36
1202046152*	954516	1	axc2	2/23/2010 10:27:31	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:28:23	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:30:13	OM_2-23-2010_10-03-36
247178001	954516	1	axc2	2/23/2010 10:32:01	OM_2-23-2010_10-03-36
247178002	954516	1	axc2	2/23/2010 10:32:53	OM_2-23-2010_10-03-36
247178003	954516	1	axc2	2/23/2010 10:33:45	OM_2-23-2010_10-03-36
247178004	954516	1	axc2	2/23/2010 10:34:37	OM_2-23-2010_10-03-36
247178005	954516	1	axc2	2/23/2010 10:35:28	OM_2-23-2010_10-03-36
247178006	954516	1	axc2	2/23/2010 10:36:22	OM_2-23-2010_10-03-36
247178007	954516	1	axc2	2/23/2010 10:37:16	OM_2-23-2010_10-03-36
247178008	954516	1	axc2	2/23/2010 10:38:10	OM_2-23-2010_10-03-36
247178009	954516	1	axc2	2/23/2010 10:39:03	OM_2-23-2010_10-03-36
247178010	954516	1	axc2	2/23/2010 10:39:56	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:40:48	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:42:39	OM_2-23-2010_10-03-36
247178011	954516	1	axc2	2/23/2010 10:44:28	OM_2-23-2010_10-03-36
247181001	954516	1	axc2	2/23/2010 10:45:20	OM_2-23-2010_10-03-36
247181002	954516	1	axc2	2/23/2010 10:46:14	OM_2-23-2010_10-03-36
247187001	954516	1	axc2	2/23/2010 10:47:06	OM_2-23-2010_10-03-36
247187002	954516	1	axc2	2/23/2010 10:47:58	OM_2-23-2010_10-03-36
247187003	954516	1	axc2	2/23/2010 10:48:51	OM_2-23-2010_10-03-36
247197001	954516	1	axc2	2/23/2010 10:49:43	OM_2-23-2010_10-03-36
247197002	954516	1	axc2	2/23/2010 10:50:35	OM_2-23-2010_10-03-36
1202046124	954512	1	axc2	2/23/2010 10:51:27	OM_2-23-2010_10-03-36
1202046131	954512	25	axc2	2/23/2010 10:52:19	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 10:53:12	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 10:55:01	OM_2-23-2010_10-03-36
247108001	954512	1	axc2	2/23/2010 10:56:52	OM_2-23-2010_10-03-36
1202046125	954512	1	axc2	2/23/2010 10:57:45	OM_2-23-2010_10-03-36
1202046127	954512	1	axc2	2/23/2010 10:58:39	OM_2-23-2010_10-03-36
1202046129	954512	1	axc2	2/23/2010 10:59:32	OM_2-23-2010_10-03-36
247108002	954512	1	axc2	2/23/2010 11:00:25	OM_2-23-2010_10-03-36
1202046126	954512	1	axc2	2/23/2010 11:01:19	OM_2-23-2010_10-03-36
1202046128	954512	1	axc2	2/23/2010 11:02:11	OM_2-23-2010_10-03-36
1202046130	954512	1	axc2	2/23/2010 11:03:05	OM_2-23-2010_10-03-36
247108003	954512	1	axc2	2/23/2010 11:03:58	OM_2-23-2010_10-03-36
247108004	954512	1	axc2	2/23/2010 11:04:50	OM_2-23-2010_10-03-36
CCV		1	axc2	2/23/2010 11:05:42	OM_2-23-2010_10-03-36
CCB		1	axc2	2/23/2010 11:07:33	OM_2-23-2010_10-03-36

247108005*	954512	1	axc2	2/23/2010	11:09:22 OM_2-23-2010_10-03-36
247195001*	954512	1	axc2	2/23/2010	11:10:14 OM_2-23-2010_10-03-36
247195002*	954512	1	axc2	2/23/2010	11:11:05 OM_2-23-2010_10-03-36

Author: axc2 Date : 2/23/2010

Original Run Filename: OM_2-23-2010_10-03-36.OMN created 2/23/2010 10:03:36
Original Run Author's Signature: [axc2]
Current Run Filename: OM_2-23-2010_10-03-36.OMN last modified 2/23/2010 11:12:14
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 Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100223-01	1	S1	200	9.53	2/23/2010@10:06:57			200 ppb
WCN100223-02	1	S2	150	7.13	2/23/2010@10:07:49			150 ppb
WCN100223-03	1	S3	100	4.60	2/23/2010@10:08:41			100 ppb
WCN100223-04	1	S4	50.0	2.53	2/23/2010@10:09:34			50 ppb
WCN100223-05	1	S5	10.0	0.617	2/23/2010@10:10:28			10 ppb
WCN100223-06	1	S6	5.00	0.385	2/23/2010@10:11:21			CRDL 5.0 ppb
WCN100223-08	1	S7	0.00	0.0245	2/23/2010@10:12:16			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
		Result:	0.99966 > 0.99500					
		Message	Pass					
		Action	Continue					
WCN100223-07	1	S8	149	7.09	2/23/2010@10:14:06			ICV
		Known Conc:	150					
DQM Test: > + Percent Relative Difference								
		Result:	-0.5 < 10.0					
		Message	ICV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	-0.5 < 10.0					
		Message	ICV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100223-08	1	S7	-1.34	0.0341	2/23/2010@10:15:57			ICB/CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.34 < 5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.34 > -5.01					
		Message	ICB/CCB Passed					
		Action	Continue					
WCN100223-06	1	S6	6.77	0.414	2/23/2010@10:17:46			CRDL
		Known Conc:	5.00					
DQM Test: > + Concentration Limit								
		Result:	6.77 < 7.50					
		Message	CRDL Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	6.77 > 2.50					
		Message	Pass					
		Action	None					
1202046146|954516|MB	1	1	-1.30	0.0360	2/23/2010@10:19:36			
1202046153||LCS	1	2	20.1	1.04	2/23/2010@10:20:29		25.00	
247172001	1	3	-1.33	0.0345	2/23/2010@10:21:22			
1202046147||DUP	1	4	-1.25	0.0384	2/23/2010@10:22:15			
1202046149||MS	1	5	98.6	4.72	2/23/2010@10:23:08			
1202046151||MSD	1	6	101	4.82	2/23/2010@10:24:01			
247172002	1	7	-0.836	0.0578	2/23/2010@10:24:54			
1202046148||DUP	1	8	-1.14	0.0437	2/23/2010@10:25:46			
1202046150||MS	1	9	107	5.10	2/23/2010@10:26:38			
1202046152||MSD	1	10	69.8	3.37	2/23/2010@10:27:31			
WCN100223-03	1	S3	103	4.93	2/23/2010@10:28:23			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.0 < 10.0					

		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.0 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.28	0.0369	2/23/2010@10:30:13			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.28 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.28 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247178001	1	11	-1.02	0.0494	2/23/2010@10:32:01			
247178002	1	12	-1.24	0.0391	2/23/2010@10:32:53			
247178003	1	13	-0.195	0.0879	2/23/2010@10:33:45			
247178004	1	14	-1.18	0.0420	2/23/2010@10:34:37			
247178005	1	15	-1.20	0.0409	2/23/2010@10:35:28			
247178006	1	16	-0.310	0.0825	2/23/2010@10:36:22			
247178007	1	17	-0.592	0.0693	2/23/2010@10:37:16			
247178008	1	18	1.40	0.162	2/23/2010@10:38:10			
247178009	1	19	0.677	0.129	2/23/2010@10:39:03			
247178010	1	20	-0.578	0.0699	2/23/2010@10:39:56			
WCN100223-03	1	S3	104	4.96	2/23/2010@10:40:48			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	3.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	3.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.27	0.0375	2/23/2010@10:42:39			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.27 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.27 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247178011	1	21	-1.34	0.0342	2/23/2010@10:44:28			
247181001	1	22	-1.33	0.0348	2/23/2010@10:45:20			
247181002	1	23	-0.741	0.0623	2/23/2010@10:46:14			
247187001	1	24	-1.57	0.0236	2/23/2010@10:47:06			
247187002	1	25	-1.22	0.0399	2/23/2010@10:47:58			
247187003	1	26	-1.40	0.0315	2/23/2010@10:48:51			
247197001	1	27	-1.38	0.0323	2/23/2010@10:49:43			
247197002	1	28	-1.11	0.0450	2/23/2010@10:50:35			
1202046124|954512|MB	1	29	-1.30	0.0361	2/23/2010@10:51:27			
1202046131||LCS	1	30	16.8	0.885	2/23/2010@10:52:19		25.00	
WCN100223-03	1	S3	104	4.98	2/23/2010@10:53:12			CCV
		Known Conc:	100					
		DQM Test: > + Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.30	0.0362	2/23/2010@10:55:01			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit								
		Result:	-1.30 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.30 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247108001	1	31	-1.09	0.0462	2/23/2010@10:56:52			
1202046125||DUP	1	32	-1.54	0.0247	2/23/2010@10:57:45			
1202046127||MS	1	33	81.1	3.90	2/23/2010@10:58:39			
1202046129||MSD	1	34	98.3	4.70	2/23/2010@10:59:32			
247108002	1	35	-1.05	0.0481	2/23/2010@11:00:25			
1202046126||DUP	1	36	-0.928	0.0536	2/23/2010@11:01:19			
1202046128||MS	1	37	95.0	4.55	2/23/2010@11:02:11			
1202046130||MSD	1	38	88.6	4.25	2/23/2010@11:03:05			
247108003	1	39	-1.15	0.0430	2/23/2010@11:03:58			
247108004	1	40	-1.94	0.00601	2/23/2010@11:04:50			
WCN100223-03	1	S3	104	4.96	2/23/2010@11:05:42			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	3.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	3.8 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.19	0.0415	2/23/2010@11:07:33			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.19 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.19 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247108005	1	41	-2.02	0.00232	2/23/2010@11:09:22			
247195001	1	42	-1.60	0.0222	2/23/2010@11:10:14			
247195002	1	43	-1.50	0.0270	2/23/2010@11:11:05			

Analyte Properties Table for OM_2-23-2010_10-03-36.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration 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

Author: axc2 Date : 2/23/2010

Channel 1: Current View

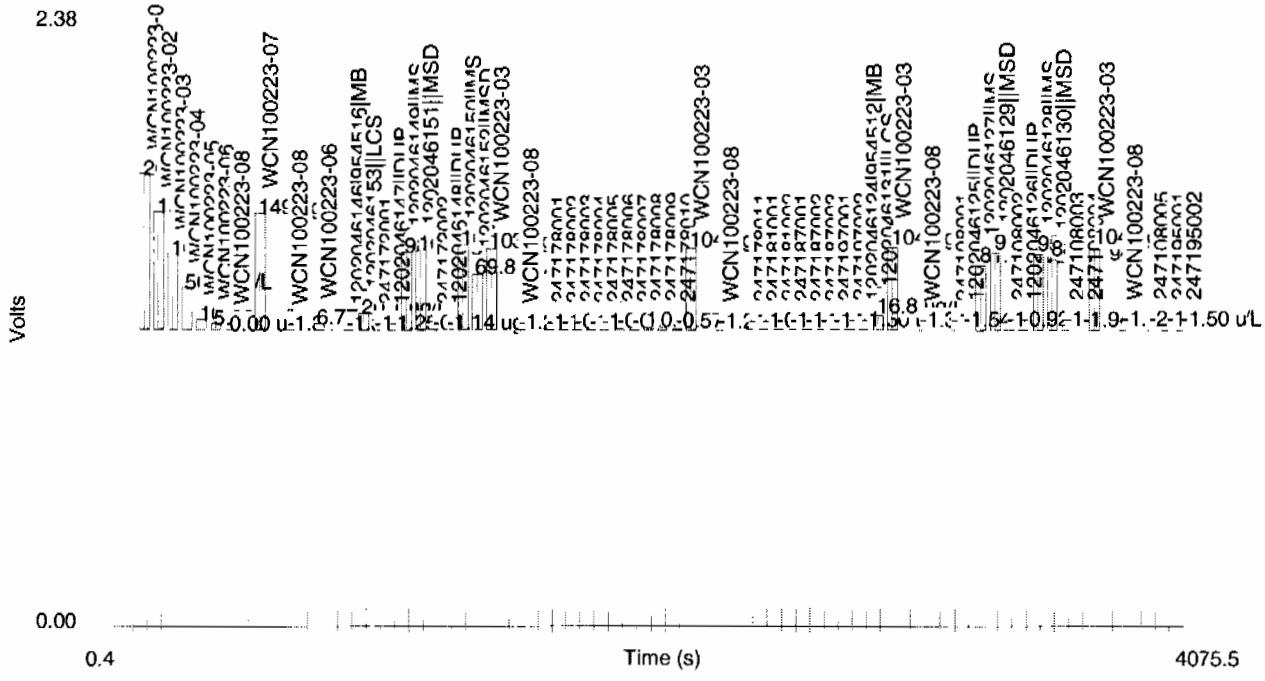
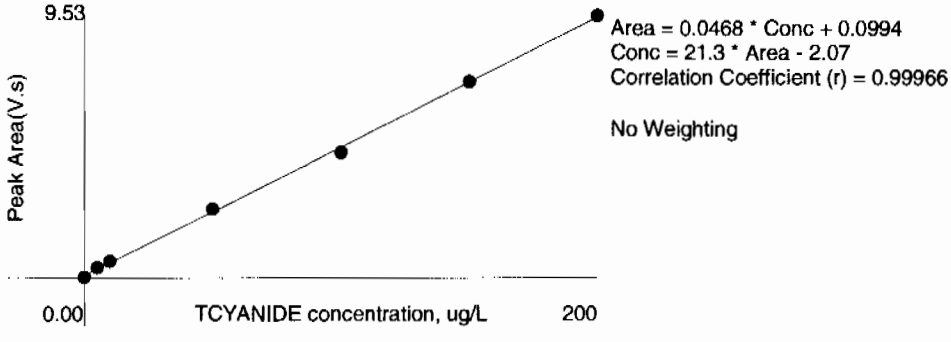


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.53	0.622	-0.6	2/23/2010	10:08:00
2	150	1	7.13	0.468	-0.1	2/23/2010	10:08:52
3	100	1	4.60	0.301	3.8	2/23/2010	10:09:44
4	50.0	1	2.53	0.167	-3.7	2/23/2010	10:10:37
5	10.0	1	0.617	0.0399	-8.7	2/23/2010	10:11:31
6	5.00	1	0.385	0.0238	-15.5	2/23/2010	10:12:24
7	0.00	1	0.0245	0.00128		2/23/2010	10:13:19

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	2/23/2010 11:22:28	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:24:18	OM_2-23-2010_11-19-05
247108005	954512	1	axc2	2/23/2010 11:26:07	OM_2-23-2010_11-19-05
247195001	954512	1	axc2	2/23/2010 11:26:59	OM_2-23-2010_11-19-05
247195002	954512	1	axc2	2/23/2010 11:27:51	OM_2-23-2010_11-19-05
247195003	954512	1	axc2	2/23/2010 11:28:44	OM_2-23-2010_11-19-05
247195004	954512	1	axc2	2/23/2010 11:29:35	OM_2-23-2010_11-19-05
247195005	954512	1	axc2	2/23/2010 11:30:30	OM_2-23-2010_11-19-05
247195006	954512	1	axc2	2/23/2010 11:31:24	OM_2-23-2010_11-19-05
247195007	954512	1	axc2	2/23/2010 11:32:17	OM_2-23-2010_11-19-05
247195008	954512	1	axc2	2/23/2010 11:33:11	OM_2-23-2010_11-19-05
247195009	954512	1	axc2	2/23/2010 11:34:05	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:34:57	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:36:48	OM_2-23-2010_11-19-05
247195010	954512	1	axc2	2/23/2010 11:38:37	OM_2-23-2010_11-19-05
247195011	954512	1	axc2	2/23/2010 11:39:30	OM_2-23-2010_11-19-05
247195012	954512	1	axc2	2/23/2010 11:40:23	OM_2-23-2010_11-19-05
247195013	954512	1	axc2	2/23/2010 11:41:16	OM_2-23-2010_11-19-05
247195014	954512	1	axc2	2/23/2010 11:42:09	OM_2-23-2010_11-19-05
247195015	954512	1	axc2	2/23/2010 11:43:02	OM_2-23-2010_11-19-05
1202042913	953106	1	axc2	2/23/2010 11:43:55	OM_2-23-2010_11-19-05
1202042920	953106	25	axc2	2/23/2010 11:44:47	OM_2-23-2010_11-19-05
246870010	953106	1	axc2	2/23/2010 11:45:39	OM_2-23-2010_11-19-05
1202042914	953106	1	axc2	2/23/2010 11:46:31	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:47:23	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 11:49:13	OM_2-23-2010_11-19-05
1202042916	953106	1	axc2	2/23/2010 11:51:03	OM_2-23-2010_11-19-05
1202042918	953106	1	axc2	2/23/2010 11:51:57	OM_2-23-2010_11-19-05
246872001	953106	1	axc2	2/23/2010 11:52:52	OM_2-23-2010_11-19-05
1202042915	953106	1	axc2	2/23/2010 11:53:45	OM_2-23-2010_11-19-05
1202042917	953106	1	axc2	2/23/2010 11:54:39	OM_2-23-2010_11-19-05
1202042919	953106	1	axc2	2/23/2010 11:55:33	OM_2-23-2010_11-19-05
246872002	953106	1	axc2	2/23/2010 11:56:26	OM_2-23-2010_11-19-05
246872003	953106	1	axc2	2/23/2010 11:57:19	OM_2-23-2010_11-19-05
246872004	953106	1	axc2	2/23/2010 11:58:12	OM_2-23-2010_11-19-05
246872005	953106	1	axc2	2/23/2010 11:59:05	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 11:59:57	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 12:01:48	OM_2-23-2010_11-19-05
246872006	953106	1	axc2	2/23/2010 12:03:37	OM_2-23-2010_11-19-05
246872007	953106	1	axc2	2/23/2010 12:04:30	OM_2-23-2010_11-19-05
246872008	953106	1	axc2	2/23/2010 12:05:22	OM_2-23-2010_11-19-05
246881001	953106	1	axc2	2/23/2010 12:06:14	OM_2-23-2010_11-19-05
246881002	953106	1	axc2	2/23/2010 12:07:07	OM_2-23-2010_11-19-05
246881003	953106	1	axc2	2/23/2010 12:08:01	OM_2-23-2010_11-19-05
246881004	953106	1	axc2	2/23/2010 12:08:55	OM_2-23-2010_11-19-05
246881005	953106	1	axc2	2/23/2010 12:09:49	OM_2-23-2010_11-19-05
246881006	953106	1	axc2	2/23/2010 12:10:43	OM_2-23-2010_11-19-05
246881007	953106	1	axc2	2/23/2010 12:11:37	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010 12:12:29	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010 12:14:20	OM_2-23-2010_11-19-05
246881008	953106	1	axc2	2/23/2010 12:16:10	OM_2-23-2010_11-19-05
246881009	953106	1	axc2	2/23/2010 12:17:03	OM_2-23-2010_11-19-05
246881010	953106	1	axc2	2/23/2010 12:17:56	OM_2-23-2010_11-19-05
246881011	953106	1	axc2	2/23/2010 12:18:49	OM_2-23-2010_11-19-05
1202046152	954516	1	axc2	2/23/2010 12:19:42	OM_2-23-2010_11-19-05
1202046158	954519	1	axc2	2/23/2010 12:20:35	OM_2-23-2010_11-19-05
1202046165	954519	25	axc2	2/23/2010 12:21:28	OM_2-23-2010_11-19-05
247084001	954519	1	axc2	2/23/2010 12:22:20	OM_2-23-2010_11-19-05

247084002	954519	1	axc2	2/23/2010	12:23:13	OM_2-23-2010_11-19-05
247126001	954519	1	axc2	2/23/2010	12:24:06	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:24:58	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:26:48	OM_2-23-2010_11-19-05
247126002	954519	1	axc2	2/23/2010	12:28:37	OM_2-23-2010_11-19-05
247126003	954519	1	axc2	2/23/2010	12:29:32	OM_2-23-2010_11-19-05
247136001	954519	1	axc2	2/23/2010	12:30:26	OM_2-23-2010_11-19-05
247136002	954519	1	axc2	2/23/2010	12:31:21	OM_2-23-2010_11-19-05
247141001	954519	1	axc2	2/23/2010	12:32:16	OM_2-23-2010_11-19-05
247141002	954519	1	axc2	2/23/2010	12:33:09	OM_2-23-2010_11-19-05
247141003	954519	1	axc2	2/23/2010	12:34:03	OM_2-23-2010_11-19-05
247186001	954519	1	axc2	2/23/2010	12:34:58	OM_2-23-2010_11-19-05
1202046159	954519	1	axc2	2/23/2010	12:35:51	OM_2-23-2010_11-19-05
1202046161	954519	1	axc2	2/23/2010	12:36:44	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:37:37	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:38:31	OM_2-23-2010_11-19-05
1202046163	954519	1	axc2	2/23/2010	12:39:24	OM_2-23-2010_11-19-05
247186002	954519	1	axc2	2/23/2010	12:40:17	OM_2-23-2010_11-19-05
1202046160	954519	1	axc2	2/23/2010	12:41:10	OM_2-23-2010_11-19-05
1202046162	954519	1	axc2	2/23/2010	12:42:03	OM_2-23-2010_11-19-05
1202046164	954519	1	axc2	2/23/2010	12:42:55	OM_2-23-2010_11-19-05
247186003	954519	1	axc2	2/23/2010	12:43:49	OM_2-23-2010_11-19-05
247186004	954519	1	axc2	2/23/2010	12:44:43	OM_2-23-2010_11-19-05
247186005	954519	1	axc2	2/23/2010	12:45:38	OM_2-23-2010_11-19-05
247186006	954519	1	axc2	2/23/2010	12:46:32	OM_2-23-2010_11-19-05
247186007	954519	1	axc2	2/23/2010	12:47:26	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:48:19	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:49:13	OM_2-23-2010_11-19-05
247186008	954519	1	axc2	2/23/2010	12:50:07	OM_2-23-2010_11-19-05
247186009	954519	1	axc2	2/23/2010	12:51:01	OM_2-23-2010_11-19-05
247186010	954519	1	axc2	2/23/2010	12:51:56	OM_2-23-2010_11-19-05
1202046185	954529	1	axc2	2/23/2010	12:52:50	OM_2-23-2010_11-19-05
1202046192	954529	1	axc2	2/23/2010	12:53:43	OM_2-23-2010_11-19-05
246983002	954529	1	axc2	2/23/2010	12:54:37	OM_2-23-2010_11-19-05
247036005	954529	1	axc2	2/23/2010	12:55:30	OM_2-23-2010_11-19-05
1202046186	954529	1	axc2	2/23/2010	12:56:23	OM_2-23-2010_11-19-05
1202046188	954529	1	axc2	2/23/2010	12:57:17	OM_2-23-2010_11-19-05
1202046190	954529	1	axc2	2/23/2010	12:58:09	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	12:59:01	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	12:59:56	OM_2-23-2010_11-19-05
247039001	954529	1	axc2	2/23/2010	13:00:48	OM_2-23-2010_11-19-05
247039002	954529	1	axc2	2/23/2010	13:01:43	OM_2-23-2010_11-19-05
247039003	954529	1	axc2	2/23/2010	13:02:39	OM_2-23-2010_11-19-05
247039004	954529	1	axc2	2/23/2010	13:03:33	OM_2-23-2010_11-19-05
247092001	954529	1	axc2	2/23/2010	13:04:27	OM_2-23-2010_11-19-05
247098001	954529	1	axc2	2/23/2010	13:05:21	OM_2-23-2010_11-19-05
247098002	954529	1	axc2	2/23/2010	13:06:15	OM_2-23-2010_11-19-05
247098003	954529	1	axc2	2/23/2010	13:07:10	OM_2-23-2010_11-19-05
247098004	954529	1	axc2	2/23/2010	13:08:04	OM_2-23-2010_11-19-05
247109001	954529	1	axc2	2/23/2010	13:08:58	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:09:50	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:10:44	OM_2-23-2010_11-19-05
247109002	954529	1	axc2	2/23/2010	13:11:38	OM_2-23-2010_11-19-05
1202046187	954529	1	axc2	2/23/2010	13:12:31	OM_2-23-2010_11-19-05
1202046189	954529	1	axc2	2/23/2010	13:13:25	OM_2-23-2010_11-19-05
1202046191	954529	1	axc2	2/23/2010	13:14:18	OM_2-23-2010_11-19-05
247127001	954529	1	axc2	2/23/2010	13:15:11	OM_2-23-2010_11-19-05
247139001	954529	1	axc2	2/23/2010	13:16:04	OM_2-23-2010_11-19-05
247179001	954529	1	axc2	2/23/2010	13:16:59	OM_2-23-2010_11-19-05
247182001	954529	1	axc2	2/23/2010	13:17:54	OM_2-23-2010_11-19-05

247183001	954529	1	axc2	2/23/2010	13:18:48	OM_2-23-2010_11-19-05
247192001	954529	1	axc2	2/23/2010	13:19:43	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:20:35	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:22:26	OM_2-23-2010_11-19-05
1202049704	955981	1	axc2	2/23/2010	13:24:16	OM_2-23-2010_11-19-05
1202049711	955981	1	axc2	2/23/2010	13:25:10	OM_2-23-2010_11-19-05
246941002	955981	1	axc2	2/23/2010	13:26:05	OM_2-23-2010_11-19-05
1202049705	955981	1	axc2	2/23/2010	13:26:59	OM_2-23-2010_11-19-05
1202049707	955981	1	axc2	2/23/2010	13:27:53	OM_2-23-2010_11-19-05
1202049709	955981	1	axc2	2/23/2010	13:28:47	OM_2-23-2010_11-19-05
247203001	955981	1	axc2	2/23/2010	13:29:41	OM_2-23-2010_11-19-05
1202049706	955981	1	axc2	2/23/2010	13:30:34	OM_2-23-2010_11-19-05
1202049708	955981	1	axc2	2/23/2010	13:31:28	OM_2-23-2010_11-19-05
1202049710	955981	1	axc2	2/23/2010	13:32:21	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:33:13	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:35:03	OM_2-23-2010_11-19-05
247204001	955981	1	axc2	2/23/2010	13:36:52	OM_2-23-2010_11-19-05
247244001	955981	1	axc2	2/23/2010	13:37:47	OM_2-23-2010_11-19-05
247250001	955981	1	axc2	2/23/2010	13:38:42	OM_2-23-2010_11-19-05
247250002	955981	1	axc2	2/23/2010	13:39:37	OM_2-23-2010_11-19-05
247256001	955981	1	axc2	2/23/2010	13:40:32	OM_2-23-2010_11-19-05
247256002	955981	1	axc2	2/23/2010	13:41:27	OM_2-23-2010_11-19-05
247273001	955981	1	axc2	2/23/2010	13:42:22	OM_2-23-2010_11-19-05
247322001	955981	1	axc2	2/23/2010	13:43:15	OM_2-23-2010_11-19-05
247322002	955981	1	axc2	2/23/2010	13:44:09	OM_2-23-2010_11-19-05
247335001	955981	1	axc2	2/23/2010	13:45:04	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:45:56	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:47:47	OM_2-23-2010_11-19-05
247339001	955981	1	axc2	2/23/2010	13:49:37	OM_2-23-2010_11-19-05
247339002	955981	1	axc2	2/23/2010	13:50:31	OM_2-23-2010_11-19-05
247350001	955981	1	axc2	2/23/2010	13:51:25	OM_2-23-2010_11-19-05
247434001	955981	1	axc2	2/23/2010	13:52:18	OM_2-23-2010_11-19-05
247434002	955981	1	axc2	2/23/2010	13:53:12	OM_2-23-2010_11-19-05
247559001	955981	1	axc2	2/23/2010	13:54:05	OM_2-23-2010_11-19-05
247560001	955981	1	axc2	2/23/2010	13:55:00	OM_2-23-2010_11-19-05
247567001	955981	1	axc2	2/23/2010	13:55:56	OM_2-23-2010_11-19-05
247273001	955981	2	axc2	2/23/2010	13:56:50	OM_2-23-2010_11-19-05
CCV		1	axc2	2/23/2010	13:57:43	OM_2-23-2010_11-19-05
CCB		1	axc2	2/23/2010	13:59:33	OM_2-23-2010_11-19-05

Author: axc2 Date : 2/23/2010

Original Run Filename: OM_2-23-2010_11-19-05.OMN created 2/23/2010 11:19:05
Original Run Author's Signature: [axc2]
Current Run Filename: OM_2-23-2010_11-19-05.OMN last modified 2/23/2010 14:00:39
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 Conc. (ug/L)	Area (Vs)	Detection Time	ADF	MDF	Description
WCN100223-03	1	S3	103	4.91	2/23/2010@11:22:28			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	2.6 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		Calibration:	Table/Fig. 1					
WCN100223-08	1	S7	-1.61	0.0215	2/23/2010@11:24:18			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.61 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.61 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247108005|954512|	1	41	-2.38	-0.0147	2/23/2010@11:26:07			
247195001	1	42	-1.98	0.00432	2/23/2010@11:26:59			
247195002	1	43	-1.72	0.0166	2/23/2010@11:27:51			
247195003	1	44	-1.17	0.0424	2/23/2010@11:28:44			
247195004	1	45	-0.745	0.0621	2/23/2010@11:29:35			
247195005	1	46	-1.28	0.0369	2/23/2010@11:30:30			
247195006	1	47	-1.56	0.0240	2/23/2010@11:31:24			
247195007	1	48	-1.45	0.0293	2/23/2010@11:32:17			
247195008	1	49	-3.33	-0.0592	2/23/2010@11:33:11			
247195009	1	50	-1.19	0.0412	2/23/2010@11:34:05			
WCN100223-03	1	S3	102	4.89	2/23/2010@11:34:57			CCV
		Known Conc:	100					
			DQM Test: > + Percent Relative Difference					
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
			DQM Test: < - Percent Relative Difference					
		Result:	2.4 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.39	0.0321	2/23/2010@11:36:48			CCB
		Known Conc:	0.00					
			DQM Test: > + Concentration Limit					
		Result:	-1.39 < 5.00					
		Message	CCB Passed					
		Action	Continue					
			DQM Test: < - Concentration Limit					
		Result:	-1.39 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247195010	1	51	-0.780	0.0605	2/23/2010@11:38:37			
247195011	1	52	-1.91	0.00734	2/23/2010@11:39:30			
247195012	1	53	-1.44	0.0298	2/23/2010@11:40:23			
247195013	1	54	-1.29	0.0368	2/23/2010@11:41:16			
247195014	1	55	-1.40	0.0315	2/23/2010@11:42:09			

247195015	1	56	-1.32	0.0351	2/23/2010@11:43:02			
1202042913|953106|MB	1	57	-1.34	0.0343	2/23/2010@11:43:55			
1202042920||LCS	1	58	20.7	1.07	2/23/2010@11:44:47		25.00	
246870010	1	59	-1.12	0.0447	2/23/2010@11:45:39			
1202042914||DUP	1	60	-1.41	0.0309	2/23/2010@11:46:31			
WCN100223-03	1	S3	103	4.94	2/23/2010@11:47:23			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		3.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		3.4 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100223-08	1	S7	-1.29	0.0368	2/23/2010@11:49:13			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.29 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.29 > -5.00					
	Message		CCB Passed					
	Action		Continue					
1202042916||MS	1	61	100	4.81	2/23/2010@11:51:03			
1202042918||MSD	1	62	99.6	4.76	2/23/2010@11:51:57			
246872001	1	63	-0.922	0.0539	2/23/2010@11:52:52			
1202042915||DUP	1	64	-0.752	0.0618	2/23/2010@11:53:45			
1202042917||MS	1	65	87.7	4.21	2/23/2010@11:54:39			
1202042919||MSD	1	66	97.7	4.67	2/23/2010@11:55:33			
246872002	1	67	-0.703	0.0641	2/23/2010@11:56:26			
246872003	1	68	-0.152	0.0899	2/23/2010@11:57:19			
246872004	1	69	-2.08	-2.27e-4	2/23/2010@11:58:12			
246872005	1	70	-0.139	0.0905	2/23/2010@11:59:05			
WCN100223-03	1	S3	104	4.98	2/23/2010@11:59:57			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100223-08	1	S7	-1.19	0.0412	2/23/2010@12:01:48			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.19 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.19 > -5.00					
	Message		CCB Passed					
	Action		Continue					
246872006	1	71	-1.15	0.0433	2/23/2010@12:03:37			
246872007	1	72	-1.05	0.0479	2/23/2010@12:04:30			
246872008	1	73	0.643	0.127	2/23/2010@12:05:22			
246881001	1	74	-2.08	-1.94e-4	2/23/2010@12:06:14			
246881002	1	75	-0.602	0.0689	2/23/2010@12:07:07			
246881003	1	76	-0.887	0.0555	2/23/2010@12:08:01			
246881004	1	77	-0.0611	0.0942	2/23/2010@12:08:55			
246881005	1	78	0.768	0.133	2/23/2010@12:09:49			
246881006	1	79	-0.774	0.0608	2/23/2010@12:10:43			
246881007	1	80	-0.623	0.0678	2/23/2010@12:11:37			
WCN100223-03	1	S3	105	5.00	2/23/2010@12:12:29			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								

		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
		DQM Test: < - Percent Relative Difference						
		Result:	4.7 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.05	0.0478	2/23/2010@12:14:20			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.05 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.05 > -5.00					
		Message	CCB Passed					
		Action	Continue					
246881008	1	81	-0.812	0.0590	2/23/2010@12:16:10			
246881009	1	82	-0.213	0.0871	2/23/2010@12:17:03			
246881010	1	83	1.65	0.174	2/23/2010@12:17:56			
246881011	1	84	-1.44	0.0294	2/23/2010@12:18:49			
1202046152|954516|MSD	1	10	82.2	3.95	2/23/2010@12:19:42			
1202046158|954519|MB	1	85	-1.23	0.0392	2/23/2010@12:20:35			
1202046165||LCS	1	86	27.6	1.39	2/23/2010@12:21:28		25.00	
247084001	1	87	-0.732	0.0627	2/23/2010@12:22:20			
247084002	1	88	-1.03	0.0489	2/23/2010@12:23:13			
247126001	1	89	-1.40	0.0313	2/23/2010@12:24:06			
WCN100223-03	1	S3	105	5.02	2/23/2010@12:24:58			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					
WCN100223-08	1	S7	-1.23	0.0392	2/23/2010@12:26:48			CCB
		Known Conc:	0.00					
		DQM Test: > + Concentration Limit						
		Result:	-1.23 < 5.00					
		Message	CCB Passed					
		Action	Continue					
		DQM Test: < - Concentration Limit						
		Result:	-1.23 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247126002	1	90	-1.37	0.0329	2/23/2010@12:28:37			
247126003	1	91	-0.806	0.0593	2/23/2010@12:29:32			
247136001	1	92	-0.846	0.0574	2/23/2010@12:30:26			
247136002	1	93	-1.49	0.0274	2/23/2010@12:31:21			
247141001	1	94	-1.44	0.0296	2/23/2010@12:32:16			
247141002	1	95	-1.10	0.0454	2/23/2010@12:33:09			
247141003	1	96	1.05	0.146	2/23/2010@12:34:03			
247186001	1	97	-1.11	0.0450	2/23/2010@12:34:58			
1202046159||DUP	1	98	-0.879	0.0558	2/23/2010@12:35:51			
1202046161||MS	1	99	99.4	4.76	2/23/2010@12:36:44			
WCN100223-03	1	S3	104	4.98	2/23/2010@12:37:37			CCV
		Known Conc:	0.00					
WCN100223-08	1	S7	-1.26	0.0382	2/23/2010@12:38:31			CCB
		Known Conc:	0.00					
1202046163||MSD	1	100	82.4	3.96	2/23/2010@12:39:24			
247186002	1	101	-0.608	0.0685	2/23/2010@12:40:17			
1202046160||DUP	1	102	-1.18	0.0415	2/23/2010@12:41:10			
1202046162||MS	1	103	99.3	4.75	2/23/2010@12:42:03			
1202046164||MSD	1	104	99.5	4.76	2/23/2010@12:42:55			
247186003	1	105	-0.780	0.0605	2/23/2010@12:43:49			
247186004	1	106	0.0465	0.0992	2/23/2010@12:44:43			

247186005	1	107	-0.959	0.0521	2/23/2010@12:45:38			
247186006	1	108	-0.485	0.0743	2/23/2010@12:46:32			
247186007	1	109	-1.06	0.0473	2/23/2010@12:47:26			
WCN100223-03	1	S3	103	4.95	2/23/2010@12:48:19			CCV
	Known Conc:		0.00					
WCN100223-08	1	S7	-1.16	0.0425	2/23/2010@12:49:13			CCB
	Known Conc:		0.00					
247186008	1	110	-1.30	0.0360	2/23/2010@12:50:07			
247186009	1	111	-0.542	0.0716	2/23/2010@12:51:01			
247186010	1	112	-0.994	0.0504	2/23/2010@12:51:56			
1202046185|954529|MB	1	113	-1.55	0.0242	2/23/2010@12:52:50			
1202046192||LCS	1	114	52.8	2.57	2/23/2010@12:53:43			
246983002	1	115	-1.39	0.0319	2/23/2010@12:54:37			
247036005	1	116	0.513	0.121	2/23/2010@12:55:30			
1202046186||DUP	1	117	-1.91	0.00766	2/23/2010@12:56:23			
1202046188||MS	1	118	93.0	4.45	2/23/2010@12:57:17			
1202046190||MSD	1	119	105	5.03	2/23/2010@12:58:09			
WCN100223-03	1	S3	104	4.96	2/23/2010@12:59:01			CCV
	Known Conc:		0.00					
WCN100223-08	1	S7	-1.46	0.0288	2/23/2010@12:59:56			CCB
	Known Conc:		0.00					
247039001	1	120	-1.15	0.0433	2/23/2010@13:00:48			
247039002	1	121	-1.35	0.0338	2/23/2010@13:01:43			
247039003	1	122	-1.24	0.0391	2/23/2010@13:02:39			
247039004	1	123	-1.49	0.0273	2/23/2010@13:03:33			
247092001	1	124	-2.07	2.59e-4	2/23/2010@13:04:27			
247098001	1	125	-2.08	-2.07e-4	2/23/2010@13:05:21			
247098002	1	126	-1.26	0.0378	2/23/2010@13:06:15			
247098003	1	127	-1.54	0.0247	2/23/2010@13:07:10			
247098004	1	128	-1.58	0.0230	2/23/2010@13:08:04			
247109001	1	129	-1.47	0.0281	2/23/2010@13:08:58			
WCN100223-03	1	S3	103	4.94	2/23/2010@13:09:50			CCV
	Known Conc:		0.00					
WCN100223-08	1	S7	-0.806	0.0593	2/23/2010@13:10:44			CCB
	Known Conc:		0.00					
247109002	1	130	-1.40	0.0315	2/23/2010@13:11:38			
1202046187||DUP	1	131	-1.64	0.0200	2/23/2010@13:12:31			
1202046189||MS	1	132	108	5.17	2/23/2010@13:13:25			
1202046191||MSD	1	133	86.4	4.14	2/23/2010@13:14:18			
247127001	1	134	-1.37	0.0327	2/23/2010@13:15:11			
247139001	1	135	-1.34	0.0342	2/23/2010@13:16:04			
247179001	1	136	-2.08	-2.07e-4	2/23/2010@13:16:59			
247182001	1	137	-1.43	0.0303	2/23/2010@13:17:54			
247183001	1	138	-1.38	0.0326	2/23/2010@13:18:48			
247192001	1	139	-1.93	0.00645	2/23/2010@13:19:43			
WCN100223-03	1	S3	104	4.98	2/23/2010@13:20:35			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
		Result:	4.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	4.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100223-08	1	S7	-1.39	0.0321	2/23/2010@13:22:26			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.39 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.39 > -5.00					
		Message	CCB Passed					
		Action	Continue					
1202049704|955981|MB	1	140	-2.06	4.71e-4	2/23/2010@13:24:16			
1202049711||LCS	1	141	54.3	2.64	2/23/2010@13:25:10			
246941002	1	142	-1.47	0.0283	2/23/2010@13:26:05			

1202049705||DUP	1	143	-2.02	0.00224	2/23/2010@13:26:59			
1202049707||MS	1	144	108	5.14	2/23/2010@13:27:53			
1202049709||MSD	1	145	115	5.47	2/23/2010@13:28:47			
247203001	1	146	-1.26	0.0380	2/23/2010@13:29:41			
1202049706||DUP	1	147	-2.03	0.00182	2/23/2010@13:30:34			
1202049708||MS	1	148	109	5.22	2/23/2010@13:31:28			
1202049710||MSD	1	149	102	4.89	2/23/2010@13:32:21			
WCN100223-03	1	S3	104	4.99	2/23/2010@13:33:13			CCV
	Known Conc:		100					
DQM Test: > + Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
DQM Test: < - Percent Relative Difference								
	Result:		4.3 < 10.0					
	Message		CCV Passed					
	Action		Continue					
WCN100223-08	1	S7	-1.25	0.0385	2/23/2010@13:35:03			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.25 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.25 > -5.00					
	Message		CCB Passed					
	Action		Continue					
247204001	1	150	3.39	0.256	2/23/2010@13:36:52			
247244001	1	151	2.20	0.200	2/23/2010@13:37:47			
247250001	1	152	-1.65	0.0198	2/23/2010@13:38:42			
247250002	1	153	-1.43	0.0302	2/23/2010@13:39:37			
247256001	1	154	-1.39	0.0317	2/23/2010@13:40:32			
247256002	1	155	-1.28	0.0369	2/23/2010@13:41:27			
247273001	1	156	247	11.7	2/23/2010@13:42:22			
247322001	1	157	-1.24	0.0389	2/23/2010@13:43:15			
247322002	1	158	-1.40	0.0314	2/23/2010@13:44:09			
247335001	1	159	-1.39	0.0318	2/23/2010@13:45:04			
WCN100223-03	1	S3	105	5.01	2/23/2010@13:45:56			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					
WCN100223-08	1	S7	-1.55	0.0242	2/23/2010@13:47:47			CCB
	Known Conc:		0.00					
DQM Test: > + Concentration Limit								
	Result:		-1.55 < 5.00					
	Message		CCB Passed					
	Action		Continue					
DQM Test: < - Concentration Limit								
	Result:		-1.55 > -5.00					
	Message		CCB Passed					
	Action		Continue					
247339001	1	160	-1.25	0.0386	2/23/2010@13:49:37			
247339002	1	161	-2.07	1.64e-4	2/23/2010@13:50:31			
247350001	1	162	1.51	0.168	2/23/2010@13:51:25			
247434001	1	163	-1.33	0.0346	2/23/2010@13:52:18			
247434002	1	164	-0.955	0.0523	2/23/2010@13:53:12			
247559001	1	165	-1.30	0.0363	2/23/2010@13:54:05			
247560001	1	166	-1.67	0.0188	2/23/2010@13:55:00			
247567001	1	167	-1.26	0.0379	2/23/2010@13:55:56			
247273001	1	156	131	6.22	2/23/2010@13:56:50		2.00	
WCN100223-03	1	S3	105	5.02	2/23/2010@13:57:43			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					
WCN100223-08	1	S7	-1.21	0.0401	2/23/2010@13:59:33			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-1.21 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-1.21 > -5.00					
		Message	CCB Passed					
		Action	Continue					

Analyte Properties Table for OM_2-23-2010_11-19-05.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Callibration 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

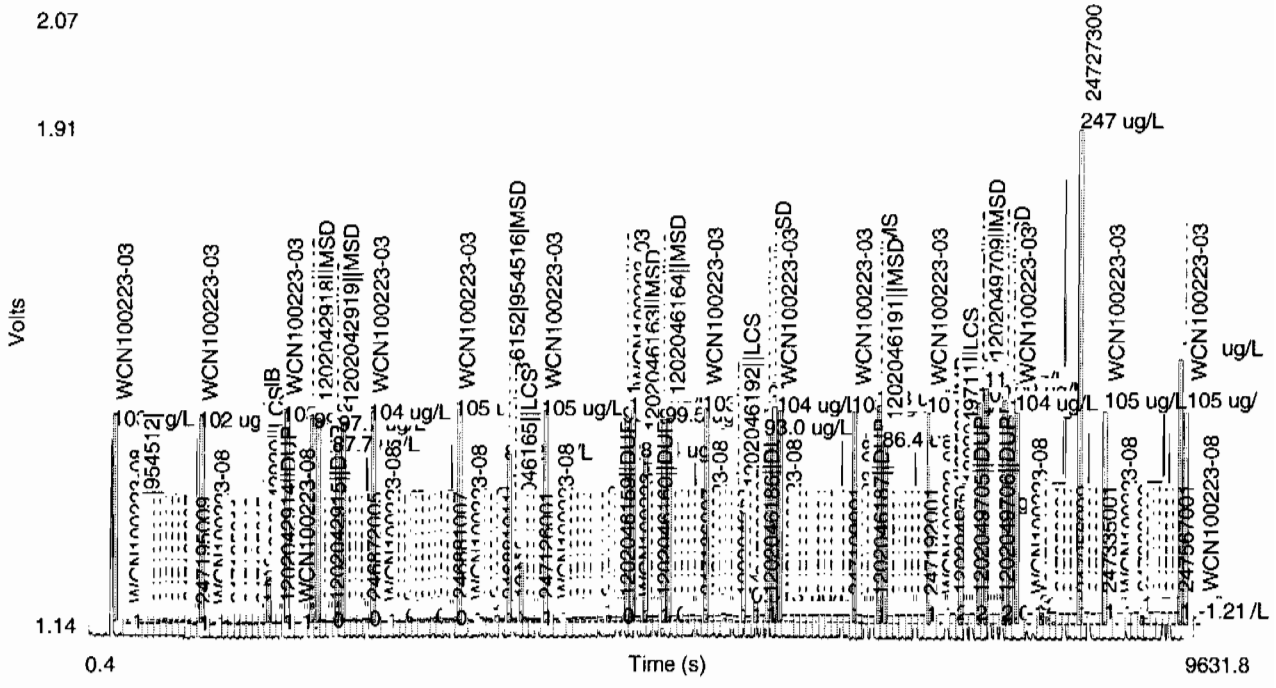
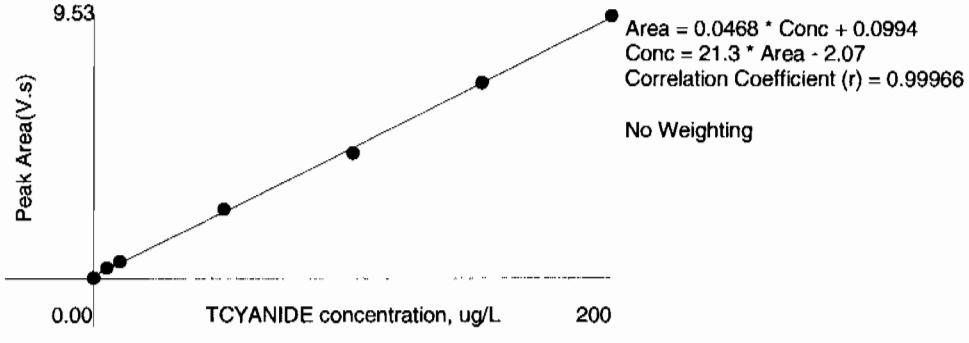


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.53	0.622	-0.6	2/23/2010	10:08:00
2	150	1	7.13	0.468	-0.1	2/23/2010	10:08:52
3	100	1	4.60	0.301	3.8	2/23/2010	10:09:44
4	50.0	1	2.53	0.167	-3.7	2/23/2010	10:10:37
5	10.0	1	0.617	0.0399	-8.7	2/23/2010	10:11:31
6	5.00	1	0.385	0.0238	-15.5	2/23/2010	10:12:24
7	0.00	1	0.0245	0.00128		2/23/2010	10:13:19

Figure 1: TCYANIDE



Miscellaneous

DATA EXCEPTION REPORT

Mo.Day Yr.	Division:	Quality Criteria:	Type:
23-FEB-10	Industrial	Specifications	Process
Instrument Type:	**Test / Method:**	**Matrix Type:**	**Client Code:**
LACHAT Flow Injection Analyzer	EPA 335.4	Liquid	ESHL, LANL
Batch ID:	**Sample Numbers:**		
954529	See Below		

Potentially affected work order(s)(SDG): 246983(10-1812-1),247036(10-1826),247039(10-1819),247092(10-1831-1),247098(10-1833-1),247109(10-1837-1),247127(10-1849-1),247139(10-1854-1),247179(10-1871),247182(10-1861-1),247183(10-1868),247192(10-1863-1)

Application Issues:

Failed RPD for MS/MSD, or PS/PSD

Specification and Requirements Exception Description:	DER Disposition:
1. Failed RPD for MS/MSD: QC 1202046189MS 1202046191MSD	1. The relative percent difference (RPD) between the Spike and Spike Duplicate was outside of the required acceptance limits. However, both the Spike and Spike Duplicate recoveries were within the required acceptance limits; therefore, the data is deemed acceptable.

Originator's Name:
Ashley Earl 23-FEB-10

Data Validator/Group Leader:
Elzbieta Szulc 05-MAR-10