

Monday, February 22, 2010

REQUEST NUMBER: 10-1973

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
SW-846:6012A	SW-846:6010B	1	RE15-10-8265	R	2/16/2010	
		1	RE15-10-8269	R	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	
		1	RE15-10-8255	R	2/16/2010	
		1	RE15-10-8256	R	2/16/2010	
		1	RE15-10-8257	R	2/16/2010	
		1	RE15-10-8258	R	2/16/2010	
		1	RE15-10-8259	R	2/16/2010	
SW-846:6850	SW-846:6012A	1	RE15-10-8260	R	2/16/2010	
		1	RE15-10-8261	R	2/16/2010	
		1	RE15-10-8262	R	2/16/2010	
		1	RE15-10-8263	R	2/16/2010	
		1	RE15-10-8265	R	2/16/2010	
		1	RE15-10-8269	R	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	

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Monday, February 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1973

LOS ALAMOS

REQUEST NUMBER: 10-1973

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/24/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8259	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8261	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8257	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8260	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8258	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8263	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8255	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8256	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8262	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8272	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8272	1	POLY	SW-846:6850	Ice	W
RE15-10-8272	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8265	1	POLY	Metals+CIO4+CN	Ice	R
RE15-10-8269	1	POLY	Metals+CIO4+CN	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8255

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010	MEDIA:	QBT3		OK	
TIME COLLECTED (HH:MM)		844	SUB-MEDIA:	TUFF1		↓	
PRS ID:	15-007(d)	OK	SAMPLE TECH CODE:	HA		CBS	
LOCATION ID:	15-610820	↓	FIELD QC TYPE:	NA		OK	
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA		↓	
TOP DEPTH:	0	2/16/10 13m 48.0 48.5	SAMPLE USAGE:	INV		↓	
BOTTOM DEPTH:	0	50.0	SCREEN/PORT DESC:			NA	
FIELD MATRIX:	R	R	EXCAVATED: YES/NO/NA	NO/NA			
COMPOSITE TYPE:	NA	COMPOSITE TIME INTERVAL:	NA	WATER FLOWING: YES/NO/NA	NO/NA		
BOREHOLE: YES/NO/NA	YES	BOREHOLE DECLINATION:	-90	BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	13m 2/16/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice		
1	↓	H3	500 ML POLY	Ice		
1	↓	Metals+ClO4+CN	500 ML POLY	Ice		
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None		

SAMPLE DESC:

Pinkish gray tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 7d.2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 25 dpm
Beta/Gamma \leq 2.10 dpm

PID $\frac{\text{Ambient Reading}}{\text{ppm}} = \text{ppm}$ 13m 2/16/10

COLLECTED BY (PRINT)

ThMcFarland

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY (Printed Name) Rolanda Saunders (Signature) Rolanda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) (Signature) Jay W.	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8256

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		0907		SUB-MEDIA:	TUFF 1		J
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610820	OK		FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC	BH		FIELD PREP:	NA		J
TOP DEPTH:	0	63.5		SAMPLE USAGE:	INV		NA
BOTTOM DEPTH:	0	65.0		SCREEN/PORT DESC:			
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION: 73m -90			
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	73m 2/16/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light Gray stuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 15 dpm
Beta/Gamma \leq 1898 dpm

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

73m 2/16/10

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT)

SON MARIN

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8257

WORK ORDER:

	AS PLANNED	AS COLLECTED		AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):		02/16/2010	MEDIA:	QBT3	OK
TIME COLLECTED (HH:MM)		0928	SUB-MEDIA:	TUFF 1	↓
PRS ID:	15-007(d)	OK	SAMPLE TECH CODE:	HA	CBS
LOCATION ID:	15-610820	OK	FIELD QC TYPE:	NA	OK
LOCATION TYPE:	GENERIC	BH	FIELD PREP:	NA	↓
TOP DEPTH:	0	79.0	SAMPLE USAGE:	INV	↓
BOTTOM DEPTH:	0	80.0	SCREEN/PORT DESC:		NA
FIELD MATRIX:	R	R	EXCAVATED: YES/NO/NA		
COMPOSITE TYPE:	NA		COMPOSITE TIME INTERVAL:	NA	
BOREHOLE: YES/NO/NA			BOREHOLE DECLINATION:	-90	
			BOREHOLE DIRECTION:	NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: tight gray nonindurated tuff

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 30 dpm
Beta/Gamma \leq 2.09 dpm

PID $\frac{\text{Ambient Reading}}{72m \ 2/16/10} = \text{ppm}$

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J MARIN

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) Joy W (Signature) Joy W	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8258

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	QBT3		OK
TIME COLLECTED (HH:MM)		0952		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610820	↓		FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC	B4		FIELD PREP:	NA		↓
TOP DEPTH:	0	93.5		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	95.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	72m 2/16/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Gray and white nonindurated tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 30 dpm
Beta/Gamma \leq 2.15 dpm

72m 2/16/10
PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$

COLLECTED BY (PRINT)

JLMcFarland

REVIEWED BY (PRINT)

JOA MARIN

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8259

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	OBT3		OK
TIME COLLECTED (HH:MM)		1017		SUB-MEDIA:	TUFF 1		↓
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610820	L		FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC	BH		FIELD PREP:	NA		↓
TOP DEPTH:	0	108.5		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	110.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	-90		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	72m 2/16/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	y	
1	↓	H3	500 ML POLY	Ice	y	
1	↓	Metals+ClO4+CN	500 ML POLY	Ice	y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC:

light pinkish gray nonendurated buff

SAMPLE COMMENTS:

NA

LOCATION DESC:

7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 15 dpm
Beta/Gamma \pm 2.9 dpm

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$ 72m 2/16/10

COLLECTED BY (PRINT)

Th. McFarland

REVIEWED BY (PRINT)

SON MARIN

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) [Signature] (Signature) [Signature]	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8260

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	QBT3	73m 2/16/10	OK Obt 2
TIME COLLECTED (HH:MM)		1055		SUB-MEDIA:	TUFF 1		OK
PRS ID:	15-007(d)	OK		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610820	↓		FIELD QC TYPE:	NA		OK
LOCATION TYPE:	GENERIC	BH		FIELD PREP:	NA		↓
TOP DEPTH:	0	124.0		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	125.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA	NO/NA		
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE: YES/NO/NA	NO/NA			BOREHOLE DECLINATION:	-90		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	73m 2/16/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	y	
1	↓	H3	500 ML POLY	Ice	y	
1	↓	Metals+ClO4+CN	500 ML POLY	Ice	y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	y	

SAMPLE DESC:

Pebbles gray indurated tuff

SAMPLE COMMENTS:

NA

LOCATION DESC:

7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha = 15 dpm
Beta/Gamma = 1898 dpm

PID $\frac{\text{Ambient Reading}}{73m 2/16/10} = \text{ppm}$

COLLECTED BY (PRINT)

TLMCFarland

REVIEWED BY (PRINT)

R Saunders

RELINQUISHED BY (Printed Name) Rolanda Saunders (Signature) Rolanda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 2/17/10 808
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8261

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA: QBT3		Qbt2	
TIME COLLECTED (HH:MM)		1314		SUB-MEDIA: TUFF 1		ok	
PRS ID: 15-007(d)		ok		SAMPLE TECH CODE: HA		CBS	
LOCATION ID: 15-610820		↓		FIELD QC TYPE: NA		ok	
LOCATION TYPE: GENERIC		BH		FIELD PREP: NA		↓	
TOP DEPTH: 0		138.5		SAMPLE USAGE: INV		↓	
BOTTOM DEPTH: 0		140.0		SCREEN/PORT DESC:		NA	
FIELD MATRIX: R		R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE: NA		COMPOSITE TIME INTERVAL: NA		WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA		BOREHOLE DECLINATION: -90		BOREHOLE DIRECTION: NA			

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	72m 2/16/10 8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light brownish gray, strongly indurated, moderately welded, dehydrified, dry, ash flow tuff

SAMPLE COMMENTS:

NA

LOCATION DESC: 7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 41 dpm
Beta/Gamma \leq 1891 dpm

PID $\frac{\text{Ambient Reading}}{\text{Reading}} = \text{ppm}$ 72m 2/16/10

COLLECTED BY (PRINT)

Th McFarland

REVIEWED BY (PRINT) J M A R I N

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8262

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	OBT3		QBT2
TIME COLLECTED (HH:MM)		13:59		SUB-MEDIA:	TUFF 1		ok
PRS ID:	15-007(d)	ok		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610820	↓		FIELD QC TYPE:	NA		ok
LOCATION TYPE:	GENERIC	B4		FIELD PREP:	NA		↓
TOP DEPTH:	0	153.5 ft		SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0	155.0 ft		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082-NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light pinkish gray, slightly to moderately indurated, dehydrified, dry, arch flow tuff.

SAMPLE COMMENTS: NA

LOCATION DESC: 7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

51 gpm
Alpha = 51 dpm
Beta/Gamma = 2100 dpm

PID ~~Ambient Reading~~ = ppm 73m 2/16/10

COLLECTED BY (PRINT)

TLMcFarland

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) Joy W. S. (Signature) Joy W. S.	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8263

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	OBT3		OBT 2
TIME COLLECTED (HH:MM)		1430		SUB-MEDIA:	TUFF 1		ok
PRS ID:	15-007(d)		ok	SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	15-610820		L	FIELD QC TYPE:	NA		ok
LOCATION TYPE:	GENERIC		BH	FIELD PREP:	NA		↓
TOP DEPTH:	0		168.5	SAMPLE USAGE:	INV		↓
BOTTOM DEPTH:	0		170.0	SCREEN/PORT DESC:			NA
FIELD MATRIX:	R		R	EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		
				WATER FLOWING: YES/NO/NA			
BOREHOLE: YES/NO/NA				BOREHOLE DECLINATION:	-90		
				BOREHOLE DIRECTION:	NA		

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Metals+CIO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC:

Light reddish brown, slightly indurated, nonwelded, dehydrated, dry, ark flow tuff

SAMPLE COMMENTS:

NA

FR: RE15-10-8272

LOCATION DESC:

7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \pm 51 dpm
Beta/Gamma \pm 2120 dpm

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

73m 2/16/10

COLLECTED BY (PRINT)

PL McFarland

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) Rolanda Saunders (Signature) Rolanda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) Jaylwg (Signature) Jaylwg	Date/Time 2/17/10 808
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8265

WORK ORDER:

AS PLANNED		AS COLLECTED		AS PLANNED		AS COLLECTED	
DATE COLLECTED(MM/DD/YYYY):		02/16/2010		MEDIA:	QBT3		Qbt/v
TIME COLLECTED (HH:MM)		1455		SUB-MEDIA:	TUFF 1		ok
PRS ID:	15-007(d)	ok		SAMPLE TECH CODE:	HA		CBS
LOCATION ID:	UNK	15-610820		FIELD QC TYPE:	NA		ok
LOCATION TYPE:	GENERIC	BH		FIELD PREP:	NA		↓
TOP DEPTH:	0	178.0		SAMPLE USAGE:	INV		
BOTTOM DEPTH:	0	180.0		SCREEN/PORT DESC:			NA
FIELD MATRIX:	R	R		EXCAVATED: YES/NO/NA			
COMPOSITE TYPE:	NA			COMPOSITE TIME INTERVAL:	NA		WATER FLOWING: YES/NO/NA
BOREHOLE:	YES/NO/NA			BOREHOLE DECLINATION:	-90		BOREHOLE DIRECTION: NA

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1		H3	500 ML POLY	Ice	Y	
1		Metals+ClO4+CN	500 ML POLY	Ice	Y	
1		RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: Grayish pink slightly indurated ~~luff~~ sam No IV welded
dehydrated, dry, ark flow tuff. 2/16/10

SAMPLE COMMENTS: FD: RE15-10-8269

NA

LOCATION DESC: 7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 30 dpm
Beta/Gamma \leq 2040 dpm

PID $\frac{\text{Ambient Reading}}{72m 2/16/10} = \text{ppm}$

COLLECTED BY (PRINT)

REVIEWED BY (PRINT) J. MARIN

TLMcFarland

RELINQUISHED BY (Printed Name) Rolanda Saunders (Signature) <i>Rolanda Saunders</i>	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) (Signature) <i>Jeyllus</i>	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8269

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	02/16/2010	MEDIA:	QBT3
TIME COLLECTED (HH:MM)	1455	SUB-MEDIA:	TUFF 1
PRS ID: 15-007(d)	OK	SAMPLE TECH CODE: HA	CBS
LOCATION ID: UNK	15-610820	FIELD QC TYPE: ED	OK
LOCATION TYPE: GENERIC	BH	FIELD PREP: NA	↓
TOP DEPTH: 0	178.0	SAMPLE USAGE: QC	↓
BOTTOM DEPTH: 0	180.0	SCREEN/PORT DESC:	NA
FIELD MATRIX: R	R	EXCAVATED: YES/NO/NA	
COMPOSITE TYPE: NA	COMPOSITE TIME INTERVAL: NA	WATER FLOWING: YES/NO/NA	
BOREHOLE: YES/NO/NA	BOREHOLE DECLINATION: -90	BOREHOLE DIRECTION: NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	8082+NMED-HEXP	250 ML AMBER GLASS	Ice	Y	
1	↓	H3	500 ML POLY	Ice	Y	
1	↓	Metals+ClO4+CN	500 ML POLY	Ice	Y	
1	↓	RADVANA+B+G	1 EA 8 IN RESEALABLE POLY BAG	None	Y	

SAMPLE DESC: QC Sample of RE15-10-8265

SAMPLE COMMENTS: Grayish pink slightly indurated, non welded, dehydrified, dry ash flow tuff

NA

LOCATION DESC: 7d-2

FIELD SCREENING/MEASUREMENT RESULTS:

Alpha \leq 30 dpm
Beta/Gamma \leq 2040dpmPID $\frac{\text{Ambient Reading}}{73m \ 2/16/10} = \text{ppm}$ COLLECTED BY (PRINT)
TL McFarland

REVIEWED BY (PRINT) J. MARIN

RELINQUISHED BY (Printed Name) Rolando Saunders (Signature) Rolando Saunders	Date/Time 2/17/10 7:40	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 2/17/10 8:05
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

SAMPLE COLLECTION LOG/FIELD CHAIN OF CUSTODY

EVENT ID: 2504

EVENT NAME: 4th Qtr. FY09 - SWMU 15-007(d) - Threemile Canyon

SAMPLE ID: RE15-10-8272

WORK ORDER:

AS PLANNED	AS COLLECTED	AS PLANNED	AS COLLECTED
DATE COLLECTED(MM/DD/YYYY):	02/16/2010	MEDIA:	NA
TIME COLLECTED (HH:MM)	1500	SUB-MEDIA:	OTHER
PRS ID: 15-007(d)	OK	SAMPLE TECH CODE:	DC
LOCATION ID: UNK	15-610820	FIELD QC TYPE:	ER
LOCATION TYPE: GENERIC	BH	FIELD PREP:	UF
TOP DEPTH: 0	OK	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: -90'	BOREHOLE DIRECTION: NA	

#	PRIORITY	ORDER	CNTNR	PRESERVATIVE	COLLECTED Y/N	SPECIAL INSTRUCTIONS
1	Normal	METALS-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 RE15-10-8263

SAMPLE COMMENTS:

Rinsate

LOCATION DESC:

NA

FIELD SCREENING/MEASUREMENT RESULTS:

NA

COLLECTED BY (PRINT)

TL McFarlane

REVIEWED BY (PRINT)

J. MARIN

RELINQUISHED BY (Printed Name) Rolenda Saunders (Signature) Rolenda Saunders	Date/Time 2/17/10 740	RECEIVED BY (Printed Name) (Signature) [Signature]	Date/Time 2/17/10 805
RELINQUISHED BY (Printed Name) (Signature)	Date/Time	RECEIVED BY (Printed Name) (Signature)	Date/Time

Rad Screening Data Release Form

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

RE15-10-8269
8265

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

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

RE15-10-8272 Rinsate

RS 02/17/10
~~RE15-10-8265~~ FD

8945
WST15-10-~~894X~~ FTB
RS 02-17-10

Reason:

.....
Print Last Name Saunders Signature Rolinda Saunders Date 2/17/10



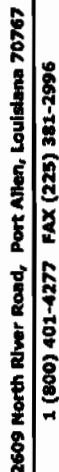
2609 North River Road, Port Allen, Louisiana 70767
1 (800) 401-4277 FAX (225) 381-2996

1 of 2

ARS Sample Delivery Group: ARS1-10-00276
Analysis Description: Gross Alpha/Beta in (Soil, Sludge, Waste, Sediment (SO))
Analysis Test Method: GPC-A-003

Request or PO Number: N/A
Date Received: 2/18/2010
Report Date: 02/19/10 14:51

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	HDC	DLC	Qual	Analysis Units	Analysis Date/Time	Analysis Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
ARS1-10-00276-001	RE15-10-8269	GROSS ALPHA	10.697	5.568	14.162	4.333	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-001	RE15-10-8269	GROSS BETA	38.193	6.364	7.844	3.391		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-002	RE15-10-8265	GROSS ALPHA	11.347	5.441	12.361	3.509	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-002	RE15-10-8265	GROSS BETA	46.084	7.285	8.009	3.480		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-003	RE15-10-8263	GROSS ALPHA	-2.988	0.686	13.421	4.021	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-003	RE15-10-8263	GROSS BETA	27.186	5.017	7.690	3.308		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-004	RE15-10-8262	GROSS ALPHA	16.863	6.710	13.885	4.214		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-004	RE15-10-8262	GROSS BETA	37.171	6.210	7.584	3.276		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-005	RE15-10-8261	GROSS ALPHA	2.953	3.534	13.347	3.980	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-005	RE15-10-8261	GROSS BETA	33.499	5.824	7.952	3.432		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-006	RE15-10-8260	GROSS ALPHA	9.712	5.362	14.035	4.145	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-006	RE15-10-8260	GROSS BETA	28.355	5.266	7.924	3.413		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-007	RE15-10-8259	GROSS ALPHA	11.151	5.530	13.539	4.037	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-007	RE15-10-8259	GROSS BETA	27.604	5.136	7.864	3.408		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-008	RE15-10-8258	GROSS ALPHA	6.052	4.662	15.175	4.824	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-008	RE15-10-8258	GROSS BETA	30.003	5.428	8.011	3.468		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-009	RE15-10-8257	GROSS ALPHA	12.411	5.897	13.425	3.811	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-009	RE15-10-8257	GROSS BETA	24.144	4.784	8.099	3.521		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-010	RE15-10-8255	GROSS ALPHA	15.706	6.496	13.437	3.927		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-010	RE15-10-8255	GROSS BETA	38.194	6.453	8.242	3.576		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-011	RE15-10-8256	GROSS ALPHA	16.381	6.704	13.779	4.005		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-011	RE15-10-8256	GROSS BETA	36.007	6.164	7.930	3.423		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-012	RE11-10-1560	GROSS ALPHA	8.971	5.175	14.130	4.288	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-012	RE11-10-1560	GROSS BETA	31.109	5.674	8.889	3.908		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-013	RE11-10-1561	GROSS ALPHA	9.231	5.315	14.026	4.182	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-013	RE11-10-1561	GROSS BETA	36.509	6.190	8.007	3.466		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-014	RE11-10-1562	GROSS ALPHA	1.350	2.778	12.112	3.481	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-014	RE11-10-1562	GROSS BETA	33.262	5.788	8.188	3.564		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-015	RE11-10-1563	GROSS ALPHA	7.129	4.631	13.430	3.986	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-015	RE11-10-1563	GROSS BETA	30.307	5.427	7.748	3.341		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-016	RE11-10-1564	GROSS ALPHA	3.283	4.238	16.310	5.341	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-016	RE11-10-1564	GROSS BETA	33.531	5.833	8.187	3.560		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-017	RE11-10-1565	GROSS ALPHA	0.430	3.067	14.783	4.559	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-017	RE11-10-1565	GROSS BETA	28.160	5.214	8.177	3.548		pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-018	RE11-10-1566	GROSS ALPHA	3.751	4.211	15.540	4.983	U	pCi/g	2/19/2010	CR	N/A	SO	
ARS1-10-00276-018	RE11-10-1566	GROSS BETA	26.261	5.177	9.206	4.049		pCi/g	2/19/2010	CR	N/A	SO	



ARS Sample Delivery Group:	ARS1-10-00276
Analysis Description:	Gross Alpha/Beta
Analysis Test Method:	GPC-A-003

Request or PO Number:	N/A
Date Received:	2/18/11
Report Date:	02/18/11

ARS Sample ID	Client Sample ID	Isotope	Analysis Results	Analysis Error +/- 2 s	MDC	DLC	Qual	Analysis Units	Analysis Date/TIME	Analyst Technician	Tracer/Chem Recovery	Sample Matrix	Collection Date
AR51-10-00276-019	RE11-10-1567	GROSS ALPHA	-2.851	2.411	16.430	5.298	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-019	RE11-10-1567	GROSS BETA	41.899	6.782	7.903	3.405		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-020	RE11-10-1568	GROSS ALPHA	15.884	6.729	15.324	4.914		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-020	RE11-10-1568	GROSS BETA	21.471	4.534	8.054	3.479		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-021	RE11-10-1569	GROSS ALPHA	10.821	5.863	15.430	5.028	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-021	RE11-10-1569	GROSS BETA	38.721	6.393	7.536	3.237		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-022	RE11-10-1570	GROSS ALPHA	-0.082	2.768	13.813	4.363	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-022	RE11-10-1570	GROSS BETA	27.261	5.102	8.042	3.474		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-023	RE11-10-1571	GROSS ALPHA	6.547	5.040	15.985	5.296	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-023	RE11-10-1571	GROSS BETA	35.681	6.051	7.790	3.362		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-024	RE11-10-1572	GROSS ALPHA	5.004	4.153	13.728	4.415	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-024	RE11-10-1572	GROSS BETA	19.507	4.178	7.737	3.335		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-025	RE11-10-1573	GROSS ALPHA	0.151	3.730	16.805	5.627	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-025	RE11-10-1573	GROSS BETA	31.305	5.562	7.980	3.444		pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-026	RE11-10-1576	GROSS ALPHA	-0.117	3.911	17.349	6.135	U	pCi/g	2/19/2010	CR	N/A	SO	
AR51-10-00276-026	RE11-10-1576	GROSS BETA	39.023	6.509	8.540	3.729		pCi/g	2/19/2010	CR	N/A	SO	

NOTES:

Project Manager Review

Notes: American Radiation Services, Inc. assumes no liability for the use or interpretation of any analytical results provided other than the cost of the analysis itself. Reproduction of this report in full without the written consent of the client.

LELAP Certificate # 01949

DATA VALIDATION COVER SHEET

5121-1

Data Validation Cover Sheet

Records Use only



Section I.

REQUEST NUMBER: 10-1973 VALIDATION DATE: 04/27/10 LAB CODE: GEL

CONTRACT LABORATORY NAME: GEL Laboratories LLC

VALIDATOR: Kevin A. Lambert ORGANIZATION: Analytical Quality Associates, Inc.

ANALYTICAL SUITE (CHECK ALL THAT APPLY):

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

Section II. Completeness Check


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

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


1. The water MSD %R for perchlorate was > the laboratory UAL. The associated sample result was a ND and, thus, was not qualified.
2. It should be noted that the soil MS/MSD analyses were on a LANL sample from another RN, and the parent sample raw data was not included in the data package. No sample data were qualified.

Reviewed by: ETM Level: 1 Date: 4/27/10


VALIDATOR'S SIGNATURE: Kevin A. Lambert DATE: 04/27/10

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

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

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

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

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

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 257945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8259

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 24770001

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 97.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 21:15	per0313015a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:15	per0313015a
14797-73-0	Perchlorate-101	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 21:15	per0313015a
	Perchlorate-O(18)			4.77	ug/kg		1	13-MAR-10 21:15	per0313015a

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

*Concentration =

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

Form I

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8261

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 24770002

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:23	per0313016a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:23	per0313016a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:23	per0313016a
	Perchlorate-O(18)			4.49	ug/kg		1	13-MAR-10 21:23	per0313016a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8257
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 24770003
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 98.7

Concentrated Extract Volume: 20.0

CAS No.	Analyte^	MDL	RL	Conc**	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	0.507	ug/kg	U	1	13-MAR-10 21:32	per0313017a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:32	per0313017a
14797-73-0	Perchlorate-101	.507	2.03	0.507	ug/kg	U	1	13-MAR-10 21:32	per0313017a
	Perchlorate-O(18)			4.68	ug/kg		1	13-MAR-10 21:32	per0313017a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8260
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 24770004
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 98.4

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:40	per0313018a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:40	per0313018a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:40	per0313018a
	Perchlorate-O(18)			4.56	ug/kg		1	13-MAR-10 21:40	per0313018a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8258
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770005
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 98.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.03	0.509	ug/kg	U	1	13-MAR-10 21:49	per0313019a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:49	per0313019a
14797-73-0	Perchlorate-101	.509	2.03	0.509	ug/kg	U	1	13-MAR-10 21:49	per0313019a
	Perchlorate-O(18)			4.73	ug/kg		1	13-MAR-10 21:49	per0313019a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 257945
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8263
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 24770006
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 98.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 21:58	per0313020a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:58	per0313020a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 21:58	per0313020a
	Perchlorate-O(18)			4.58	ug/kg		1	13-MAR-10 21:58	per0313020a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8255

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 24770007

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	13-MAR-10 22:06	per0313021a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:06	per0313021a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	13-MAR-10 22:06	per0313021a
	Perchlorate-O(18)			4.53	ug/kg		1	13-MAR-10 22:06	per0313021a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8256
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770008
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 97.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 22:40	per0313025a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:40	per0313025a
14797-73-0	Perchlorate-101	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 22:40	per0313025a
	Perchlorate-O(18)			4.47	ug/kg		1	13-MAR-10 22:40	per0313025a

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

*Concentration =

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

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: 957945

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8262

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770009

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.2

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:49	per0313026a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:49	per0313026a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:49	per0313026a
	Perchlorate-O(18)			4.62	ug/kg		1	13-MAR-10 22:49	per0313026a

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

*Concentration =

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8265

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 24770010

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:57	per0313027a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:57	per0313027a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:57	per0313027a
	Perchlorate-O(18)			4.33	ug/kg		1	13-MAR-10 22:57	per0313027a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8269

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770011

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 23:06	per0313028a
	Perchlorate Isotope Ratio						1	13-MAR-10 23:06	per0313028a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 23:06	per0313028a
	Perchlorate-O(18)			4.40	ug/kg		1	13-MAR-10 23:06	per0313028a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: WATER

Extraction Batch ID: 957436

Extraction Type: Filter/DAL

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8272

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973-1

GEL Sample ID: 247771001

Date Filtered: 25-FEB-10

Injection Volume (uL): 20


% Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:13	per0301116a
	Perchlorate Isotope Ratio						1	02-MAR-10 05:13	per0301116a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:13	per0301116a
	Perchlorate-O(18)			0.495	ug/L		1	02-MAR-10 05:13	per0301116a

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

*Concentration =

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

DATA VALIDATION COVER SHEET	
5118-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.		
REQUEST NUMBER: <u>10-1973</u>	VALIDATION DATE: <u>04/27/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Kevin A. Lambert</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input checked="" type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
		<input type="checkbox"/> LCMSMS PERCHLORATES
		<input type="checkbox"/> ORGANOCHLORINE PESTICIDES/POLYCHLORINATED BIPHENYLS
<input type="checkbox"/> OTHER (DESCRIBE): _____		


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


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

1. In the water MB, Cr was detected. The associated sample result was ND and, thus, was not qualified.
In the soil MB, Sb was detected. The associated sample results were NDs and, thus, were not qualified.
2. In the FR blank, sample RE15-10-8272, associated with all field samples, Ca, Mn, K, Na, and Tl were detected. The Na and Tl results for sample -8259 were detects $\leq 5X$ the FR blank concentrations and, thus, were qualified UJ14d. All other associated sample results were either NDs or detects $> 5X$ the FR blank concentrations and, thus, were not qualified.
3. The water MS %Rs for Ca, Fe, and Mn were $>$ the laboratory UAL. However, the associated parent sample concentrations for Ca, Fe, and Mn were $> 4X$ the spike concentrations. Thus, no sample data were qualified as result, based on professional judgment.


The soil MS %Rs for Al, Fe, Mg, Mn, K, and Na were $>$ the laboratory UAL. However, the associated parent sample concentrations for Fe and Mn were $> 4X$ the spike concentrations. Thus, no sample data were qualified as result, based on professional judgment. The Na result for sample -8259 was qualified ND and, thus, was qualified UJ16b. All other Na results, and all Al, Mg, and K results were detects and, thus, were qualified J+16b.
4. It should be noted that the parent samples for the water ICP-AES and ICP-MS matrix QC analyses and soil CVAA matrix QC analyses were LANL samples from other RNs, and the parent sample raw data were not included in the data package. No sample data were qualified.

Reviewed by: ETMLevel: 1Date: 4/27/10


DATA VALIDATION COVER SHEET	
5118-1 Data Validation Cover Sheet	Records Use only  <small>EST. 1945</small>
VALIDATOR'S SIGNATURE: <u>Kevin A. Lambert</u> DATE: <u>04/27/10</u>	
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 


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

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

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

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

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

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

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

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770001

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8259

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 97.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+, I6b	935000	ug/kg	N	6750	19800	19800	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-36-0	Antimony	992	ug/kg	U	327	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-38-2	Arsenic	589	ug/kg	J	201	1000	1000	2	MS	PRB	04/11/10 20:20	100411-2	957490
7440-39-3	Barium	10700	ug/kg		99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-41-7	Beryllium	804	ug/kg		20.1	100	100	2	MS	PRB	04/12/10 18:29	100412-3	957490
7440-43-9	Cadmium	118	ug/kg	J	99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-70-2	Calcium	287000	ug/kg		7940	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-47-3	Chromium	1210	ug/kg		149	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-48-4	Cobalt	284	ug/kg	J	149	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-50-8	Copper	1420	ug/kg		298	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-89-6	Iron	6850000	ug/kg		7940	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-92-1	Lead	4200	ug/kg		248	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-95-4	Magnesium J+, I6b	426000	ug/kg	N	8430	29800	29800	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-96-5	Manganese	243000	ug/kg		198	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-97-6	Mercury	11.3	ug/kg	U	3.85	11.3	11.3	1	AV	JXL1	03/08/10 10:40	030810S1-4	958689
7440-02-0	Nickel	737	ug/kg		100	402	402	2	MS	PRB	04/12/10 18:29	100412-3	957490
7440-09-7	Potassium J+, I6b	267000	ug/kg	N	6350	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7782-49-2	Selenium	1000	ug/kg	U	502	1000	1000	2	MS	PRB	04/11/10 20:20	100411-2	957490
7440-22-4	Silver	496	ug/kg	U	99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-23-5	Sodium U, I4d	145000	ug/kg	N	6950	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-28-0	Thallium U, I4d	60.6	ug/kg	J	60.2	201	201	2	MS	PRB	04/11/10 20:20	100411-2	957490
7440-62-2	Vanadium	1950	ug/kg		99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-66-6	Zinc	31900	ug/kg		327	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.518	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.512	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.545	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770002

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8261

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1470000	ug/kg	N	6700	19700	19700	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-36-0	Antimony	985	ug/kg	U	325	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-38-2	Arsenic	362	ug/kg	J	203	1020	1020	2	MS	PRB	04/11/10 20:49	100411-2	957490
7440-39-3	Barium	11300	ug/kg		98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-41-7	Beryllium	506	ug/kg		20.3	102	102	2	MS	PRB	04/12/10 18:50	100412-3	957490
7440-43-9	Cadmium	493	ug/kg	U	98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-70-2	Calcium	793000	ug/kg		7880	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-47-3	Chromium	12000	ug/kg		148	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-48-4	Cobalt	660	ug/kg		148	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-50-8	Copper	1340	ug/kg		296	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-89-6	Iron	6980000	ug/kg		7880	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-92-1	Lead	4670	ug/kg		246	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-95-4	Magnesium J+,I6b	156000	ug/kg	N	8370	29600	29600	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-96-5	Manganese	394000	ug/kg		197	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-97-6	Mercury	10.3	ug/kg	U	3.5	10.3	10.3	1	AV	JXL1	03/08/10 10:41	030810S1-4	958689
7440-02-0	Nickel	742	ug/kg		102	407	407	2	MS	PRB	04/12/10 18:50	100412-3	957490
7440-09-7	Potassium J+,I6b	933000	ug/kg	N	6310	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7782-49-2	Selenium	1020	ug/kg	U	508	1020	1020	2	MS	PRB	04/11/10 20:49	100411-2	957490
7440-22-4	Silver	298	ug/kg	J	98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-23-5	Sodium J+,I6b	654000	ug/kg	N	6900	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-28-0	Thallium	203	ug/kg	U	61	203	203	2	MS	PRB	04/11/10 20:49	100411-2	957490
7440-62-2	Vanadium	2760	ug/kg		98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-66-6	Zinc	43300	ug/kg		325	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.516	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.5	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.593	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770003

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8257

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	848000	ug/kg	N	6550	19300	19300	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-36-0	Antimony	963	ug/kg	U	318	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-38-2	Arsenic	989	ug/kg	U	198	989	989	2	MS	PRB	04/11/10 20:53	100411-2	957490
7440-39-3	Barium	6840	ug/kg		96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-41-7	Beryllium	227	ug/kg		19.8	98.9	98.9	2	MS	PRB	04/12/10 18:53	100412-3	957490
7440-43-9	Cadmium	481	ug/kg	U	96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-70-2	Calcium	573000	ug/kg		7700	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-47-3	Chromium	2110	ug/kg		144	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-48-4	Cobalt	265	ug/kg	J	144	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-50-8	Copper	1090	ug/kg		289	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-89-6	Iron	6780000	ug/kg		7700	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-92-1	Lead	2880	ug/kg		241	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-95-4	Magnesium J+,16b	177000	ug/kg	N	8190	28900	28900	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-96-5	Manganese	183000	ug/kg		193	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-97-6	Mercury	10.5	ug/kg	U	3.56	10.5	10.5	1	AV	JXL1	03/08/10 10:43	030810S1-4	958689
7440-02-0	Nickel	366	ug/kg	J	98.9	396	396	2	MS	PRB	04/12/10 18:53	100412-3	957490
7440-09-7	Potassium J+,16b	488000	ug/kg	N	6160	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7782-49-2	Selenium	989	ug/kg	U	495	989	989	2	MS	PRB	04/11/10 20:53	100411-2	957490
7440-22-4	Silver	229	ug/kg	J	96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-23-5	Sodium J+,16b	339000	ug/kg	N	6740	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-28-0	Thallium	198	ug/kg	U	59.4	198	198	2	MS	PRB	04/11/10 20:53	100411-2	957490
7440-82-2	Vanadium	1620	ug/kg		96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-66-6	Zinc	40900	ug/kg		318	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.526	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.512	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.58	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770004

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8260

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	1180000	ug/kg	N	6830	20100	20100	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-36-0	Antimony	1000	ug/kg	U	331	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-38-2	Arsenic	389	ug/kg	J	187	935	935	2	MS	PRB	04/11/10 20:57	100411-2	957490
7440-39-3	Barium	10600	ug/kg		100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-41-7	Beryllium	560	ug/kg		18.7	93.5	93.5	2	MS	PRB	04/12/10 18:56	100412-3	957490
7440-43-9	Cadmium	502	ug/kg	U	100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-70-2	Calcium	589000	ug/kg		8030	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-47-3	Chromium	18700	ug/kg		151	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-48-4	Cobalt	834	ug/kg		151	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-50-8	Copper	1110	ug/kg		301	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-89-6	Iron	6040000	ug/kg		8030	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-92-1	Lead	3870	ug/kg		251	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-95-4	Magnesium J+,16b	103000	ug/kg	N	8530	30100	30100	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-96-5	Manganese	325000	ug/kg		201	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-97-6	Mercury	11.1	ug/kg	U	3.77	11.1	11.1	1	AV	JXL1	03/08/10 10:48	030810S1-4	958689
7440-02-0	Nickel	642	ug/kg		93.5	374	374	2	MS	PRB	04/12/10 18:56	100412-3	957490
7440-09-7	Potassium J+,16b	736000	ug/kg	N	6420	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7782-49-2	Selenium	935	ug/kg	U	468	935	935	2	MS	PRB	04/11/10 20:57	100411-2	957490
7440-22-4	Silver	149	ug/kg	J	100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-23-5	Sodium J+,16b	538000	ug/kg	N	7030	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-28-0	Thallium	187	ug/kg	U	56.1	187	187	2	MS	PRB	04/11/10 20:57	100411-2	957490
7440-62-2	Vanadium	1660	ug/kg		100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-66-6	Zinc	57900	ug/kg		331	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.506	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.543	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.55	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770005

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8258

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	644000	ug/kg	N	6650	19600	19600	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-36-0	Antimony	978	ug/kg	U	323	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-38-2	Arsenic	980	ug/kg	U	196	980	980	2	MS	PRB	04/11/10 21:01	100411-2	957490
7440-39-3	Barium	5450	ug/kg		97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-41-7	Beryllium	326	ug/kg		19.6	98	98	2	MS	PRB	04/12/10 18:58	100412-3	957490
7440-43-9	Cadmium	489	ug/kg	U	97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-70-2	Calcium	347000	ug/kg		7820	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-47-3	Chromium	991	ug/kg		147	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-48-4	Cobalt	192	ug/kg	J	147	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-50-8	Copper	1000	ug/kg		293	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-89-6	Iron	4910000	ug/kg		7820	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-92-1	Lead	2760	ug/kg		245	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-95-4	Magnesium J+,16b	112000	ug/kg	N	8310	29300	29300	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-96-5	Manganese	147000	ug/kg		196	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-97-6	Mercury	10.9	ug/kg	U	3.7	10.9	10.9	1	AV	JXL1	03/08/10 10:50	030810S1-4	958689
7440-02-0	Nickel	503	ug/kg		98	392	392	2	MS	PRB	04/12/10 18:58	100412-3	957490
7440-09-7	Potassium J+,16b	366000	ug/kg	N	6260	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7782-49-2	Selenium	980	ug/kg	U	490	980	980	2	MS	PRB	04/11/10 21:01	100411-2	957490
7440-22-4	Silver	489	ug/kg	U	97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-23-5	Sodium J+,16b	279000	ug/kg	N	6850	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-28-0	Thallium	196	ug/kg	U	58.8	196	196	2	MS	PRB	04/11/10 21:01	100411-2	957490
7440-62-2	Vanadium	1230	ug/kg		97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-66-6	Zinc	31700	ug/kg		323	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.52	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.519	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.561	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770006

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8263

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+, I6b	893000	ug/kg	N	6560	19300	19300	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-36-0	Antimony	965	ug/kg	U	318	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-38-2	Arsenic	242	ug/kg	J	192	961	961	2	MS	PRB	04/11/10 21:05	100411-2	957490
7440-39-3	Barium	7580	ug/kg		96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-41-7	Beryllium	451	ug/kg		19.2	96.1	96.1	2	MS	PRB	04/12/10 19:01	100412-3	957490
7440-43-9	Cadmium	482	ug/kg	U	96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-70-2	Calcium	509000	ug/kg		7720	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-47-3	Chromium	2090	ug/kg		145	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-48-4	Cobalt	146	ug/kg	J	145	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-50-8	Copper	1170	ug/kg		289	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-89-6	Iron	5760000	ug/kg		7720	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-92-1	Lead	4020	ug/kg		241	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-95-4	Magnesium J+, I6b	98100	ug/kg	N	8200	28900	28900	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-96-5	Manganese	268000	ug/kg		193	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-97-6	Mercury	10.6	ug/kg	U	3.61	10.6	10.6	1	AV	JXL1	03/08/10 10:51	030810S1-4	958689
7440-02-0	Nickel	422	ug/kg		96.1	384	384	2	MS	PRB	04/12/10 19:01	100412-3	957490
7440-09-7	Potassium J+, I6b	510000	ug/kg	N	6170	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7782-49-2	Selenium	961	ug/kg	U	481	961	961	2	MS	PRB	04/11/10 21:05	100411-2	957490
7440-22-4	Silver	225	ug/kg	J	96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-23-5	Sodium J+, I6b	423000	ug/kg	N	6750	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-28-0	Thallium	192	ug/kg	U	57.7	192	192	2	MS	PRB	04/11/10 21:05	100411-2	957490
7440-62-2	Vanadium	1850	ug/kg		96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-66-6	Zinc	39400	ug/kg		318	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.528	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.53	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.576	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770007

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8255

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	1070000	ug/kg	N	6790	20000	20000	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-36-0	Antimony	998	ug/kg	U	329	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-38-2	Arsenic	286	ug/kg	J	201	1000	1000	2	MS	PRB	04/11/10 21:09	100411-2	957490
7440-39-3	Barium	10100	ug/kg		99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-41-7	Beryllium	376	ug/kg		20.1	100	100	2	MS	PRB	04/12/10 19:10	100412-3	957490
7440-43-9	Cadmium	499	ug/kg	U	99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-70-2	Calcium	354000	ug/kg		7990	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-47-3	Chromium	1620	ug/kg		150	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-48-4	Cobalt	274	ug/kg	J	150	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-50-8	Copper	788	ug/kg	J	299	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-89-6	Iron	6670000	ug/kg		7990	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-92-1	Lead	2620	ug/kg		250	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-95-4	Magnesium J+,16b	211000	ug/kg	N	8480	29900	29900	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-96-5	Manganese	184000	ug/kg		200	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-97-6	Mercury	11	ug/kg	U	3.73	11	11	1	AV	JXL1	03/08/10 10:53	030810S1-4	958689
7440-02-0	Nickel	646	ug/kg		100	402	402	2	MS	PRB	04/12/10 19:10	100412-3	957490
7440-09-7	Potassium J+,16b	536000	ug/kg	N	6390	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7782-49-2	Selenium	1000	ug/kg	U	502	1000	1000	2	MS	PRB	04/11/10 21:09	100411-2	957490
7440-22-4	Silver	195	ug/kg	J	99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-23-5	Sodium J+,16b	453000	ug/kg	N	6990	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-28-0	Thallium	201	ug/kg	U	60.2	201	201	2	MS	PRB	04/11/10 21:09	100411-2	957490
7440-62-2	Vanadium	1800	ug/kg		99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-66-6	Zinc	34300	ug/kg		329	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.507	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.504	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.554	g	30	mL	03/06/10	TXR3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770008

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8256

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 97.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,I6b	1160000	ug/kg	N	6830	20100	20100	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-38-0	Antimony	1000	ug/kg	U	332	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-38-2	Arsenic	972	ug/kg	U	194	972	972	2	MS	PRB	04/11/10 21:13	100411-2	957490
7440-39-3	Barium	8480	ug/kg		100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-41-7	Beryllium	289	ug/kg		19.4	97.2	97.2	2	MS	PRB	04/12/10 19:13	100412-3	957490
7440-43-9	Cadmium	502	ug/kg	U	100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-70-2	Calcium	301000	ug/kg		8040	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-47-3	Chromium	1780	ug/kg		151	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-48-4	Cobalt	260	ug/kg	J	151	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-50-8	Copper	919	ug/kg	J	301	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-89-6	Iron	6540000	ug/kg		8040	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-92-1	Lead	4410	ug/kg		251	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-95-4	Magnesium J+,I6b	185000	ug/kg	N	8540	30100	30100	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-96-5	Manganese	183000	ug/kg		201	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-97-6	Mercury	10.5	ug/kg	U	3.56	10.5	10.5	1	AV	JXL1	03/08/10 10:55	030810S1-4	958689
7440-02-0	Nickel	617	ug/kg		97.2	389	389	2	MS	PRB	04/12/10 19:13	100412-3	957490
7440-09-7	Potassium J+,I6b	623000	ug/kg	N	6430	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7782-49-2	Selenium	972	ug/kg	U	486	972	972	2	MS	PRB	04/11/10 21:13	100411-2	957490
7440-22-4	Silver	137	ug/kg	J	100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-23-5	Sodium J+,I6b	495000	ug/kg	N	7030	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-28-0	Thallium	194	ug/kg	U	58.3	194	194	2	MS	PRB	04/11/10 21:13	100411-2	957490
7440-62-2	Vanadium	1710	ug/kg		100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-66-6	Zinc	37300	ug/kg		332	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.512	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.529	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.59	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770009

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8262

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+, I6b	899000	ug/kg	N	6580	19400	19400	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-36-0	Antimony	968	ug/kg	U	319	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-38-2	Arsenic	329	ug/kg	J	202	1010	1010	2	MS	PRB	04/11/10 21:17	100411-2	957490
7440-39-3	Barium	7490	ug/kg		96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-41-7	Beryllium	488	ug/kg		20.2	101	101	2	MS	PRB	04/12/10 19:16	100412-3	957490
7440-43-9	Cadmium	484	ug/kg	U	96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-70-2	Calcium	475000	ug/kg		7740	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-47-3	Chromium	2450	ug/kg		145	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-48-4	Cobalt	484	ug/kg	U	145	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-50-8	Copper	1000	ug/kg		290	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-89-6	Iron	5530000	ug/kg		7740	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-92-1	Lead	3590	ug/kg		242	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-95-4	Magnesium J+, I6b	84100	ug/kg	N	8230	29000	29000	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-96-5	Manganese	269000	ug/kg		194	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-97-6	Mercury	11.4	ug/kg	U	3.87	11.4	11.4	1	AV	JXL1	03/08/10 10:56	030810S1-4	958689
7440-02-0	Nickel	366	ug/kg	J	101	405	405	2	MS	PRB	04/12/10 19:16	100412-3	957490
7440-09-7	Potassium J+, I6b	511000	ug/kg	N	6190	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7782-49-2	Selenium	1010	ug/kg	U	506	1010	1010	2	MS	PRB	04/11/10 21:17	100411-2	957490
7440-22-4	Silver	484	ug/kg	U	96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-23-5	Sodium J+, I6b	368000	ug/kg	N	6770	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-28-0	Thallium	202	ug/kg	U	60.7	202	202	2	MS	PRB	04/11/10 21:17	100411-2	957490
7440-62-2	Vanadium	1730	ug/kg		96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-66-6	Zinc	39200	ug/kg		319	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.526	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.503	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.537	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770010

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8265

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	932000	ug/kg	N	6820	20000	20000	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-36-0	Antimony	1000	ug/kg	U	331	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-38-2	Arsenic	285	ug/kg	J	198	989	989	2	MS	PRB	04/11/10 21:22	100411-2	957490
7440-39-3	Barium	6970	ug/kg		100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-41-7	Beryllium	522	ug/kg		19.8	98.9	98.9	2	MS	PRB	04/12/10 19:19	100412-3	957490
7440-43-9	Cadmium	501	ug/kg	U	100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-70-2	Calcium	530000	ug/kg		8020	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-47-3	Chromium	3000	ug/kg		150	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-48-4	Cobalt	205	ug/kg	J	150	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-50-8	Copper	1060	ug/kg		301	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-89-6	Iron	6040000	ug/kg		8020	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-92-1	Lead	4900	ug/kg		251	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-95-4	Magnesium J+,16b	110000	ug/kg	N	8520	30100	30100	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-96-5	Manganese	282000	ug/kg		200	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-97-6	Mercury	12.1	ug/kg	U	4.11	12.1	12.1	1	AV	JXL	03/08/10 10:58	030810S1-4	958689
7440-02-0	Nickel	509	ug/kg		98.9	395	395	2	MS	PRB	04/12/10 19:19	100412-3	957490
7440-09-7	Potassium J+,16b	464000	ug/kg	N	6410	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7782-49-2	Selenium	989	ug/kg	U	494	989	989	2	MS	PRB	04/11/10 21:22	100411-2	957490
7440-22-4	Silver	109	ug/kg	J	100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-23-5	Sodium J+,16b	365000	ug/kg	N	7020	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-28-0	Thallium	198	ug/kg	U	59.3	198	198	2	MS	PRB	04/11/10 21:22	100411-2	957490
7440-62-2	Vanadium	1990	ug/kg		100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-66-6	Zinc	44300	ug/kg		331	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.508	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.515	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.505	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770011

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8269

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum J+,16b	1010000	ug/kg	N	6540	19200	19200	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-36-0	Antimony	961	ug/kg	U	317	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-38-2	Arsenic	262	ug/kg	J	200	1000	1000	2	MS	PRB	04/11/10 21:26	100411-2	957490
7440-39-3	Barium	7980	ug/kg		96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-41-7	Beryllium	590	ug/kg		20	100	100	2	MS	PRB	04/12/10 19:22	100412-3	957490
7440-43-9	Cadmium	481	ug/kg	U	96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-70-2	Calcium	584000	ug/kg		7690	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-47-3	Chromium	5720	ug/kg		144	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-48-4	Cobalt	216	ug/kg	J	144	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-50-8	Copper	1150	ug/kg		288	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-89-6	Iron	6130000	ug/kg		7690	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-92-1	Lead	4910	ug/kg		240	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-95-4	Magnesium J+,16b	124000	ug/kg	N	8170	28800	28800	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-96-5	Manganese	309000	ug/kg		192	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-97-8	Mercury	11.6	ug/kg	U	3.93	11.6	11.6	1	AV	JXL1	03/08/10 11:00	030810S1-4	958689
7440-02-0	Nickel	721	ug/kg		100	400	400	2	MS	PRB	04/12/10 19:22	100412-3	957490
7440-09-7	Potassium J+,16b	481000	ug/kg	N	6150	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7782-49-2	Selenium	1000	ug/kg	U	500	1000	1000	2	MS	PRB	04/11/10 21:26	100411-2	957490
7440-22-4	Silver	101	ug/kg	J	96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-23-5	Sodium J+,16b	389000	ug/kg	N	6730	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-28-0	Thallium	200	ug/kg	U	60.1	200	200	2	MS	PRB	04/11/10 21:26	100411-2	957490
7440-62-2	Vanadium	2190	ug/kg		96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-66-6	Zinc	45900	ug/kg		317	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.53	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.509	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.529	g	30	mL	03/06/10	TXB3

KAL
04/27/10

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247771001

BASIS: As Received

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8272

LEVEL: Low

DATE RECEIVED 23-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	03/19/10 13:43	031910-1	957492
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	04/20/10 16:06	100420-5	957494
7440-70-2	Calcium	62.9	ug/L	J	50	200	200	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/19/10 13:43	031910-1	957492
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/19/10 13:43	031910-1	957492
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	04/20/10 16:06	100420-5	957494
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/19/10 13:43	031910-1	957492
7439-96-5	Manganese	2.51	ug/L	J	1	5	5	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL1	03/03/10 11:12	030310W2-6	958777
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-09-7	Potassium	462	ug/L		50	150	150	1	P	HSC	03/19/10 13:43	031910-1	957492
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-23-5	Sodium	341	ug/L		100	300	300	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-28-0	Thallium	0.381	ug/L	J	0.3	1	1	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/19/10 13:43	031910-1	957492

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957492	957491	SW846 3005A	50	mL	50	mL	03/01/10	BXA1
957494	957493	SW846 3005A	50	mL	50	mL	03/02/10	FGA
958777	958775	SW846 7470A Prep	20	mL	20	mL	03/02/10	TXB3

KAL
04/27/10

DATA VALIDATION COVER SHEET	
5120-1 <p style="text-align: center;">Data Validation Cover Sheet</p>	Records Use only 

Section I.		
REQUEST NUMBER: <u>10-1973</u>	VALIDATION DATE: <u>04/27/10</u>	LAB CODE: <u>GEL</u>
CONTRACT LABORATORY NAME: <u>GEL Laboratories LLC</u>		
VALIDATOR: <u>Kevin A. Lambert</u> ORGANIZATION: <u>Analytical Quality Associates, Inc.</u>		
ANALYTICAL SUITE (CHECK ALL THAT APPLY):		
<input type="checkbox"/> TPH-GRO	<input type="checkbox"/> HIGH EXPLOSIVES	<input type="checkbox"/> DIOXIN FURANS
<input type="checkbox"/> TPH-DRO	<input type="checkbox"/> METALS	<input type="checkbox"/> PCB CONGENERS
<input checked="" type="checkbox"/> GENERAL CHEMISTRY	<input type="checkbox"/> RADIOCHEMISTRY	<input type="checkbox"/> LCMSMS HIGH EXPLOSIVES
<input type="checkbox"/> OTHER (DESCRIBE):	<u>total cyanide only</u>	

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

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


1. It should be noted that the parent samples for matrix QC analyses for Batch # 956938 and 957567 were LANL samples from other RNs. No sample data were qualified as a result.

Reviewed by: ETM


Level: 1

Date: 4/27/10


VALIDATOR'S SIGNATURE: Kevin A. Lambert DATE: 04/27/10

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

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

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

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

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

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

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Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8259
Sample ID: 247770001
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 2.72%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	68.5	252	ug/kg	1	AXC2	03/02/10	1500	956938	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/01/10	1255	956937

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

KAL
04/27/10

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

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8261
Sample ID: 247770002
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.65%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	69.1	254	ug/kg	1	AXC2	03/02/10	1501	956938	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/01/10	1255	956937

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8257
Sample ID: 247770003
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.29%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	61.5	226	ug/kg	1	AXC2	03/02/10	1613	957567	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8260
Sample ID: 247770004
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.56%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.4	244	ug/kg	1	AXC2	03/02/10	1614	957567	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8258
Sample ID: 247770005
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.69%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	61.8	227	ug/kg	1	AXC2	03/02/10	1614	957567	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

Company : Los Alamos National Laboratory
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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8263
Sample ID: 247770006
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.85%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	66.6	245	ug/kg	1	AXC2	03/02/10	1615	957567	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8255
Sample ID: 247770007
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	60.4	222	ug/kg	1	AXC2	03/02/10	1616	957567	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8256
Sample ID: 247770008
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 2.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
-----------	-----------	--------	----	----	-------	----	---------	------	------	-------	--------

Flow Injection Analysis

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	70.0	257	ug/kg	1	AXC2	03/02/10	1649	957569	1
----------------	---	----	------	-----	-------	---	------	----------	------	--------	---

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8262
Sample ID: 247770009
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.78%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	65.3	240	ug/kg	1	AXC2	03/02/10	1652	957569	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8265
 Sample ID: 247770010
 Matrix: R
 Collect Date: 16-FEB-10 12:00
 Receive Date: 23-FEB-10
 Collector: Client
 Moisture: 1.8%

Project: LANL01004
 Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.1	236	ug/kg	1	AXC2	03/02/10	1656	957569	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8269
Sample ID: 247770011
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.86%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	59.7	220	ug/kg	1	AXC2	03/02/10	1700	957569	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1973-1

Client Sample ID: RE15-10-8272
Sample ID: 247771001
Matrix: W
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	03/02/10	1545	956940	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1321	956939

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Monday, February 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1973

LOS ALAMOS

REQUEST NUMBER: 10-1973

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/24/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

24777101, 24777111

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8259	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8261	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8257	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8260	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8258	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8263	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8255	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8256	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8262	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8272	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8272	1	POLY	SW-846.6850	Ice	W
RE15-10-8272	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8265	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8269	1	POLY	Metals+ClO4+CN	Ice	R

Relinquished By:

Date

Time

Received By:

Date

Time

[Signature]
 Printed Name Signature

2/22/10 1400

[Signature]
 Printed Name Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date

Time

Remarks:

Printed Name

Signature

Page 1 of 2

Monday, February 22, 2010

LOS ALAMOS
NATIONAL LABORATORY

ATTN: Valerie Davis

General Engineering Laboratories, Inc., Charleston, S.C.

2040 Savage Rd

Charleston, SC 29407

These Samples are on:

LANL Request Number: 10-1973

Per Agreement Number: 126310011

Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/22/2010

TURNAROUND/REPORT DUE: 3/24/2010

TURNAROUND REQ'D: 30 DAYS

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	QNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846/6010B	1	RE15-10-8255	R	2/16/2010	
		1	RE15-10-8256	R	2/16/2010	
		1	RE15-10-8257	R	2/16/2010	
		1	RE15-10-8258	R	2/16/2010	
		1	RE15-10-8259	R	2/16/2010	
		1	RE15-10-8260	R	2/16/2010	
		1	RE15-10-8261	R	2/16/2010	
		1	RE15-10-8262	R	2/16/2010	
		1	RE15-10-8263	R	2/16/2010	

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:8010B	1	RE15-10-8265	R	2/16/2010	
		1	RE15-10-8269	R	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	
	SW-846:6020	1	RE15-10-8272	W	2/16/2010	
	SW-846:6850	1	RE15-10-8272	W	2/16/2010	
	SW-846:9012A	1	RE15-10-8255	R	2/16/2010	
		1	RE15-10-8256	R	2/16/2010	
		1	RE15-10-8257	R	2/16/2010	
		1	RE15-10-8258	R	2/16/2010	
		1	RE15-10-8259	R	2/16/2010	
		1	RE15-10-8260	R	2/16/2010	
		1	RE15-10-8261	R	2/16/2010	
		1	RE15-10-8262	R	2/16/2010	
		1	RE15-10-8263	R	2/16/2010	
		1	RE15-10-8265	R	2/16/2010	
		1	RE15-10-8269	R	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	

Final Page of REQUEST NUMBER 10-1973



March 01, 2010

www.gel.com

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

Re: LANL ER Project
Work Orders: 247770 247771
SDG: 10-1973

Dear Ms. Valdez:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the following analytical results for the sample(s) we received on February 23, 2010, and analyzed for 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
Project Manager

Purchase Order: 72733-001-09
Chain of Custody: 10-1973
Enclosures

Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Work Order #: 247770 and 247771
SDG: 10-1973

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Cyanide, Total	991

Case Narrative

**Case Narrative for
Los Alamos National Laboratory (72733-001-09)
LANL ER Project
Workorder #: 247770 and 247771
SDG # : 10-1973**

March 01, 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 23, 2010 for analysis. The samples were prepared/analyzed within the required holding time. Shipping container temperatures were checked, documented, and within specifications. The samples were screened according to GEL Standard Operating Procedure. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. Containers were checked for pH, where appropriate, and matched the preservative as documented on the accompanying chain of custody. Shipping container temperature was within specification (0 - 6C).

Sample Identification The laboratory received the following samples:

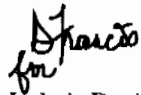
<u>Laboratory ID</u>	<u>Client ID</u>
247770001	RE15-10-8259
247770002	RE15-10-8261
247770003	RE15-10-8257
247770004	RE15-10-8260
247770005	RE15-10-8258
247770006	RE15-10-8263
247770007	RE15-10-8255
247770008	RE15-10-8256
247770009	RE15-10-8262
247770010	RE15-10-8265
247770011	RE15-10-8269
247771001	RE15-10-8272

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: 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.

A handwritten signature in black ink, appearing to read "for Valerie Davis".

Valerie Davis

Project Manager

List of current GEL Certifications as of 01 March 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 22, 2010

LAB CHAIN OF CUSTODY DOCUMENT NUMBER: 10-1973

LOS ALAMOS

REQUEST NUMBER: 10-1973

NATIONAL LABORATORY

ATTN: Valerie Davis

TURNAROUND/REPORT DUE: 3/24/2010

General Engineering Laboratories, Inc.,
Charleston, SC.

TURNAROUND REQ'D: 30

2040 Savage Rd

Charleston, SC 29407

LAB REQUEST COMMENTS:

247710', 247711'.

SAMPLE ID	CTNR	CTNR DESC	ORDER	PRESERV	MATRIX
RE15-10-8259	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8261	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8257	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8260	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8258	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8263	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8255	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8256	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8262	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8272	1	POLY	METALS-GEL	Nitric Acid	W
RE15-10-8272	1	POLY	SW-846:6850	Ice	W
RE15-10-8272	1	POLY	TCN	Sodium Hydroxide	W
RE15-10-8265	1	POLY	Metals+ClO4+CN	Ice	R
RE15-10-8269	1	POLY	Metals+ClO4+CN	Ice	R

Relinquished By:

Date Time

Received By:

Date Time

Printed Name

Signature

2/22/10 1400

Printed Name

Signature

Greg Tyler Huguenin 2-23-10 0850

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Printed Name

Signature

Received for DISPOSAL By:

Date Time

Remarks:

Printed Name

Signature

Monday, February 22, 2010

**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:10-1973
Per Agreement Number:126310011
Project Cost Code: MR3A05529E00

Please analyse the enclosed samples according to the schedule indicated:

SHIP DATE: 2/22/2010

TURNAROUND/REPORT DUE: 3/24/2010

TURNAROUND REQ'D: 30 Days

RAD SCREENING: Yes, Below Background

LAB REQUEST COMMENTS:

LANL ER SMO CONTACT:

Signature:

PRIORITY	METHOD CODE	QNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8255	R	2/16/2010	
		1	RE15-10-8256	R	2/16/2010	
		1	RE15-10-8257	R	2/16/2010	
		1	RE15-10-8258	R	2/16/2010	
		1	RE15-10-8259	R	2/16/2010	
		1	RE15-10-8260	R	2/16/2010	
		1	RE15-10-8261	R	2/16/2010	
		1	RE15-10-8262	R	2/16/2010	
		1	RE15-10-8263	R	2/16/2010	

Monday, February 22, 2010

PRIORITY	METHOD CODE	CNTNR	SAMPLE ID	SAMPLE MATRIX	DATE SAMPLED	SPECIAL INSTRUCTIONS
	SW-846:6010B	1	RE15-10-8265	R	2/16/2010	
		1	RE15-10-8269	R	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	
	SW-846:6020	1	RE15-10-8272	W	2/16/2010	
	SW-846:6850	1	RE15-10-8272	W	2/16/2010	
	SW-846:9012A	1	RE15-10-8255	R	2/16/2010	
		1	RE15-10-8258	R	2/16/2010	
		1	RE15-10-8257	R	2/16/2010	
		1	RE15-10-8258	R	2/16/2010	
		1	RE15-10-8259	R	2/16/2010	
		1	RE15-10-8260	R	2/16/2010	
		1	RE15-10-8261	R	2/16/2010	
		1	RE15-10-8262	R	2/16/2010	
		1	RE15-10-8263	R	2/16/2010	
		1	RE15-10-8265	R	2/16/2010	
		1	RE15-10-8269	R	2/16/2010	
		1	RE15-10-8272	W	2/16/2010	

Final Page of REQUEST NUMBER 10-1973



SAMPLE RECEIPT & REVIEW FORM

Client: LANL			SDG/ARCOC/Work Order: 10-1973		
Received By: Greg Tyler			Date Received: 2/23/10		
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 $0 \leq 6$ deg. C?	X			Preservation Method: ice bags blue ice dry ice none other 0, 2-4C 7, 11, 12C
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 1530 0C 7209 7850 1584 3C
 7209 7850 1595 2C 7209 7850 1621 4C
 7209 7850 1632 2C 7209 7850 1600 7C
 7209 7850 1529 2C 7209 7850 1507 11C
 7209 7850 1610 2C 7209 7850 1492 12C
 7209 7850 1518 3C
 7209 7850 1562 3C
 7209 7850 1573 3C

PM (or PMA) review: Initials

Date

2/24/10

ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTMGT: 55.8 LB MAN
CRD: 0014178/CAFE2450
BILL SENDER

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

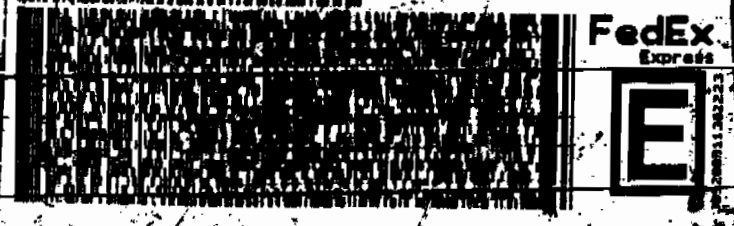
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CRD: 0014178/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 6B010AMR1A015AGMNO

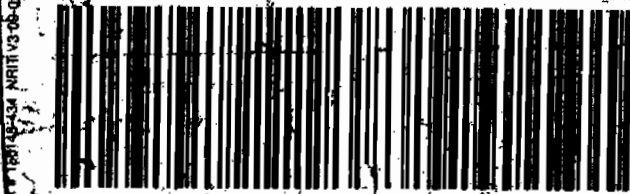
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 6B010AMR2A05158YDO



2 of 2
MPS# 7209 7850 1530
Matr# 7209 7850 1529 (8201)
TUE - 23FEB A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

2 of 2
MPS# 7209 7850 1595
Matr# 7209 7850 1584 (8201)
TUE - 23FEB A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US
TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

SHIP DATE: 22FEB10
ACTMGT: 55.8 LB MAN
CRD: 0014178/CAFE2450
BILL SENDER

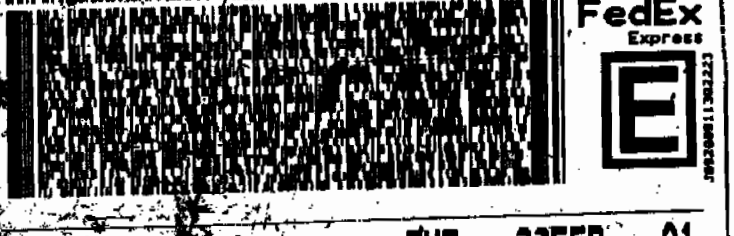
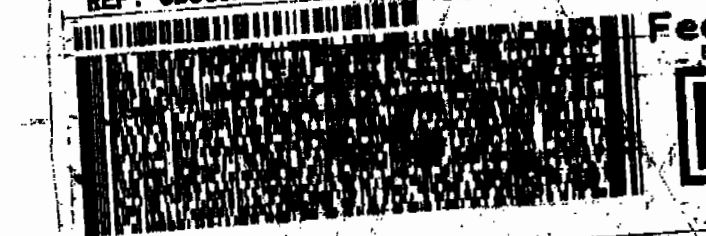
ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGO BLDG 1237 DPU 03
LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 22FEB10
ACTMGT: 52.8 LB MAN
CRD: 0014178/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407
(843) 555-8171
REF: 6B010AMR3A05529E00

CHARLESTON SC 29407
(843) 555-8171
REF: 6B010AMR1A015AGMNO



1 of 2
TRK# 7209 7850 1632
TUE - 23FEB
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

1 of 2
TRK# 7209 7850 1529
TUE - 23FEB A1
PRIORITY OVERNIGHT
XX CHSA
29407
SC-US
CHS

ORIGIN ID: SAFA (505) 555-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 22FEB10
ACTNGT: 52.8 LB MAN
CRD: 0014176/CFE2450
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 555-8171
REF: 55010ANR3A05520E00

10-08



1 of 2
7209 7850 1610
MASTER NM

TUE - 23FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 22FEB10
ACTNGT: 52.8 LB MAN
CRD: 0014176/CFE2450
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 555-8171
REF: 55010ANR3A0223KY10

10-08



7209 7850 1562

TUE - 23FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



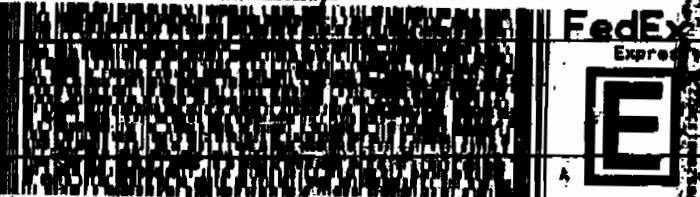
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JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 22FEB10
ACTNGT: 52.8 LB MAN
CRD: 0014176/CFE2450
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 555-8171
REF: 55010ANR10015AGM0

10-08



2 of 2
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Master NM 7209 7850 1507 (8281)

TUE - 23FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGS BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US
SHIP DATE: 22FEB10
ACTNGT: 52.8 LB MAN
CRD: 0014176/CFE2450
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(943) 555-8171
REF: 55010ANR3A0532VA00

10-08



7209 7850 1573

TUE - 23FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



UNFEIN ID: SAFA (505) 665-9968

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
T800 BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTNGT: 52.0 LB MM
CRD: 0014178/CAFE2450

BILL SENDER:

ORIGIN ID: SAFA (505) 665-9968

JOYLENE VALDEZ
LOS ALAMOS NATL LAB
T800 BLDG 1237 DPU 83

LOS ALAMOS, NM 87545
UNITED STATES US

SHIP DATE: 23FEB10
ACTNGT: 46.0 LB MM
CRD: 0014178/CAFE2450

BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 666-8171

REF: 68810AMR2A05158YDO

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 666-8171

REF: 68810AMR3A05328E00

FedEx



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1 of 2
TRKH 7209 7850 1584
NN MASTER NN

TUE - 23FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

XX CHSA



LOS ALAMOS NATL LAB
8 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

CRD: 0014178/CAFE2450
BILL SENDER

VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 666-8171

F: 68810AMR3A0224JFT0

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Express



TUE - 23FEB A1
PRIORITY OVERNIGHT

7209 7850 1600

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2 of 2
TRKH 7209 7850 1621

TUE - 23FEB A1
PRIORITY OVERNIGHT

29407
SC-US
CHS

7209 7850 1610 0201

XX CHSA



JOYLENE VALDEZ
LOS ALAMOS NATL LAB
T800 BLDG 1237 DPU 83
LOS ALAMOS, NM 87545
UNITED STATES US

ACTNGT: 56.0 LB MM
CRD: 0014178/CAFE2450
BILL SENDER

TO VALERIE DAVIS
GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 666-8171

REF: 68810AMR1A015AGWMO

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Express



TUE - 23FEB A1
PRIORITY OVERNIGHT

7209 7850 1507

NN MASTER NN

29407
SC-US
CHS

XX CHSA



ORIGIN ID: SAFA (505) 665-9968
JOYLENE VALDEZ
LOS ALAMOS NATL LAB
TAGG BLDG 1237 DPU 63

SHIP DATE: 22FEB10
ACTWGT: 55.8 LB MAN
CRD: 0014176/CAFE2450

LOS ALAMOS, NM 87545
UNITED STATES US

BILL SENDER

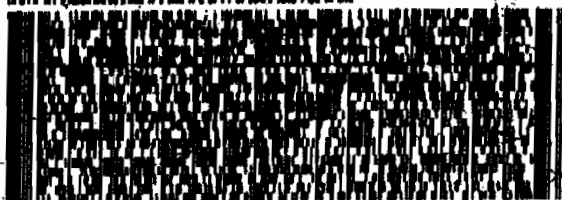
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GENERAL ENGINEERING LAB
2040 SAVAGE RD

CHARLESTON SC 29407

(843) 898-9171

REF: 680100AREN01300M00

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Express



2 of 2

MPSH 7209 7850 1492

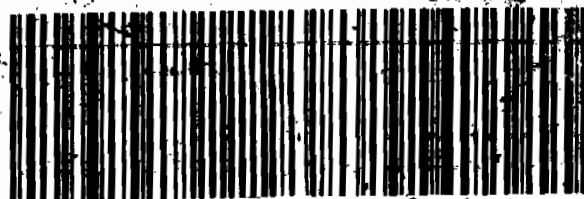
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TUE - 23FEB A1
PRIORITY OVERNIGHT

29407

SC-US
CHS

XX CHSA



Part # 156116-434 NRIT V3 09-09

Data Review Qualifier Flag Definition Sheet

Data Review Qualifier Definitions

Qualifier	Explanation
-----------	-------------

*	A quality control analyte recovery is outside of specified acceptance criteria
**	Analyte is a surrogate compound
<	Result is less than value reported
>	Result is greater than value reported
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL
A	The TIC is a suspected aldol-condensation product
B	Target analyte was detected in the associated blank
B	Metals-Either presence of analyte detected in the associated blank, or MDL/IDL < sample value < PQL
BD	Results are either below the MDC or tracer recovery is low
C	Analyte has been confirmed by GC/MS analysis
D	Results are reported from a diluted aliquot of the sample
d	5-day BOD-The 2:1 depletion requirement was not met for this sample
E	Organics-Concentration of the target analyte exceeds the instrument calibration range
E	Metals-%difference of sample and SD is >10%. Sample concentration must meet flagging criteria
H	Analytical holding time was exceeded
h	Preparation or preservation holding time was exceeded
J	Value is estimated
N	Metals-The Matrix spike sample recovery is not within specified control limits
N	Organics-Presumptive evidence based on mass spectral library search to make a tentative identification of the analyte (TIC). Quantitation is based on nearest internal standard response factor
N/A	Spike recovery limits do not apply. Sample concentration exceeds spike concentration by 4X or more
ND	Analyte concentration is not detected above the reporting limit
UI	Gamma Spectroscopy-Uncertain identification
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier
Y	QC Samples were not spiked with this compound
Z	Paint Filter Test-Particulates passed through the filter, however no free liquids were observed.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1973**

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: 957948

Prep Batch Number: 957945

Sample Analysis

Sample ID	Client ID
247770001	RE15-10-8259
247770002	RE15-10-8261
247770003	RE15-10-8257
247770004	RE15-10-8260
247770005	RE15-10-8258
247770006	RE15-10-8263
247770007	RE15-10-8255
247770008	RE15-10-8256
247770009	RE15-10-8262
247770010	RE15-10-8265
247770011	RE15-10-8269
1202054235	Interference Check Sample (ICS)
1202054231	Method Blank (MB)
1202054232	Laboratory Control Sample (LCS)
1202054233	247822001(CAPU-10-12535) Matrix Spike (MS)
1202054234	247822001(CAPU-10-12535) Matrix Spike Duplicate (MSD)

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

10-1973-PERLCMS

Page 1 of 4

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 247822001 (CAPU-10-12535) from SDG 10-1995 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.

10-1973-PERLCMS

Page 2 of 4

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 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 K. Mauer Date: 04/21/10

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: 957945
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8259
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770001
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 97.3

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 21:15	per0313015a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:15	per0313015a
14797-73-0	Perchlorate-101	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 21:15	per0313015a
	Perchlorate-O(18)			4.77	ug/kg		1	13-MAR-10 21:15	per0313015a

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

*Concentration =

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

Form I

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8261
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770002
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 Sample Volume/Weight: 2.00 g
 %Solids: 98.4

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:23	per0313016a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:23	per0313016a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:23	per0313016a
	Perchlorate-O(18)			4.49	ug/kg		1	13-MAR-10 21:23	per0313016a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
 Aliquot

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8257
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770003
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 98.7

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	0.507	ug/kg	U	1	13-MAR-10 21:32	per0313017a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:32	per0313017a
14797-73-0	Perchlorate-101	.507	2.03	0.507	ug/kg	U	1	13-MAR-10 21:32	per0313017a
	Perchlorate-O(18)			4.68	ug/kg		1	13-MAR-10 21:32	per0313017a

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

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

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: 957945
Extraction Type: Solid Prep
Sample Volume/Weight: 2.00 g
Concentrated Extract Volume: 20.0
Client Sample No. RE15-10-8260
Date Received: 23-FEB-10
GEL Job No (SDG): 10-1973
GEL Sample ID: 247770004
Date Filtered: 09-MAR-10
Injection Volume (uL): 20
%Solids: 98.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:40	per0313018a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:40	per0313018a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:40	per0313018a
	Perchlorate-O(18)			4.56	ug/kg		1	13-MAR-10 21:40	per0313018a

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

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

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Client Sample No. RE15-10-8258
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770005
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 98.3

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.03	0.509	ug/kg	U	1	13-MAR-10 21:49	per0313019a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:49	per0313019a
14797-73-0	Perchlorate-101	.509	2.03	0.509	ug/kg	U	1	13-MAR-10 21:49	per0313019a
	Perchlorate-O(18)			4.73	ug/kg		1	13-MAR-10 21:49	per0313019a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Perchlorate Analysis Data Sheet

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Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: SW846 6850 Modified
 Matrix: SOIL
 Extraction Batch ID: 957945
 Extraction Type: Solid Prep
 Sample Volume/Weight: 2.00 g
 Concentrated Extract Volume: 20.0
 Client Sample No. RE15-10-8263
 Date Received: 23-FEB-10
 GEL Job No (SDG): 10-1973
 GEL Sample ID: 247770006
 Date Filtered: 09-MAR-10
 Injection Volume (uL): 20
 %Solids: 98.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 21:58	per0313020a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:58	per0313020a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 21:58	per0313020a
	Perchlorate-O(18)			4.58	ug/kg		1	13-MAR-10 21:58	per0313020a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
 Aliquot %Solids

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8255

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770007

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	13-MAR-10 22:06	per0313021a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:06	per0313021a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	13-MAR-10 22:06	per0313021a
	Perchlorate-O(18)			4.53	ug/kg		1	13-MAR-10 22:06	per0313021a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8256

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770008

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 97.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 22:40	per0313025a
	Perchlorate Isotope Ratio:						1	13-MAR-10 22:40	per0313025a
14797-73-0	Perchlorate-101	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 22:40	per0313025a
	Perchlorate-O(18)			4.47	ug/kg		1	13-MAR-10 22:40	per0313025a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8262

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770009

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:49	per0313026a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:49	per0313026a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:49	per0313026a
	Perchlorate-O(18)			4.62	ug/kg		1	13-MAR-10 22:49	per0313026a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 957945Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8265Date Received: 23-FEB-10GEL Job No (SDG): 10-1973GEL Sample ID: 24770010Date Filtered: 09-MAR-10Injection Volume (uL): 20%Solids: 98.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:57	per0313027a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:57	per0313027a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:57	per0313027a
	Perchlorate-O(18)			4.33	ug/kg		1	13-MAR-10 22:57	per0313027a

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

*Concentration =

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

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Client Sample No.

RE15-10-8269

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770011

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.1

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 23:06	per0313028a
	Perchlorate Isotope Ratio						1	13-MAR-10 23:06	per0313028a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 23:06	per0313028a
	Perchlorate-O(18)			4.40	ug/kg		1	13-MAR-10 23:06	per0313028a

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

*Concentration =

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

QUALITY CONTROL SUMMARY

P perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL GEL Job No. (SDG): 10-1973

Extract Batch Code: 957945 Date Filtered: 09-MAR-10

Matrix: SOIL Sample ID: 1202054232

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.54	ug/kg	127		70 - 130
Perchlorate Isotope Ratio		3.12				-
Perchlorate-101	2.00	2.56	ug/kg	128		70 - 130
Perchlorate-O(18)		4.59	ug/kg			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1973

Extract Batch Code: 957945

Date Filtered: 09-MAR-10

Matrix: SOIL

Sample ID: 1202054235

Analyte^	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	2.00	2.23	ug/kg	112		70 - 130
Perchlorate Isotope Ratio		3.14				
Perchlorate-101	2.00	2.23	ug/kg	112		70 - 130
Perchlorate-O(18)		4.95	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\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313014a

Date: 13-Mar-2010

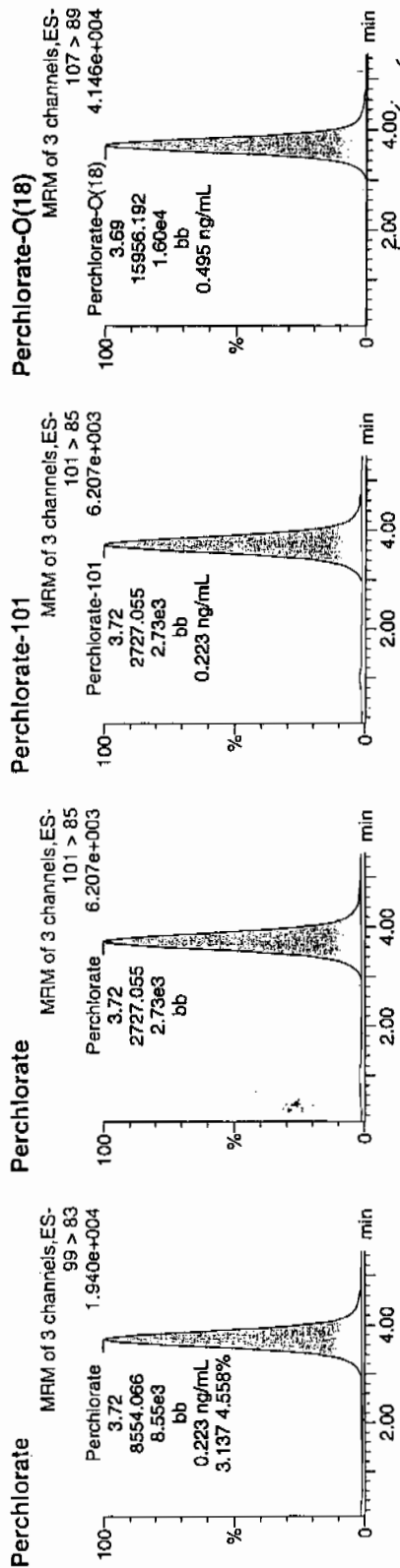
Time: 21:06:46

ID: 1202054235

Vial: 1:3,C

03-14-10

1202054235 | 30020 | 7.5 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054235	Perchlorate	99 > 83	3.72	8554.066	8554.066	bb			0.2234	111.71	11.71	1129.4...	3.14
1202054235	Perchlorate-101	101 > 85	3.72	2727.055	2727.055	bb			0.2234	111.70	11.70	653.908	
1202054235	Perchlorate-O(18)	107 > 89	3.69	15956.192	15956.192	bb			0.4948	98.96	-1.04	977.721	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

Extract Batch Code: 957945

GEL Job No (SDG): 10-1973

Date Extracted: 09-MAR-10

GEL MS/PS ID: 1202054233

Client ID: CAPU-10-12535

GEL MSD/PSD ID: 1202054234

QC Type: MS

Compound [^]	Spike Added	Sample Conc	Units	MS Conc	MS Rec	#	MSD Conc	MSD Rec	#	RPD	#	RPD Limit	Recovery Limit
Perchlorate	2.26	0.214	ug/kg	2.17	86.7		2.3	92.3		5.7		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.2			3.15			0			-
Perchlorate-101	2.26	0.251	ug/kg	2.13	83.1		2.29	90.4		7.38		30	75 - 125
Perchlorate-O(18)	0	5.11	ug/kg	5.05			4.86			3.85			-

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

Comments:

Perchlorate Initial Calibration Blank

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Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	13-MAR-10	per0313001a	IPB001
Perchlorate-101	0.00	0	NA	13-MAR-10	per0313001a	IPB001
Perchlorate	0.00	0	NA	13-MAR-10	per0313002a	IPB001
Perchlorate-101	0.00	0	NA	13-MAR-10	per0313002a	IPB001

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

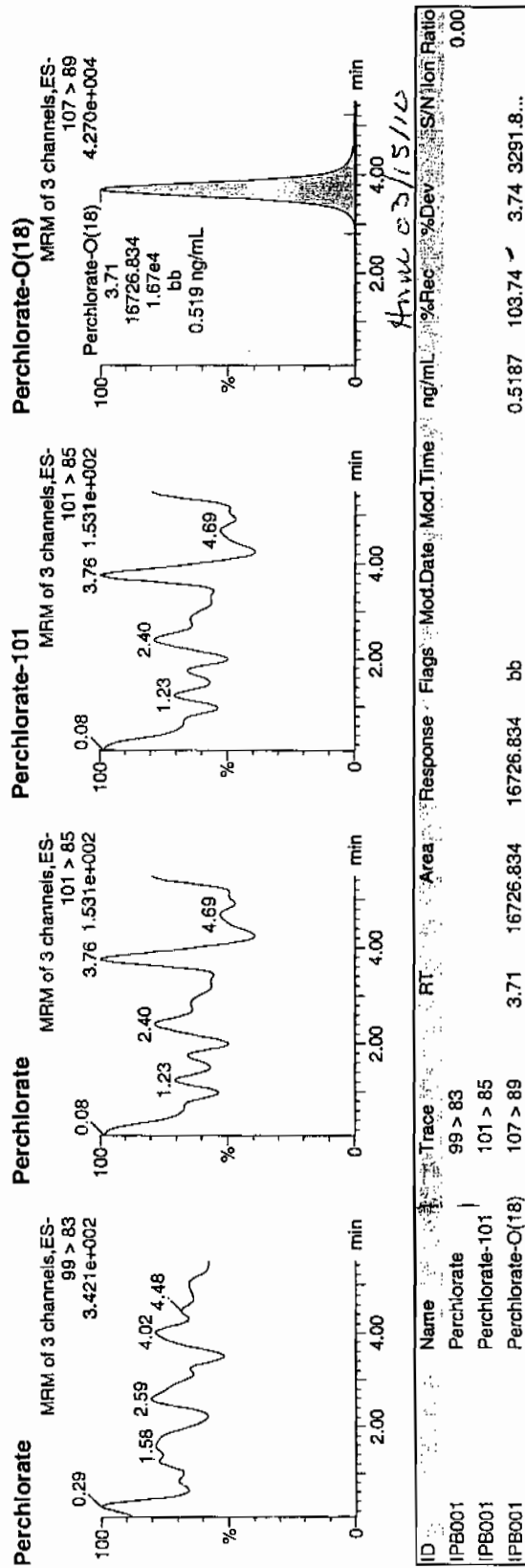
Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031310a.mdb 14 Mar 2010 12:30:10
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031310a.cdb 14 Mar 2010 12:35:48

Name: per0313001a
Date: 13-Mar-2010
Time: 19:15:35
ID: IPB001
Vial: 1:1,A

03-14-10



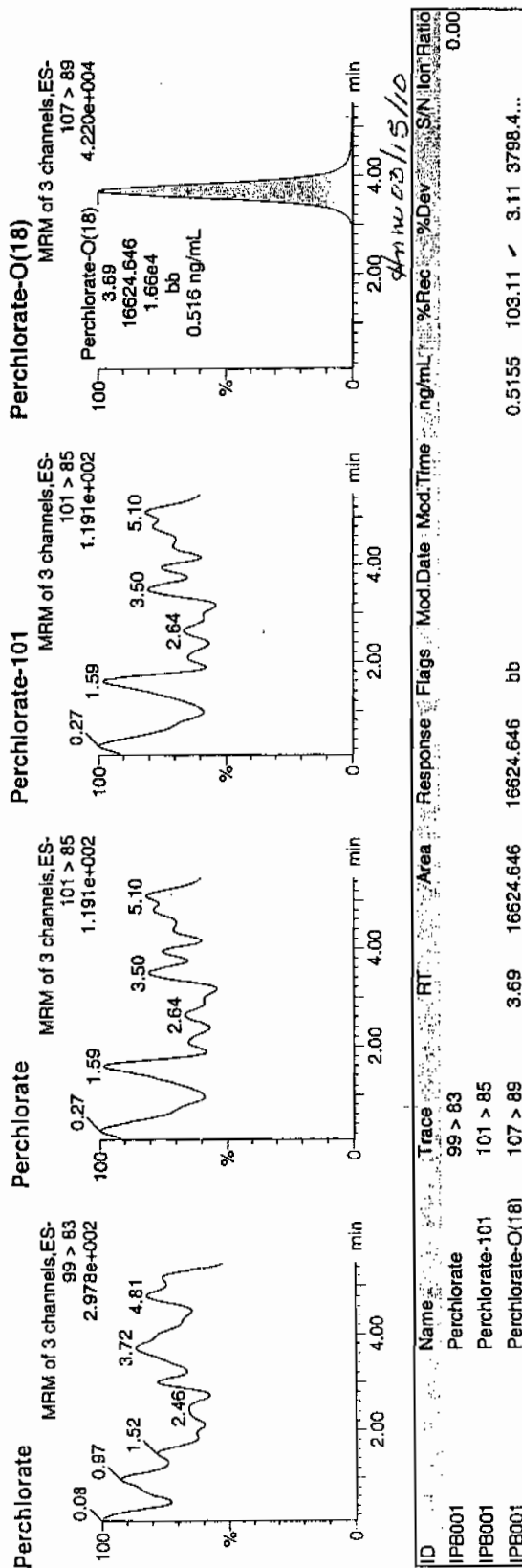
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313002a
Date: 13-Mar-2010
Time: 19:24:07
ID: IPB001
Vial: 1:1,A

03-14-10



Form 4

Perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1973

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	13-MAR-10	per0313008a	IPB002
Perchlorate-101	0.00	0	NA	13-MAR-10	per0313008a	IPB002
Perchlorate	0.00	0	NA	13-MAR-10	per0313010a	IPB003
Perchlorate-101	0.00	0	NA	13-MAR-10	per0313010a	IPB003
Perchlorate	0.00	0	NA	13-MAR-10	per0313023a	IPB004
Perchlorate-101	0.00	0	NA	13-MAR-10	per0313023a	IPB004
Perchlorate	0.00	0	NA	14-MAR-10	per0313036a	IPB005
Perchlorate-101	0.00	0	NA	14-MAR-10	per0313036a	IPB005

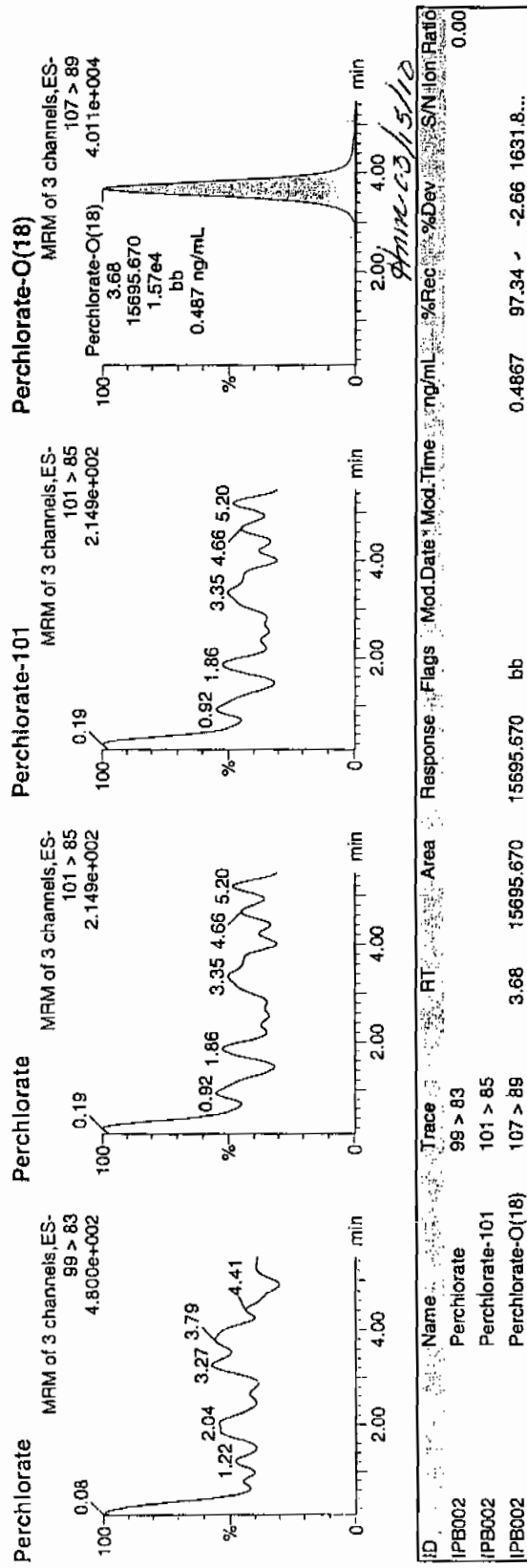
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313008a
Date: 13-Mar-2010
Time: 20:15:31
ID: IPB002
Vial: 1:1,A

03-14-10



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	3.68	15695.670	15695.670	bb			0.4867	97.34	-2.66	1631.8...	

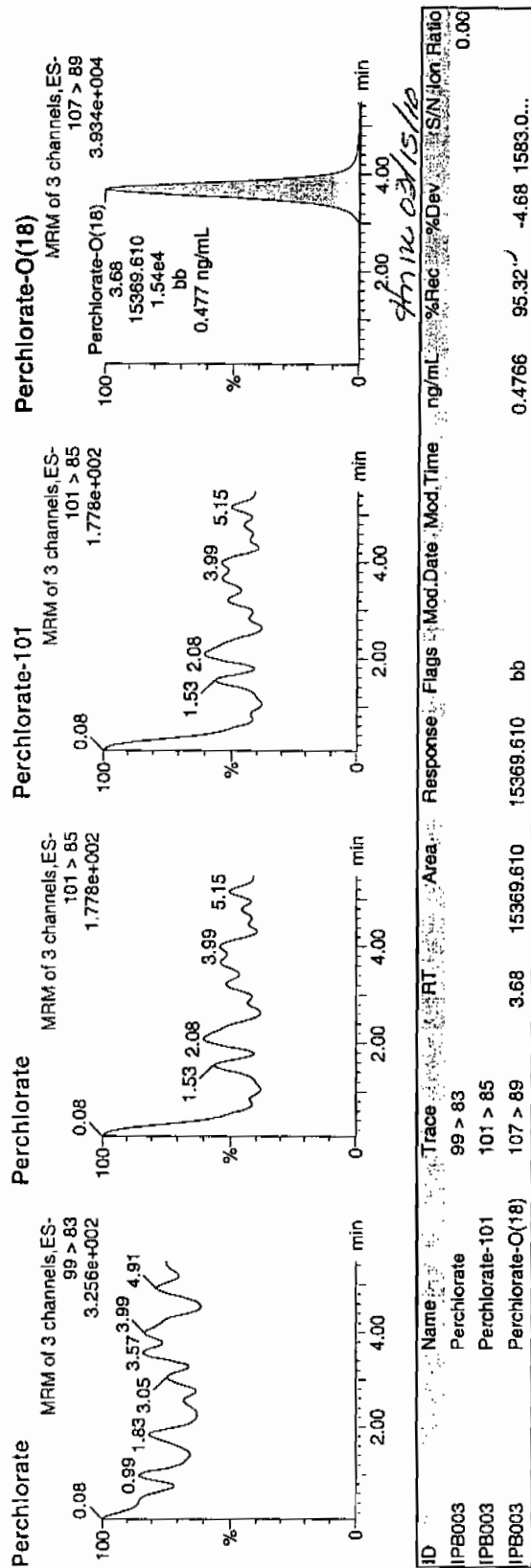
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313010a
Date: 13-Mar-2010
Time: 20:32:36
ID: IPB003
Vial: 1:1,A

03-14-10



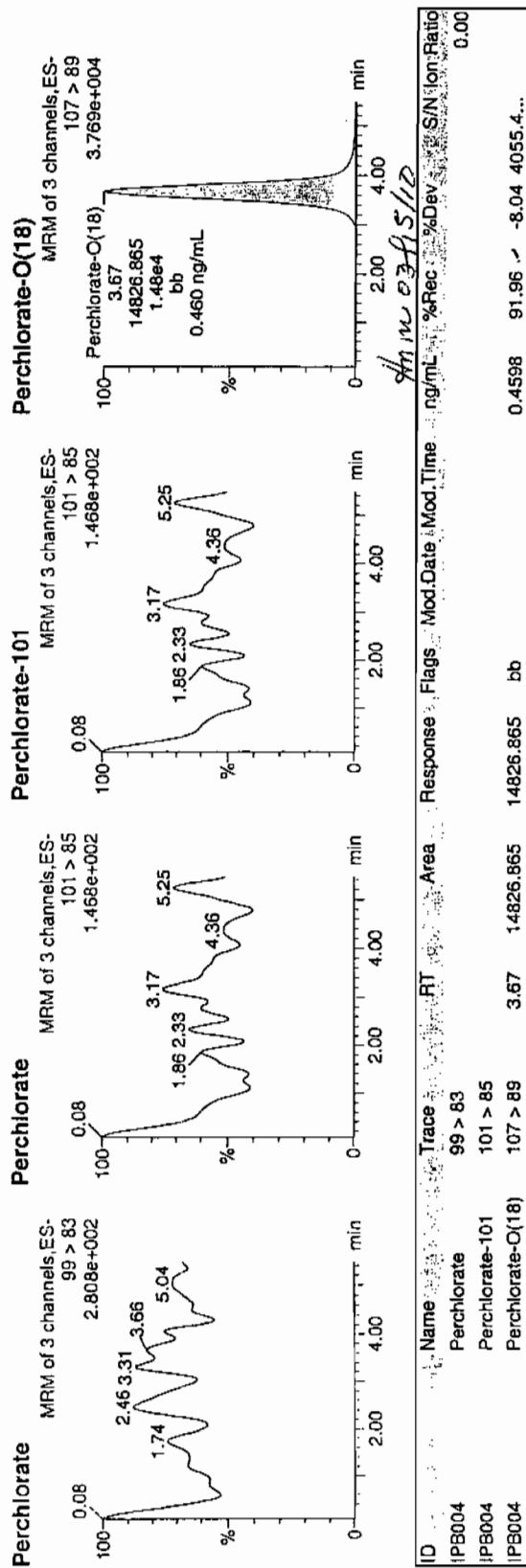
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charters W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313023a
Date: 13-Mar-2010
Time: 22:23:41
ID: IPB004
Vial: 1:1,A

03-14-10

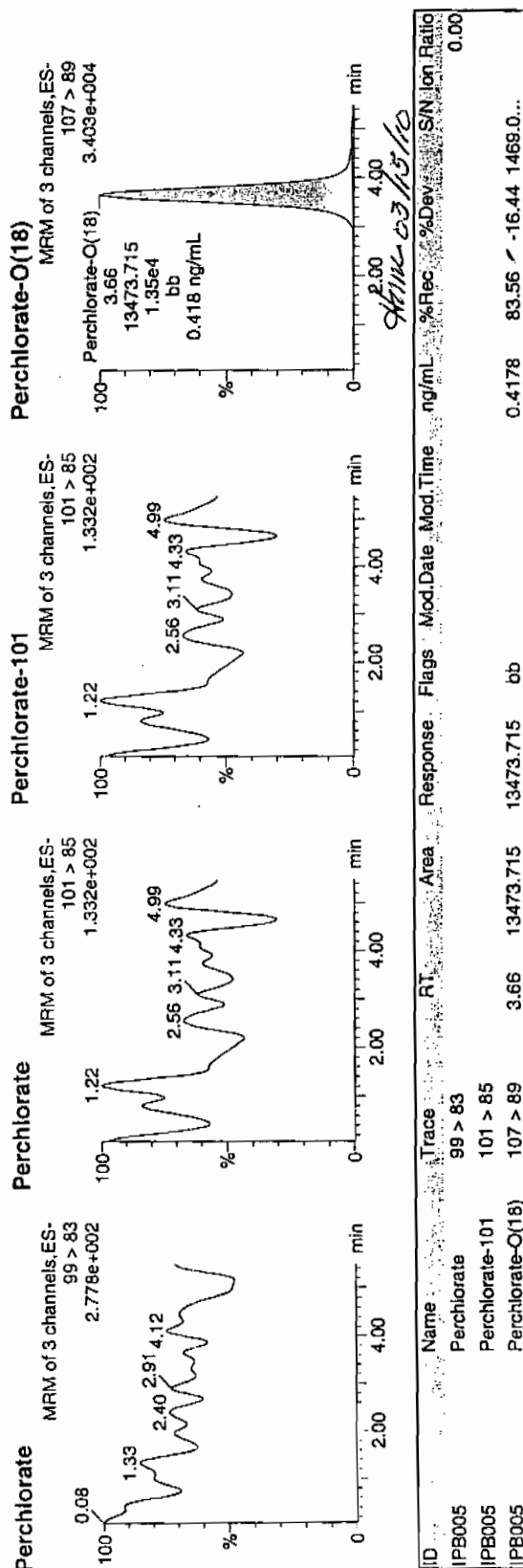


Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313036a
Date: 14-Mar-2010
Time: 00:14:49
ID: IPB005
Vial: 1:1,A

0.03-14-10



Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

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

QUANTO ULTIMA: nairb 01.08.08.ca

Calibration Report - MS1 Static

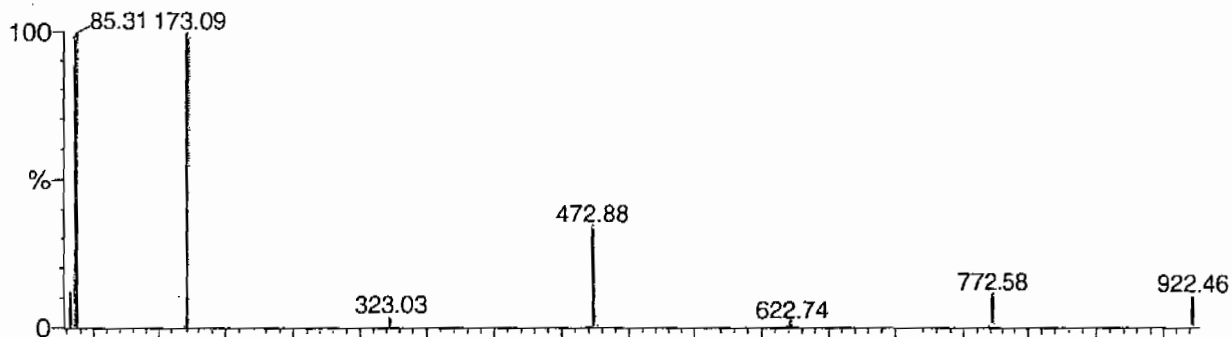
Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

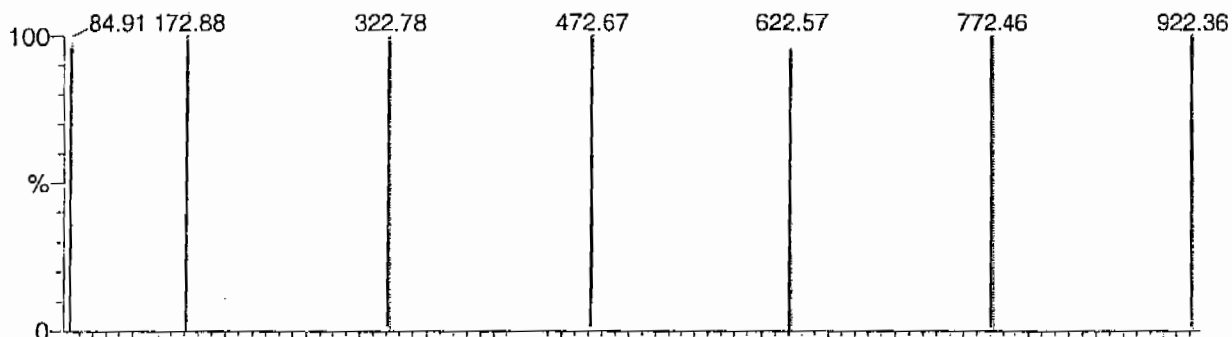
PARTS HIGHLIGHTED BY CWD 01-09-08

Data file: STATMS1 - Uncalibrated

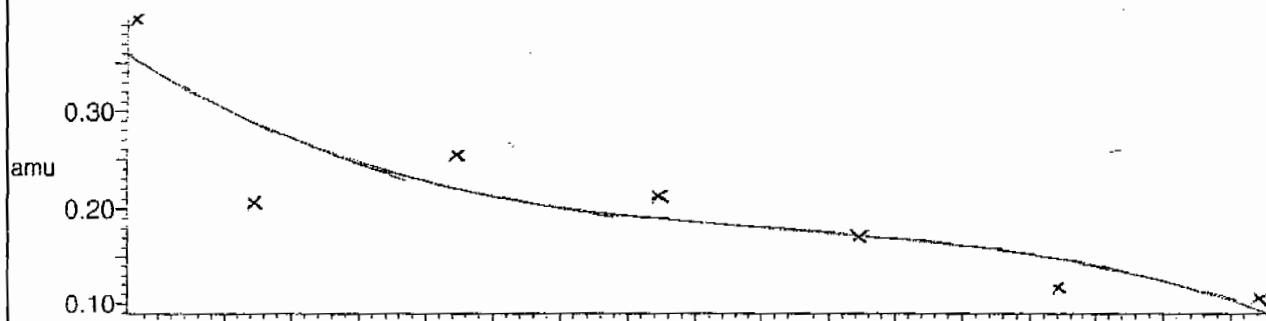
7 matches of 7 tested references



Reference file: Nairb

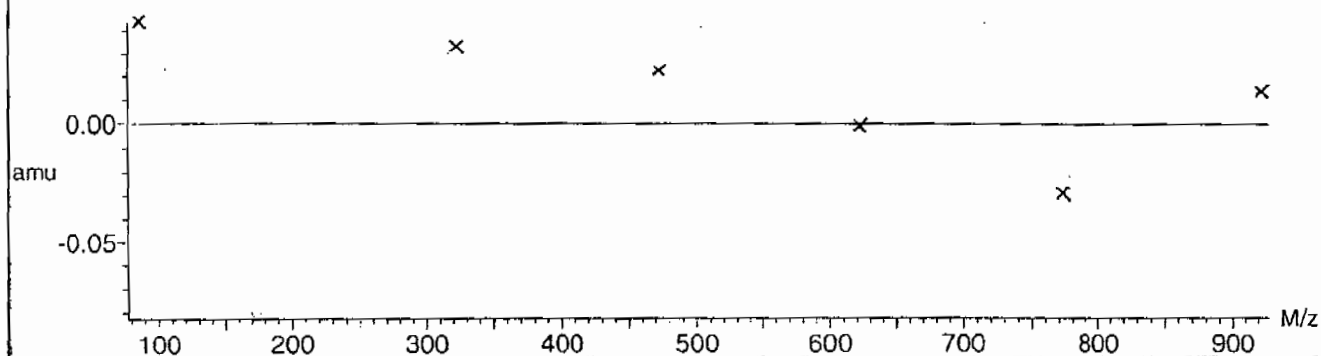


Mass difference (Raw - Ref mass)



Residuals

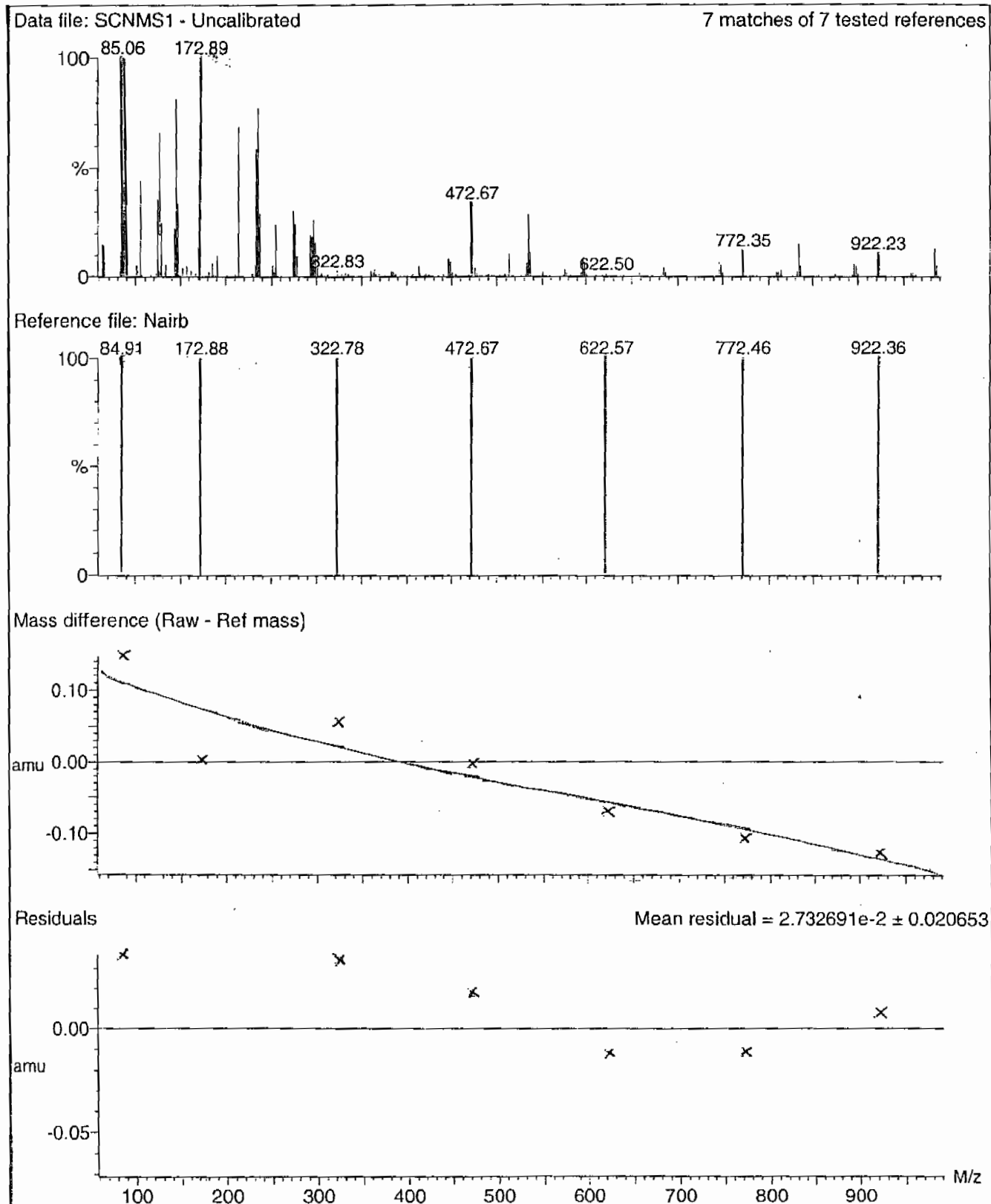
Mean residual = $3.212012 \times 10^{-2} \pm 0.024108$



Calibration Report - MS1 Scanning

Page 1 of 1

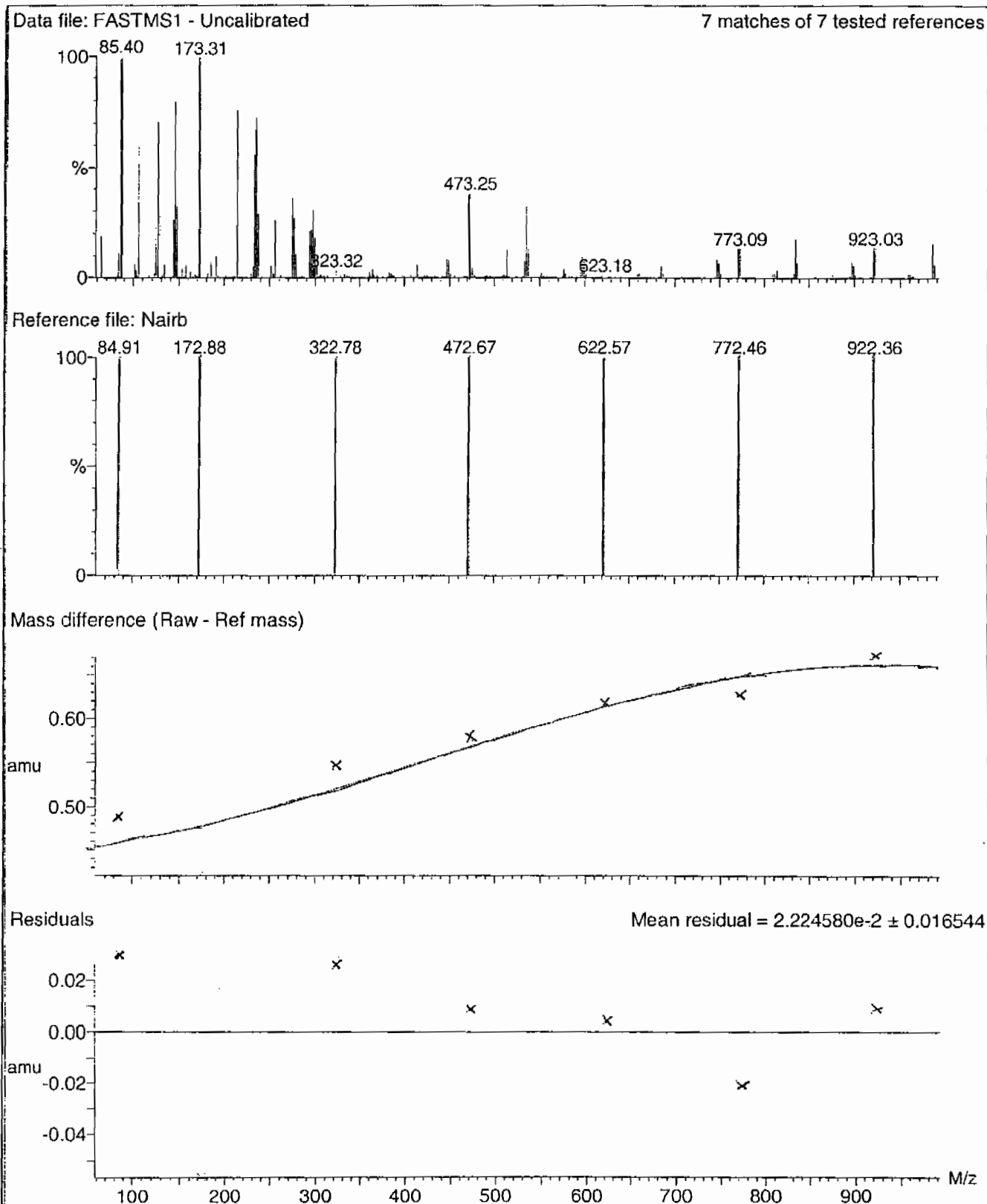
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

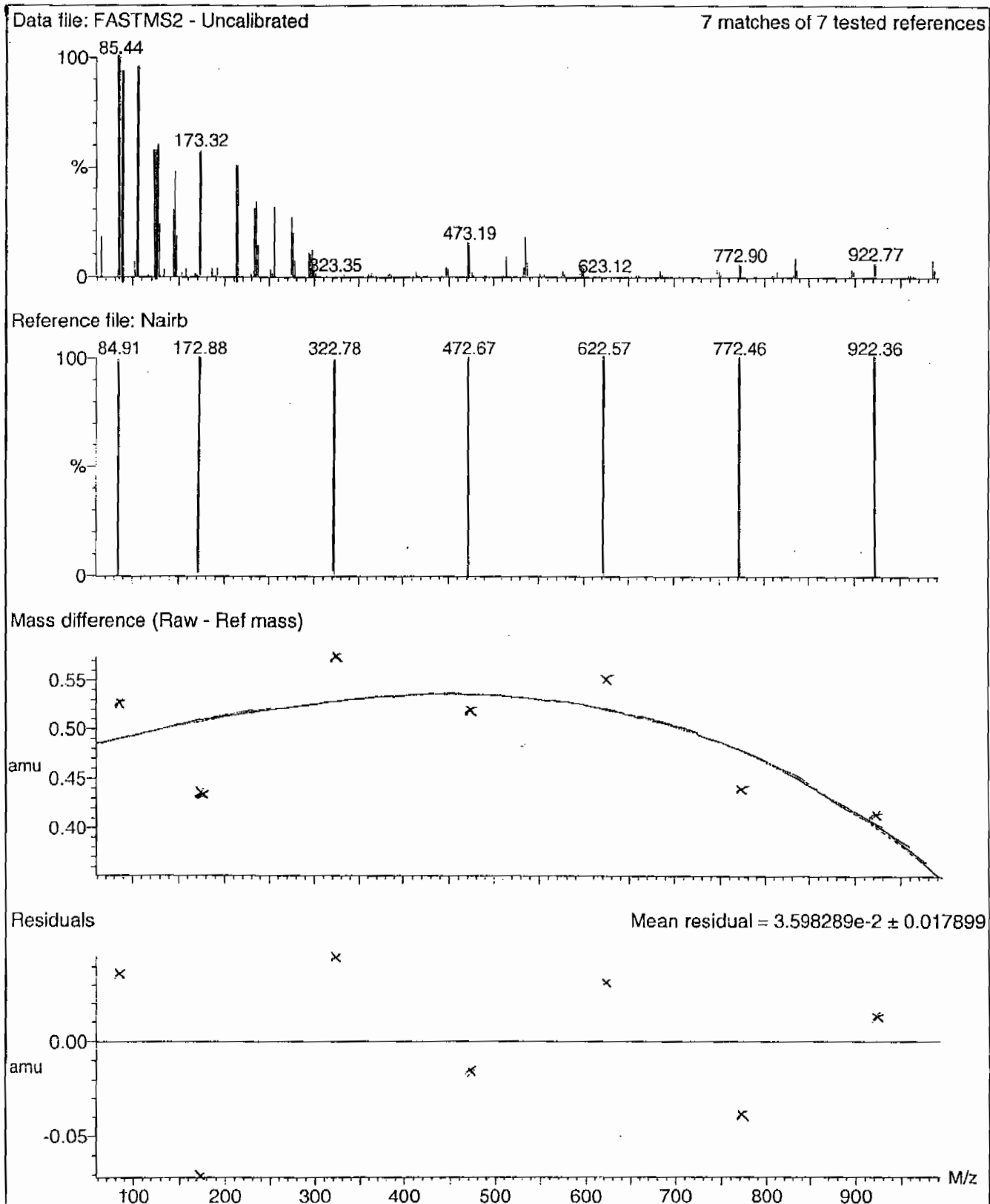
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

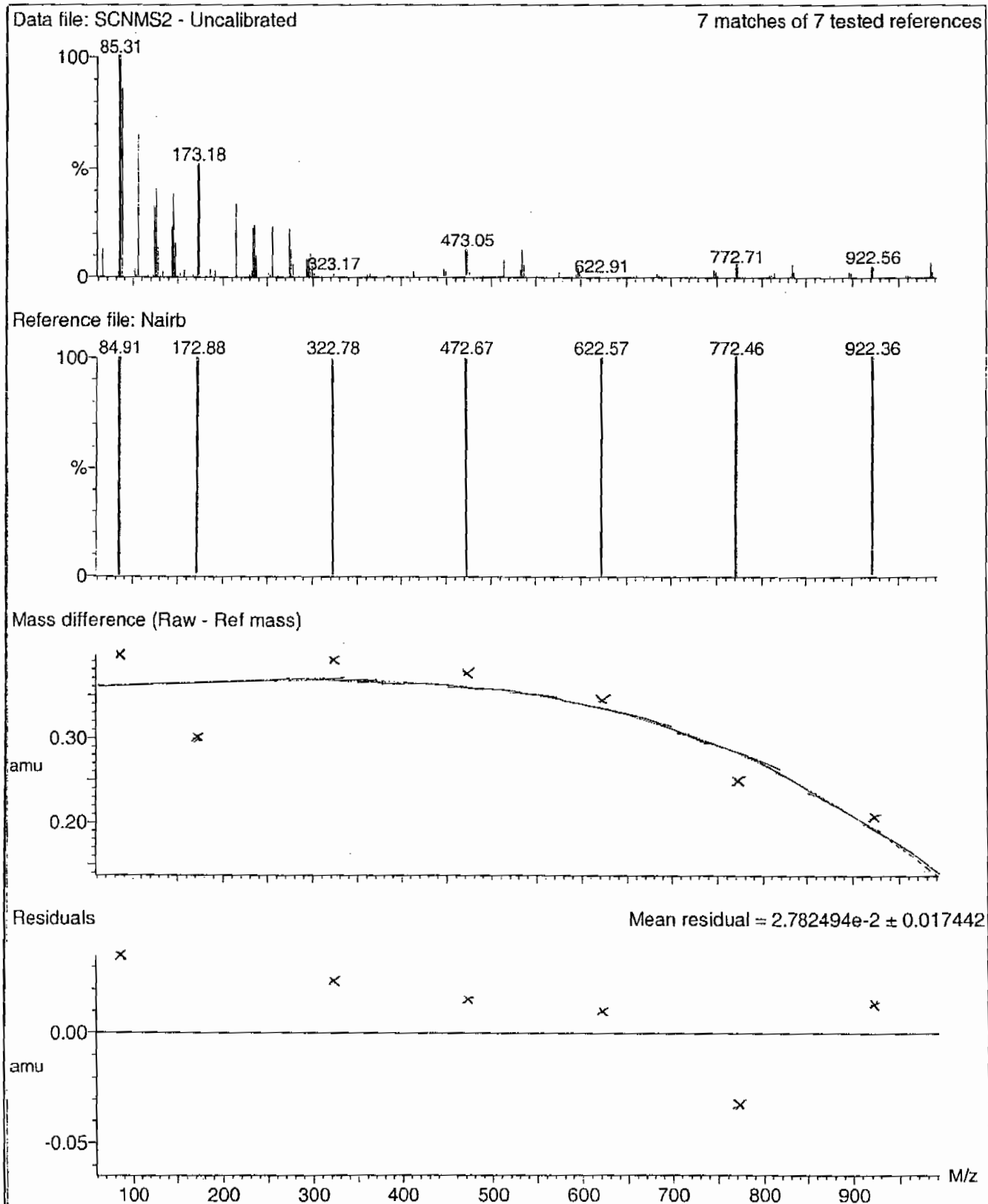
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



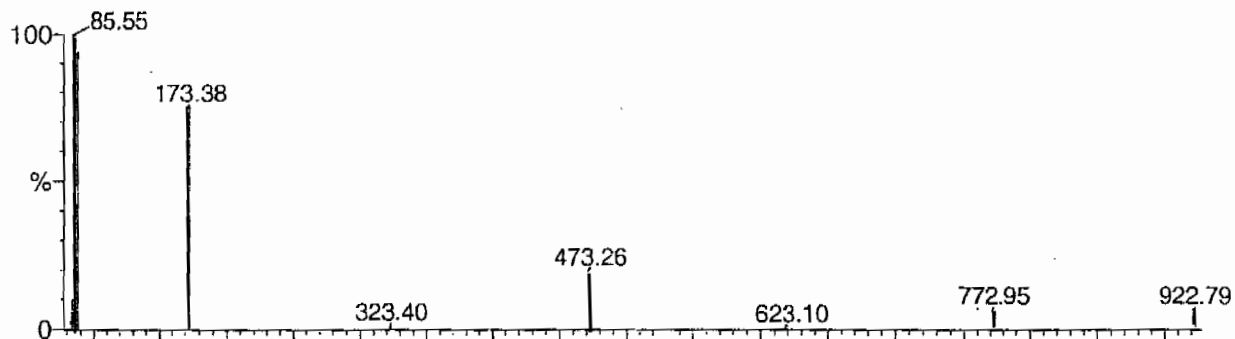
Calibration Report - MS2 Static

Page 1 of 1

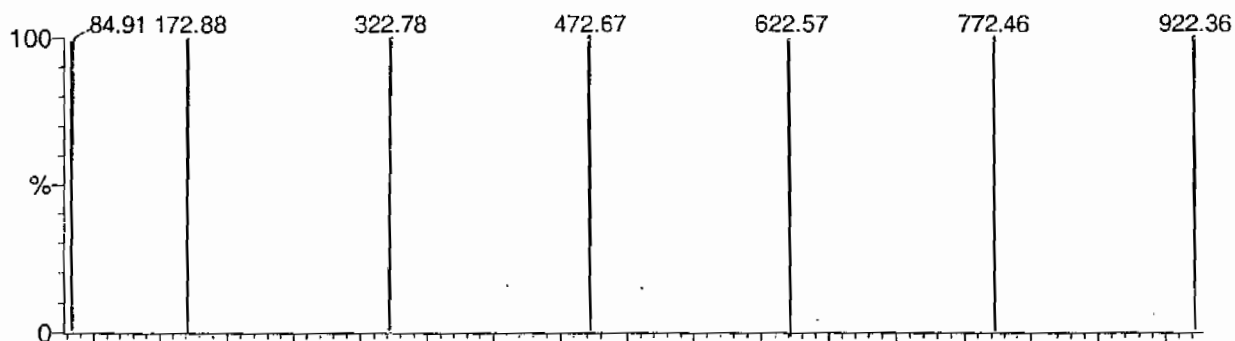
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

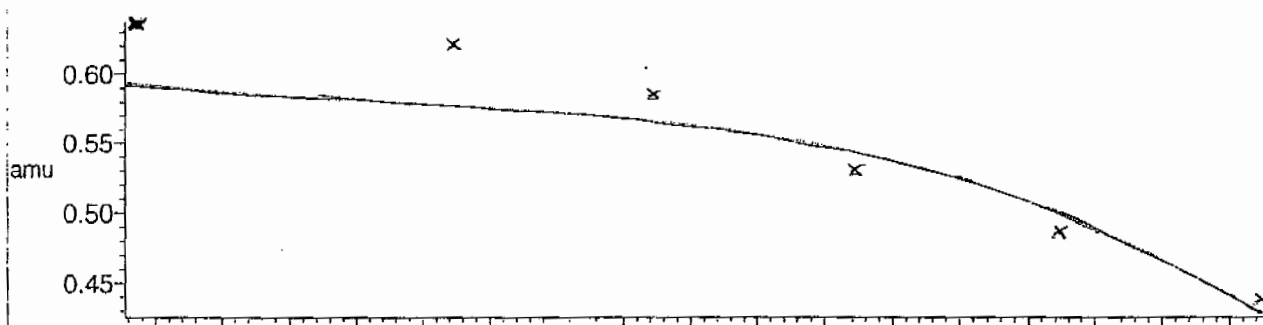
7 matches of 7 tested references



Reference file: Nairb

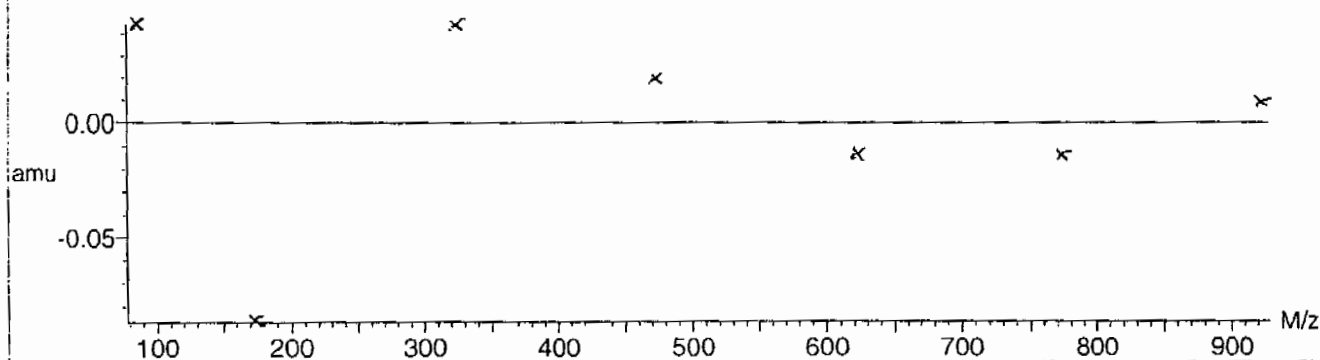


Mass difference (Raw - Ref mass)



Residuals

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



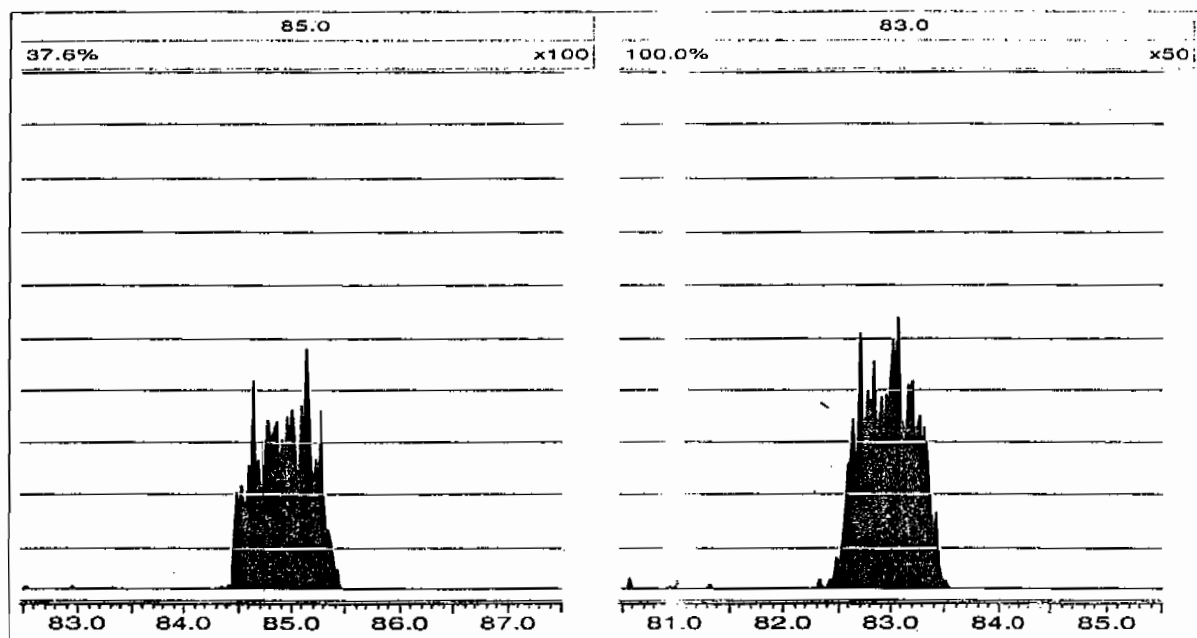
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

File: C:\MassLynx\Perchlorate.PROVACQ\Perchlorate.IPR

Printed: Saturday, March 13, 2010 16:23:58 Eastern Standard Time



Perchlorate RT And Area Summary

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

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973Lab Code: GELInstrument ID: LCMSMSHPLC 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	per0313006a	13-MAR-10	15787.7				
Lower Area Limit			7893.85				
Upper Area Limit			31575.4				
1202054231	per0313012a	13-MAR-10 20:49	14806.6	3.67			
1202054232	per0313013a	13-MAR-10 20:58	14811.2	3.68	3.694	1.004	
1202054235	per0313014a	13-MAR-10 21:06	15956.2	3.69	3.71885	1.008	
247770001	per0313015a	13-MAR-10 21:15	14959.8	3.68	3.69403	1.004	
247770002	per0313016a	13-MAR-10 21:23	14225.4	3.68	3.694	1.004	
247770003	per0313017a	13-MAR-10 21:32	14907.7	3.67	3.69402	1.007	
247770004	per0313018a	13-MAR-10 21:40	14480.6	3.67	3.65677	.996	
247770005	per0313019a	13-MAR-10 21:49	14982.9	3.67	3.68153	1.003	

Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973

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	per0313006a	13-MAR-10	15787.7				
Lower Area Limit			7893.85				
Upper Area Limit			31575.4				
247770006	per0313020a	13-MAR-10 21:58	14507.9	3.68	3.69403	1.004	
247770007	per0313021a	13-MAR-10 22:06	14441.8	3.67	3.68153	1.003	
247770008	per0313025a	13-MAR-10 22:40	14007.4	3.67	3.69402	1.007	
247770009	per0313026a	13-MAR-10 22:49	14645.4	3.67	3.68155	1.003	
247770010	per0313027a	13-MAR-10 22:57	13705.7	3.67	3.69405	1.007	
247770011	per0313028a	13-MAR-10 23:06	13914.5	3.66	3.69402	1.009	

SAMPLE DATA

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8259

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 24770001

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 97.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 21:15	per0313015a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:15	per0313015a
14797-73-0	Perchlorate-101	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 21:15	per0313015a
	Perchlorate-O(18)			4.77	ug/kg		1	13-MAR-10 21:15	per0313015a

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

*Concentration =

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313015a

Date: 13-Mar-2010

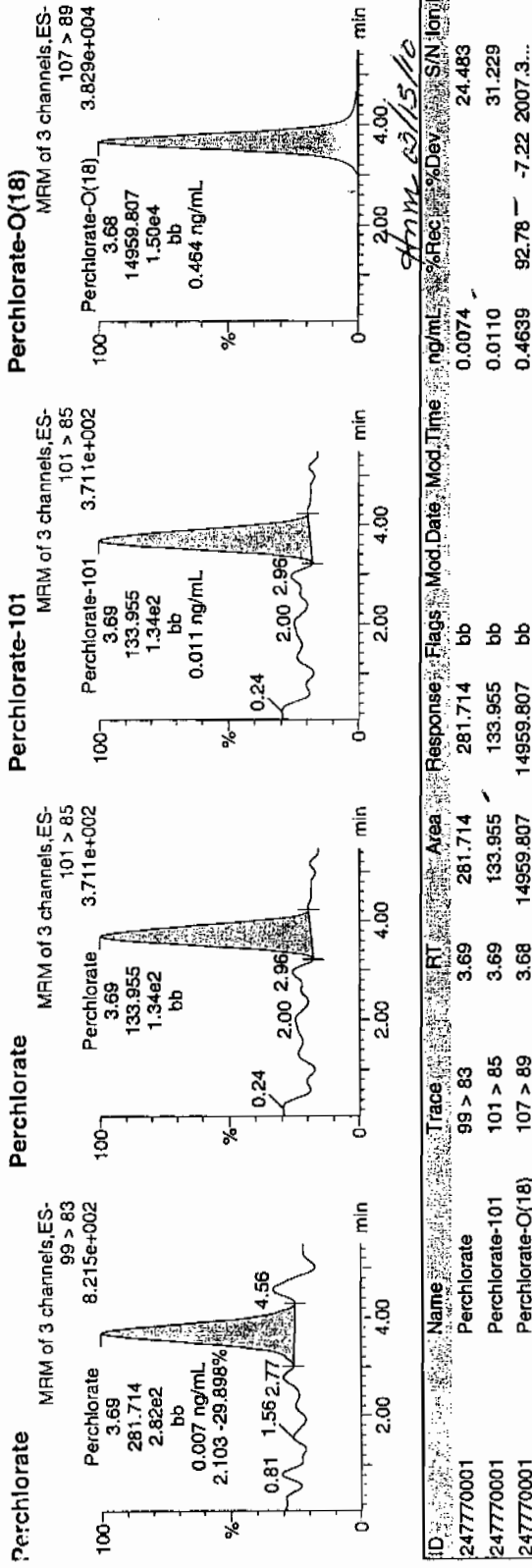
Time: 21:15:19

ID: 247770001

Vial: 1:3,D

03-14-10

157448 | 30020 | 11



Handwritten notes: 03/15/10, 157448, 30020, 11, 2.10, 2.0550

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8261

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770002

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:23	per0313016a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:23	per0313016a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:23	per0313016a
	Perchlorate-O(18)			4.49	ug/kg		1	13-MAR-10 21:23	per0313016a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313016a

Date: 13-Mar-2010

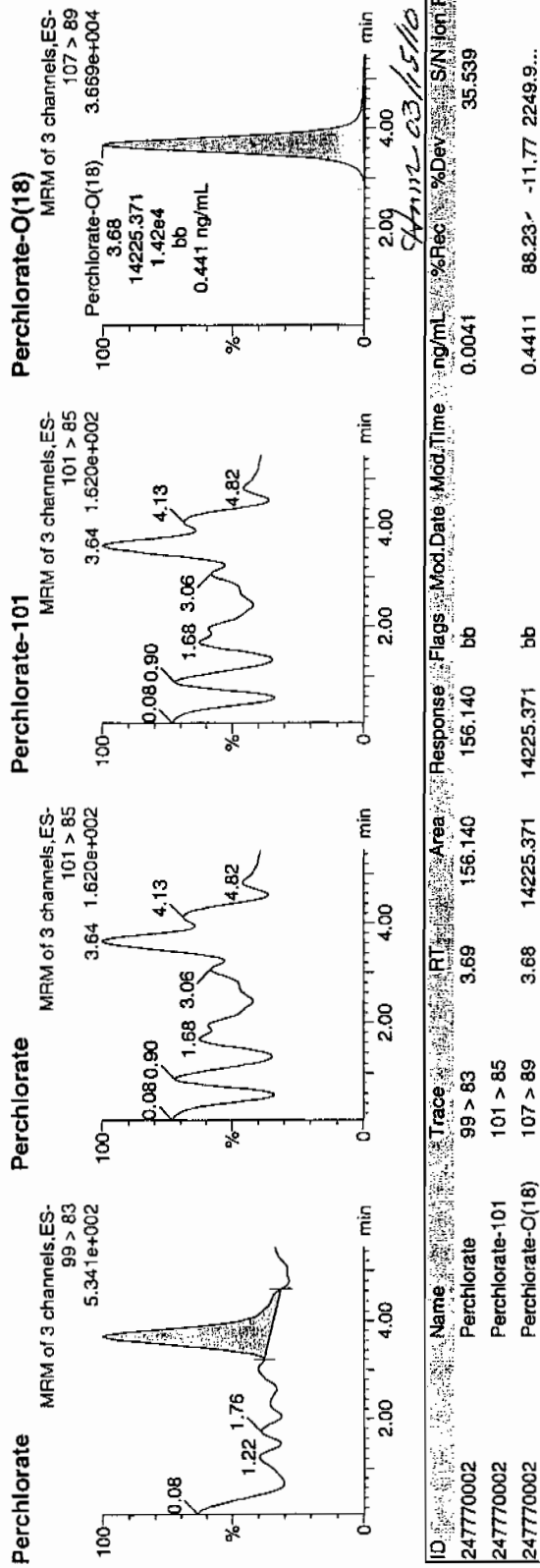
Time: 21:23:52

ID: 247770002

Vial: 1:3,E

162001957483 | 30220 | 11

03-14-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	S/N	Ion Ratio
247770002	Perchlorate	99 > 83	3.69	156.140	156.140	bb			0.0041			35.539	0.00
247770002	Perchlorate-101	101 > 85											
247770002	Perchlorate-O(18)	107 > 89	3.68	14225.371	14225.371	bb			0.4411	88.23	-11.77	2249.9...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLCLab Code: GELInstrument: LCMSMSMethod: SW846 6850 ModifiedMatrix: SOILExtraction Batch ID: 957945Extraction Type: Solid PrepSample Volume/Weight: 2.00 gConcentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8257Date Received: 23-FEB-10GEL Job No (SDG): 10-1973GEL Sample ID: 247770003Date Filtered: 09-MAR-10Injection Volume (uL): 20%Solids: 98.7

CAS No.	Analyte ^A	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.507	2.03	0.507	ug/kg	U	1	13-MAR-10 21:32	per0313017a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:32	per0313017a
14797-73-0	Perchlorate-101	.507	2.03	0.507	ug/kg	U	1	13-MAR-10 21:32	per0313017a
	Perchlorate-O(18)			4.68	ug/kg		1	13-MAR-10 21:32	per0313017a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313017a

Date: 13-Mar-2010

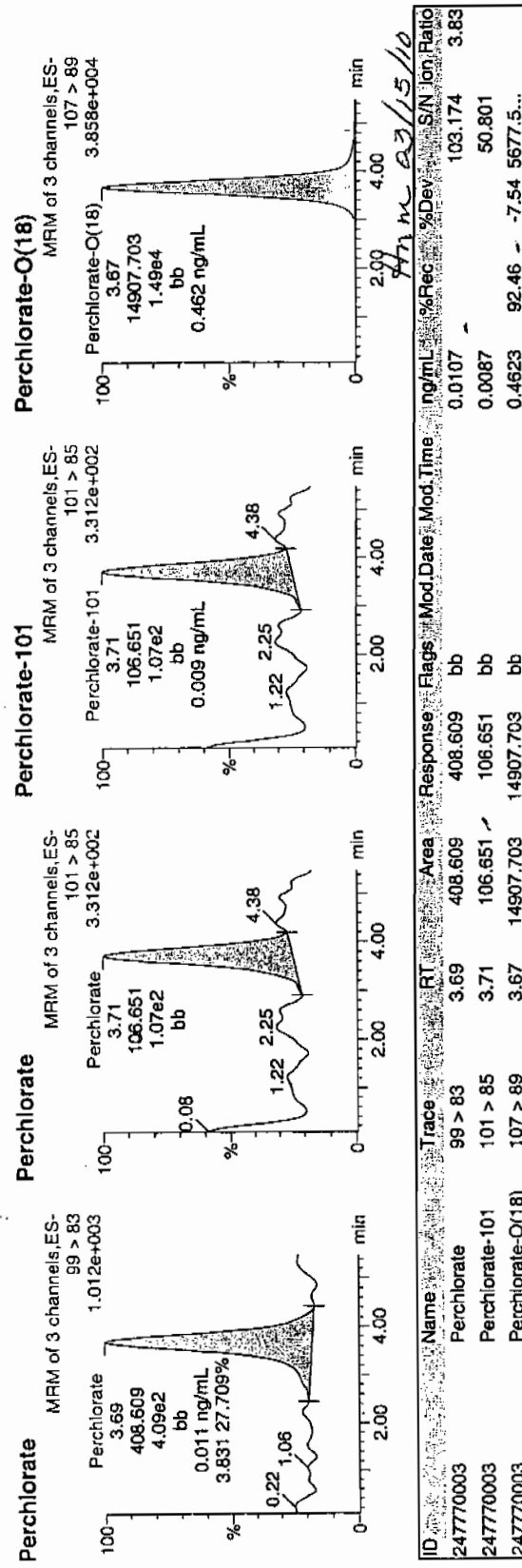
Time: 21:32:23

ID: 247770003

Vial: 1:3,F

03-14-10

1522-1957443 | 5025 | 11



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8260

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770004

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.4

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:40	per0313018a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:40	per0313018a
14797-73-0	Perchlorate-101	.508	2.03	0.508	ug/kg	U	1	13-MAR-10 21:40	per0313018a
	Perchlorate-O(18)			4.56	ug/kg		1	13-MAR-10 21:40	per0313018a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313018a

Date: 13-Mar-2010

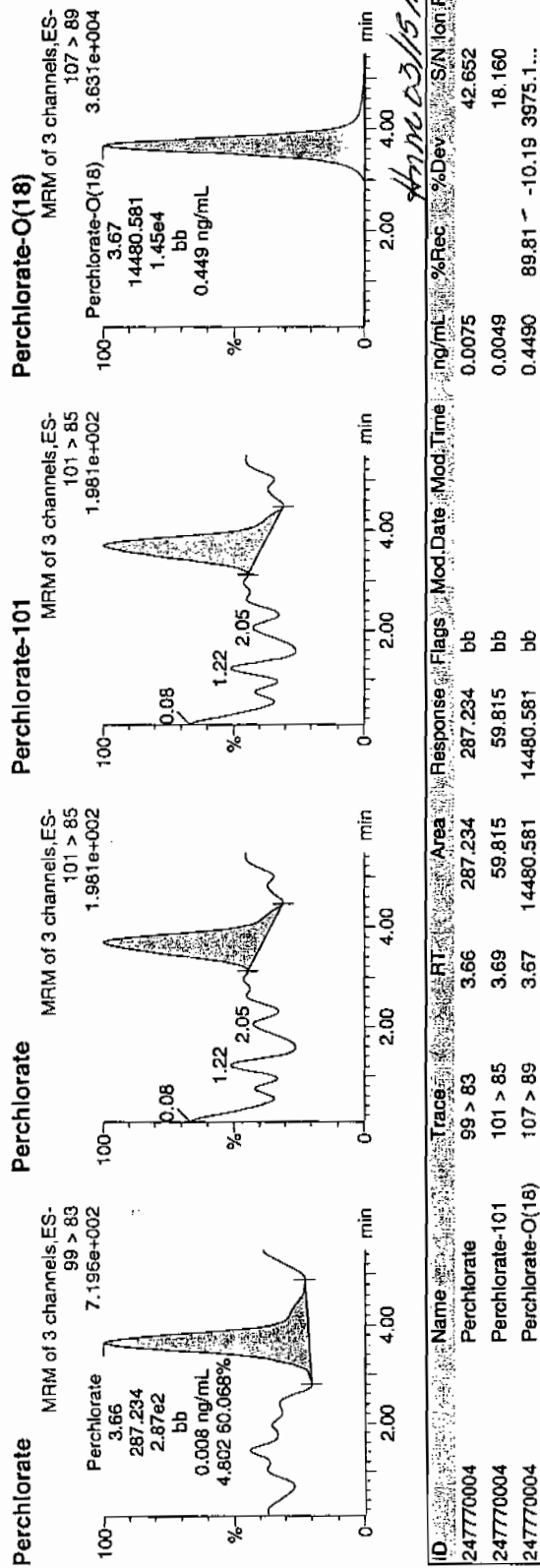
Time: 21:40:55

ID: 247770004

Vial: 1:4,A

03-14-10

157-10-1957442 | 30020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247770004	Perchlorate	99 > 83	3.66	287.234	287.234	bb			0.0075			42.652	4.80
247770004	Perchlorate-101	101 > 85	3.69	59.815	59.815	bb			0.0049			18.160	
247770004	Perchlorate-O(18)	107 > 89	3.67	14480.581	14480.581	bb			0.4490	89.81	-10.19	3975.1...	

OKAY
20.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8258

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770005

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 28.3

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.03	0.509	ug/kg	U	1	13-MAR-10 21:49	per0313019a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:49	per0313019a
14797-73-0	Perchlorate-101	.509	2.03	0.509	ug/kg	U	1	13-MAR-10 21:49	per0313019a
	Perchlorate-O(18)			4.73	ug/kg		1	13-MAR-10 21:49	per0313019a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313019a

Date: 13-Mar-2010

Time: 21:49:29

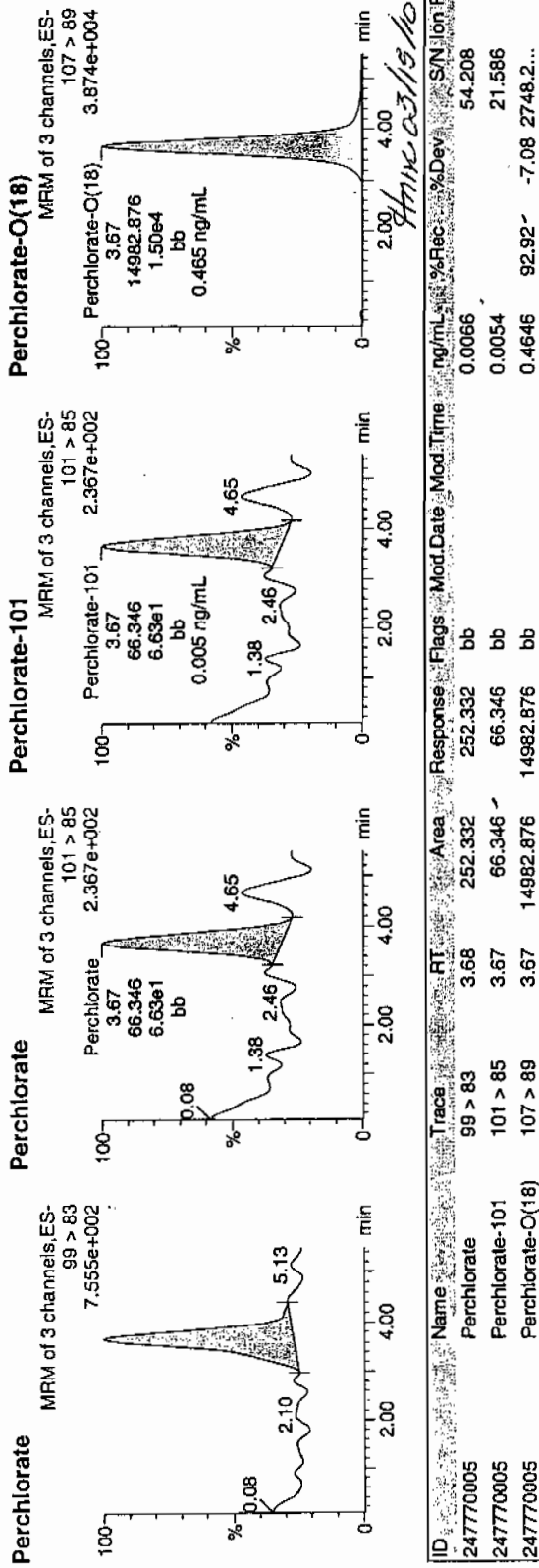
ID: 247770005

Vial: 1:4,B

03-14-10

192-957943 | 5020 | 11

o



Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 257945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8263

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770006

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 21:58	per0313020a
	Perchlorate Isotope Ratio						1	13-MAR-10 21:58	per0313020a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 21:58	per0313020a
	Perchlorate-O(18)			4.58	ug/kg		1	13-MAR-10 21:58	per0313020a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313020a

Date: 13-Mar-2010

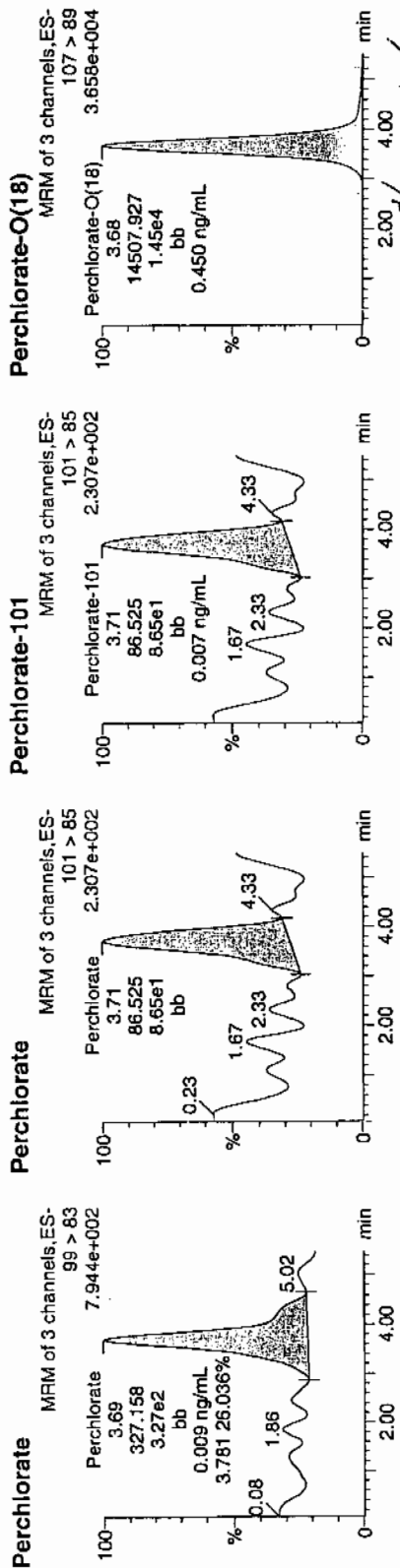
Time: 21:58:03

ID: 247770006

Vial: 1:4,C

33-14-10

1522-1957 948 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	% Rec	% Dev	SN	Ion Ratio
247770006	Perchlorate	99 > 83	3.69	327.158	327.158	bb			0.0085	-		45.264	3.78
247770006	Perchlorate-101	101 > 85	3.71	86.525	86.525	bb			0.0071			20.394	
247770006	Perchlorate-O(18)	107 > 89	3.68	14507.927	14507.927	bb			0.4499	89.98	-10.02	2351.5...	

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8255

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770007

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.8

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.506	2.02	0.506	ug/kg	U	1	13-MAR-10 22:06	per0313021a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:06	per0313021a
14797-73-0	Perchlorate-101	.506	2.02	0.506	ug/kg	U	1	13-MAR-10 22:06	per0313021a
	Perchlorate-O(18)			4.53	ug/kg		1	13-MAR-10 22:06	per0313021a

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

*Concentration =

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

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313021a

Date: 13-Mar-2010

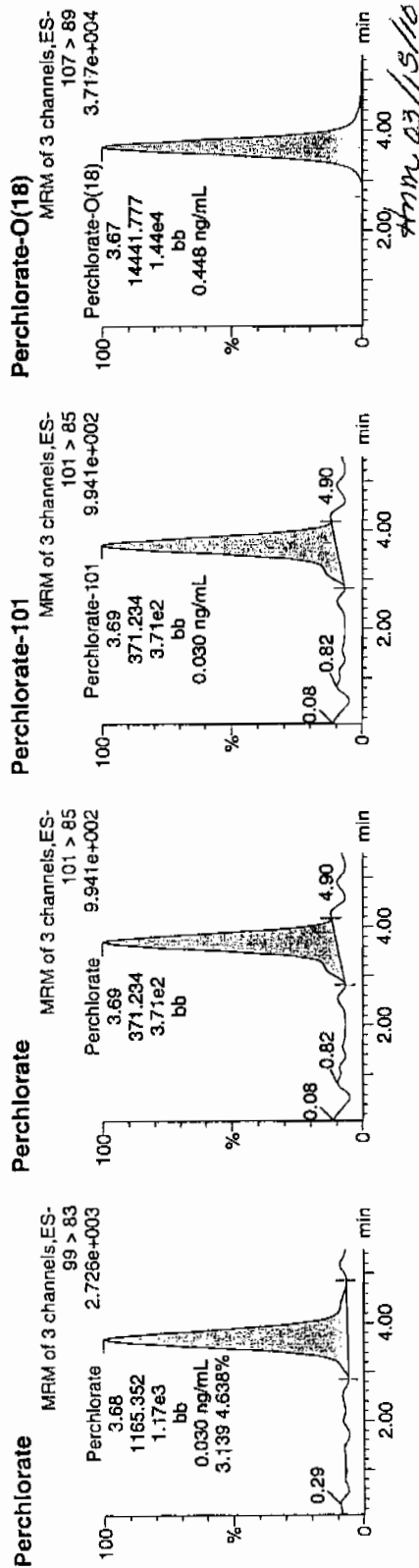
Time: 22:06:35

ID: 247770007

Vial: 1:4,D

623
03-14-10

1522-457443 | 3020 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247770007	Perchlorate	99 > 83	3.68	1165.352	1165.352	bb			0.0304			241.122	3.14
247770007	Perchlorate-101	101 > 85	3.69	371.234	371.234	bb			0.0304			54.819	
247770007	Perchlorate-O(18)	107 > 89	3.67	14441.777	14441.777	bb			0.4478	89.57	-10.43	1802.5...	

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: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8256

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770008

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 97.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 22:40	per0313025a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:40	per0313025a
14797-73-0	Perchlorate-101	.514	2.06	0.514	ug/kg	U	1	13-MAR-10 22:40	per0313025a
	Perchlorate-O(18)			4.47	ug/kg		1	13-MAR-10 22:40	per0313025a

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

*Concentration =

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

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

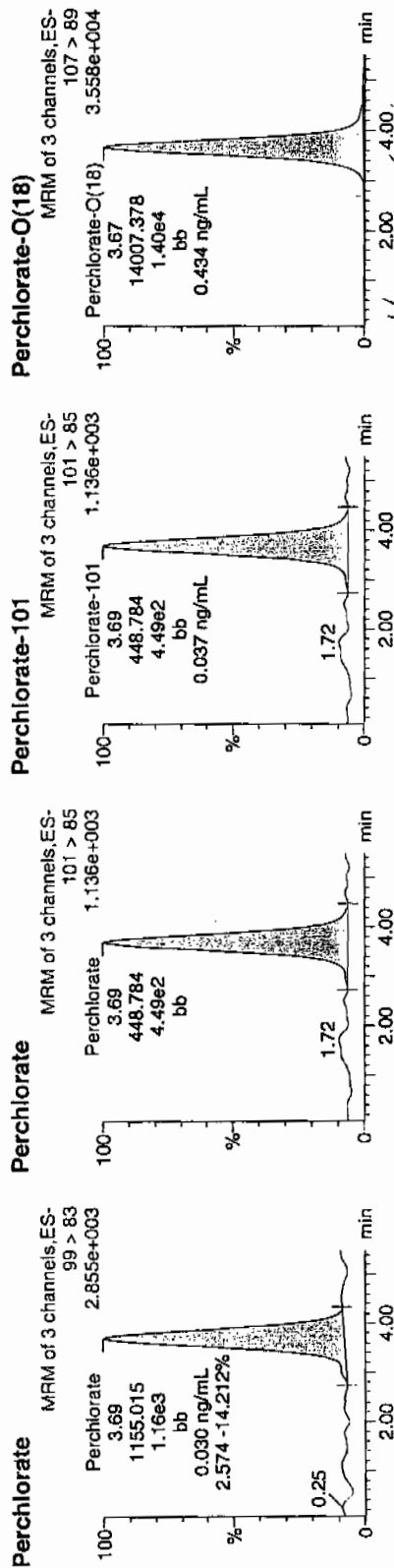
Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313025a
Date: 13-Mar-2010
Time: 22:40:47
ID: 247770008
Vial: 1:4,E

33-N-10

15200 | 957443 | 5000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247770008	Perchlorate	99 > 83	3.69	1155.015	1155.015	bb			0.0302			158.608	2.57
247770008	Perchlorate-101	101 > 85	3.69	448.784	448.784	bb			0.0368			131.674	
247770008	Perchlorate-O(18)	107 > 89	3.67	14007.378	14007.378	bb			0.4344	86.87	-13.13	1111.7...	

Form 1

P perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: SW846 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8262

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770009

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:49	per0313026a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:49	per0313026a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:49	per0313026a
	Perchlorate-O(18)			4.62	ug/kg		1	13-MAR-10 22:49	per0313026a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1
Aliquot %Solids

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313026a

Date: 13-Mar-2010

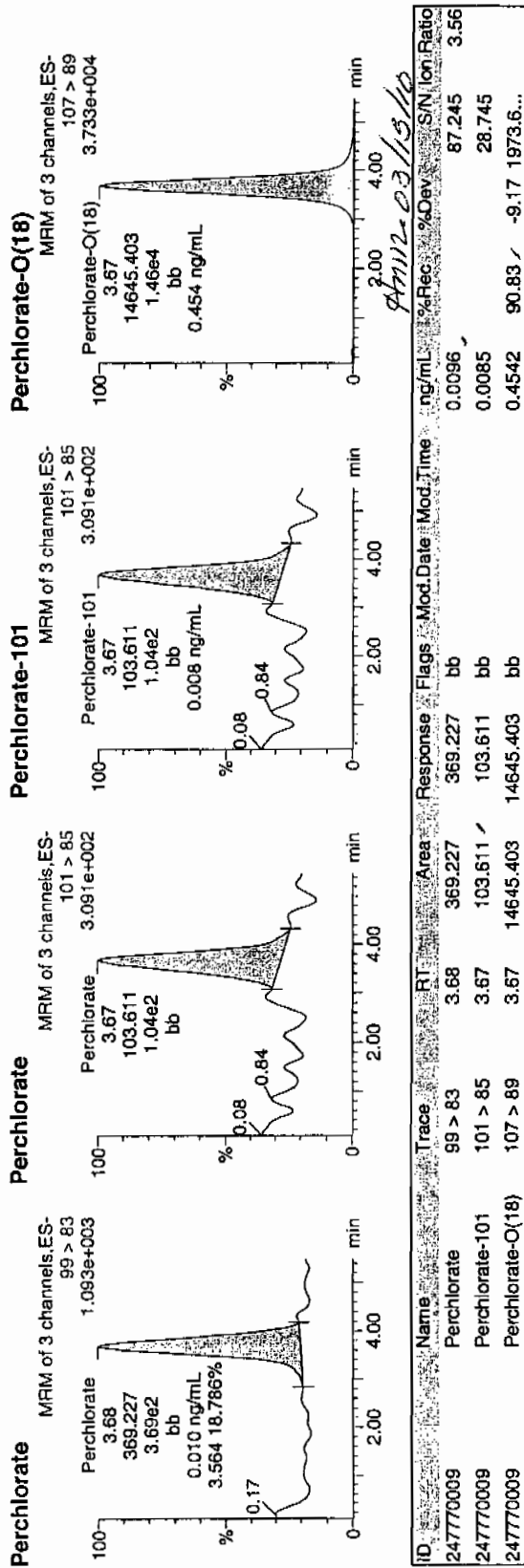
Time: 22:49:19

ID: 247770009

Vial: 1:4,F

142-1957943 | 5020 | 11

33-1410



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: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8265

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770010

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.2

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:57	per0313027a
	Perchlorate Isotope Ratio						1	13-MAR-10 22:57	per0313027a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 22:57	per0313027a
	Perchlorate-O(18)			4.33	ug/kg		1	13-MAR-10 22:57	per0313027a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313027a

Date: 13-Mar-2010

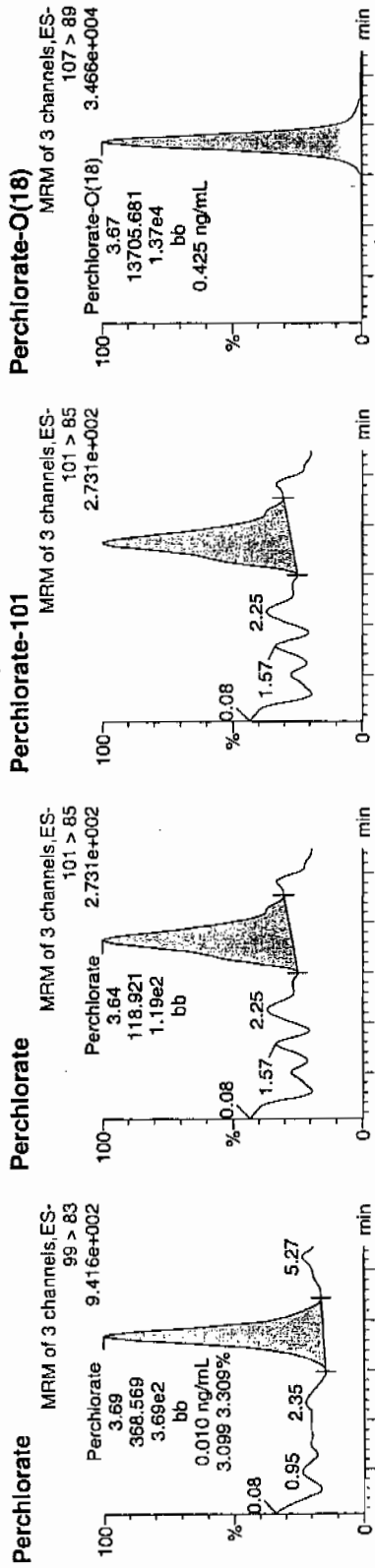
Time: 22:57:50

ID: 247770010

Vial: 1:5,A

623
03-14-10

15000 | 957948 | 5000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
247770010	Perchlorate	99 > 83	3.69	368.569	368.569	bb			0.0096			58.172	3.10
247770010	Perchlorate-101	101 > 85	3.64	118.921	118.921	bb			0.0097			15.909	
247770010	Perchlorate-O(18)	107 > 89	3.67	13705.681	13705.681	bb			0.4250	85.00	-15.00	2489.8...	

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: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

RE15-10-8269

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 247770011

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 98.1

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 23:06	per0313028a
	Perchlorate Isotope Ratio						1	13-MAR-10 23:06	per0313028a
14797-73-0	Perchlorate-101	.509	2.04	0.509	ug/kg	U	1	13-MAR-10 23:06	per0313028a
	Perchlorate-O(18)			4.40	ug/kg		1	13-MAR-10 23:06	per0313028a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313028a

Date: 13-Mar-2010

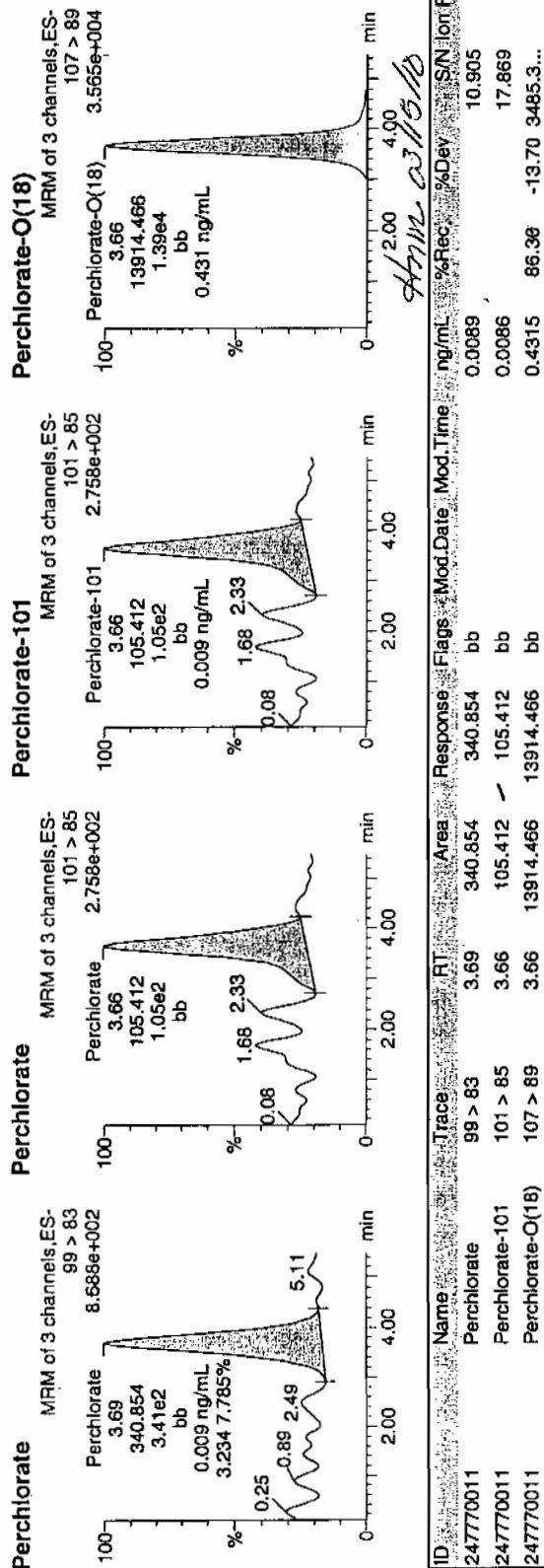
Time: 23:06:24

ID: 247770011

Vial: 1:5,B

33-14-10

1524-957948 | 50000 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
247770011	Perchlorate	99 > 83	3.69	340.854	340.854	bb			0.0089			10.905	3.23
247770011	Perchlorate-101	101 > 85	3.66	105.412	105.412	bb			0.0086			17.869	
247770011	Perchlorate-O(18)	107 > 89	3.66	13914.466	13914.466	bb			0.4315	86.36	-13.70	3485.3...	

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 13-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

Paramname Perchlorate

Coefficient of Determination:

Calibration Curve: 38288.18

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

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Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 13-MAR-10

HPLC Column: Phenomenex Ion Pac AG-162 X 50 mm

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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 12207.48

Response Type: External Standard

Curve Type: RF

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per031310a.mdb 14 Mar 2010 12:30:10
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per031310a.cdb 14 Mar 2010 12:35:48

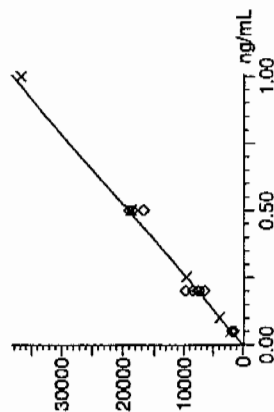
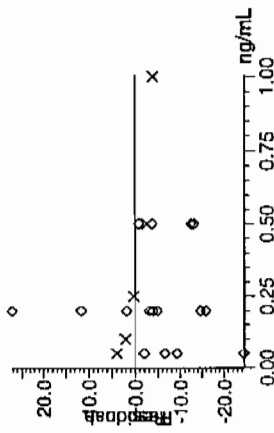
Compound name: Perchlorate

Response Factor: 38288.2

RRF SD: 1235.33, % Relative SD: 3.22641

Response type: External Std, Area

Curve type: RF



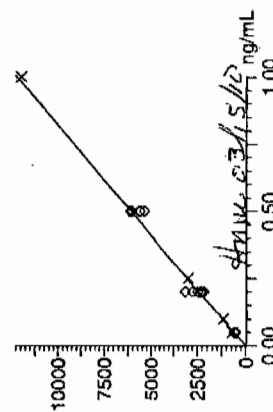
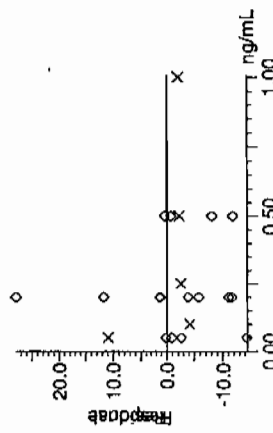
Compound name: Perchlorate-101

Response Factor: 12207.5

RRF SD: 751.15, % Relative SD: 6.15319

Response type: External Std, Area

Curve type: RF



03-14-10

03-14-10

Quantify Calibration Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

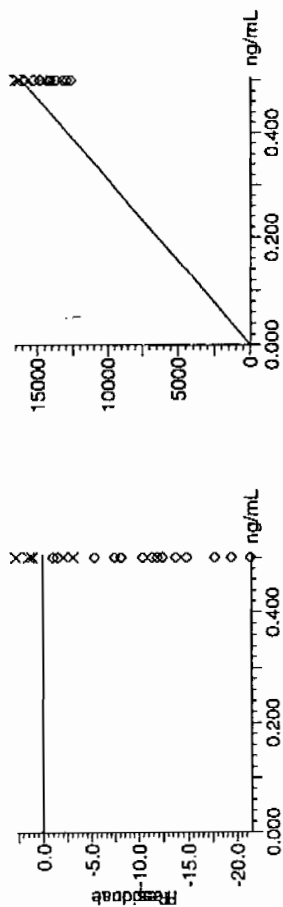
Compound name: Perchlorate-O⁻(18)

Response Factor: 32247.6

RF SD: 800.307, % Relative SD: 2.48176

Response type: External Std, Area

Curve type: RF



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.5	99.19	13-MAR-10 20:24	per0313009a
Perchlorate Isotope Ratio		3.1		13-MAR-10 20:24	per0313009a
Perchlorate-101	.5	.5	100.43	13-MAR-10 20:24	per0313009a

Quantify Sample Report MassLynx 4.0 SP4

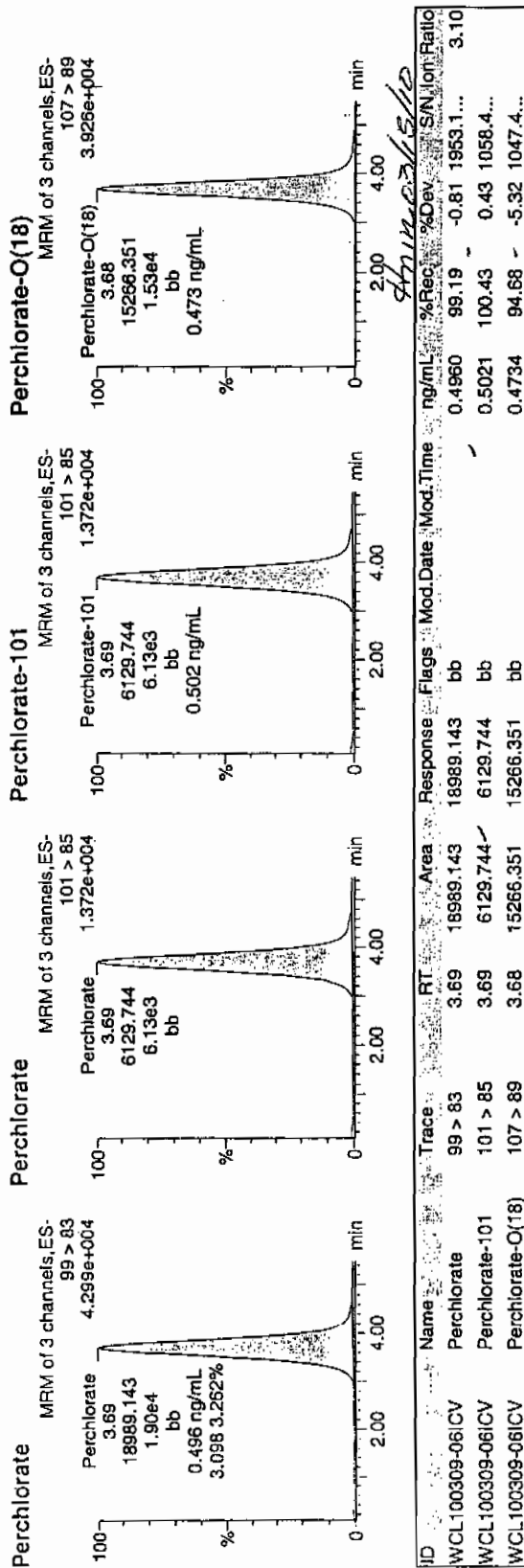
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313009a
Date: 13-Mar-2010
Time: 20:24:04
ID: WCL100309-06ICV
Vial: 1:2,A

Run
03-14-10



Perchlorate Continuing Calibration Verification

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Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.48	96.42	13-MAR-10 22:15	per0313022a
Perchlorate Isotope Ratio		3.05		13-MAR-10 22:15	per0313022a
Perchlorate-101	.5	.5	99.26	13-MAR-10 22:15	per0313022a
Perchlorate	.5	.44	87.55	14-MAR-10 00:06	per0313035a
Perchlorate Isotope Ratio		2.99		14-MAR-10 00:06	per0313035a
Perchlorate-101	.5	.46	91.97	14-MAR-10 00:06	per0313035a

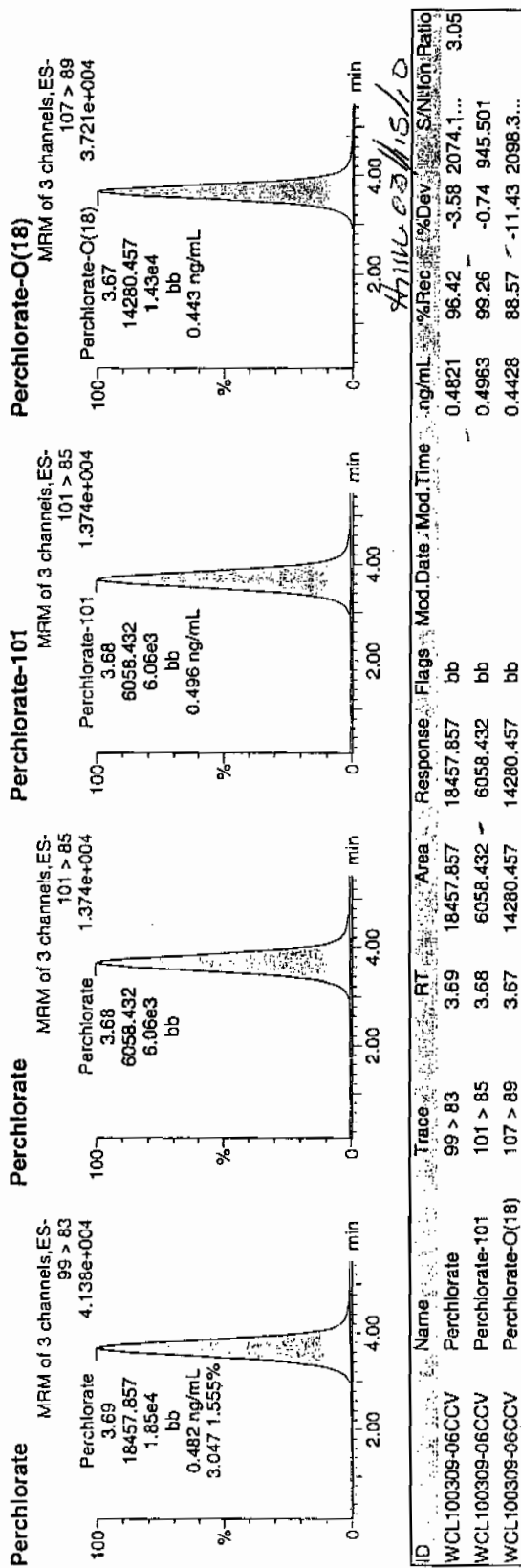
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313022a
Date: 13-Mar-2010
Time: 22:15:08
ID: WCL100309-06CCV
Vial: 1:2,A

Per
03-14-10



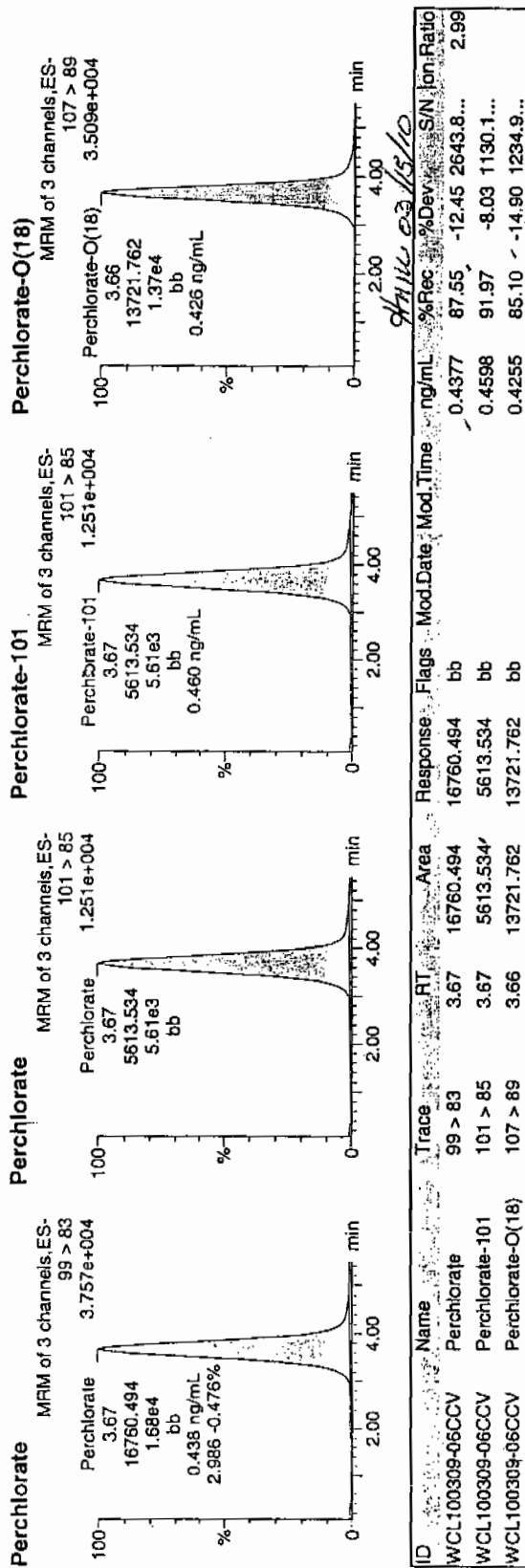
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313035a
Date: 14-Mar-2010
Time: 00:06:16
ID: WCL100309-06CCV
Vial: 1:2,A

Per03
03-14-10



Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973

Lab Code: GEL

Reporting Units: ug/kg

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	98.04	13-MAR-10 20:41	per0313011a
Perchlorate Isotope Ratio		3.16		13-MAR-10 20:41	per0313011a
Perchlorate-101	.05	.05	97.43	13-MAR-10 20:41	per0313011a
Perchlorate	.05	.05	93.53	13-MAR-10 22:32	per0313024a
Perchlorate Isotope Ratio		2.96		13-MAR-10 22:32	per0313024a
Perchlorate-101	.05	.05	99.17	13-MAR-10 22:32	per0313024a
Perchlorate	.05	.05	90.87	14-MAR-10 00:23	per0313037a
Perchlorate Isotope Ratio		2.84		14-MAR-10 00:23	per0313037a
Perchlorate-101	.05	.05	100.2	14-MAR-10 00:23	per0313037a

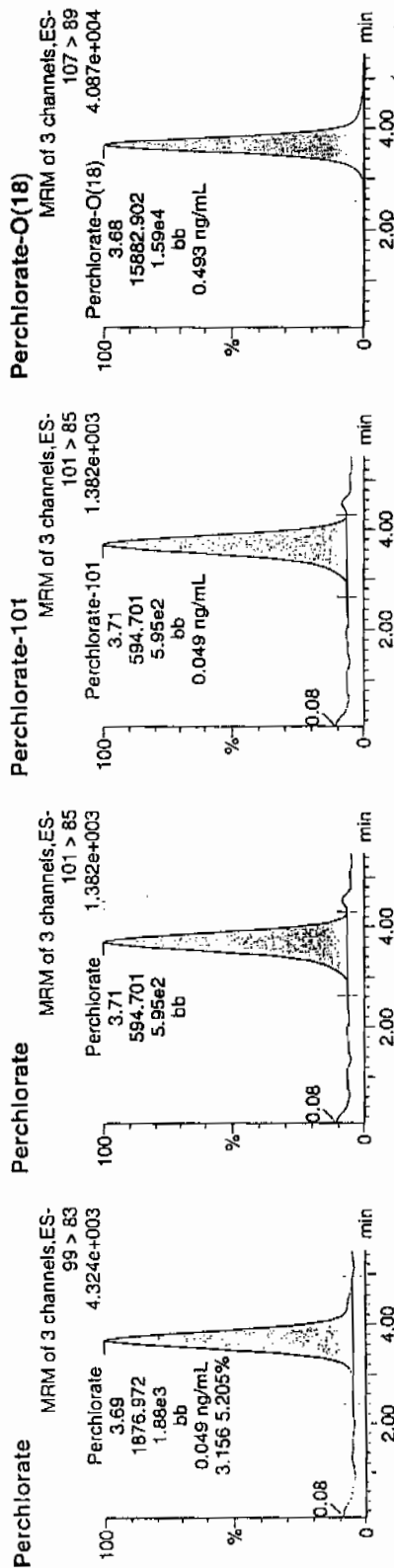
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313011a
Date: 13-Mar-2010
Time: 20:41:09
ID: WCL100309-07CRI
Vial: 1:2,B

03-14-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.69	1876.972	1876.972	bb			0.0490	98.04	-1.96	190.629	3.16
WCL100309-07CRI	Perchlorate-101	101 > 85	3.71	594.701	594.701	bb			0.0487	97.43	-2.57	45.285	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.68	15882.902	15882.902	bb			0.4925	98.51	-1.49	2623.7...	

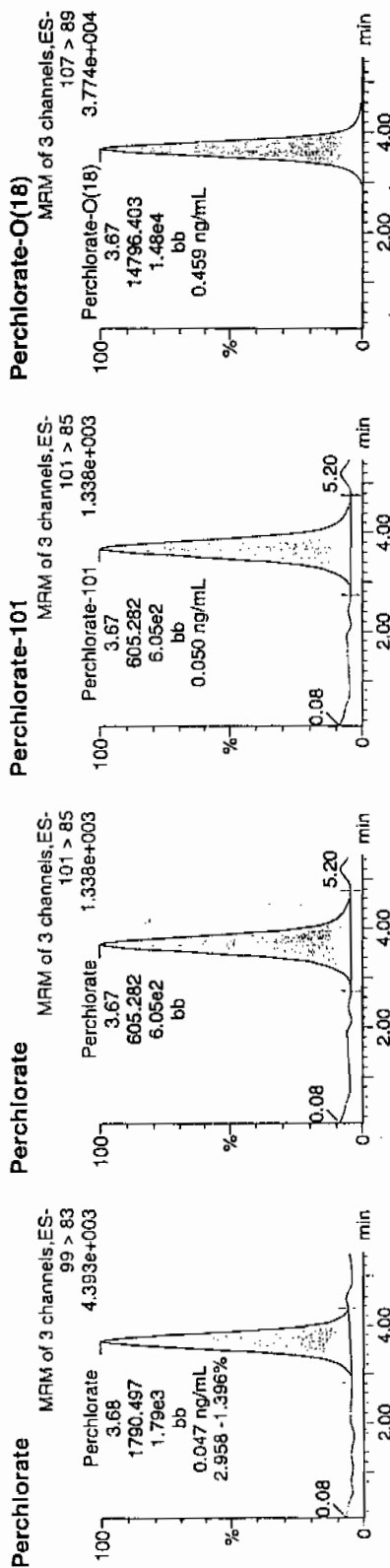
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313024a
Date: 13-Mar-2010
Time: 22:32:14
ID: WCL100309-07CRI
Vial: 1:2,B

Pure
CWS
3-14-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100309-07CRI	Perchlorate	99 > 83	3.68	1790.497	1790.497	bb			0.0468	93.53	-6.47	203.338	2.96
WCL100309-07CRI	Perchlorate-101	101 > 85	3.67	605.282	605.282	bb			0.0496	98.17	-0.83	146.569	
WCL100309-07CRI	Perchlorate-O(18)	107 > 89	3.67	14796.403	14796.403	bb			0.4588	91.77	-8.23	2204.4...	

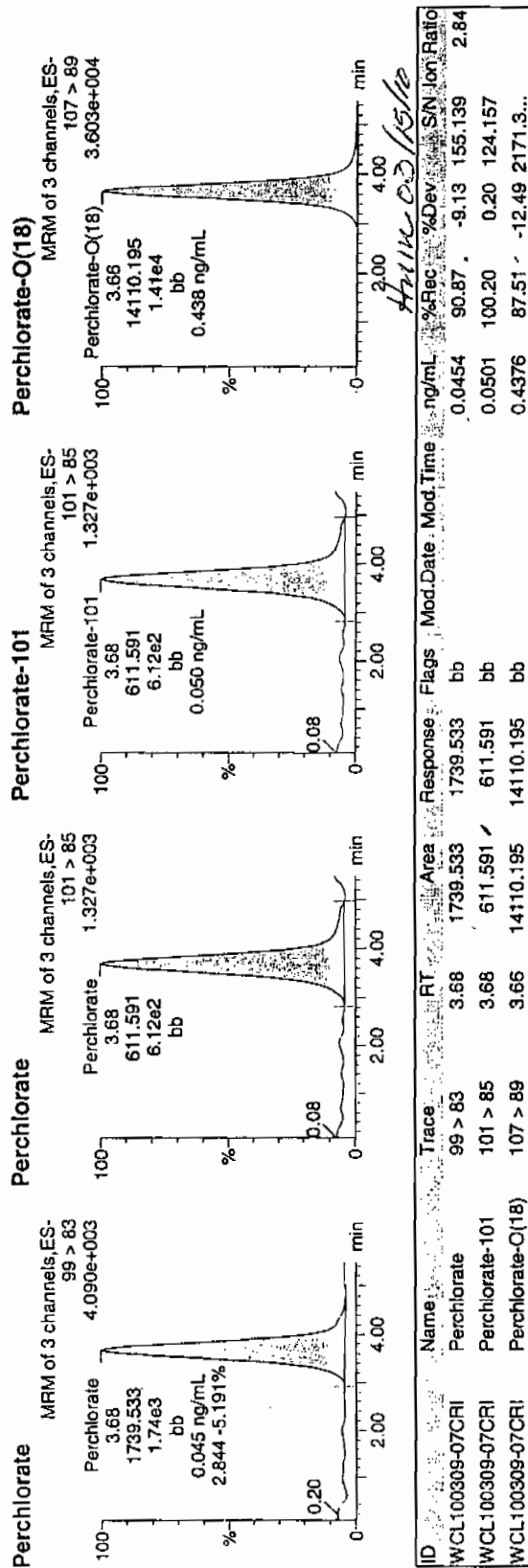
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313037a
Date: 14-Mar-2010
Time: 00:23:22
ID: WCL100309-07CRI
Vial: 1:2,B

Perchlorate
03-M-10



QUALITY CONTROL

Form I

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: SOIL

Extraction Batch ID: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

MB

Date Received: 09-MAR-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 1202054231

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	0.500	ug/kg	U	1	13-MAR-10 20:49	per0313012a
	Perchlorate Isotope Ratio						1	13-MAR-10 20:49	per0313012a
14797-73-0	Perchlorate-101	.5	2	0.500	ug/kg	U	1	13-MAR-10 20:49	per0313012a
	Perchlorate-O(18)			4.59	ug/kg		1	13-MAR-10 20:49	per0313012a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

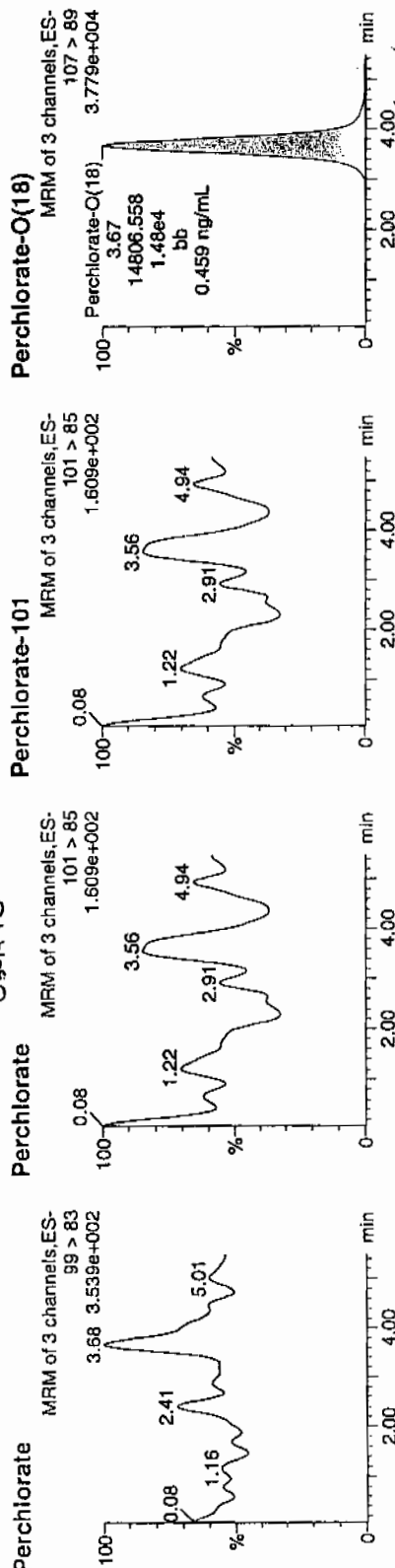
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313012a
Date: 13-Mar-2010
Time: 20:49:41
ID: 1202054231
Vial: 1:3,A

1202054231 | 957943 | 3.67 | MB | 11
03-14-10



ID	Name	Trace	RT	Area	Response	Flags	Mod Date	Mod Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054231	Perchlorate	99 > 83											0.00
1202054231	Perchlorate-101	101 > 85											
1202054231	Perchlorate-O(18)	107 > 89	3.67	14806.558	14806.558	bb			0.4592	91.83	-8.17	413.868	

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: 957945

Extraction Type: Solid Prep

Sample Volume/Weight: 2.00 g

Concentrated Extract Volume: 20.0

Client Sample No.

LCS

Date Received: 09-MAR-10

GEL Job No (SDG): 10-1973

GEL Sample ID: 1202054232

Date Filtered: 09-MAR-10

Injection Volume (uL): 20

%Solids: 100

CAS No.	Analyte ^a	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.5	2	2.54	ug/kg		1	13-MAR-10 20:58	per0313013a
	Perchlorate Isotope Ratio			3.12			1	13-MAR-10 20:58	per0313013a
14797-73-0	Perchlorate-101	.5	2	2.56	ug/kg		1	13-MAR-10 20:58	per0313013a
	Perchlorate-O(18)			4.59	ug/kg		1	13-MAR-10 20:58	per0313013a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313013a

Date: 13-Mar-2010

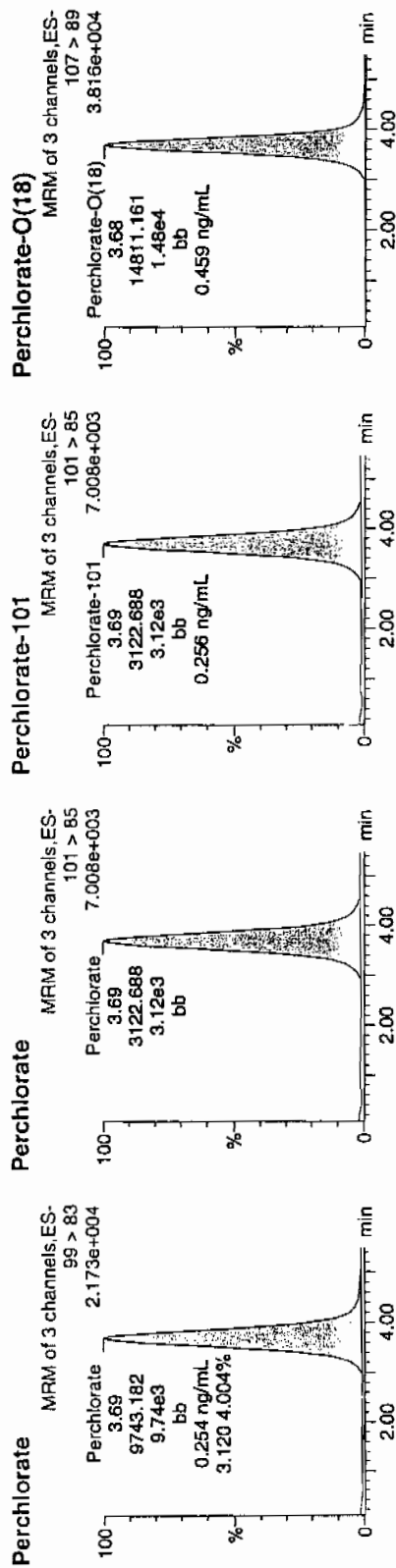
Time: 20:58:13

ID: 1202054232

Vial: 1:3,B

03-14-10

1202054232 | 3070 | LCS | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054232	Perchlorate	99 > 83	3.69	9743.182	9743.182	bb			0.2545	127.23	27.23	898.315	3.12
1202054232	Perchlorate-101	101 > 85	3.69	3122.688	3122.688	bb			0.2558	127.90	27.90	298.235	
1202054232	Perchlorate-O(18)	107 > 89	3.68	14811.161	14811.161	bb			0.4593	91.86	-8.14	3295.0...	

$$\frac{9743.182}{38288.2} = 0.2545$$

Handwritten signature and date: 03/15/10

MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 957945 Verified by: _____ Lab SOP: GL-OA-E-067 REV# 6
 Analyst: Kaylie Westmoreland Instrument: MicroMass Quatro Ultima
 Method: SW846 6850 Modified

Sample ID	Run Date	Aliquot (g)	Prepped Aliquot (mL)	Prepped Factor (mL/g)
1202054231 MB	09-MAR-2010 14:56:00	2	20	10
1202054232 LCS	09-MAR-2010 14:56:00	2	20	10
247770001	09-MAR-2010 14:56:00	2	20	10
247770002	09-MAR-2010 14:56:00	2	20	10
247770003	09-MAR-2010 14:56:00	2	20	10
247770004	09-MAR-2010 14:56:00	2	20	10
247770005	09-MAR-2010 14:56:00	2	20	10
247770006	09-MAR-2010 14:56:00	2	20	10
247770007	09-MAR-2010 14:56:00	2	20	10
247770008	09-MAR-2010 14:56:00	2	20	10
247770009	09-MAR-2010 14:56:00	2	20	10
247770010	09-MAR-2010 14:56:00	2	20	10
247770011	09-MAR-2010 14:56:00	2	20	10
247822001	09-MAR-2010 14:56:00	2	20	10
1202054233 MS (247822001)	09-MAR-2010 14:56:00	2	20	10
1202054234 MSD (247822001)	09-MAR-2010 14:56:00	2	20	10
247822002	09-MAR-2010 14:56:00	2	20	10
247822003	09-MAR-2010 14:56:00	2	20	10
247822004	09-MAR-2010 14:56:00	2	20	10
247822005	09-MAR-2010 14:56:00	2	20	10
247822006	09-MAR-2010 14:56:00	2	20	10
1202054235 LCS	09-MAR-2010 14:56:00	2	20	10

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments
LCS	1202054235	10 ug/L ICV/CCV Second Source	UCL100226-01.2	.4	mL	Desalting Cartridges used: 100217-1-H & 100222-1-Ba
LCS	1202054232	10 ug/L ICV/CCV Second Source	UCL100226-01.2	.4	mL	
MS	1202054233	10 ug/L ICV/CCV Second Source	UCL100226-01.2	.4	mL	
MSD	1202054234	10 ug/L ICV/CCV Second Source	UCL100226-01.2	.4	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/13/10

Extr. Injection Volume: 20µL

Sequence Number: per031310a

Initial Calibration Date: 03/13/10

Method: EPA 6850-Modified

Int. Std.: UCL100210-01

Mobile Phase Lot#: 1278668, 1271949

Standard-Samp Reagent Lot#: 1271949

Reviewed BY: *HMC*

Date: *03/15/10*

SOP: GL-OA-E-067 Rev.6

Alt Check Std. ID: WCL100309-06

DataFile	Sample	Analyst	Injection Date	Batch	SDG	Dilution	Client	Comments	QC_Flag
per0313001a	IPB001	CWW	3/13/2010 19:15			1		USE	B
per0313002a	IPB001	CWW	3/13/2010 19:24			1		USE	B
per0313003a	WCLICAL-01	CWW	3/13/2010 19:32			1		USE	I
per0313004a	WCLICAL-02	CWW	3/13/2010 19:41			1		USE	I
per0313005a	WCLICAL-03	CWW	3/13/2010 19:49			1		USE	I
per0313006a	WCLICAL-04	CWW	3/13/2010 19:58			1		USE	I
per0313007a	WCLICAL-05	CWW	3/13/2010 20:06			1		USE	I
per0313008a	IPB002	CWW	3/13/2010 20:15			1		USE	B
per0313009a	WCLICV	CWW	3/13/2010 20:24			1		USE	C
per0313010a	IPB003	CWW	3/13/2010 20:32			1		USE	B
per0313011a	WCLCRI	CWW	3/13/2010 20:41			1		USE	C
per0313012a	1202054231	CWW	3/13/2010 20:49	957948	VARIOUS	1	LANL	USE	S
per0313013a	1202054232	CWW	3/13/2010 20:58	957948	VARIOUS	1	LANL	USE	S
per0313014a	1202054235	CWW	3/13/2010 21:06	957948	VARIOUS	1	LANL	USE	S
per0313015a	247770001	CWW	3/13/2010 21:15	957948	10-1973	1	LANL	USE	S
per0313016a	247770002	CWW	3/13/2010 21:23	957948	10-1973	1	LANL	USE	S
per0313017a	247770003	CWW	3/13/2010 21:32	957948	10-1973	1	LANL	USE	S
per0313018a	247770004	CWW	3/13/2010 21:40	957948	10-1973	1	LANL	USE	S
per0313019a	247770005	CWW	3/13/2010 21:49	957948	10-1973	1	LANL	USE	S
per0313020a	247770006	CWW	3/13/2010 21:58	957948	10-1973	1	LANL	USE	S
per0313021a	247770007	CWW	3/13/2010 22:06	957948	10-1973	1	LANL	USE	S
per0313022a	WCLCCV	CWW	3/13/2010 22:15			1		USE	C
per0313023a	IPB004	CWW	3/13/2010 22:23			1		USE	B
per0313024a	WCLCRI	CWW	3/13/2010 22:32			1		USE	C
per0313025a	247770008	CWW	3/13/2010 22:40	957948	10-1995	1	LANL	USE	S
per0313026a	247770009	CWW	3/13/2010 22:49	957948	10-1995	1	LANL	USE	S
per0313027a	247770010	CWW	3/13/2010 22:57	957948	10-1995	1	LANL	USE	S
per0313028a	247770011	CWW	3/13/2010 23:06	957948	10-1995	1	LANL	USE	S
per0313029a	247822001	CWW	3/13/2010 23:14	957948	10-1995	1	LANL	USE	S

10-1973
HMC
04/21/10

per0313030a	1202054233	CWW	3/13/2010 23:23	957948	10-1995	1	LANL	USE	S
per0313031a	1202054234	CWW	3/13/2010 23:32	957948	10-1995	1	LANL	USE	S
per0313032a	247822002	CWW	3/13/2010 23:40	957948	10-1995	1	LANL	USE	S
per0313033a	247822003	CWW	3/13/2010 23:49	957948	10-1995	1	LANL	USE	S
per0313034a	247822004	CWW	3/13/2010 23:57	957948	10-1995	1	LANL	USE	S
per0313035a	WCLCCV	CWW	3/14/2010 0:06			1		USE	C
per0313036a	IPB005	CWW	3/14/2010 0:14			1		USE	B
per0313037a	WCLCRI	CWW	3/14/2010 0:23			1		USE	C
per0313038a	247822005	CWW	3/14/2010 0:31	957948	10-1995	1	LANL	USE	S
per0313039a	247822006	CWW	3/14/2010 0:40	957948	10-1995	1	LANL	USE	S
per0313040a	IPB006	CWW	3/14/2010 0:49			1		USE	B
per0313041a	1202054222	CWW	3/14/2010 0:57	957943	N/A	1	LANL	DUSE-RA	S
per0313042a	1202054223	CWW	3/14/2010 1:06	957943		1	LANL	DUSE-RA	S
per0313043a	1202054226	CWW	3/14/2010 1:14	957943		1	LANL	DUSE-RA	S
per0313044a	247439001	CWW	3/14/2010 1:23	957943		1	LANL	DUSE-RA	S
per0313045a	247439002	CWW	3/14/2010 1:31	957943		1	LANL	DUSE-RA	S
per0313046a	1202054224	CWW	3/14/2010 1:40	957943		1	LANL	DUSE-RA	S
per0313047a	1202054225	CWW	3/14/2010 1:48	957943		1	LANL	DUSE-RA	S
per0313048a	WCLCCV	CWW	3/14/2010 1:57			1		USE	C
per0313049a	IPB007	CWW	3/14/2010 2:06			1		USE	B
per0313050a	WCLCRI	CWW	3/14/2010 2:14			1		USE	C

N/A → 23-15-12

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

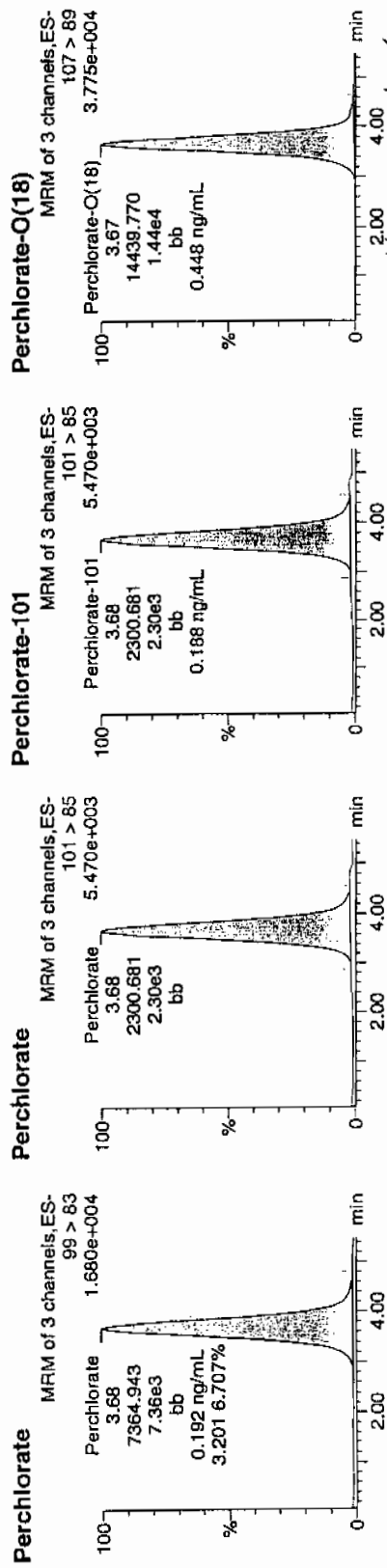
Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313030a
Date: 13-Mar-2010
Time: 23:23:32
ID: 1202054233
Vial: 1:5,D

03-14-10

1522-957942 | 30.20 | MS | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202054233	Perchlorate	99 > 83	3.68	7364.943	7364.943	bb			0.1924	96.18	-3.82	1786.1...	3.20
1202054233	Perchlorate-101	101 > 85	3.68	2300.681	2300.681	bb			0.1885	94.23	-5.77	998.040	
1202054233	Perchlorate-O(18)	107 > 89	3.67	14439.770	14439.770	bb			0.4478	89.56	-10.44	5507.2...	

$$\frac{7364.943}{38288.2} = 2.17$$

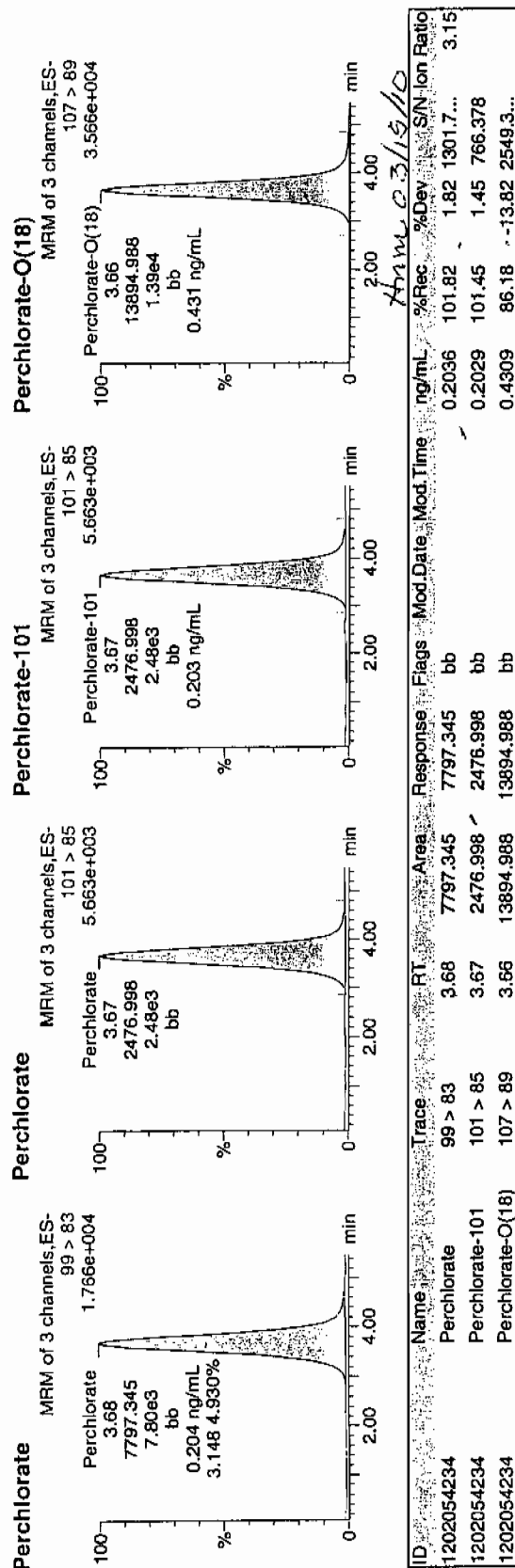
Dataset: C:\MassLynx\Perchlorate.PRO\per031310a.qld

Last Altered: Sunday, March 14, 2010 12:35:49 PM Eastern Standard Time
Printed: Sunday, March 14, 2010 12:43:19 PM Eastern Standard Time

Name: per0313031a
Date: 13-Mar-2010
Time: 23:32:04
ID: 1202054234
Vial: 1:5,E

03-14-10

1202054234 | 957943 | 5000 | MS0 | 11



Isotope Ratio Criteria

Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

LC/MS/MS PERCHLORATE ANALYSIS

**Perchlorate by LC/MSMS
Los Alamos National Laboratory (LANL)
SDG 10-1973-1**

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: 957439

Prep Batch Number: 957436

Sample Analysis

Sample ID	Client ID
247771001	RE15-10-8272
1202052909	Interference Check Sample (ICS)
1202052905	Method Blank (MB)
1202052906	Laboratory Control Sample (LCS)
1202052907	247807001(RE46-10-13371) Matrix Spike (MS)
1202052908	247807001(RE46-10-13371) Matrix Spike Duplicate (MSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

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

Calibration Information

Initial Calibration

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

CCV Requirements

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

CCB Requirements

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

10-1973-1-PERLCMS

Page 1 of 4

CCV Requirements

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

Low Level Standard (CRI) Requirements

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

Quality Control (QC) Information**Method Blank (MB) Statement**

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

Interference Check Sample (ICS)

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

Laboratory Control Sample (LCS) Recovery

The LCS spike recoveries met the acceptance limits.

QC Sample Designation

Client sample 247807001 (RE46-10-13371) from SDG 10-1991-1 was chosen for matrix spike and matrix spike duplicate analysis. Please see the raw data in the Miscellaneous Section.

Matrix Spike (MS) Recovery Statement

The MS recoveries were within the established acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recovered Perchlorate at 130% and the acceptance range is 75-125%. The high recovery may be the result of sample matrix, since similar recovery was observed in the MS. Please see data exception report 797970.

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.

10-1973-1-PERLCMS

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**

The following DER was generated for this SDG: 797970 1202052908 (RE46-10-13371).

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: Heather Mauer Date: 03/05/10

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: 957436

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

RE15-10-8272

Date Received: 23-FEB-10

GEL Job No (SDG): 10-1973-1

GEL Sample ID: 247771001

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:13	per0301116a
	Perchlorate Isotope Ratio						1	02-MAR-10 05:13	per0301116a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:13	per0301116a
	Perchlorate-O(18)			0.495	ug/L		1	02-MAR-10 05:13	per0301116a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

QUALITY CONTROL SUMMARY

Perchlorate Laboratory Control Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1973-1

Extract Batch Code: 957436

Date Filtered: 25-FEB-10

Matrix: WATER

Sample ID: 1202052906

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.219	ug/L	109		85 - 115
Perchlorate Isotope Ratio		3.02				-
Perchlorate-101	0.200	.217	ug/L	109		85 - 115
Perchlorate-O(18)		.464	ug/L			-

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

Perchlorate Interference Check Sample

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No. (SDG): 10-1973-1

Extract Batch Code: 957436

Date Filtered: 25-FEB-10

Matrix: WATER

Sample ID: 1202052909

Analyte [^]	True	Found	Units	%Rec	Q	Control Limits
Perchlorate	0.200	.207	ug/L	103		70 - 130
Perchlorate Isotope Ratio		3.29				
Perchlorate-101	0.200	.189	ug/L	94.3		70 - 130
Perchlorate-O(18)		.455	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: Charles W. Wilson

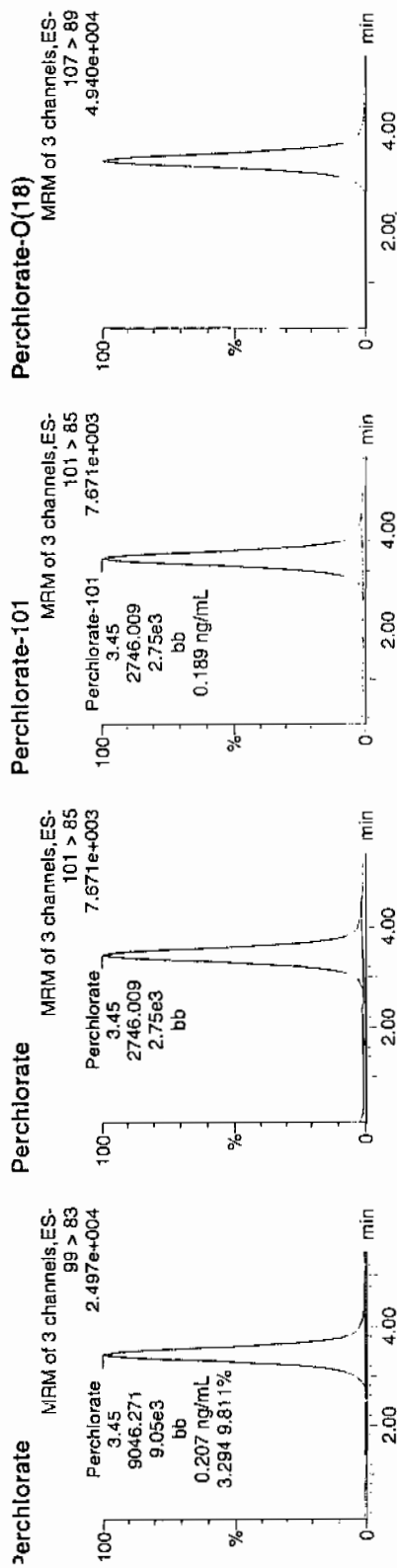
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301101a
Date: 02-Mar-2010
Time: 03:05:14
D: 1202052909
Vial: 3:1,C

03-02-10

1202052909 | 202052909 | 202052909



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202052909	Perchlorate	99 > 83	3.45	9046.271	9046.271	bb			0.2067	103.37	3.37	1270.8...	3.29
1202052909	Perchlorate-101	101 > 85	3.45	2746.009	2746.009	bb			0.1885	94.27	-5.73	356.936	
1202052909	Perchlorate-O(18)	107 > 89	3.43	17763.203	17763.203	bb			0.4545	90.90	-9.10	2182.9...	

Perchlorate Spike/Spike Duplicate Summary

Lab Name: General Engineering Laboratories

Lab Code: GEL

GEL Job No (SDG): 10-1973-1

Extract Batch Code: 957436

Date Extracted: 25-FEB-10

GEL MS/PS ID: 1202052907

Client ID: RE46-10-13371

GEL MSD/PSD ID: 1202052908

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	0.00257	ug/L	0.249	123		.263	130	*	5.6		30	75 - 125
Perchlorate Isotope Ratio	0	0.00		3.17			3.36			0			-
Perchlorate-101	0.200	0.00208	ug/L	0.236	117		.235	117		.352		30	75 - 125
Perchlorate-O(18)	0	0.504	ug/L	0.504			.527			4.53			-

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

Comments:

Perchlorate Initial Calibration Blank

GEL Job No.(SDG): 10-1973-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	01-MAR-10	per0301001a	IPB001
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301001a	IPB001
Perchlorate	0.00	0	NA	01-MAR-10	per0301002a	IPB001
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301002a	IPB001

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

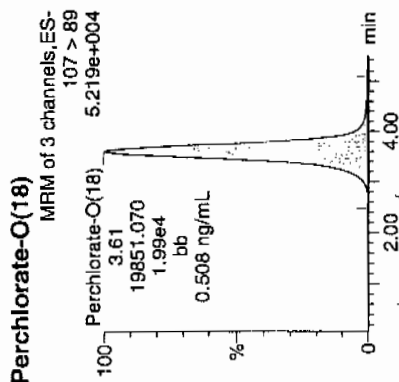
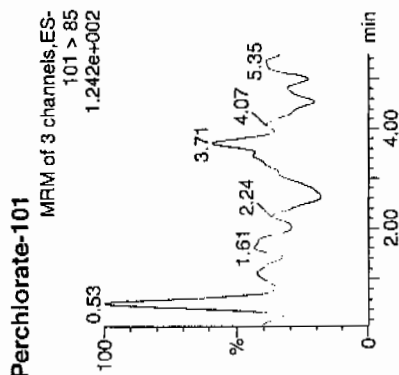
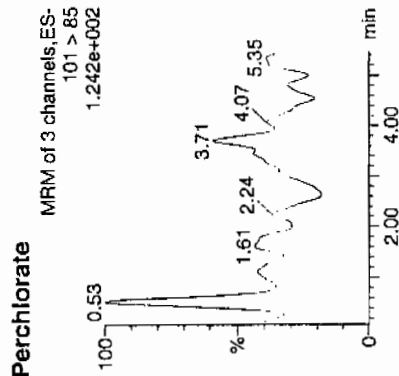
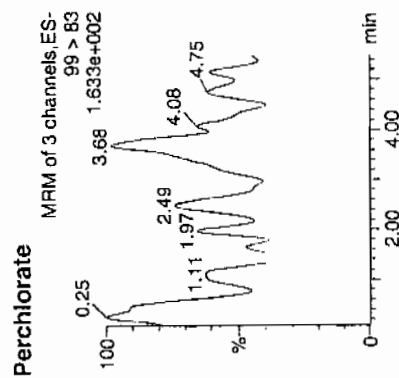
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030110a.mdb 02 Mar 2010 08:52:20
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030110a.cdb 02 Mar 2010 08:52:38

Name: per0301001a
Date: 01-Mar-2010
Time: 12:47:16
ID: IPB001
Vial: 1:1,A

03-02-10



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	3.61	19851.070	19851.070	bb			0.5079	101.59	✓	1.59	3254.6...

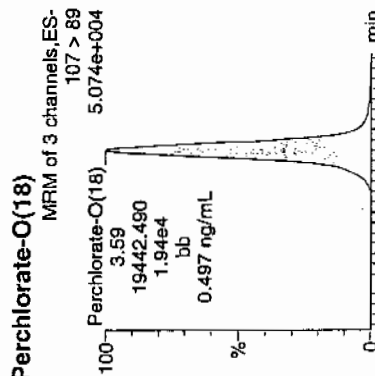
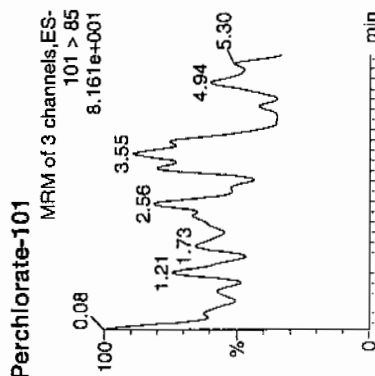
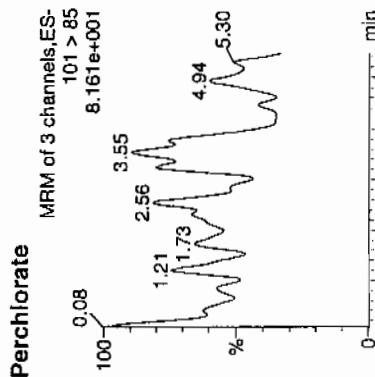
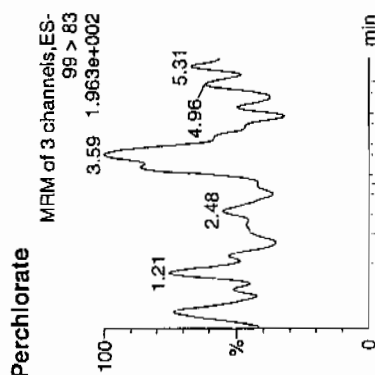
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301002a
Date: 01-Mar-2010
Time: 12:55:59
ID: IPB001
Vial: 1:1,A

03-02-10



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	3.59	19442.490	19442.490	bb			0.4975	99.50	-0.50	1858.7...	

Perchlorate Continuing Calibration Blank

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Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
Perchlorate	0.00	0	NA	01-MAR-10	per0301008a	IPB002
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301008a	IPB002
Perchlorate	0.00	0	NA	01-MAR-10	per0301010a	IPB003
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301010a	IPB003
Perchlorate	0.00	0	NA	01-MAR-10	per0301020a	IPB004
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301020a	IPB004
Perchlorate	0.00	0	NA	01-MAR-10	per0301030a	IPB005
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301030a	IPB005
Perchlorate	0.00	0	NA	01-MAR-10	per0301035a	IPB006
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301035a	IPB006
Perchlorate	0.00	0	NA	01-MAR-10	per0301042a	IPB007
Perchlorate-101	0.00	0	NA	01-MAR-10	per0301042a	IPB007
Perchlorate	0.00	0	NA	01-MAR-10	per0301055a	IPB008

P perchlorate Continuing Calibration Blank

GEL Job No.(SDG): 10-1973-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id	GEL Sample ID
P perchlorate-101	0.00	0	NA	01-MAR-10	per0301055a	IPB008
P perchlorate	0.00	0	NA	01-MAR-10	per0301068a	IPB009
P perchlorate-101	0.00	0	NA	01-MAR-10	per0301068a	IPB009
P perchlorate	0.00	0	NA	02-MAR-10	per0301081a	IPB010
P perchlorate-101	0.00	0	NA	02-MAR-10	per0301081a	IPB010
P perchlorate	0.00	0	NA	02-MAR-10	per0301094a	IPB011
P perchlorate-101	0.00	0	NA	02-MAR-10	per0301094a	IPB011
P perchlorate	0.00	0	NA	02-MAR-10	per0301098a	IPB012
P perchlorate-101	0.00	0	NA	02-MAR-10	per0301098a	IPB012
P perchlorate	0.00	0	NA	02-MAR-10	per0301107a	IPB013
P perchlorate-101	0.00	0	NA	02-MAR-10	per0301107a	IPB013
P perchlorate	0.00	0	NA	02-MAR-10	per0301120a	IPB014
P perchlorate-101	0.00	0	NA	02-MAR-10	per0301120a	IPB014

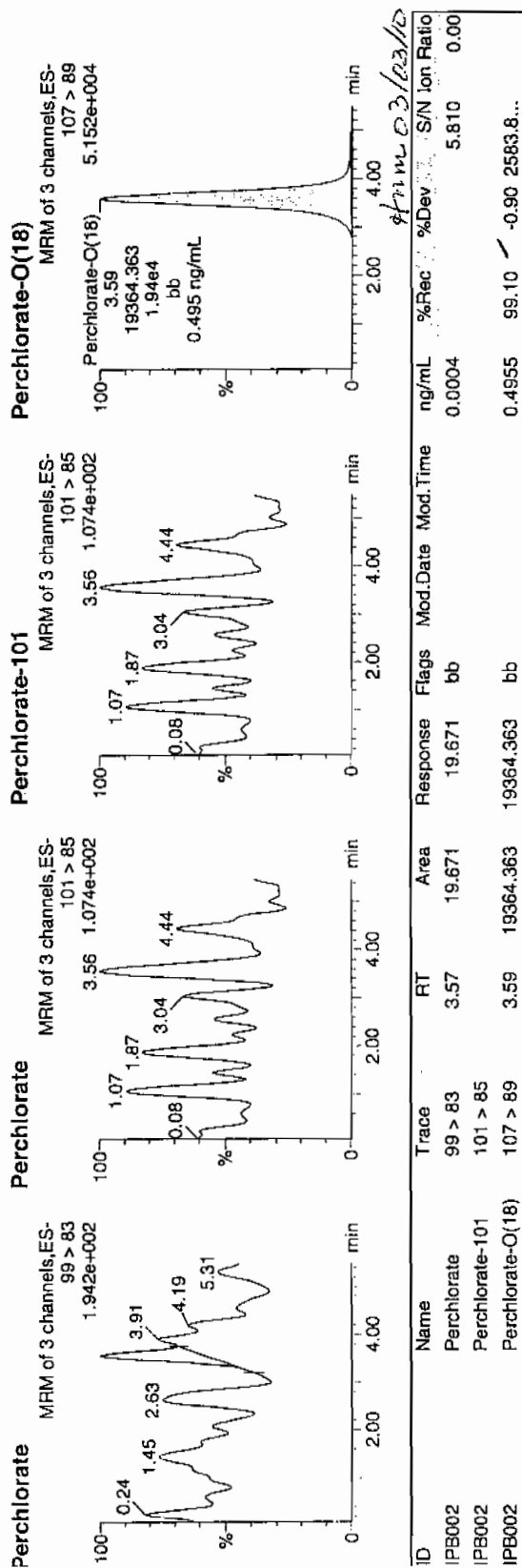
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301008a
Date: 01-Mar-2010
Time: 13:47:06
D: IPB002
Vial: 1:1,A

03-07-10

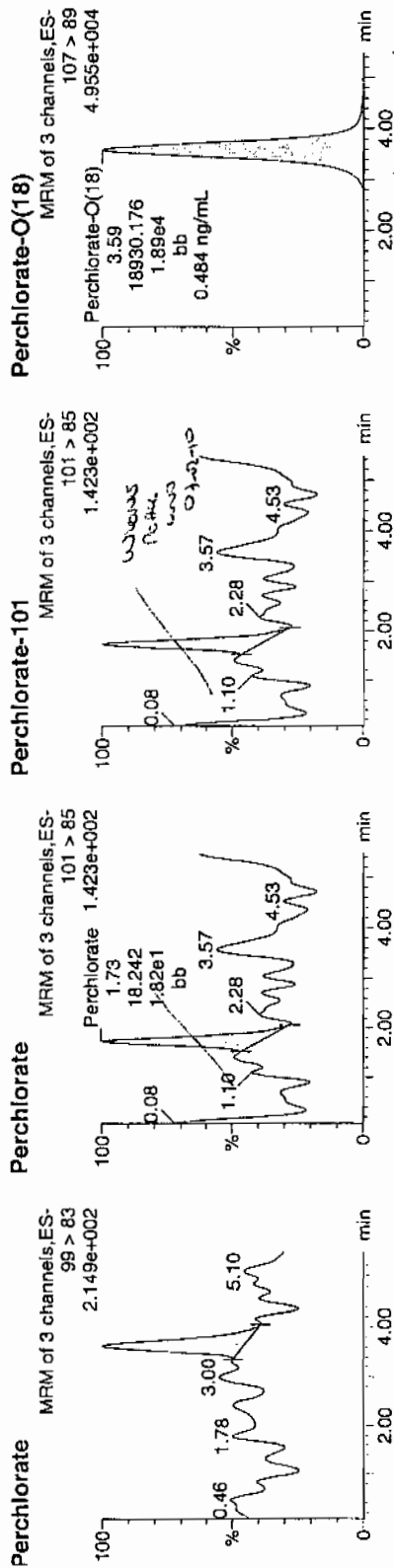


Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301010a
Date: 01-Mar-2010
Time: 14:04:26
ID: IPB003
Vial: 1:1,A



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB003	Perchlorate	99 > 83	3.63	32.539	32.539	bb			0.0007			9.481	1.78
PB003	Perchlorate-101	101 > 85	1.73	18.242	18.242	bb			0.0013			11.792	
PB003	Perchlorate-O(18)	107 > 89	3.59	18930.176	18930.176	bb			0.4844	96.88	-3.12	730.850	

Handwritten: 4.955e+004
4.955e+004

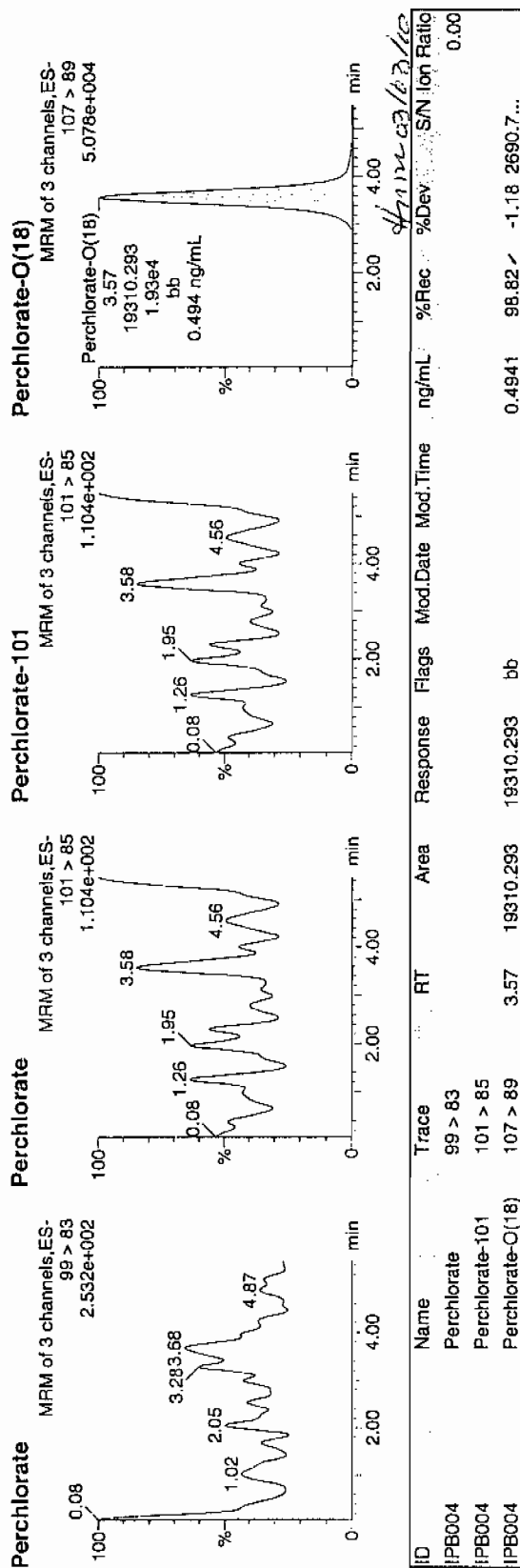
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301020a
Date: 01-Mar-2010
Time: 15:29:50
ID: IPB004
Vial: 1:1,A

0.494
0.494-10



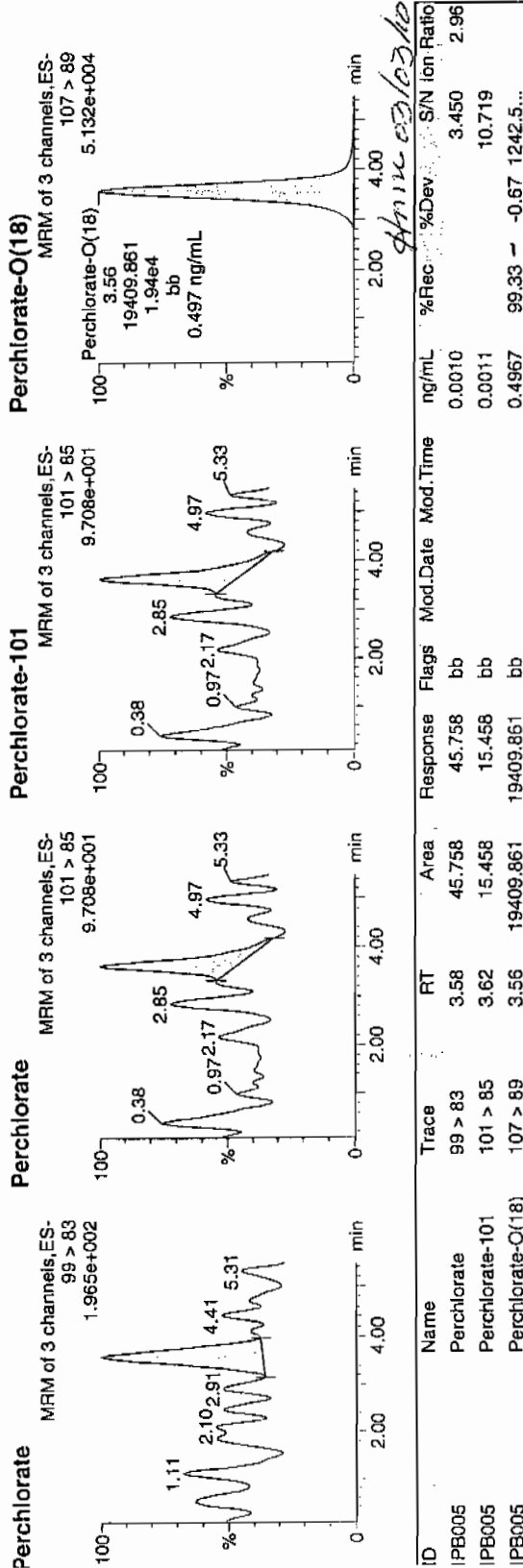
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301030a
Date: 01-Mar-2010
Time: 16:55:24
ID: IPB005
Vial: 1:1,A

03-07-10



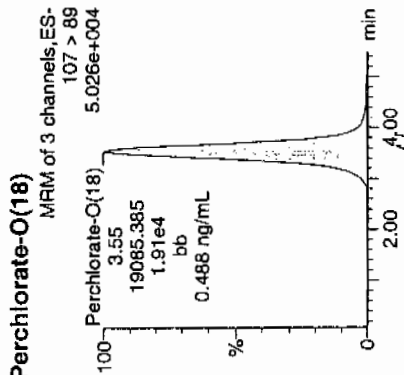
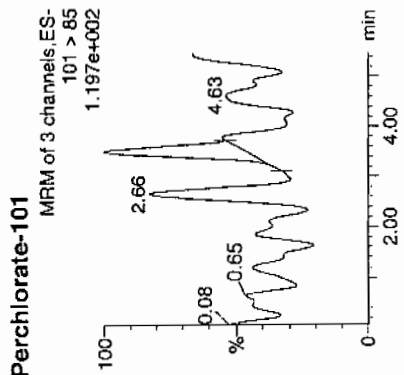
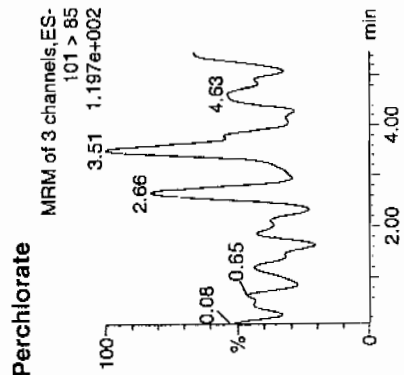
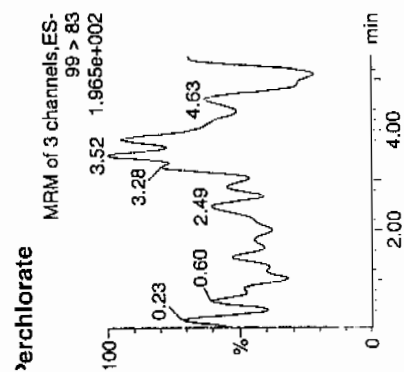
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301035a
Date: 01-Mar-2010
Time: 17:38:34
D: IPB006
File: 1:1,A

03-02-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
PB006	Perchlorate	99 > 83											0.00
PB006	Perchlorate-101	101 > 85	3.51	15.186	15.186	bb			0.0010			11.215	
PB006	Perchlorate-Q(18)	107 > 89	3.55	19085.385	19085.385	bb			0.4883	97.67	-2.33	1213.1...	

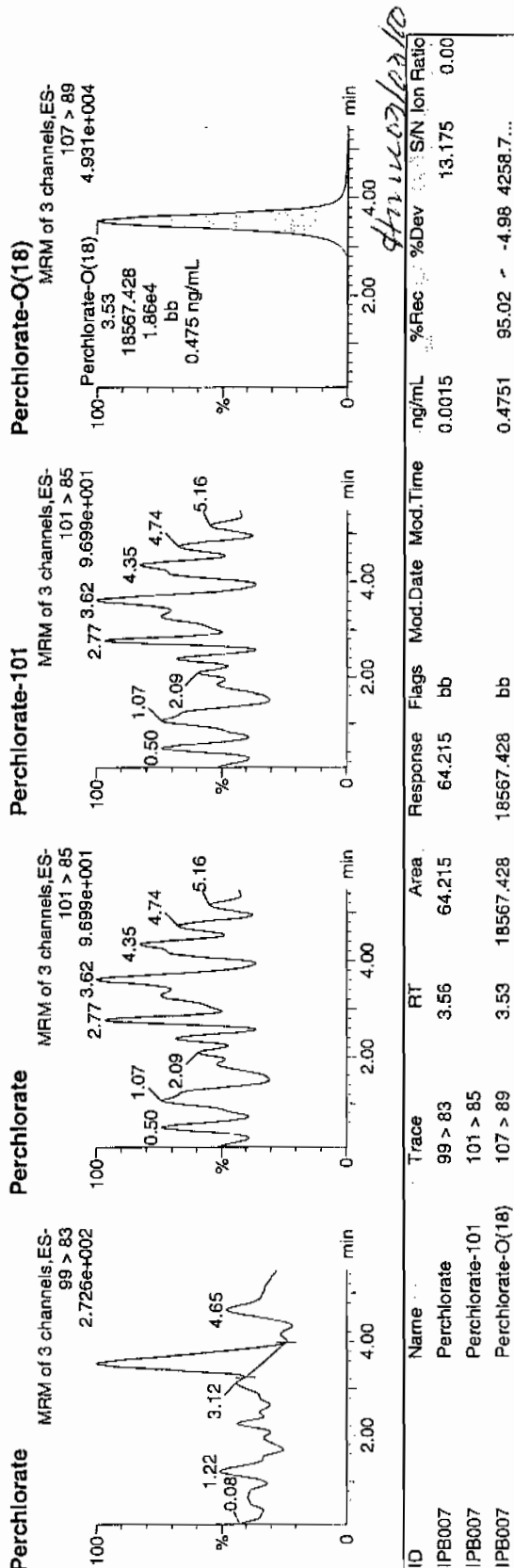
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301042a
Date: 01-Mar-2010
Time: 18:38:50
ID: IPB007
Vial: 1:1,A

03-07-10



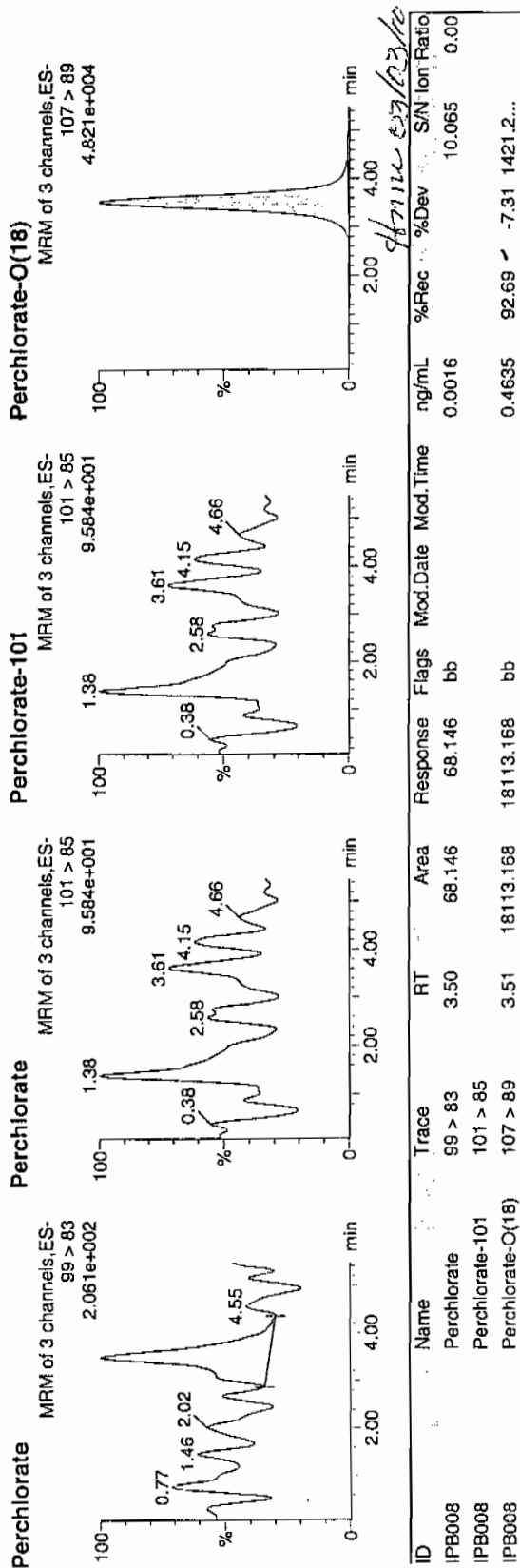
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301055a
Date: 01-Mar-2010
Time: 20:30:13
ID: IPB008
Vial: 1:1,A

03-07-10



Identify Sample Report MassLynx 4.0 SP4
e GEL Group, LLC Analyst: Charlers W. Wilson

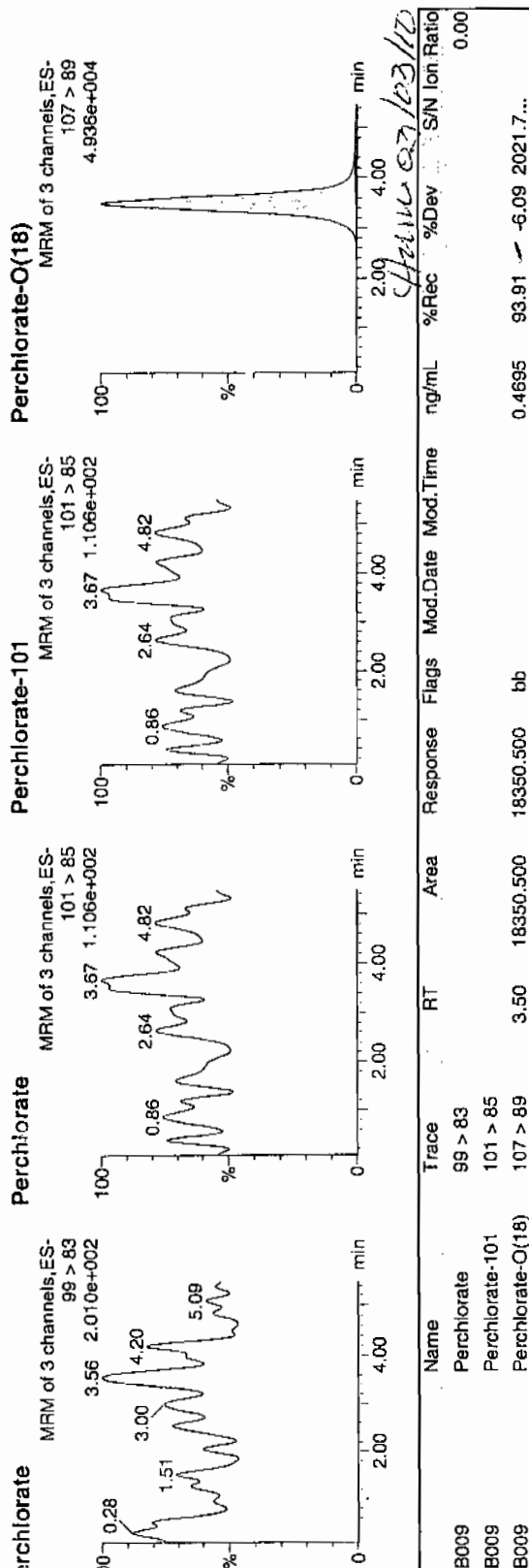
Page 68 of 134

taset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

st Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
nted: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

ime: per0301068a
ite: 01-Mar-2010
ne: 22:21:37
: IPB009
at: 1:1,A

03-02-10



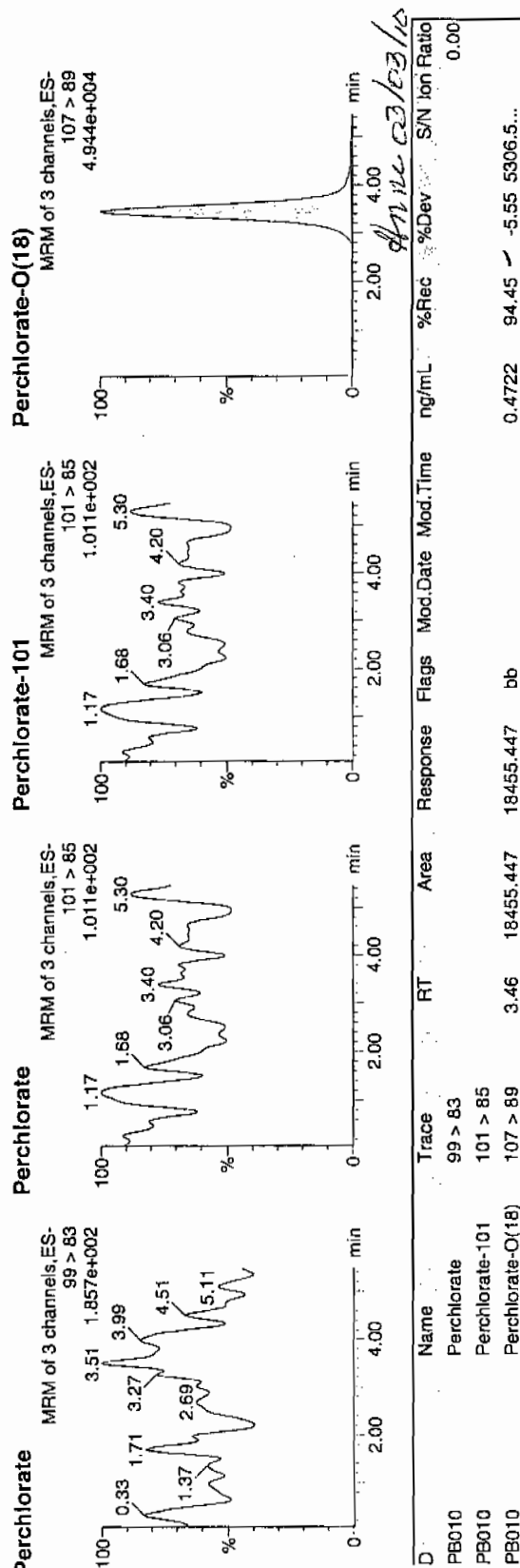
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301081a
Date: 02-Mar-2010
Time: 00:13:07
D: IPB010
/lat: 1:1A

03-02-10



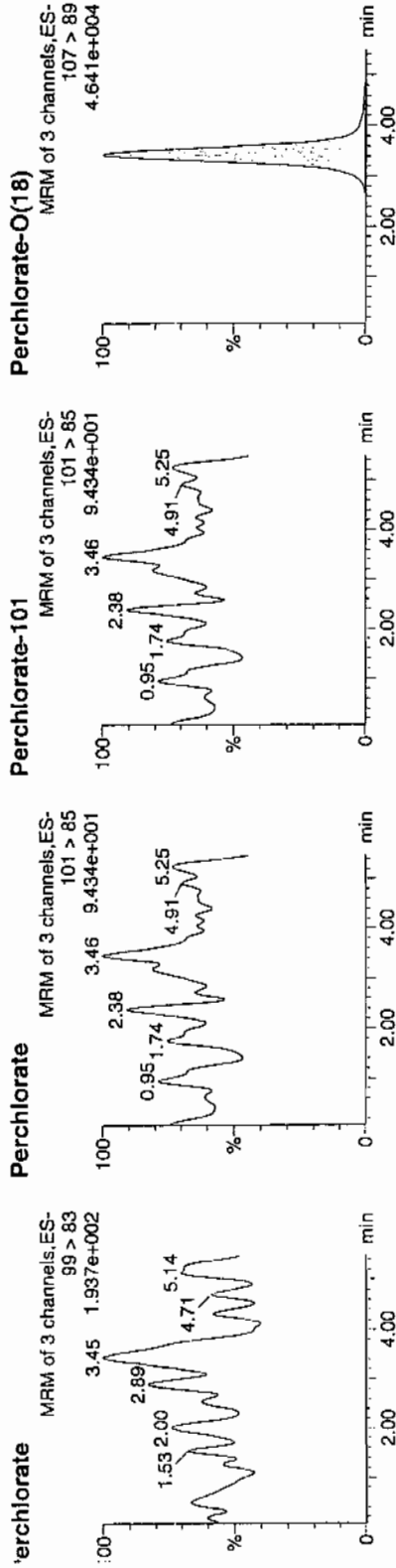
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301094a
Date: 02-Mar-2010
Time: 02:04:50
Operator: IPB011
Injection: 1:1,A

03-02-10



Trace	Name	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
99 > 83	Perchlorate											0.00
101 > 85	Perchlorate-101	3.43	17432.324	17432.324	bb			0.4461	89.21	-10.79	2108.5...	
107 > 89	Perchlorate-O(18)											

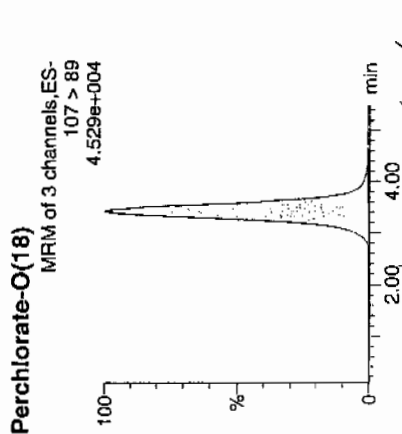
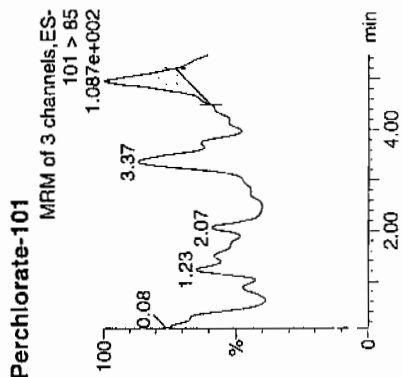
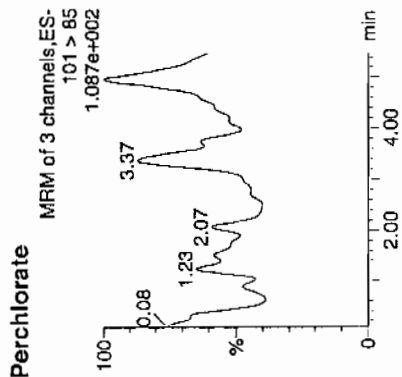
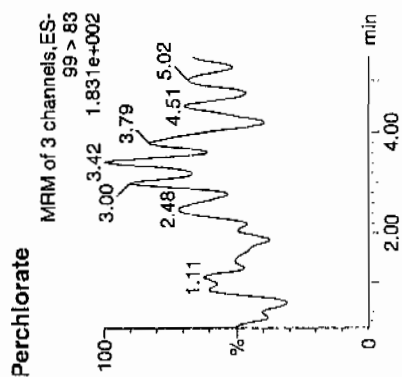
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301098a
Date: 02-Mar-2010
Time: 02:39:12
ID: IPB012
Vial: 1:1,A

03-07-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB012	Perchlorate	99 > 83	4.96	9.993	9.993	bb			0.0007	86.14	-13.86	5321.7...	0.00
IPB012	Perchlorate-101	101 > 85	3.42	16832.818	16832.818	bb			0.4307				
IPB012	Perchlorate-O(18)	107 > 89											

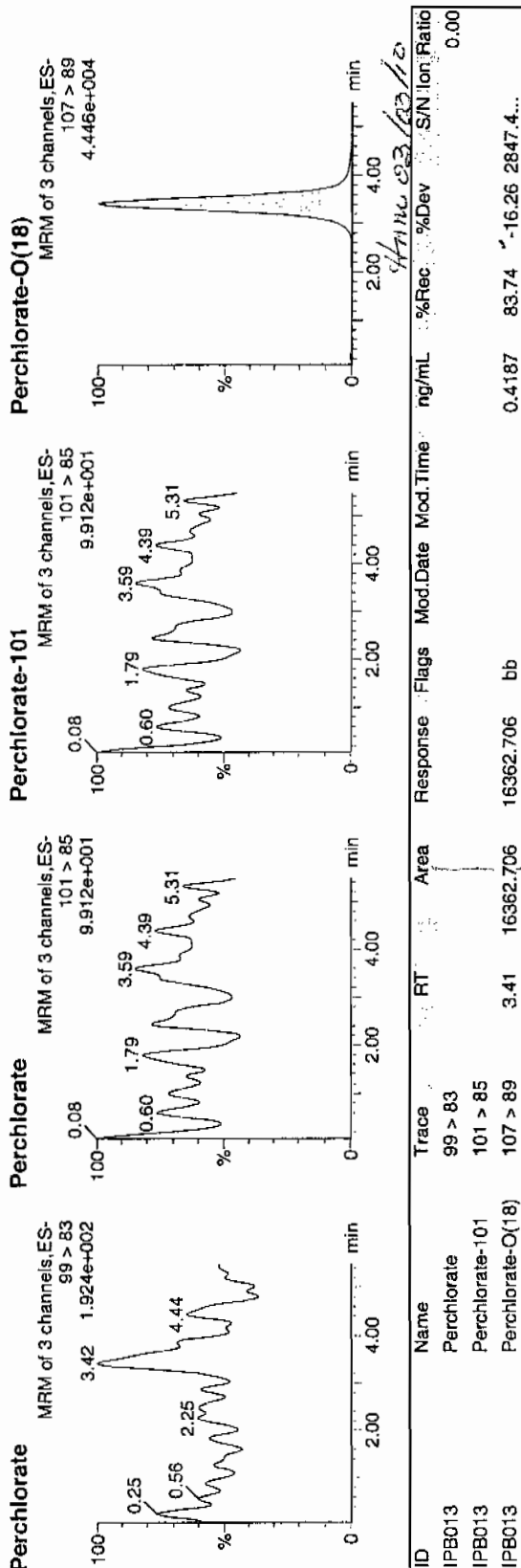
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301107a
Date: 02-Mar-2010
Time: 03:56:35
ID: IPB013
Vial: 1:1,A

02-03-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
IPB013	Perchlorate	99 > 83											0.00
IPB013	Perchlorate-101	101 > 85											
IPB013	Perchlorate-O(18)	107 > 89	3.41	16362.706	16362.706	bb			0.4187	83.74	-16.26	2847.4...	

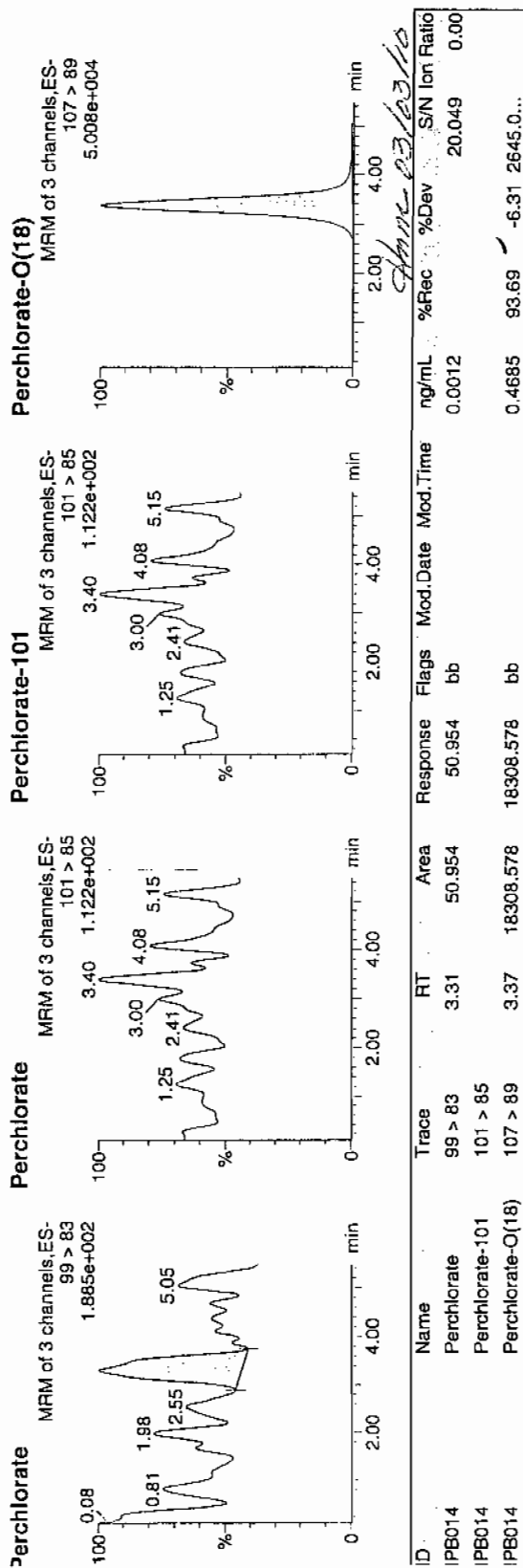
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301120a
Date: 02-Mar-2010
Time: 05:47:52
D: IPB014
Vial: 1:1,A

03-01-10



Nairb.ref

;Positive ion monoisotopic and average masses from solution
 ;of NaI/Rbi (2.0/0.05ug/ul) in 50/20 2-propanol/H₂O.
 ;Most useful general purpose calibrant for all low
 ;MW applications, including MS/MS work.
 ;At high resolution, readily covers from m/z 50-2000.
 ;At reduced resolution, can be used to over m/z 3000.
 ;NOT RECOMMENDED FOR PROTEIN WORK. USE MYO, MYOTRP or TRP.
 Updated 20 April '95

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

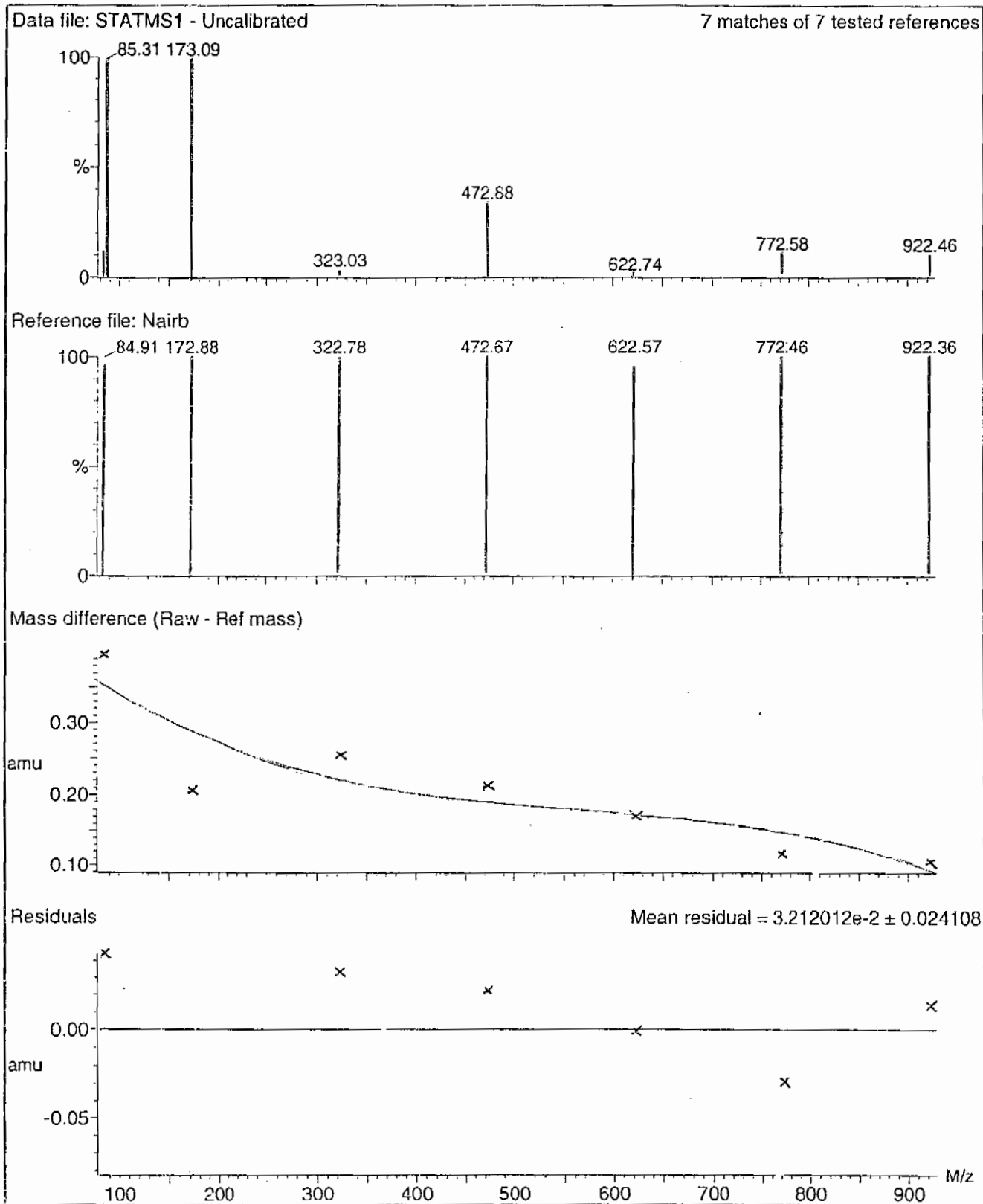
QUATRO ULTIMA: nairb_01_08_08.cal

Calibration Report - MS1 Static

Page 1 of 1

Printed: Tue Jan 08 12:19:12 2008

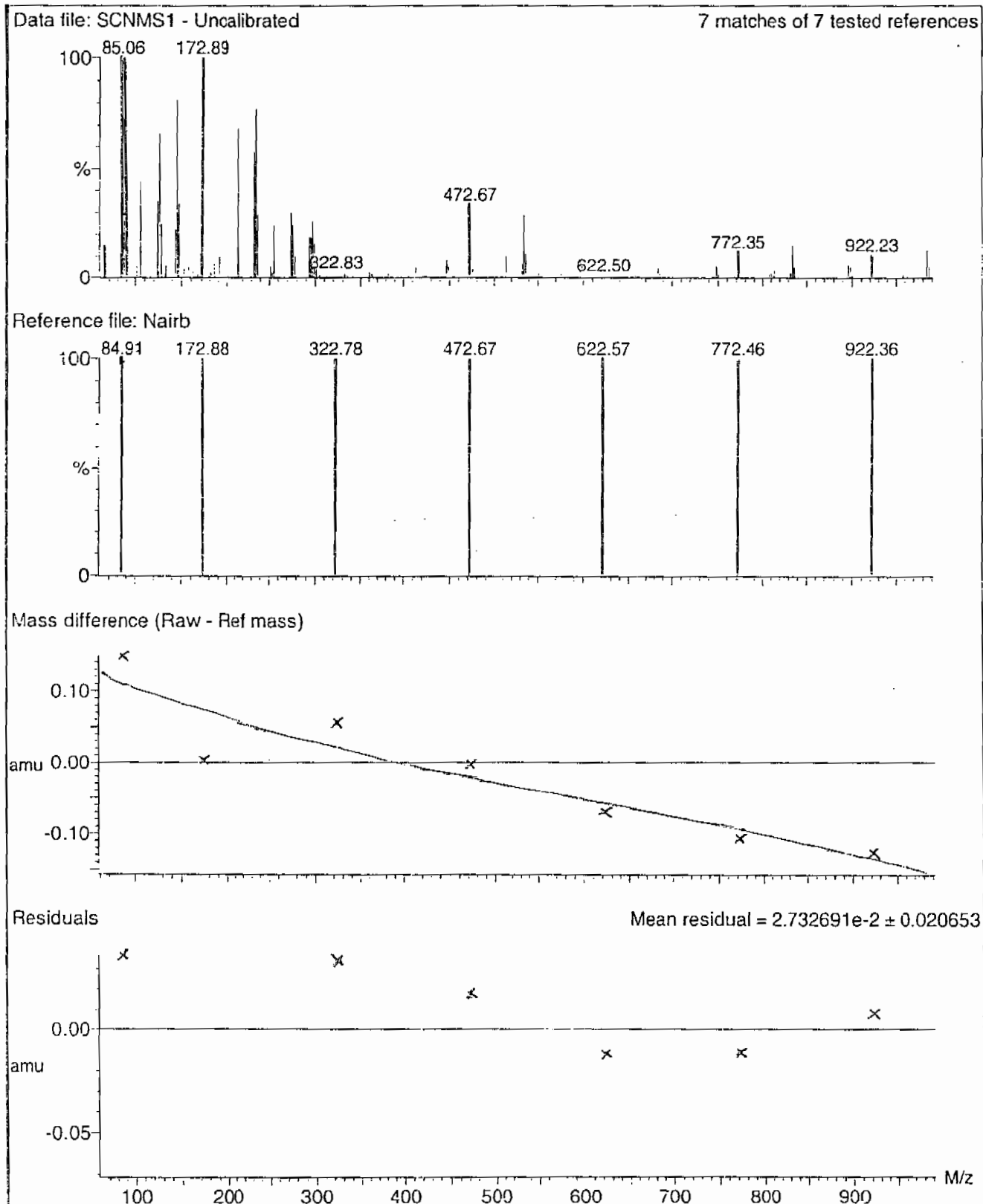
POINTS HIGHLIGHTED BY CURVE 01-07-03



Calibration Report - MS1 Scanning

Page 1 of 1

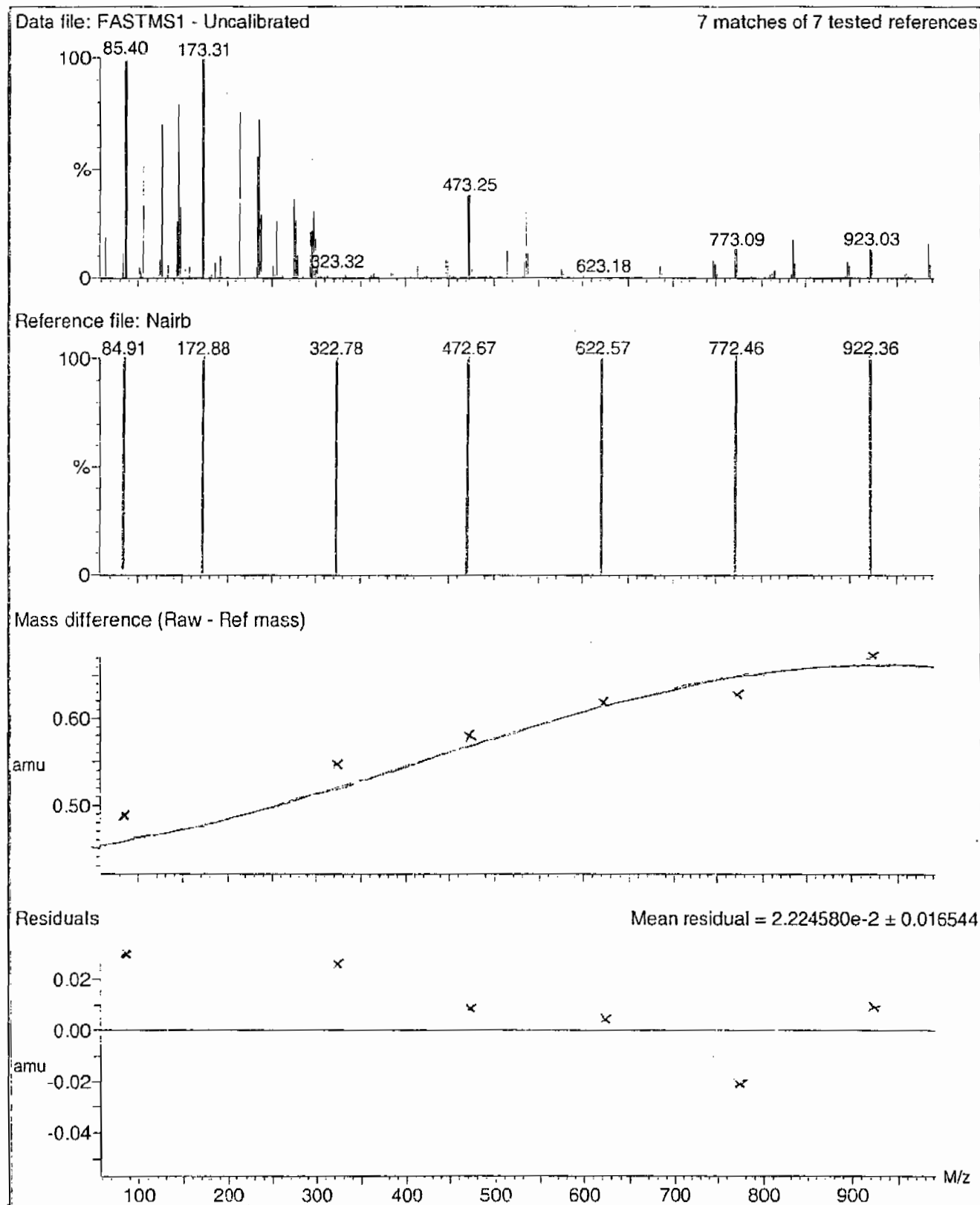
Printed: Tue Jan 08 12:20:09 2008



Calibration Report - MS1 Scan Speed Compensation

Page 1 of 1

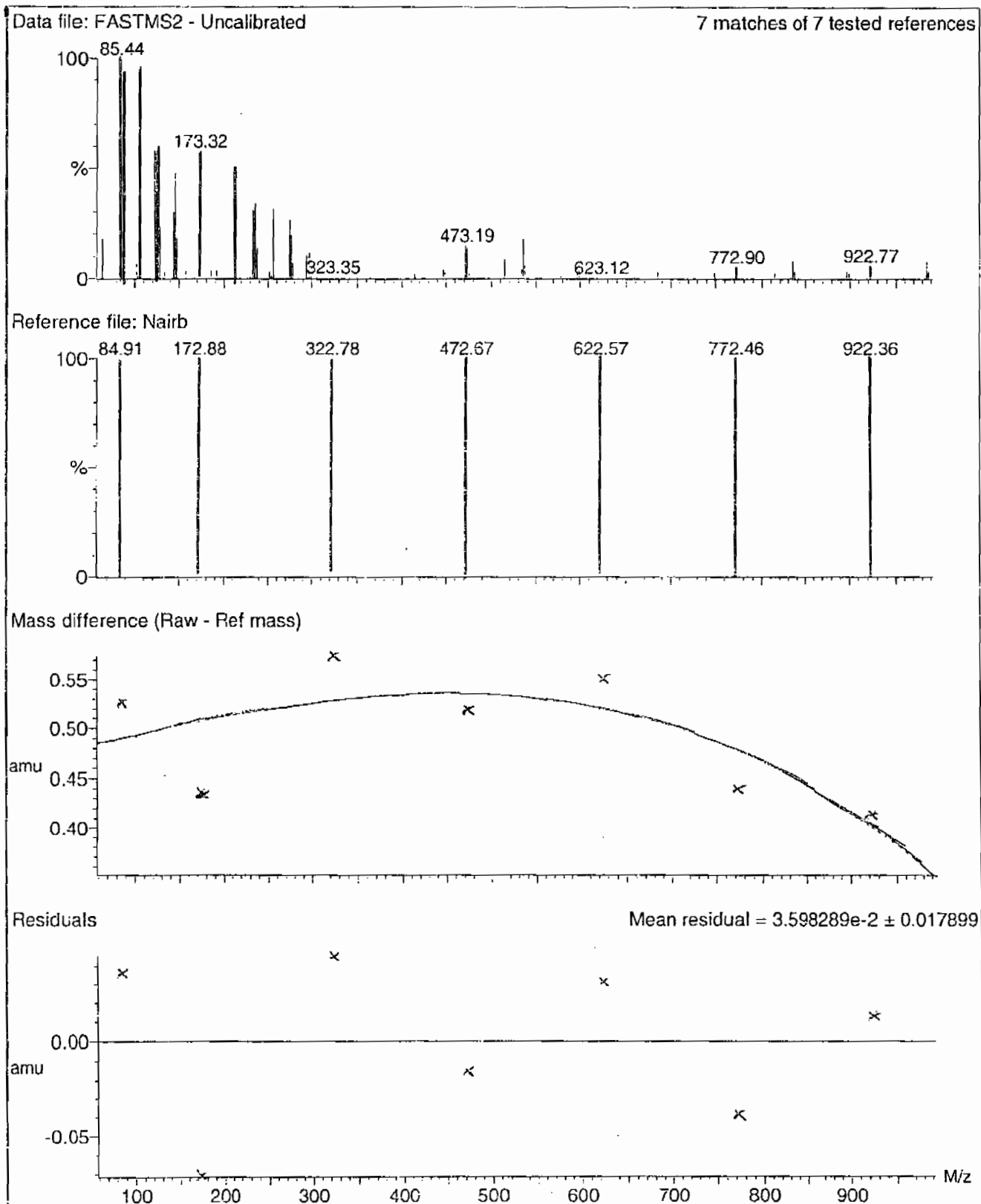
Printed: Tue Jan 08 12:21:04 2008



Calibration Report - MS2 Scan Speed Compensation

Page 1 of 1

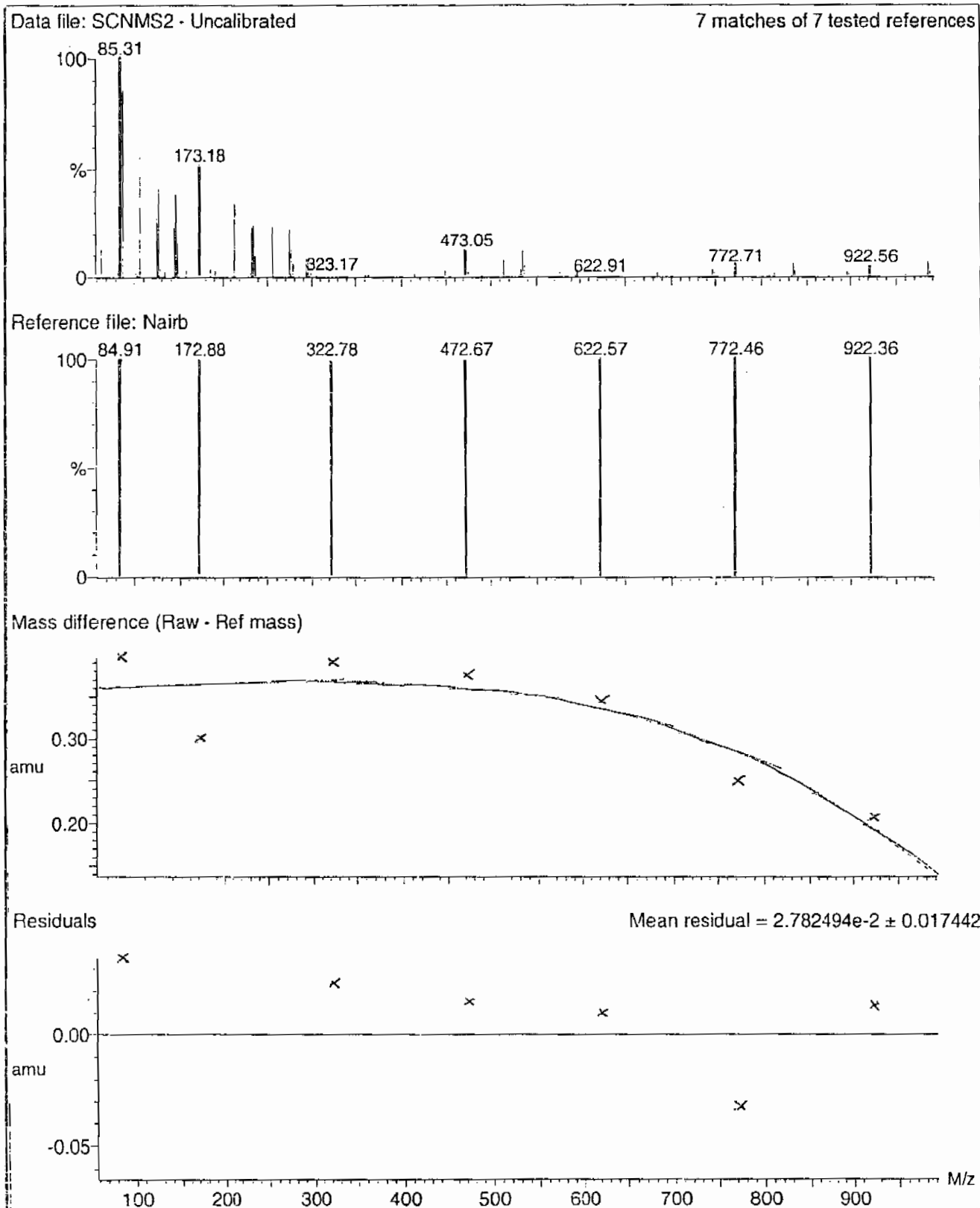
Printed: Tue Jan 08 12:23:51 2008



Calibration Report - MS2 Scanning

Page 1 of 1

Printed: Tue Jan 08 12:22:56 2008



Calibration Report - MS2 Static

Page 1 of 1

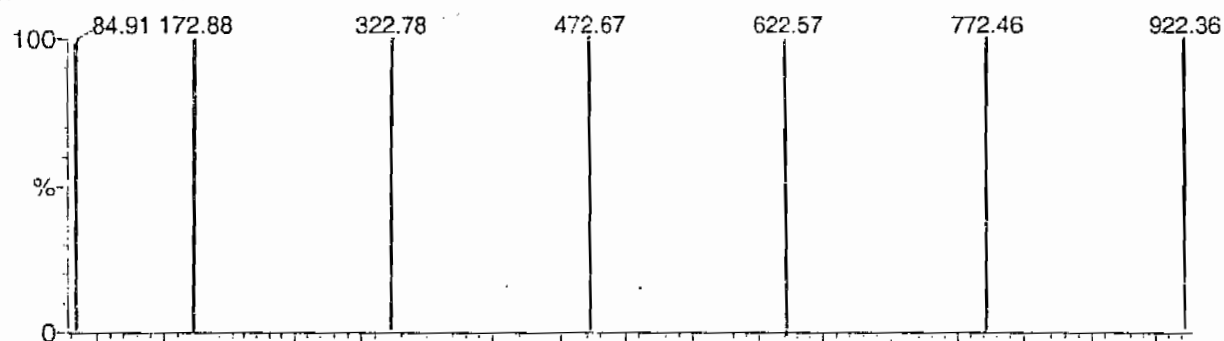
Printed: Tue Jan 08 12:21:59 2008

Data file: STATMS2 - Uncalibrated

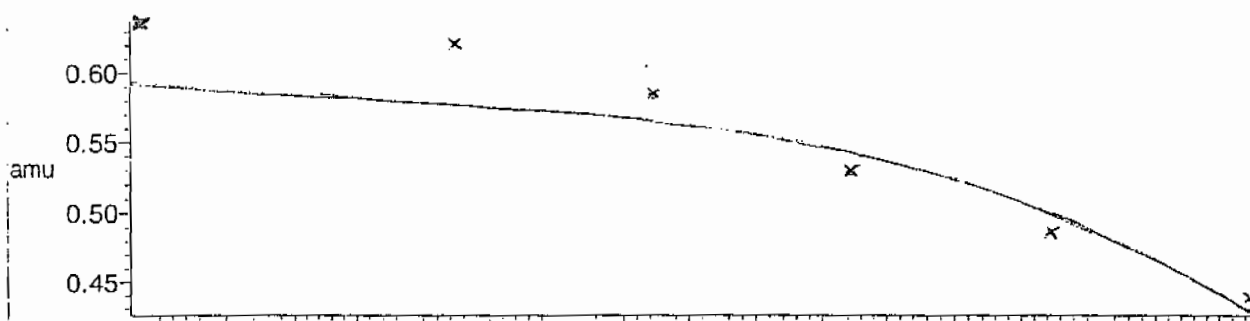
7 matches of 7 tested references



Reference file: Nairb

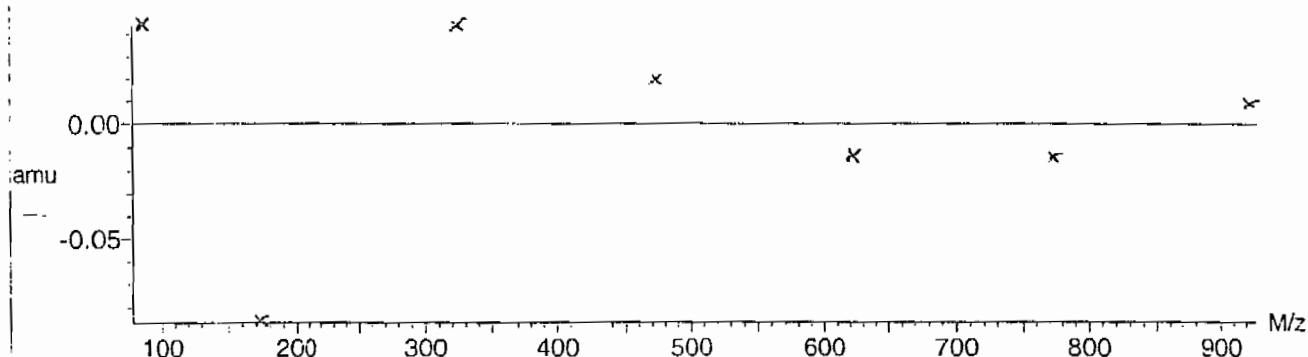


Mass difference (Raw - Ref mass)



Residuals

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



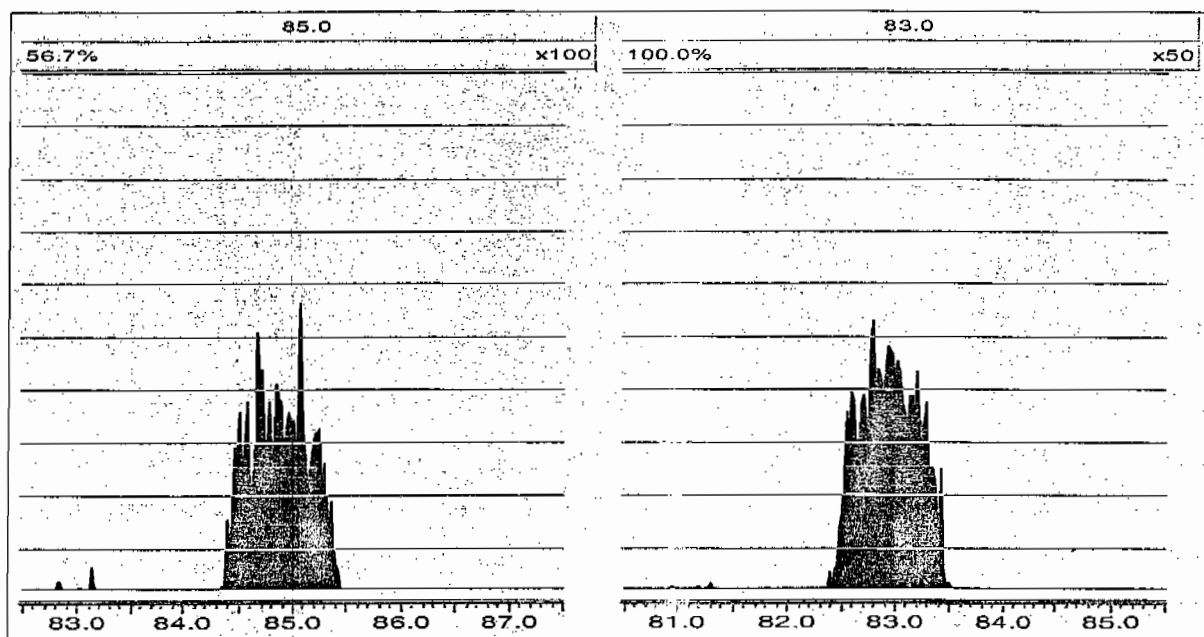
Tune Parameters

MassLynx 4.0 SP4

Page 1 of 1

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

Printed: Monday, March 01, 2010 09:44:20 Eastern Standard Time



Perchlorate RT And Area Summary

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

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	per0301006a	01-MAR-10	19759.7				
Lower Area Limit			9879.85				
Upper Area Limit			39519.4				
1202052905	per0301099a	02-MAR-10 02:47	17957.8	3.42	3.4334	1.004	
1202052906	per0301100a	02-MAR-10 02:56	18150.8	3.43	3.44552	1.005	
1202052909	per0301101a	02-MAR-10 03:05	17763.2	3.43	3.44555	1.005	
247771001	per0301116a	02-MAR-10 05:13	19350.9	3.38	3.3959	1.005	

SAMPLE DATA

Form 1

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC Client Sample No. RE15-10-8272

Lab Code: GEL Date Received: 23-FEB-10

Instrument: LCMSMS GEL Job No (SDG): 10-1973-1

Method: SW846 6850 Modified GEL Sample ID: 24771001

Matrix: WATER Date Filtered: 25-FEB-10

Extraction Batch ID: 257436 Injection Volume (uL): 20

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL % Solids:

Concentrated Extract Volume: 10.0

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	02-MAR-10 05:13	per0301116a
	Perchlorate Isotope Ratio						1	02-MAR-10 05:13	per0301116a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 05:13	per0301116a
	Perchlorate-O(18)			0.495	ug/L		1	02-MAR-10 05:13	per0301116a

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

*Concentration =

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

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qid

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301116a

Date: 02-Mar-2010

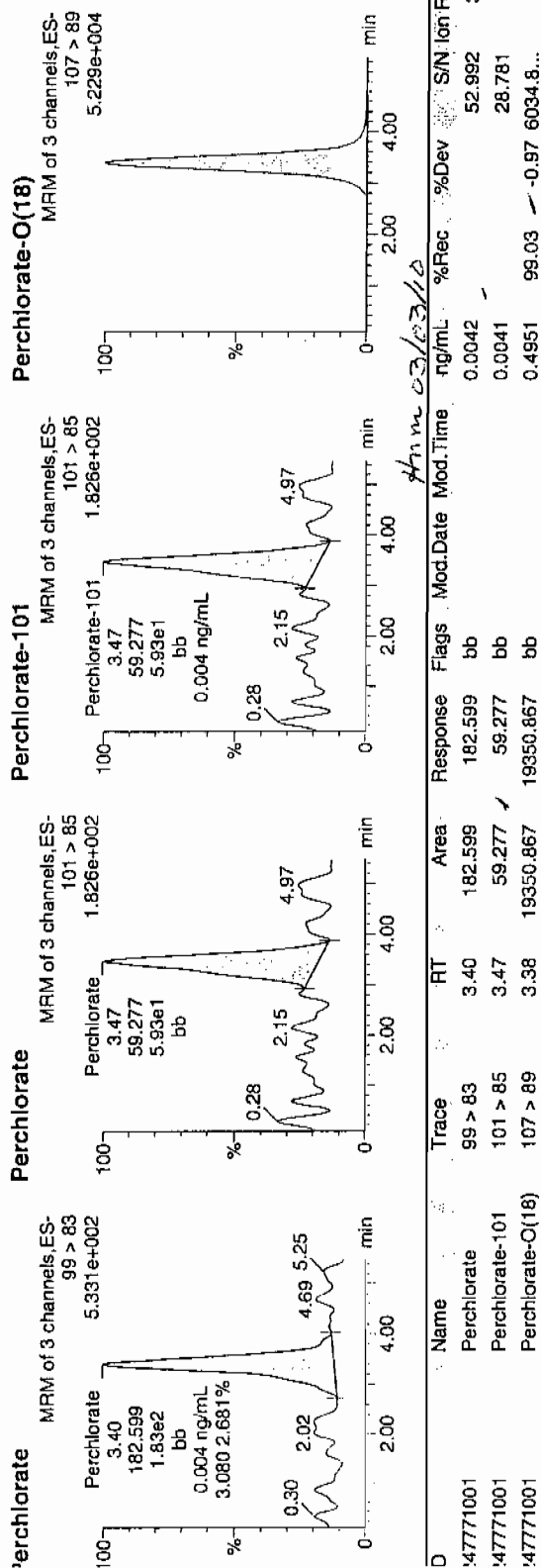
Time: 05:13:32

ID: 247771001

File: 3:3,C

03-02-10

1222 | 957434 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
47771001	Perchlorate	99 > 83	3.40	182.599	182.599	bb			0.0042	-		52.992	3.08
47771001	Perchlorate-101	101 > 85	3.47	59.277	59.277	bb			0.0041			28.781	
47771001	Perchlorate-O(18)	107 > 89	3.38	19350.867	19350.867	bb			0.4951	99.03	-0.97	6034.8...	

IEL SOP GL-OA-E-067, Method 6850-Modified / MM = Manual Modification

STANDARDS DATA

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-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

Parname Perchlorate

Coefficient of Determination:

Calibration Curve: 43756.34

Response Type: External Standard

Curve Type: RF

Perchlorate Initial Calibration

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Instrument ID: LCMSMS Date Analyzed: 01-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

Parname Perchlorate-101

Coefficient of Determination:

Calibration Curve: 14564.22

Response Type: External Standard

Curve Type: RF

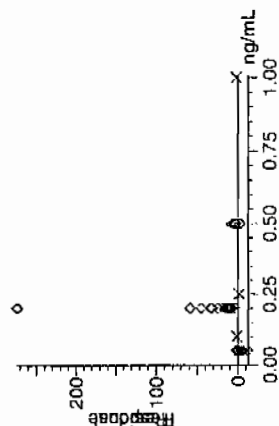
Quantify Calibration Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

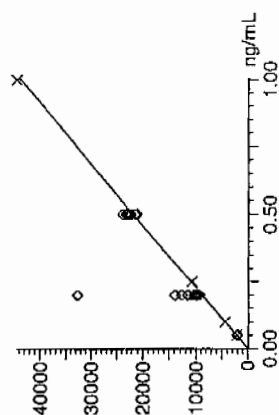
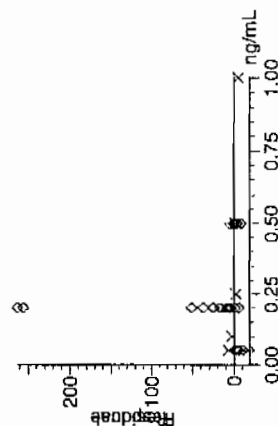
Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Method: C:\MassLynx\Perchlorate.PRO\MethDB\per030110a.mdb 02 Mar 2010 08:52:20
Calibration: C:\MassLynx\Perchlorate.PRO\CurveDB\per030110a.cdb 02 Mar 2010 08:52:38

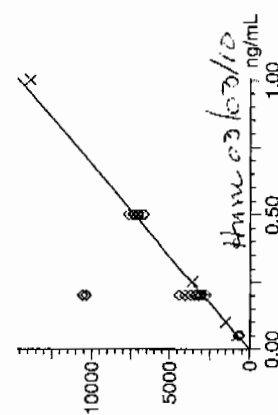
Compound name: Perchlorate
Response Factor: 43756.3
RRF SD: 769.757, % Relative SD: 1.75919 ✓
Response type: External Std, Area
Curve type: RF ✓



Compound name: Perchlorate-101
Response Factor: 14564.2
RRF SD: 704.149, % Relative SD: 4.83479 ✓
Response type: External Std, Area
Curve type: RF ✓



663-07-10



663-07-10

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

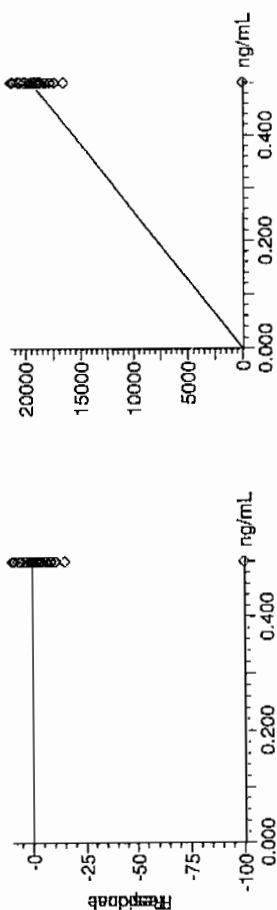
Compound name: Perchlorate-O⁻(18)

Response Factor: 39081.4

R² SD: 496.592, % Relative SD: 1.27066

Response type: External Std, Area

Curve type: R²



Perchlorate Initial Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.53	105.35	01-MAR-10 13:55	per0301009a
Perchlorate Isotope Ratio		3.12		01-MAR-10 13:55	per0301009a
Perchlorate-101	.5	.51	101.51	01-MAR-10 13:55	per0301009a

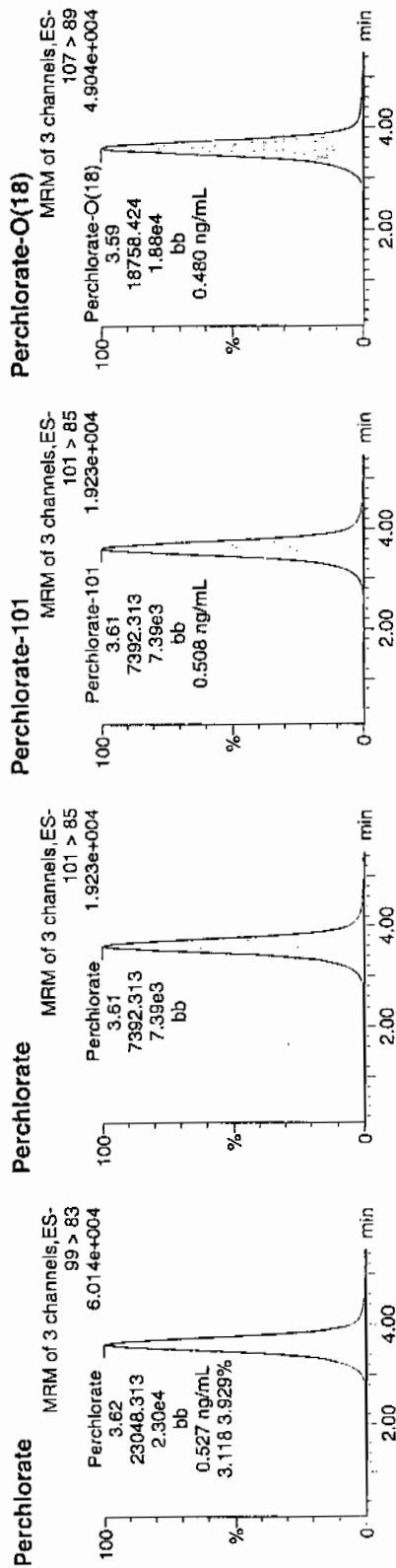
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301009a
Date: 01-Mar-2010
Time: 13:55:47
ID: WCL100227-06ICV
Vial: 1:2,A

Per
and
03-01-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06ICV	Perchlorate	99 > 83	3.62	23048.313	23048.313	bb			0.5267	105.35	5.35	285.800	3.12
WCL100227-06ICV	Perchlorate-101	101 > 85	3.61	7392.313	7392.313	bb			0.5076	101.51	1.51	581.722	
WCL100227-06ICV	Perchlorate-O(18)	107 > 89	3.59	18758.424	18758.424	bb			0.4800	96.00	-4.00	5381.0...	

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.5	.54	108.86	01-MAR-10 15:21	per0301019a
Perchlorate Isotope Ratio		3.34		01-MAR-10 15:21	per0301019a
Perchlorate-101	.5	.49	97.78	01-MAR-10 15:21	per0301019a
Perchlorate	.5	.53	106.46	01-MAR-10 16:46	per0301029a
Perchlorate Isotope Ratio		3.05		01-MAR-10 16:46	per0301029a
Perchlorate-101	.5	.52	104.92	01-MAR-10 16:46	per0301029a
Perchlorate	.5	.53	105.15	01-MAR-10 18:30	per0301041a
Perchlorate Isotope Ratio		3.26		01-MAR-10 18:30	per0301041a
Perchlorate-101	.5	.49	97.01	01-MAR-10 18:30	per0301041a
Perchlorate	.5	.51	101.35	01-MAR-10 20:21	per0301054a
Perchlorate Isotope Ratio		3.19		01-MAR-10 20:21	per0301054a
Perchlorate-101	.5	.48	95.6	01-MAR-10 20:21	per0301054a
Perchlorate	.5	.51	102.4	01-MAR-10 22:12	per0301067a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3.18		01-MAR-10 22:12	per0301067a
Perchlorate-101	.5	.48	96.82	01-MAR-10 22:12	per0301067a
Perchlorate	.5	.52	103.19	02-MAR-10 00:04	per0301080a
Perchlorate Isotope Ratio		3.11		02-MAR-10 00:04	per0301080a
Perchlorate-101	.5	.5	99.79	02-MAR-10 00:04	per0301080a
Perchlorate	.5	.49	98.22	02-MAR-10 01:56	per0301093a
Perchlorate Isotope Ratio		3.21		02-MAR-10 01:56	per0301093a
Perchlorate-101	.5	.46	92.02	02-MAR-10 01:56	per0301093a
Perchlorate	.5	.48	96.44	02-MAR-10 03:47	per0301106a
Perchlorate Isotope Ratio		3.17		02-MAR-10 03:47	per0301106a
Perchlorate-101	.5	.46	91.32	02-MAR-10 03:47	per0301106a
Perchlorate	.5	.52	104.38	02-MAR-10 05:39	per0301119a
Perchlorate Isotope Ratio		3.12		02-MAR-10 05:39	per0301119a

Form 3

Perchlorate Continuing Calibration Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

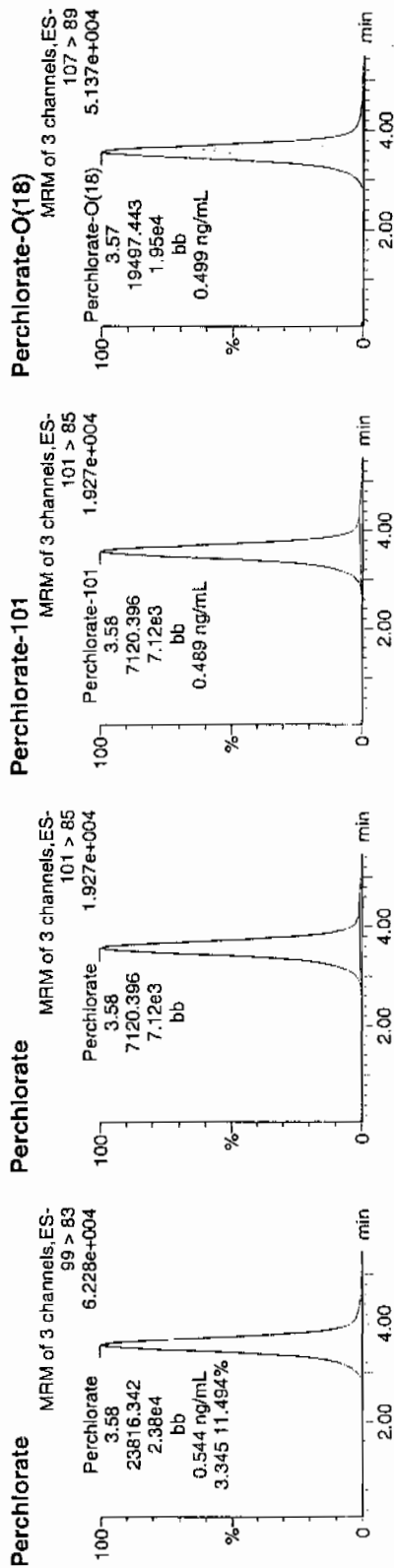
Perchlorate-101	.5	.5	100.4	02-MAR-10 05:39	per0301119a
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Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301019a
Date: 01-Mar-2010
Time: 15:21:16
ID: WCL100227-06CCV
Vial: 1:2,A



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.58	23816.342	23816.342	bb			0.5443	108.86	8.86	722.740	3.34
WCL100227-06CCV	Perchlorate-101	101 > 85	3.58	7120.396	7120.396	bb			0.4889	97.78	-2.22	2935.5...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.57	19497.443	19497.443	bb			0.4989	99.78	-0.22	3503.2...	

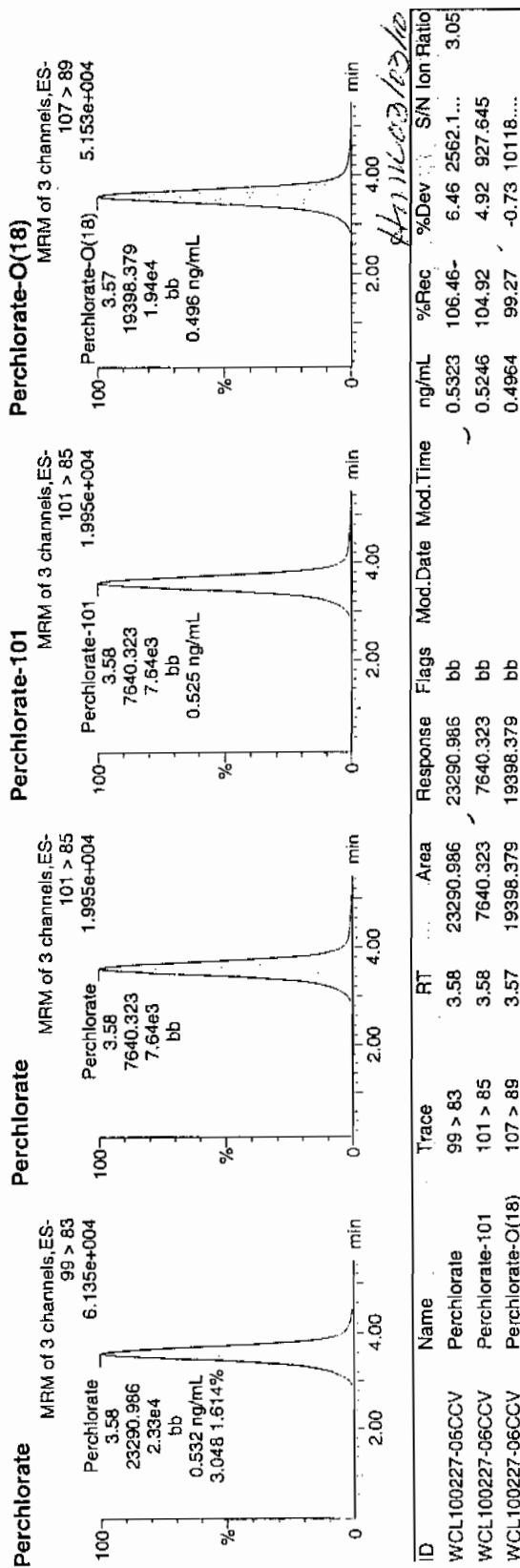
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301029a
Date: 01-Mar-2010
Time: 16:46:52
ID: WCL100227-06CCV
Vial: 1:2,A

Per
WCL
07-06-10



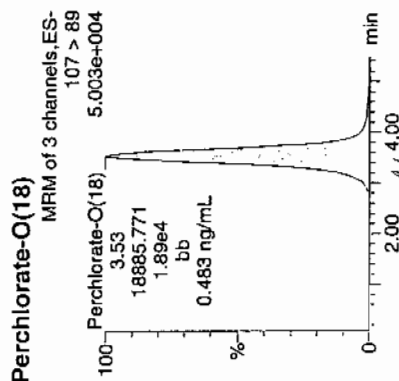
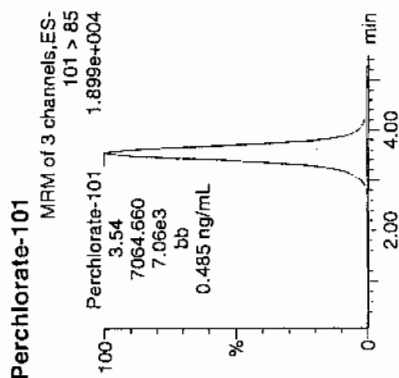
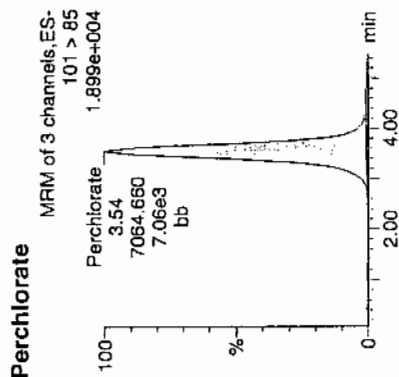
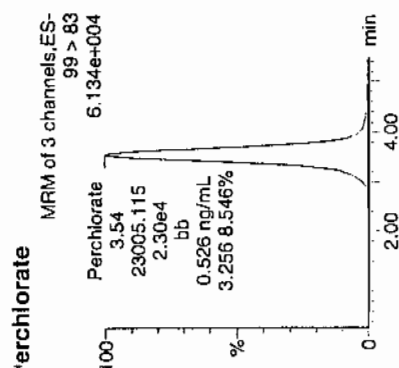
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301041a
Date: 01-Mar-2010
Time: 18:30:04
File: WCL100227-06CCV
Label: 1:2,A

Pure
0.483 ng/mL
0.483 ng/mL



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
	Perchlorate	99 > 83	3.54	23005.115	23005.115	bb			0.5258	105.15	5.15	1878.6...	3.26
	Perchlorate-101	101 > 85	3.54	7064.660	7064.660	bb			0.4851	97.01	-2.99	1637.0...	
	Perchlorate-O(18)	107 > 89	3.53	18885.771	18885.771	bb			0.4832	96.65	-3.35	1409.8...	

Handwritten signature: *Handwritten signature*

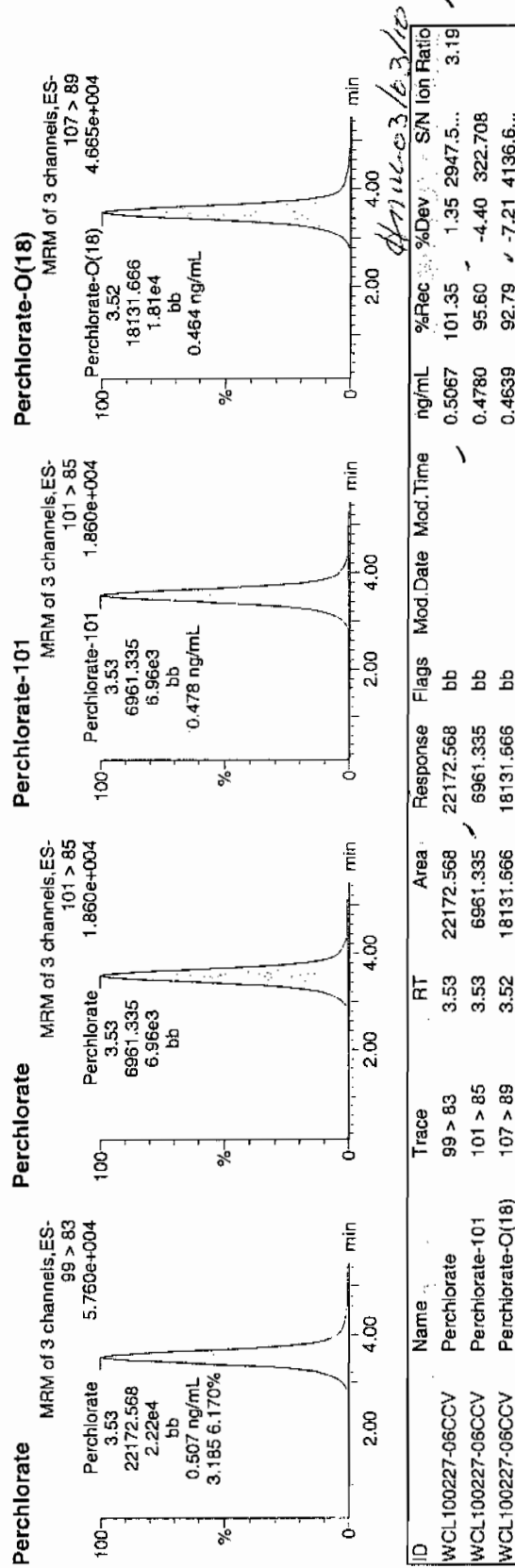
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301054a
Date: 01-Mar-2010
Time: 20:21:26
ID: WCL100227-06CCV
Vial: 1:2,A

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and
03-02-10



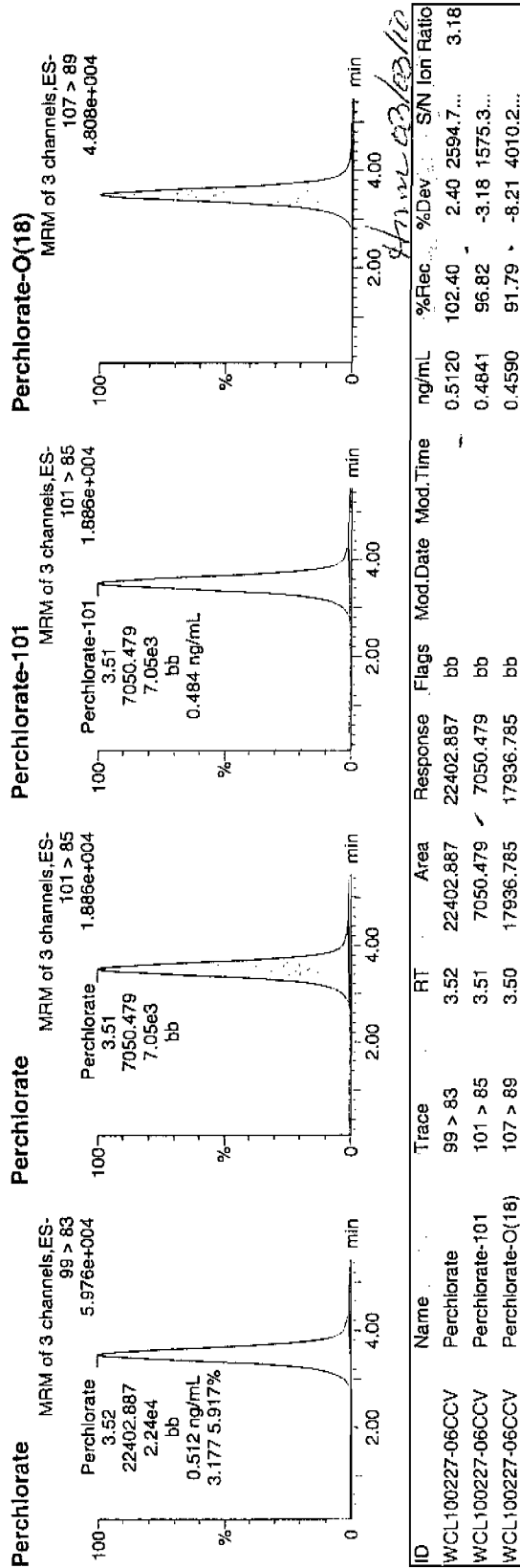
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301067a
Date: 01-Mar-2010
Time: 22:12:51
ID: WCL100227-06CCV
Vial: 1:2,A

Per
03-02-10



Quantify Sample Report MassLynx 4.0 SP4

The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time

Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301080a

Date: 02-Mar-2010

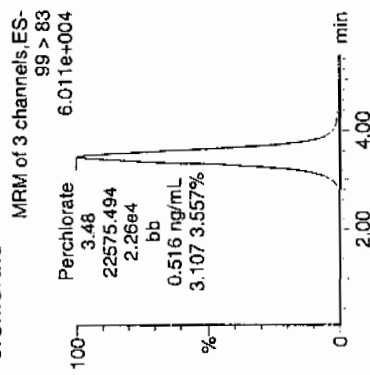
Time: 00:04:20

D: WCL100227-06CCV

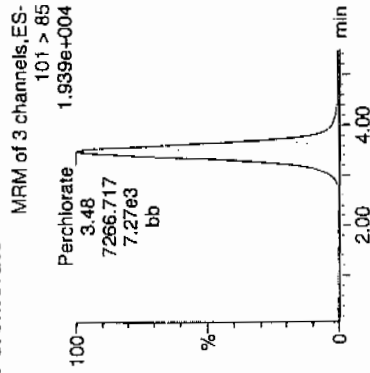
Vial: 1:2,A

Perchlorate-101

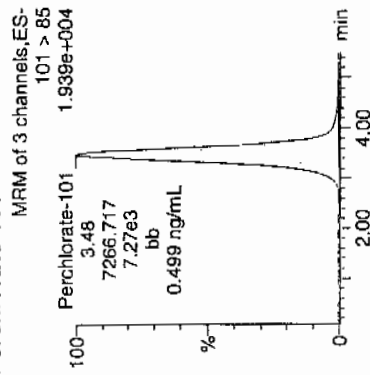
Perchlorate



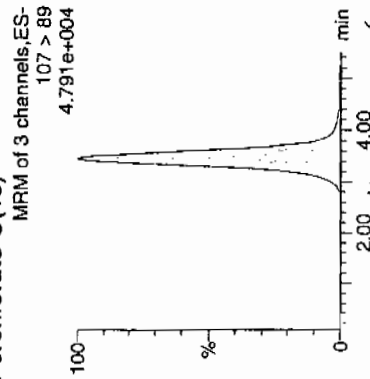
Perchlorate



Perchlorate-101



Perchlorate-O(18)



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
NCL100227-06CCV	Perchlorate	99 > 83	3.48	22575.494	22575.494	bb			0.5159	103.19	3.19	2204.0...	3.11
NCL100227-06CCV	Perchlorate-101	101 > 85	3.48	7266.717	7266.717	bb			0.4989	99.79	-0.21	2719.0...	
NCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.47	17896.398	17896.398	bb			0.4579	91.59	-8.41	1927.6...	

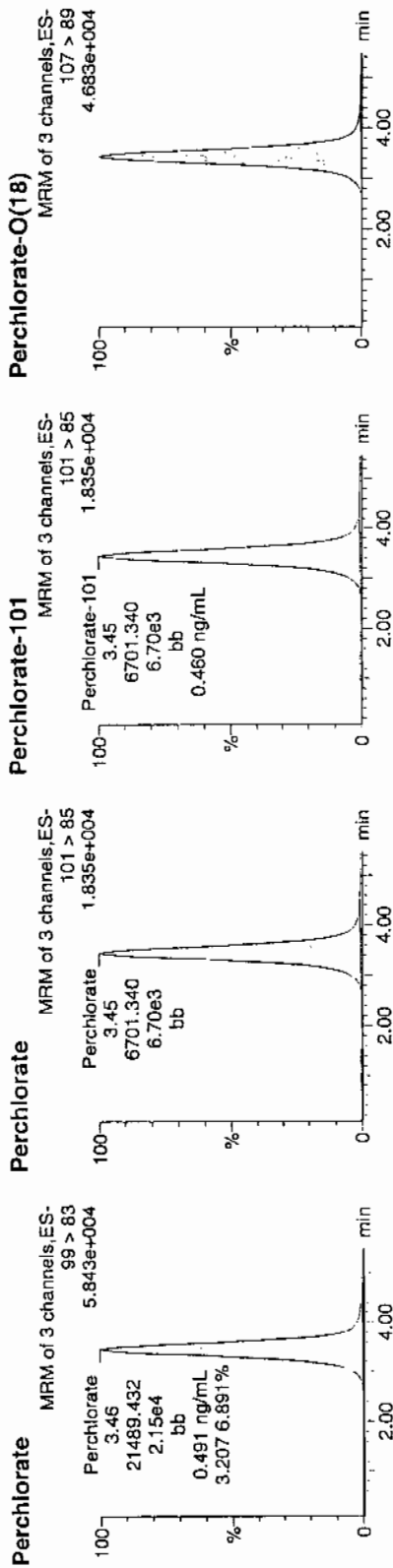
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301093a
Date: 02-Mar-2010
Time: 01:56:03
ID: WCL100227-06CCV
Vial: 1:2,A

Pure
03-2-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.46	21489.432	21489.432	bb			0.4911	98.22	-1.78	1165.7...	3.21
WCL100227-06CCV	Perchlorate-101	101 > 85	3.45	6701.340	6701.340	bb			0.4601	92.02	-7.98	2131.2...	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.43	17389.604	17389.604	bb			0.4450	88.99	-11.01	2294.8...	

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301106a

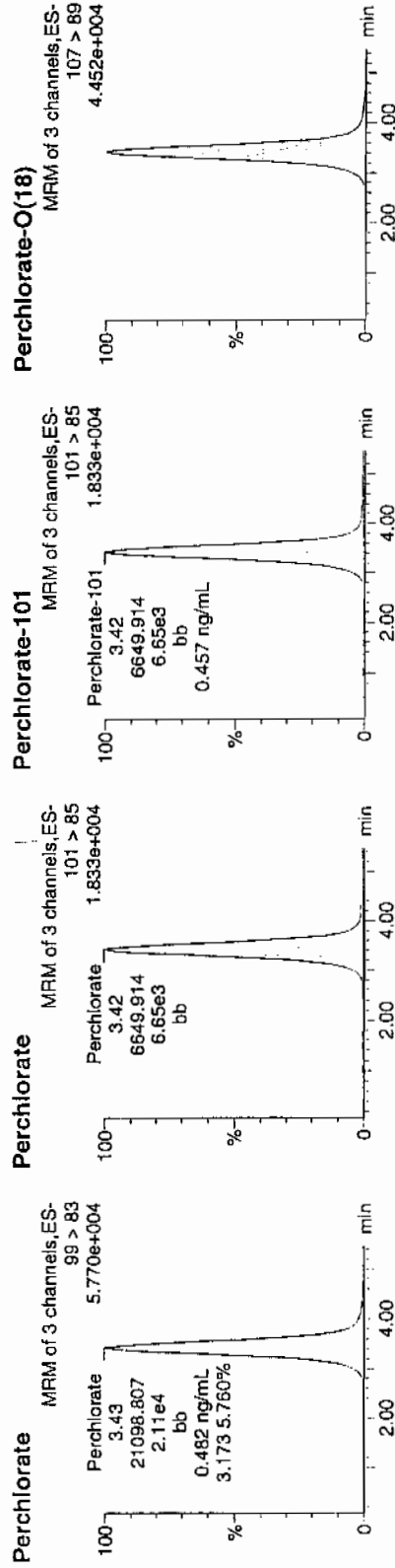
Date: 02-Mar-2010

Time: 03:47:50

ID: WCL100227-06CCV

Vial: 1:2,A

Run and 03-02-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-06CCV	Perchlorate	99 > 83	3.43	21098.807	21098.807	bb			0.4822	96.44	-3.56	982.579	3.17
WCL100227-06CCV	Perchlorate-101	101 > 85	3.42	6649.914	6649.914	bb			0.4566	91.32	-8.68	370.292	
WCL100227-06CCV	Perchlorate-O(18)	107 > 89	3.41	16618.670	16618.670	bb			0.4252	85.05	-14.95	820.393	

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

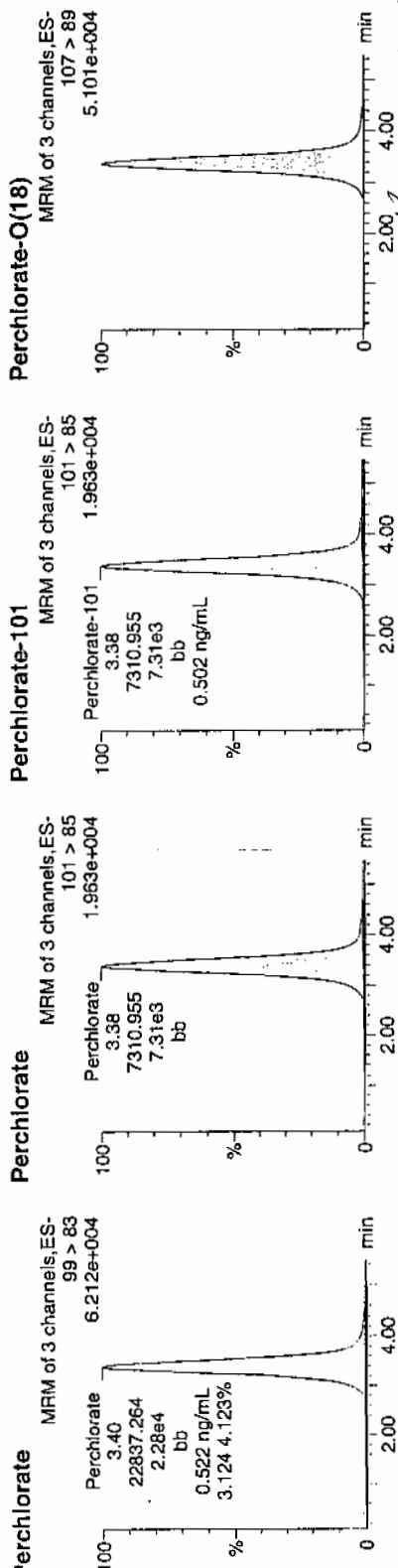
Page 119 of 134

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301119a
Date: 02-Mar-2010
Time: 05:39:07
File: WCL100227-06CCV
Vial: 1:2,A

Per
03-02-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion:Ratio
	Perchlorate	99 > 83	3.40	22837.264	22837.264	bb			0.5219	104.38	4.38	2399.8...	3.12
	Perchlorate-101	101 > 85	3.38	7310.955	7310.955	bb			0.5020	100.40	0.40	1114.9...	
	Perchlorate-O(18)	107 > 89	3.37	18701.783	18701.783	bb			0.4785	95.71	-4.29	721.836	

Perchlorate MDL Verification

GEL Job No.(SDG): 10-1973-1

Lab Name: General Engineering Laboratories

Lab Code: GEL

Reporting Units: $\mu\text{g/L}$

Analyte	True	Found	%Rec	Date Analyzed	GEL File Id
Perchlorate	.05	.05	99.46	01-MAR-10 14:12	per0301011a
Perchlorate Isotope Ratio		3.01		01-MAR-10 14:12	per0301011a
Perchlorate-101	.05	.05	99.12	01-MAR-10 14:12	per0301011a
Perchlorate	.05	.05	99.36	01-MAR-10 15:38	per0301021a
Perchlorate Isotope Ratio		3.21		01-MAR-10 15:38	per0301021a
Perchlorate-101	.05	.05	92.98	01-MAR-10 15:38	per0301021a
Perchlorate	.05	.05	101.16	01-MAR-10 17:04	per0301031a
Perchlorate Isotope Ratio		3.17		01-MAR-10 17:04	per0301031a
Perchlorate-101	.05	.05	95.99	01-MAR-10 17:04	per0301031a
Perchlorate	.05	.05	96.24	01-MAR-10 18:47	per0301043a
Perchlorate Isotope Ratio		3.26		01-MAR-10 18:47	per0301043a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories

GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate-101	.05	.04	88.6	01-MAR-10 18:47	per0301043a
Perchlorate	.05	.05	96.12	01-MAR-10 20:38	per0301056a
Perchlorate Isotope Ratio		3.2		01-MAR-10 20:38	per0301056a
Perchlorate-101	.05	.05	90.1	01-MAR-10 20:38	per0301056a
Perchlorate	.05	.05	94.34	01-MAR-10 22:30	per0301069a
Perchlorate Isotope Ratio		2.9		01-MAR-10 22:30	per0301069a
Perchlorate-101	.05	.05	97.68	01-MAR-10 22:30	per0301069a
Perchlorate	.05	.05	102.56	02-MAR-10 00:21	per0301082a
Perchlorate Isotope Ratio		3.11		02-MAR-10 00:21	per0301082a
Perchlorate-101	.05	.05	98.97	02-MAR-10 00:21	per0301082a
Perchlorate	.05	.05	93.81	02-MAR-10 02:13	per0301095a

Perchlorate MDL Verification

Lab Name: General Engineering Laboratories GEL Job No.(SDG): 10-1973-1

Lab Code: GEL

Reporting Units: ug/L

Perchlorate Isotope Ratio		3		02-MAR-10 02:13	per0301095a
Perchlorate-101	.05	.05	94.03	02-MAR-10 02:13	per0301095a
Perchlorate	.05	.04	87.45	02-MAR-10 04:05	per0301108a
Perchlorate Isotope Ratio		3.21		02-MAR-10 04:05	per0301108a
Perchlorate-101	.05	.04	81.87	02-MAR-10 04:05	per0301108a
Perchlorate	.05	.05	102.25	02-MAR-10 05:56	per0301121a
Perchlorate Isotope Ratio		3.23		02-MAR-10 05:56	per0301121a
Perchlorate-101	.05	.05	95.21	02-MAR-10 05:56	per0301121a

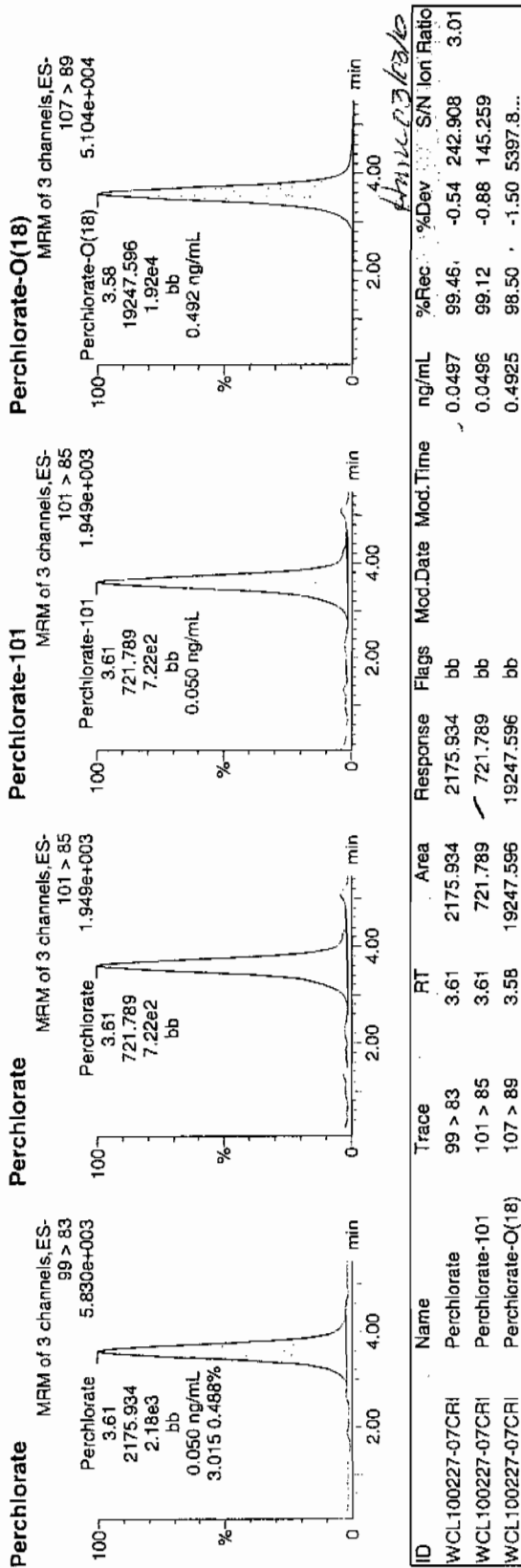
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301011a
Date: 01-Mar-2010
Time: 14:12:58
ID: WCL100227-07CRI
Vial: 1:2,B

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03-02-10



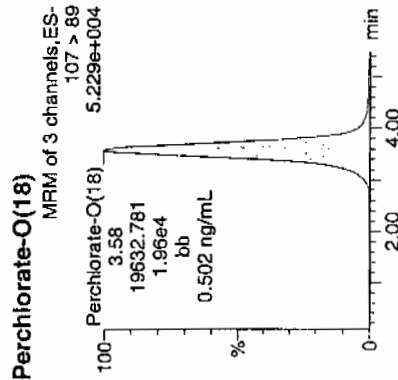
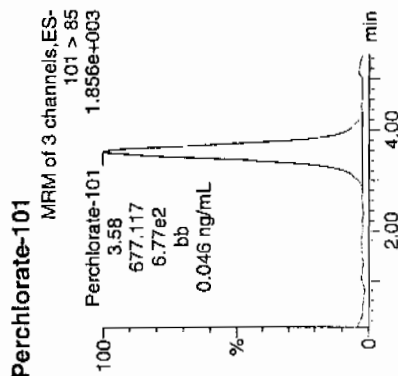
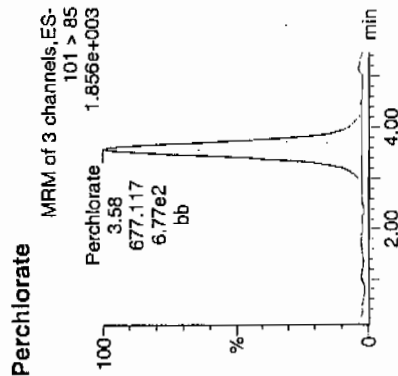
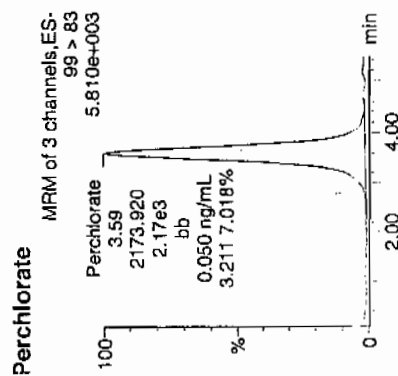
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301021a
Date: 01-Mar-2010
Time: 15:38:29
ID: WCL100227-07CRI
Vial: 1:2,B

*Per
Q2
03-02-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	SN	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.59	2173.920	2173.920	bb			0.0497	99.36	-0.64	116.476	3.21
WCL100227-07CRI	Perchlorate-101	101 > 85	3.58	677.117	677.117	bb			0.0465	92.98	-7.02	220.722	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.58	19632.781	19632.781	bb			0.5024	100.47	0.47	622.376	

Min 03/02/10

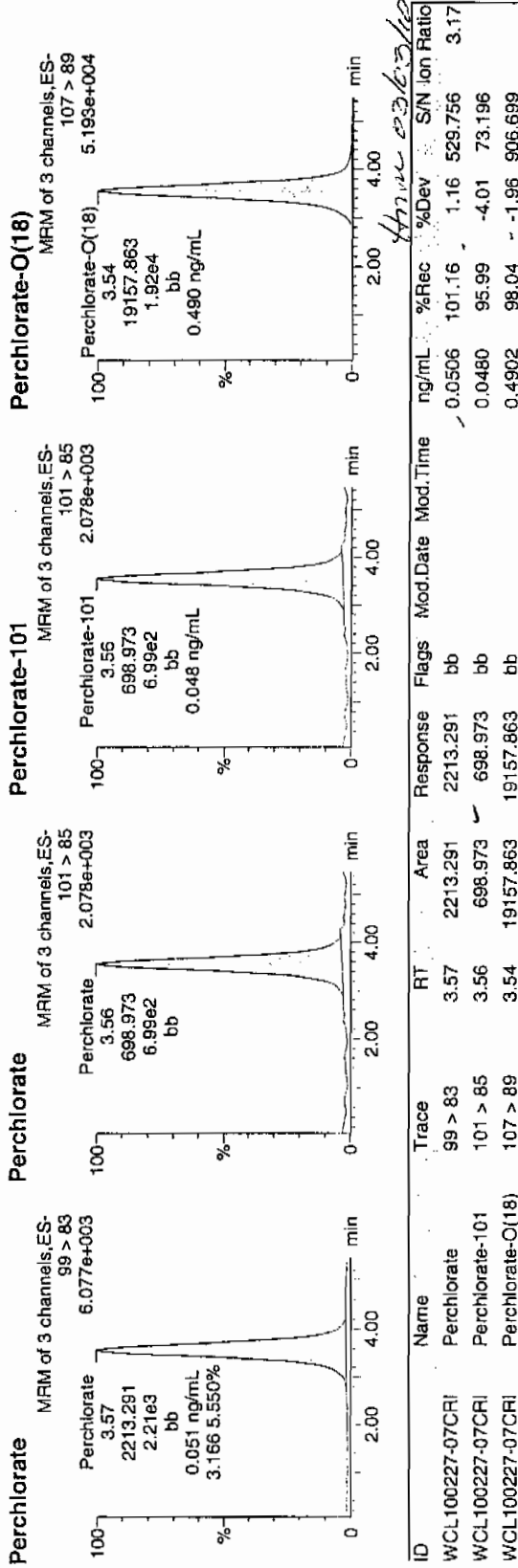
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charfers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301031a
Date: 01-Mar-2010
Time: 17:04:11
ID: WCL100227-07CRI
Vial: 1:2,B

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603-02-10



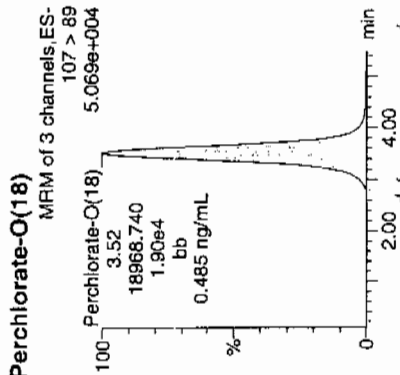
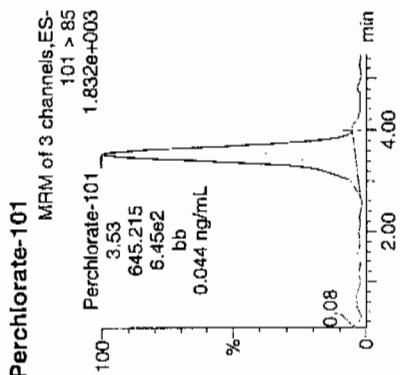
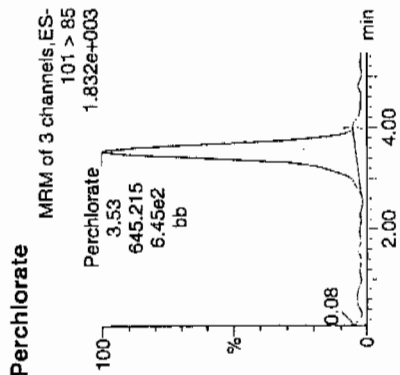
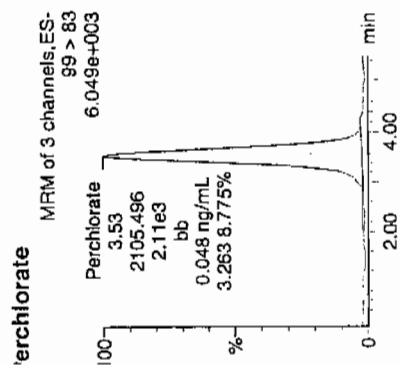
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301043a
Date: 01-Mar-2010
Time: 18:47:22
Job: WCL100227-07CRI
File: 1:2,B

Per
03-02-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
VCL100227-07CRI	Perchlorate	99 > 83	3.53	2105.496	2105.496	bb			0.0481	96.24	-3.76	827.986	3.26
VCL100227-07CRI	Perchlorate-101	101 > 85	3.53	645.215	645.215	bb			0.0443	88.60	-11.40	257.268	
VCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.52	18968.740	18968.740	bb			0.4854	97.07	-2.93	1758.6...	

03-02-10

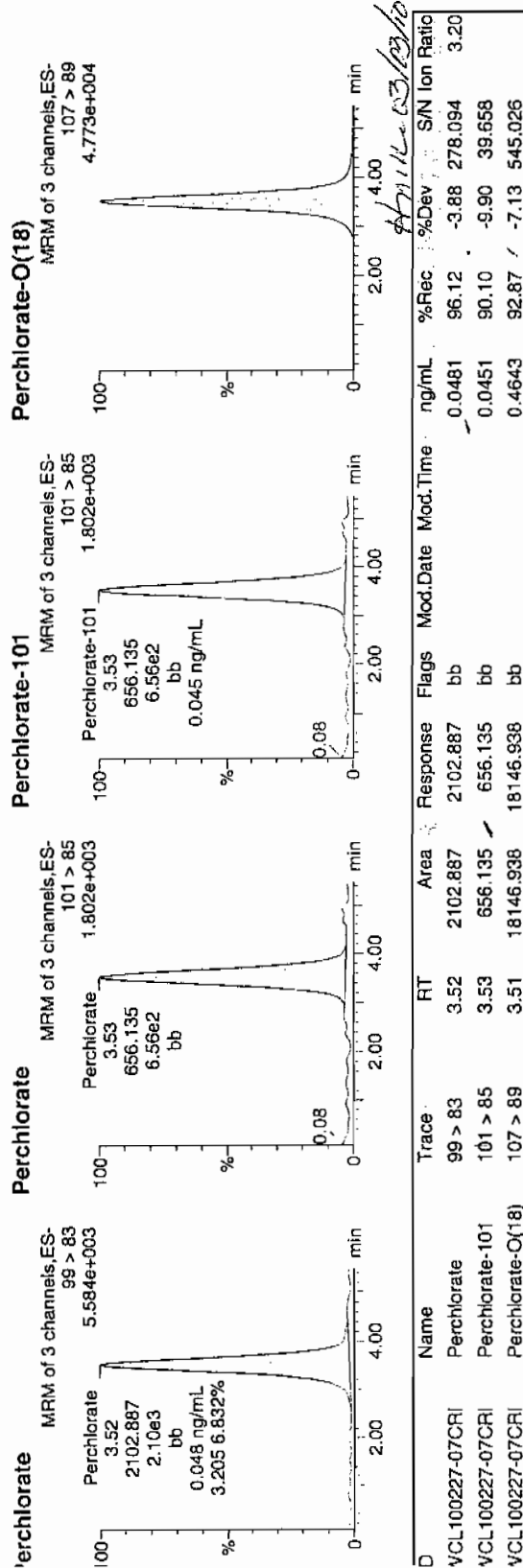
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Sample Name: per0301056a
Date: 01-Mar-2010
Time: 20:38:45
File: WCL100227-07CRI
Label: 1:2,B

Pure
03-01-10



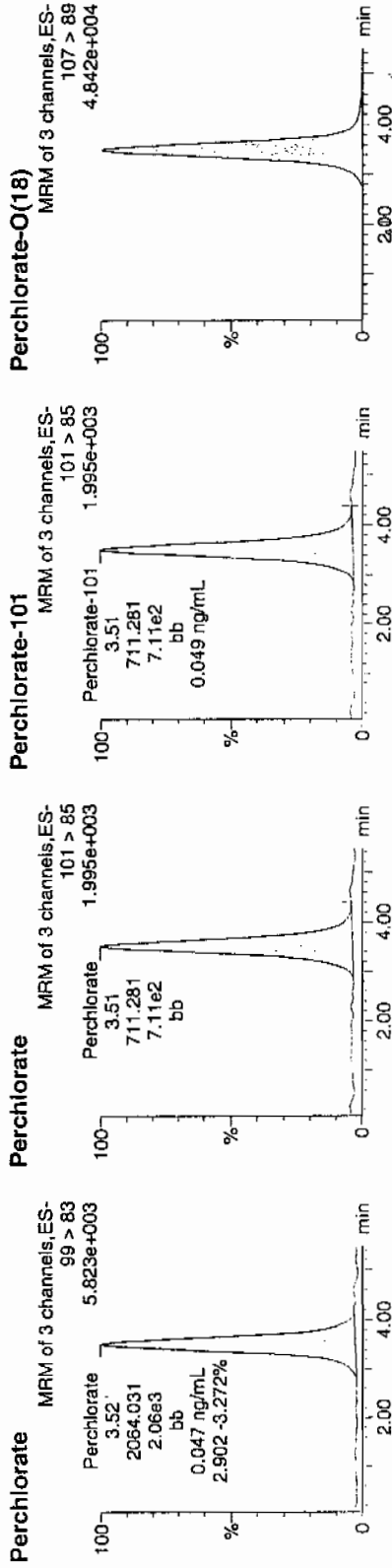
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301069a
Date: 01-Mar-2010
Time: 22:30:09
ID: WCL100227-07CRI
Vial: 1:2,B

*per
03-01-10*



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.52	2064.031	2064.031	bb			0.0472	94.34	-5.66	405.117	2.90
WCL100227-07CRI	Perchlorate-101	101 > 85	3.51	711.281	711.281	bb			0.0488	97.68	-2.32	94.678	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.50	18314.125	18314.125	bb			0.4686	93.72	-6.28	4727.9...	

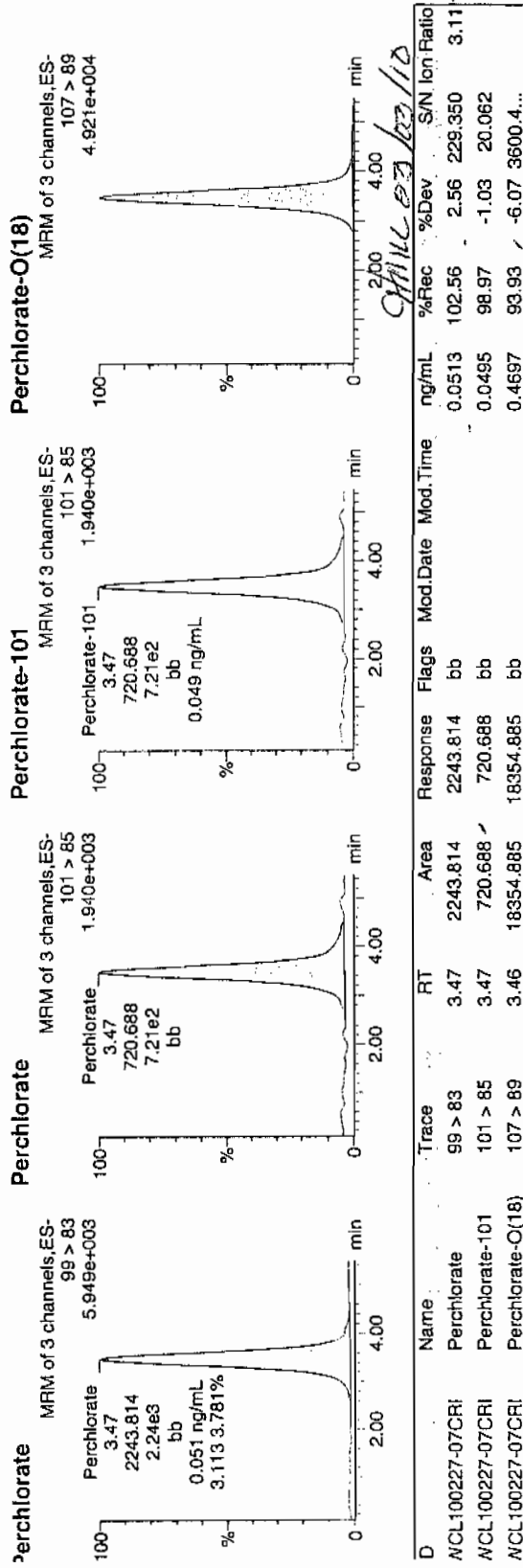
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charliers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

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Date: 02-Mar-2010
Time: 00:21:39
D: WCL100227-07CRI
/ial: 1;2,B

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03-02-10



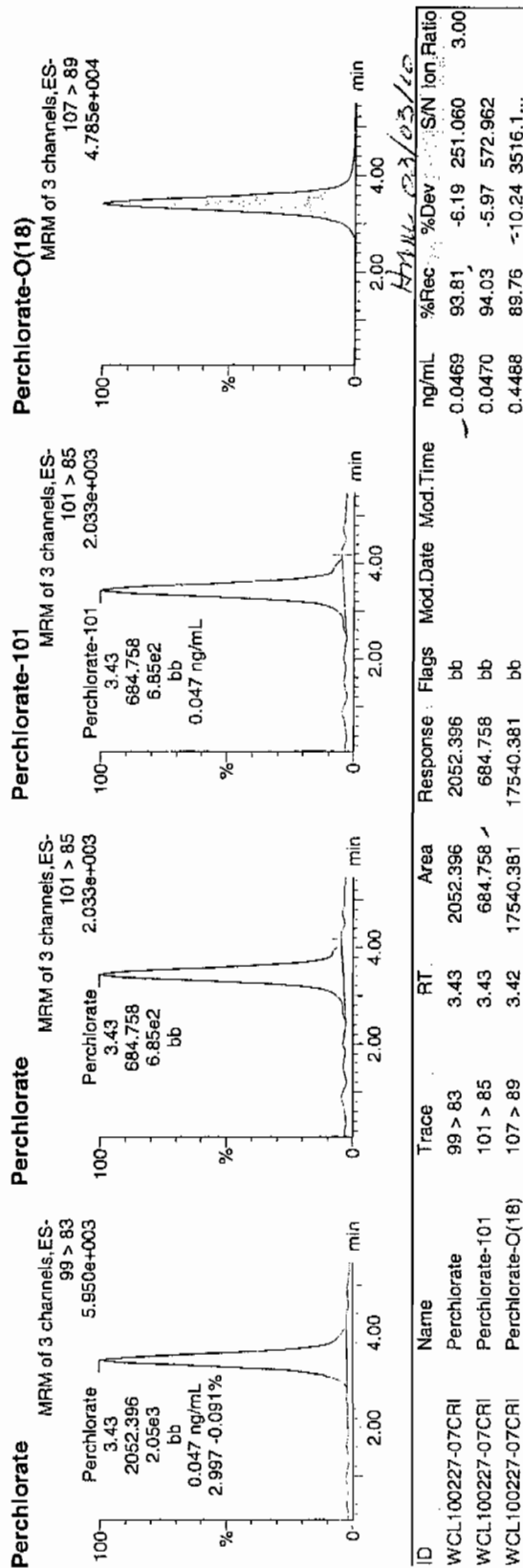
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The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qid

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301095a
Date: 02-Mar-2010
Time: 02:13:22
ID: WCL100227-07CRI
Vial: 1:2,B

Perchlorate
03-02-10



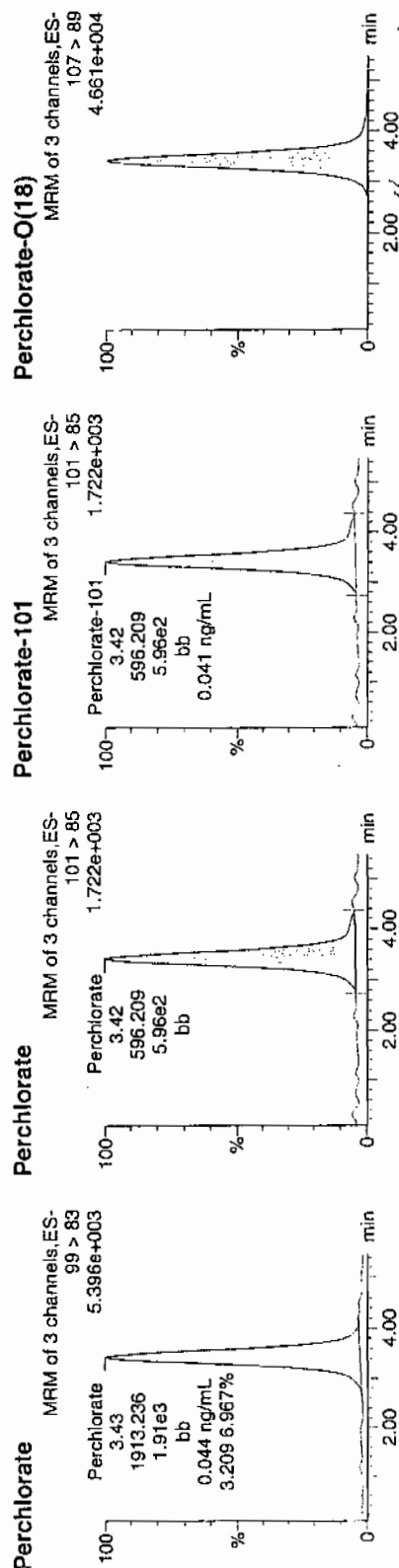
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charles W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

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Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301108a
Date: 02-Mar-2010
Time: 04:05:07
ID: WCL100227-07CRI
Vial: 1:2,B

Pure and Ob-2-10



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.43	1913.236	1913.236	bb			0.0437	87.45	-12.55	518.963	3.21
WCL100227-07CRI	Perchlorate-101	101 > 85	3.42	596.209	596.209	bb			0.0409	81.87	-18.13	160.700	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.41	17387.477	17387.477	bb			0.4449	88.98	-11.02	3405.9...	

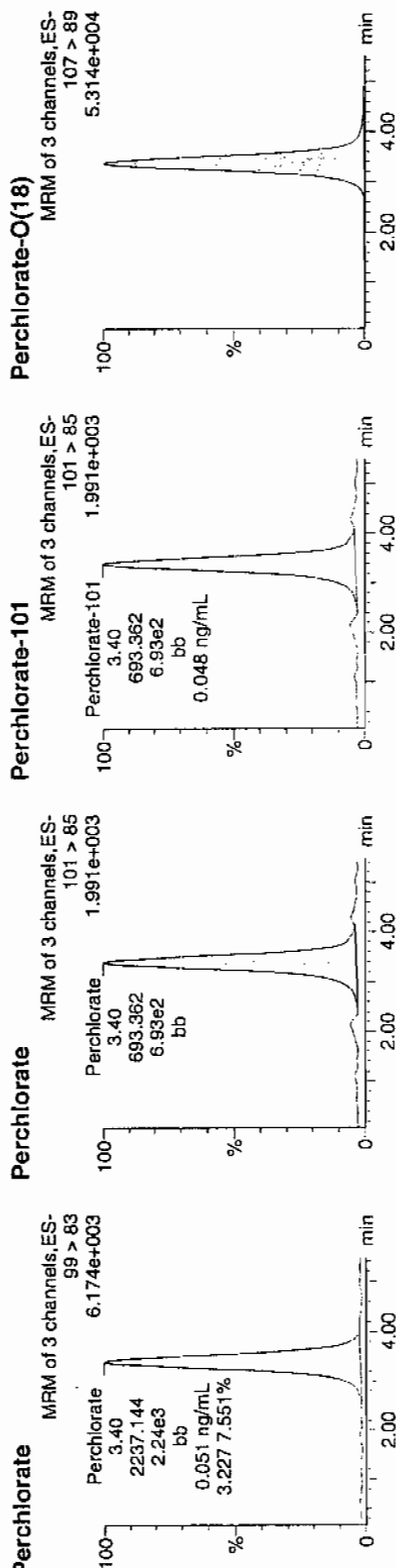
Quantify Sample Report MassLynx 4.0 SP4
The GEL Group, LLC Analyst: Charlers W. Wilson

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301121a
Date: 02-Mar-2010
Time: 05:56:24
D: WCL100227-07CRI
/ial: 1;2,B

Pass
03-02-10



D	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
WCL100227-07CRI	Perchlorate	99 > 83	3.40	2237.144	2237.144	bb			0.0511	102.25	2.25	230.488	3.23
WCL100227-07CRI	Perchlorate-101	101 > 85	3.40	693.362	693.362	bb			0.0476	95.21	-4.79	275.471	
WCL100227-07CRI	Perchlorate-O(18)	107 > 89	3.37	19497.398	19497.398	bb			0.4989	99.78	-0.22	1379.6...	

QUALITY CONTROL

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC

Lab Code: GEL

Instrument: LCMSMS

Method: EPA 6850 Modified

Matrix: WATER

Extraction Batch ID: 957436

Extraction Type: Filter/DAI

Sample Volume/Weight: 10.0 mL

Concentrated Extract Volume: 10.0

Client Sample No.

MB

Date Received: 25-FEB-10

GEL Job No (SDG): 10-1973-1

GEL Sample ID: 1202052905

Date Filtered: 25-FEB-10

Injection Volume (uL): 20

%Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.050	ug/L	U	1	02-MAR-10 02:47	per0301099a
	Perchlorate Isotope Ratio						1	02-MAR-10 02:47	per0301099a
14797-73-0	Perchlorate-101	.05	.2	0.050	ug/L	U	1	02-MAR-10 02:47	per0301099a
	Perchlorate-O(18)			0.459	ug/L		1	02-MAR-10 02:47	per0301099a

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

*Concentration =

Instrument Value X Concentrated Extract Volume X 1 %Solids
Aliquot

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301099a

Date: 02-Mar-2010

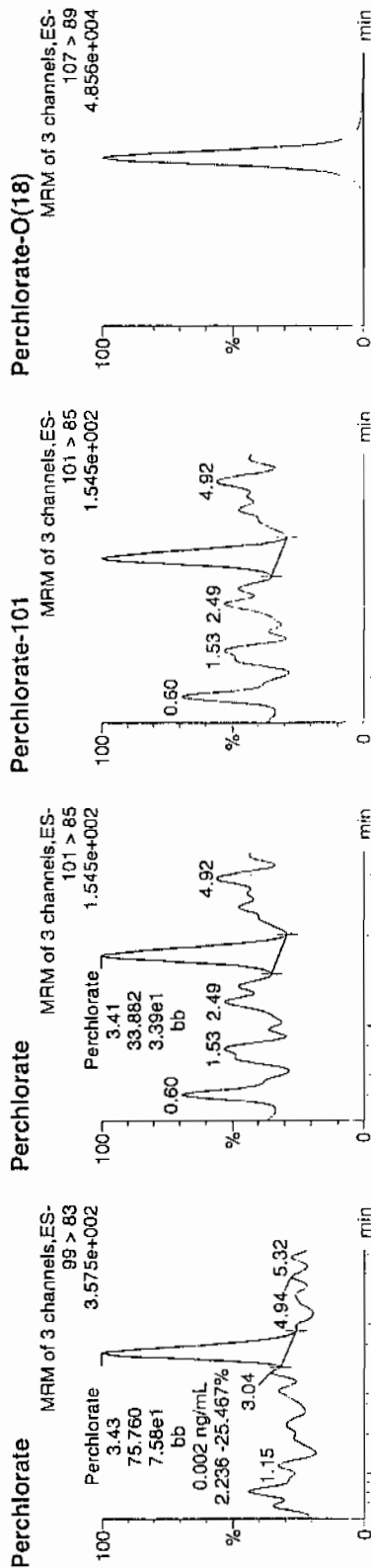
Time: 02:47:58

ID: 1202052905

Vial: 3:1,A

600
03-02-10

195747H | 120 | 103 | 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202052905	Perchlorate	99 > 83	3.43	75.760	75.760	bb			0.0017			17.194	2.24
1202052905	Perchlorate-101	101 > 85	3.41	33.882	33.882	bb			0.0023			18.276	
1202052905	Perchlorate-Q(18)	107 > 89	3.42	17957.791	17957.791	bb			0.4595	91.90	-8.10	2507.1...	

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0.004
20.0500

Perchlorate Analysis Data Sheet

Lab Name: GEL Laboratories LLC
 Lab Code: GEL
 Instrument: LCMSMS
 Method: EPA 6850 Modified
 Matrix: WATER
 Extraction Batch ID: 957436
 Extraction Type: Filter/DAI
 Sample Volume/Weight: 10.0 mL
 Concentrated Extract Volume: 10.0
 Client Sample No. LCS
 Date Received: 25-FEB-10
 GEL Job No (SDG): 10-1973-1
 GEL Sample ID: 1202052906
 Date Filtered: 25-FEB-10
 Injection Volume (uL): 20
 %Solids:

CAS No.	Analyte [^]	MDL	RL	Conc*	Units	Q	Dilution Factor	Date Analyzed	GEL File ID
14797-73-0	Perchlorate	.05	.2	0.219	ug/L		1	02-MAR-10 02:56	per0301100a
	Perchlorate Isotope Ratio			3.02			1	02-MAR-10 02:56	per0301100a
14797-73-0	Perchlorate-101	.05	.2	0.217	ug/L		1	02-MAR-10 02:56	per0301100a
	Perchlorate-O(18)			0.464	ug/L		1	02-MAR-10 02:56	per0301100a

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

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

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

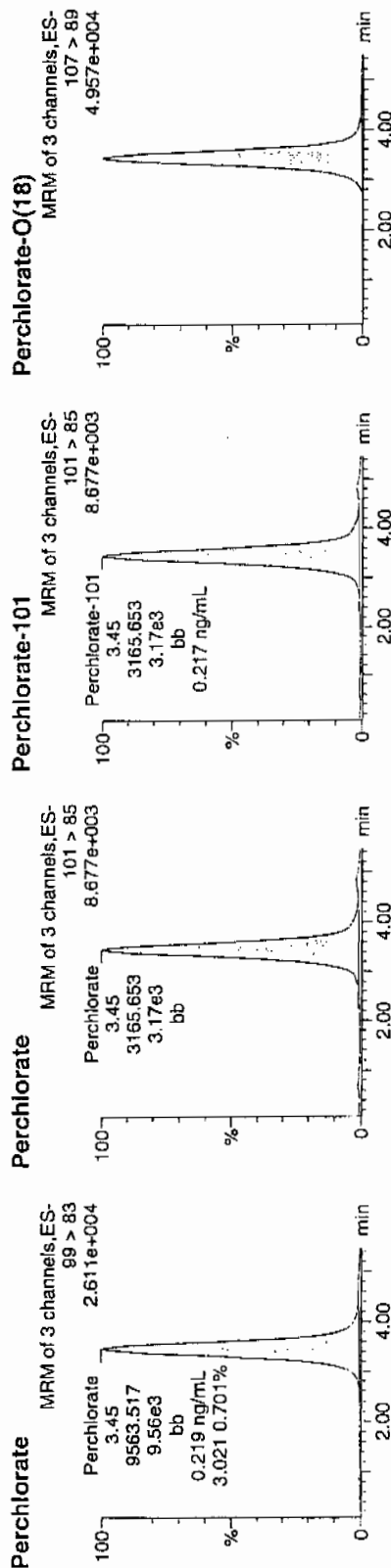
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Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301100a
Date: 02-Mar-2010
Time: 02:56:42
ID: 1202052906
Vial: 3:1,B

6000
03-02-10

LANC 1957439 / 120125 / 11



ID	Name	Trace	RT	Area	Response	Flags	Mod.Date	Mod.Time	ng/mL	%Rec	%Dev	S/N	Ion Ratio
1202052906	Perchlorate	99 > 83	3.45	9563.517	9563.517	bb			-0.2186	109.28	9.28	1109.7...	3.02
1202052906	Perchlorate-101	101 > 85	3.45	3165.653	3165.653	bb			0.2174	108.68	8.68	1019.8...	
1202052906	Perchlorate-O(18)	107 > 89	3.43	18150.789	18150.789	bb			0.4644	92.89	-7.11	2961.5...	

9563.517
43756.3
0.2186
4/11/10

MISCELLANEOUS DATA

Prep Logbook

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

Batch ID: 957436 Verified by: _____
 Analyst: Charles Wilson
 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)
1202052903 MB	25-FEB-2010 11:13:00	10	10	1
1202052906 LCS	25-FEB-2010 11:13:00	10	10	1
247434001	25-FEB-2010 11:13:00	10	10	1
247437006	25-FEB-2010 11:13:00	10	10	1
247438001	25-FEB-2010 11:13:00	10	10	1
247441001	25-FEB-2010 11:13:00	10	10	1
247443004	25-FEB-2010 11:13:00	10	10	1
247449001	25-FEB-2010 11:13:00	10	10	1
247548001	25-FEB-2010 11:13:00	10	10	1
247548002	25-FEB-2010 11:13:00	10	10	1
247559001	25-FEB-2010 11:13:00	10	10	1
247560001	25-FEB-2010 11:13:00	10	10	1
247567001	25-FEB-2010 11:13:00	10	10	1
247771001	25-FEB-2010 11:13:00	10	10	1
247780001	25-FEB-2010 11:13:00	10	10	1
247793001	25-FEB-2010 11:13:00	10	10	1
247807001	25-FEB-2010 11:13:00	10	10	1
1202052907 MS (247807001)	25-FEB-2010 11:13:00	10	10	1
1202052908 MSD (247807001)	25-FEB-2010 11:13:00	10	10	1
247807002	25-FEB-2010 11:13:00	10	10	1
247807003	25-FEB-2010 11:13:00	10	10	1
247807004	25-FEB-2010 11:13:00	10	10	1
1202052909 ICS	25-FEB-2010 11:13:00	10	10	1

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
ICS	1202052909	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	Desalting cartridges used: BJ0003K0402 (IC-Ba) & BJ0005J0812
LCS	1202052906	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	
MS	1202052907	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	
MSD	1202052908	10 ug/L ICV/CCV Second Source	UCL100210-02.1	.2	mL	
RGNT	All	Q3SI HPLC Grade Water	1261217	10	mL	
RGNT	All	500 ppm Carbonate, Bicarbonate, Chloride, Sulfate	1262643	10	mL	

GEL ORGANIC RUN LOG

INSTRUMENT ID: LCMSMS#2

Date: 03/01/10
 Extr. Injection Volume: 20uL
 Sequence Number: per030110a
 Initial Calibration Date: 03/01/10

Method: EPA 6850-Modified
 Int. Std.: UCL100126-01
 Mobile Phase Lot#: 1269535, 1261217
 Standard-Samp Reagent Lot#: 1261217

Reviewed BY: *Amc*
 Date: *2/23/10*
 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
per0301001a	IPB001	CWW	3/1/2010 12:47			1		USE	B
per0301002a	IPB001	CWW	3/1/2010 12:55			1		USE	B
per0301003a	WCLICAL-01	CWW	3/1/2010 13:04			1		USE	I
per0301004a	WCLICAL-02	CWW	3/1/2010 13:13			1		USE	I
per0301005a	WCLICAL-03	CWW	3/1/2010 13:21			1		USE	I
per0301006a	WCLICAL-04	CWW	3/1/2010 13:30			1		USE	I
per0301007a	WCLICAL-05	CWW	3/1/2010 13:38			1		USE	I
per0301008a	IPB002	CWW	3/1/2010 13:47			1		USE	B
per0301009a	WCLICV	CWW	3/1/2010 13:55			1		USE	C
per0301010a	IPB003	CWW	3/1/2010 14:04			1		USE	B
per0301011a	WCLCRI	CWW	3/1/2010 14:12			1		USE	C
per0301012a	1202057198	CWW	3/1/2010 14:21	959224	DOC-KW-L	1	QCQA	USE	S
per0301013a	1202057199	CWW	3/1/2010 14:30	959224	DOC-KW-L	1	QCQA	USE	S
per0301014a	1202057200	CWW	3/1/2010 14:38	959224	DOC-KW-L	1	QCQA	USE	S
per0301015a	1202057201	CWW	3/1/2010 14:47	959224	DOC-KW-L	1	QCQA	USE	S
per0301016a	1202057202	CWW	3/1/2010 14:55	959224	DOC-KW-L	1	QCQA	USE	S
per0301017a	1202057203	CWW	3/1/2010 15:04	959224	DOC-KW-L	1	QCQA	USE	S
per0301018a	248193001	CWW	3/1/2010 15:12	959224	DOC-KW-L	1	QCQA	USE	S
per0301019a	WCLCCV	CWW	3/1/2010 15:21			1		USE	C
per0301020a	IPB004	CWW	3/1/2010 15:29			1		USE	B
per0301021a	WCLCRI	CWW	3/1/2010 15:38			1		USE	C
per0301022a	1202057204	CWW	3/1/2010 15:47	959227	DOC-KW-S	1	QCQA	USE	S
per0301023a	1202057326	CWW	3/1/2010 15:55	959227	DOC-KW-S	1	QCQA	USE	S
per0301024a	1202057327	CWW	3/1/2010 16:04	959227	DOC-KW-S	1	QCQA	USE	S
per0301025a	1202057328	CWW	3/1/2010 16:12	959227	DOC-KW-S	1	QCQA	USE	S
per0301026a	1202057329	CWW	3/1/2010 16:21	959227	DOC-KW-S	1	QCQA	USE	S
per0301027a	1202057330	CWW	3/1/2010 16:29	959227	DOC-KW-S	1	QCQA	USE	S
per0301028a	248195001	CWW	3/1/2010 16:38	959227	DOC-KW-S	1	QCQA	USE	S
per0301029a	WCLCCV	CWW	3/1/2010 16:46			1		USE	C

per0301030a	IPB005	CWW	3/1/2010 16:55		1	USE	B
per0301031a	WCLCRI	CWW	3/1/2010 17:04		1	USE	C
per0301032a	246336007	CWW	3/1/2010 17:12	10-1568-1	1	LANL	S
per0301033a	246336008	CWW	3/1/2010 17:21	10-1568-1	1	LANL	S
per0301034a	246336009	CWW	3/1/2010 17:30	10-1568-1	1	LANL	S
per0301035a	IPB006	CWW	3/1/2010 17:38		1	USE	B
per0301036a	1202042706	CWW	3/1/2010 17:47	VARIOUS	1	LANL	S
per0301037a	1202042707	CWW	3/1/2010 17:55	VARIOUS	1	LANL	S
per0301038a	1202042712	CWW	3/1/2010 18:04	VARIOUS	1	LANL	S
per0301039a	246574002	CWW	3/1/2010 18:13	10-1679	1	LANL	S
per0301040a	246598002	CWW	3/1/2010 18:21	10-1696	1	LANL	S
per0301041a	WCLCCV	CWW	3/1/2010 18:30		1	USE	C
per0301042a	IPB007	CWW	3/1/2010 18:38		1	USE	B
per0301043a	WCLCRI	CWW	3/1/2010 18:47		1	USE	C
per0301044a	246690002	CWW	3/1/2010 18:55	10-1722	1	LANL	S
per0301045a	1202042708	CWW	3/1/2010 19:04	10-1722	1	LANL	S
per0301046a	1202042709	CWW	3/1/2010 19:13	10-1722	1	LANL	S
per0301047a	246690003	CWW	3/1/2010 19:21	10-1722	1	LANL	S
per0301048a	246853001	CWW	3/1/2010 19:30	10-1753	1	LANL	S
per0301049a	246860001	CWW	3/1/2010 19:38	10-1756	1	LANL	S
per0301050a	246862001	CWW	3/1/2010 19:47	10-1780	1	LANL	S
per0301051a	246871001	CWW	3/1/2010 19:55	10-1759	1	LANL	S
per0301052a	246877001	CWW	3/1/2010 20:04	10-1774	1	LANL	S
per0301053a	246877004	CWW	3/1/2010 20:12	10-1774	1	LANL	S
per0301054a	WCLCCV	CWW	3/1/2010 20:21		1	USE	C
per0301055a	IPB008	CWW	3/1/2010 20:30		1	USE	B
per0301056a	WCLCRI	CWW	3/1/2010 20:38		1	USE	C
per0301057a	246882001	CWW	3/1/2010 20:47	10-1770	1	LANL	S
per0301058a	246882002	CWW	3/1/2010 20:56	10-1770	1	LANL	S
per0301059a	246883001	CWW	3/1/2010 21:04	10-1767-1	1	LANL	S
per0301060a	1202042710	CWW	3/1/2010 21:13	10-1767-1	1	LANL	S
per0301061a	1202042711	CWW	3/1/2010 21:21	10-1767-1	1	LANL	S
per0301062a	246883002	CWW	3/1/2010 21:30	10-1767-1	1	LANL	S
per0301063a	246883003	CWW	3/1/2010 21:38	10-1767-1	1	LANL	S
per0301064a	246883004	CWW	3/1/2010 21:47	10-1767-1	1	LANL	S
per0301065a	246886002	CWW	3/1/2010 21:55	10-1777	1	LANL	S
per0301066a	246886004	CWW	3/1/2010 22:04	10-1777	1	LANL	S

per0301067a	WCLCCV	CWW	3/1/2010 22:12			1	USE	C
per0301068a	IPB009	CWW	3/1/2010 22:21			1	USE	B
per0301069a	WCLCRI	CWW	3/1/2010 22:30			1	USE	C
per0301070a	1202042696	CWW	3/1/2010 22:38	VARIOUS	953005	1	LANL	S
per0301071a	1202042697	CWW	3/1/2010 22:47	VARIOUS	953005	1	LANL	S
per0301072a	1202042700	CWW	3/1/2010 22:55	VARIOUS	953005	1	LANL	S
per0301073a	246861001	CWW	3/1/2010 23:04	10-1756-1	953005	1	LANL	S
per0301074a	246861002	CWW	3/1/2010 23:13	10-1756-1	953005	1	LANL	S
per0301075a	1202042698	CWW	3/1/2010 23:21	10-1756-1	953005	1	LANL	S
per0301076a	1202042699	CWW	3/1/2010 23:30	10-1756-1	953005	1	LANL	S
per0301077a	246861003	CWW	3/1/2010 23:38	10-1756-1	953005	1	LANL	S
per0301078a	246861004	CWW	3/1/2010 23:47	10-1756-1	953005	1	LANL	S
per0301079a	246861005	CWW	3/1/2010 23:55	10-1756-1	953005	1	LANL	S
per0301080a	WCLCCV	CWW	3/2/2010 0:04			1	USE	C
per0301081a	IPB010	CWW	3/2/2010 0:13			1	USE	B
per0301082a	WCLCRI	CWW	3/2/2010 0:21			1	USE	C
per0301083a	246861006	CWW	3/2/2010 0:30	10-1756-1	953005	1	LANL	S
per0301084a	246861007	CWW	3/2/2010 0:38	10-1756-1	953005	1	LANL	S
per0301085a	246861008	CWW	3/2/2010 0:47	10-1756-1	953005	1	LANL	S
per0301086a	246861009	CWW	3/2/2010 0:56	10-1756-1	953005	1	LANL	S
per0301087a	246872001	CWW	3/2/2010 1:04	10-1759-1	953005	1	LANL	S
per0301088a	246872002	CWW	3/2/2010 1:13	10-1759-1	953005	1	LANL	S
per0301089a	246872003	CWW	3/2/2010 1:21	10-1759-1	953005	1	LANL	S
per0301090a	246872004	CWW	3/2/2010 1:30	10-1759-1	953005	1	LANL	S
per0301091a	246872005	CWW	3/2/2010 1:38	10-1759-1	953005	1	LANL	S
per0301092a	246872006	CWW	3/2/2010 1:47	10-1759-1	953005	1	LANL	S
per0301093a	WCLCCV	CWW	3/2/2010 1:56			1	USE	C
per0301094a	IPB011	CWW	3/2/2010 2:04			1	USE	B
per0301095a	WCLCRI	CWW	3/2/2010 2:13			1	USE	C
per0301096a	246872007	CWW	3/2/2010 2:21	10-1759-1	953005	1	LANL	S
per0301097a	246872008	CWW	3/2/2010 2:30	10-1759-1	953005	1	LANL	S
per0301098a	IPB012	CWW	3/2/2010 2:39			1	USE	B
per0301099a	1202052905	CWW	3/2/2010 2:47	VARIOUS	957439	1	LANL	S
per0301100a	1202052906	CWW	3/2/2010 2:56	VARIOUS	957439	1	LANL	S
per0301101a	1202052909	CWW	3/2/2010 3:05	VARIOUS	957439	1	LANL	S
per0301102a	247434001	CWW	3/2/2010 3:13	10-1929	957439	1	LANL	S
per0301103a	247437006	CWW	3/2/2010 3:22	10-1931	957439	1	LANL	S

per0301104a	247438001	CWW	3/2/2010 3:30	957439	10-1932	1	LANL	USE	S
per0301105a	247441001	CWW	3/2/2010 3:39	957439	10-1934	1	LANL	USE	S
per0301106a	WCLCCV	CWW	3/2/2010 3:47			1		USE	C
per0301107a	IPB013	CWW	3/2/2010 3:56			1		USE	B
per0301108a	WCLCRI	CWW	3/2/2010 4:05			1		USE	C
per0301109a	247443004	CWW	3/2/2010 4:13	957439	10-1935	1	LANL	USE	S
per0301110a	247449001	CWW	3/2/2010 4:22	957439	10-1936	1	LANL	USE	S
per0301111a	247548001	CWW	3/2/2010 4:30	957439	10-1965-1	1	LANL	USE	S
per0301112a	247548002	CWW	3/2/2010 4:39	957439	10-1965-1	1	LANL	USE	S
per0301113a	247559001	CWW	3/2/2010 4:47	957439	10-1954-1	1	LANL	USE	S
per0301114a	247560001	CWW	3/2/2010 4:56	957439	10-1951	1	LANL	USE	S
per0301115a	247567001	CWW	3/2/2010 5:05	957439	10-1957-1	1	LANL	USE	S
per0301116a	247771001	CWW	3/2/2010 5:13	957439	10-1973-1	1	LANL	USE	S
per0301117a	247780001	CWW	3/2/2010 5:22	957439	10-1976	1	LANL	USE	S
per0301118a	247793001	CWW	3/2/2010 5:30	957439	10-1983	1	LANL	USE	S
per0301119a	WCLCCV	CWW	3/2/2010 5:39			1		USE	C
per0301120a	IPB014	CWW	3/2/2010 5:47			1		USE	B
per0301121a	WCLCRI	CWW	3/2/2010 5:56			1		USE	C
per0301122a	247807001	CWW	3/2/2010 6:04	957439	10-1991-1	1	LANL	USE	S
per0301123a	1202052907	CWW	3/2/2010 6:13	957439	10-1991-1	1	LANL	USE	S
per0301124a	1202052908	CWW	3/2/2010 6:22	957439	10-1991-1	1	LANL	USE	S
per0301125a	247807002	CWW	3/2/2010 6:30	957439	10-1991-1	1	LANL	USE	S
per0301126a	247807003	CWW	3/2/2010 6:39	957439	10-1991-1	1	LANL	USE	S
per0301127a	247807004	CWW	3/2/2010 6:47	957439	10-1991-1	1	LANL	USE	S
per0301128a	IPB015	CWW	3/2/2010 6:56			1		USE	B
per0301129a	1202042707	CWW	3/2/2010 7:07	953012	VARIOUS	1	LANL	DUSE	S
per0301130a	246598002	CWW	3/2/2010 7:16	953012	10-1696	2	LANL	USE	S
per0301131a	UCL100226-01.1	CWW	3/2/2010 7:24	Screen		1	GEL	USE	S
per0301132a	WCLCCV	CWW	3/2/2010 7:33			1		USE	C
per0301133a	IPB016	CWW	3/2/2010 7:42			1		USE	B
per0301134a	WCLCRI	CWW	3/2/2010 7:50			1		USE	C

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

Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301123a

Date: 02-Mar-2010

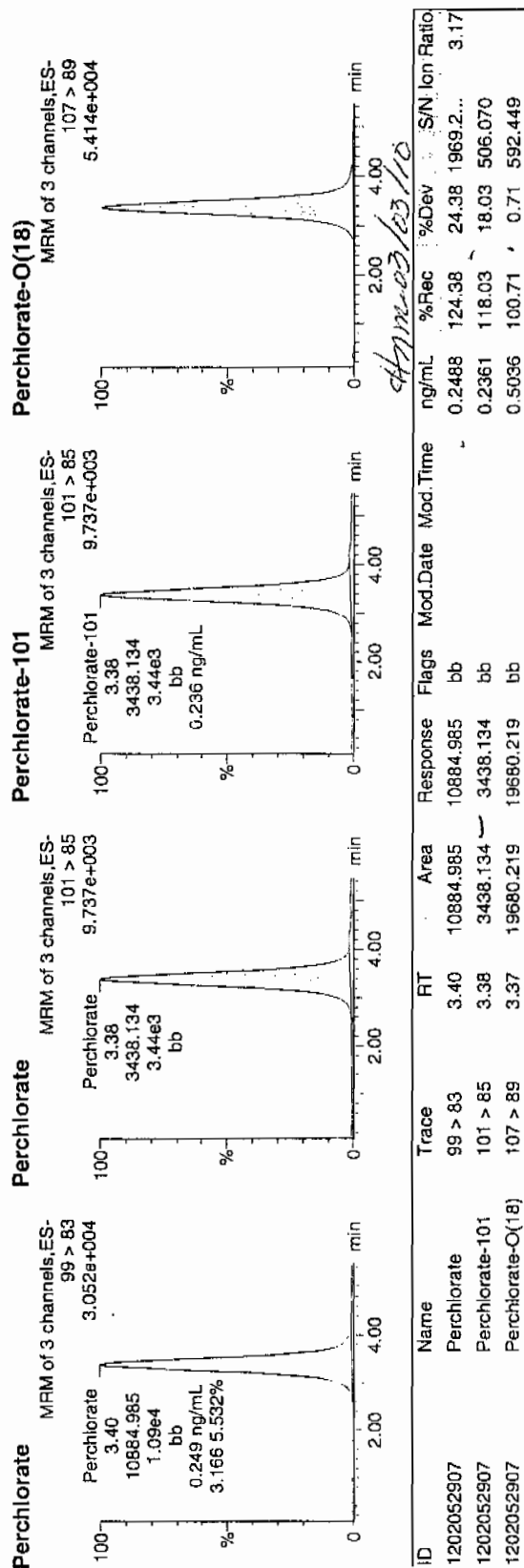
Time: 06:13:41

ID: 1202052907

Vial: 3:4,A

157439 | 1200 | MS | 111

05-02-10



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

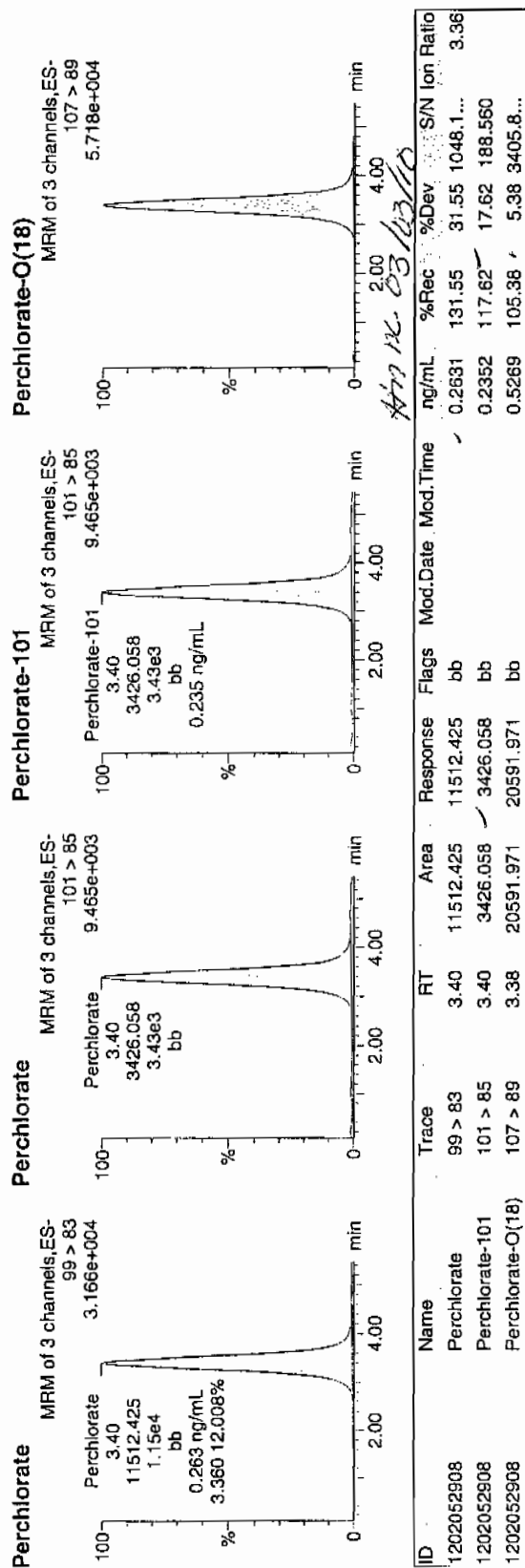
Dataset: C:\MassLynx\Perchlorate.PRO\per030110a.qld

Last Altered: Tuesday, March 02, 2010 8:52:39 AM Eastern Standard Time
Printed: Tuesday, March 02, 2010 9:12:14 AM Eastern Standard Time

Name: per0301124a
Date: 02-Mar-2010
Time: 06:22:14
ID: 1202052908
Vial: 3:4,B

LANU-1957434 | LZW | MSO | 11

03-02-10



GEL Laboratories LLC
Form GEL-DER

DER Report No.: 797970
Revision No.: 1

DATA EXCEPTION REPORT			
Mo.Day Yr. 02-MAR-10	Division: Industrial	Quality Criteria: Specifications	Type: Process
Instrument Type: LC-MS/MS	Test / Method: SW846 6850 Modified	Matrix Type: Liquid	Client Code: LANL
Batch ID: 957439	Sample Numbers: See Below		
<p>Potentially affected work order(s)(SDG): 247434(10-1929),247437(10-1931),247438(10-1932),247441(10-1934),247443(10-1935),247449(10-1936),247548(10-1965-1),247559(10-1954-1),247560(10-1951),247567(10-1957-1),247771(10-1973-1),247780(10-1976),247793(10-1983),247807(10-1991-1)</p> <p>Application Issues:</p> <p>Failed Recovery for MSD/PSD</p>			
Specification and Requirements Exception Description:		DER Disposition:	
<p>1. High recovery for Perchlorate was observed in 1202052908 (MSD). The recovery was 130% and the acceptance range is 75-125%.</p>		<p>1. The high recovery may be the result of sample matrix. Similar recoveries were observed in 1202052907 (MS).</p>	

Originator's Name:
Charles Wilson 02-MAR-10

Data Validator/Group Leader:
Herbert Maier 03-MAR-10

Isotope Ratio Criteria

Isotope Ratio $^{35}\text{Cl}/^{37}\text{Cl}$

2.31-3.85

Tune Criteria

The tuning solution is introduced directly into the mass spectrometer using the ESI interface in the positive ion mode. The mass range scanned is 20 to 1100 amu using at least six scans. The observed mass for the target compound in the daily calibration standards must be within 0.2 amu of the expected value. If it is greater than 0.2 amu, then a mass calibration is performed and the instrument is re-calibrated.

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1973**

Sample Analysis

Sample ID	Client ID
247770001	RE15-10-8259
247770002	RE15-10-8261
247770003	RE15-10-8257
247770004	RE15-10-8260
247770005	RE15-10-8258
247770006	RE15-10-8263
247770007	RE15-10-8255
247770008	RE15-10-8256
247770009	RE15-10-8262
247770010	RE15-10-8265
247770011	RE15-10-8269
1202053041	Method Blank (MB) ICP
1202053046	Laboratory Control Sample (LCS)
1202053043	247770001(RE15-10-8259L) Serial Dilution (SD)
1202053042	247770001(RE15-10-8259D) Sample Duplicate (DUP)
1202053044	247770001(RE15-10-8259S) Matrix Spike (MS)
1202053045	247770001(RE15-10-8259SD) Matrix Spike Duplicate (MSD)
1202053047	Method Blank (MB) ICP-MS
1202053052	Laboratory Control Sample (LCS)
1202053049	247770001(RE15-10-8259L) Serial Dilution (SD)
1202053048	247770001(RE15-10-8259D) Sample Duplicate (DUP)
1202053050	247770001(RE15-10-8259S) Matrix Spike (MS)
1202053051	247770001(RE15-10-8259SD) Matrix Spike Duplicate (MSD)
1202056041	Method Blank (MB) CVAA
1202056042	Laboratory Control Sample (LCS)
1202056050	247546001(RE46-10-13324L) Serial Dilution (SD)
1202056043	247546001(RE46-10-13324D) Sample Duplicate (DUP)
1202056044	247546001(RE46-10-13324S) Matrix Spike (MS)
1202056051	247546001(RE46-10-13324SD) Matrix Spike Duplicate (MSD)

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

Method/Analysis Information

Analytical Batch:	957488, 957490 and 958689
Prep Batch :	957487, 957489 and 958687
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 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 zinc in the initial calibration. All other standards ran during the analysis was not required by the method being reported.

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: 247770001 (RE15-10-8259)-ICP and ICP-MS and 247546001 (RE46-10-13324)-CVAA.

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 aluminum, magnesium, potassium and sodium 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 aluminum, potassium and sodium as indicated by the "N" qualifiers.

MS/MSD Relative Percent Difference (RPD) Statement

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

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 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 DER was generated for this SDG: DER ID 807418. A copy is included in the Miscellaneous Data section of this package.

Additional Comments

Additional comments were not required for this SDG.

Certification Statement

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

Review Validation:

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

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

Reviewer: Nick DeJ Elmore Date: 4.14.10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770001

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8259

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 97.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	935000	ug/kg	N	6750	19800	19800	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-36-0	Antimony	992	ug/kg	U	327	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-38-2	Arsenic	589	ug/kg	J	201	1000	1000	2	MS	PRB	04/11/10 20:20	100411-2	957490
7440-39-3	Barium	10700	ug/kg		99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-41-7	Beryllium	804	ug/kg		20.1	100	100	2	MS	PRB	04/12/10 18:29	100412-3	957490
7440-43-9	Cadmium	118	ug/kg	J	99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-70-2	Calcium	287000	ug/kg		7940	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-47-3	Chromium	1210	ug/kg		149	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-48-4	Cobalt	284	ug/kg	J	149	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-50-8	Copper	1420	ug/kg		298	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-89-6	Iron	6850000	ug/kg		7940	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-92-1	Lead	4200	ug/kg		248	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-95-4	Magnesium	426000	ug/kg	N	8430	29800	29800	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-96-5	Manganese	243000	ug/kg		198	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488
7439-97-6	Mercury	11.3	ug/kg	U	3.85	11.3	11.3	1	AV	JXL1	03/08/10 10:40	030810S1-4	958689
7440-02-0	Nickel	737	ug/kg		100	402	402	2	MS	PRB	04/12/10 18:29	100412-3	957490
7440-09-7	Potassium	267000	ug/kg	N	6350	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7782-49-2	Selenium	1000	ug/kg	U	502	1000	1000	2	MS	PRB	04/11/10 20:20	100411-2	957490
7440-22-4	Silver	496	ug/kg	U	99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-23-5	Sodium	145000	ug/kg	N	6950	24800	24800	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-28-0	Thallium	60.6	ug/kg	J	60.2	201	201	2	MS	PRB	04/11/10 20:20	100411-2	957490
7440-62-2	Vanadium	1950	ug/kg		99.2	496	496	1	P	HSC	03/19/10 17:41	031910-1	957488
7440-66-6	Zinc	31900	ug/kg		327	992	992	1	P	HSC	03/19/10 17:41	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.518	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.512	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.545	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770002

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8261

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1470000	ug/kg	N	6700	19700	19700	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-36-0	Antimony	985	ug/kg	U	325	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-38-2	Arsenic	362	ug/kg	J	203	1020	1020	2	MS	PRB	04/11/10 20:49	100411-2	957490
7440-39-3	Barium	11300	ug/kg		98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-41-7	Beryllium	506	ug/kg		20.3	102	102	2	MS	PRB	04/12/10 18:50	100412-3	957490
7440-43-9	Cadmium	493	ug/kg	U	98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-70-2	Calcium	793000	ug/kg		7880	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-47-3	Chromium	12000	ug/kg		148	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-48-4	Cobalt	660	ug/kg		148	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-50-8	Copper	1340	ug/kg		296	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-89-6	Iron	6980000	ug/kg		7880	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-92-1	Lead	4670	ug/kg		246	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-95-4	Magnesium	156000	ug/kg	N	8370	29600	29600	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-96-5	Manganese	394000	ug/kg		197	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488
7439-97-6	Mercury	10.3	ug/kg	U	3.5	10.3	10.3	1	AV	JXL1	03/08/10 10:41	030810S1-4	958689
7440-02-0	Nickel	742	ug/kg		102	407	407	2	MS	PRB	04/12/10 18:50	100412-3	957490
7440-09-7	Potassium	933000	ug/kg	N	6310	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7782-49-2	Selenium	1020	ug/kg	U	508	1020	1020	2	MS	PRB	04/11/10 20:49	100411-2	957490
7440-22-4	Silver	298	ug/kg	J	98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-23-5	Sodium	654000	ug/kg	N	6900	24600	24600	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-28-0	Thallium	203	ug/kg	U	61	203	203	2	MS	PRB	04/11/10 20:49	100411-2	957490
7440-62-2	Vanadium	2760	ug/kg		98.5	493	493	1	P	HSC	03/19/10 18:16	031910-1	957488
7440-66-6	Zinc	43300	ug/kg		325	985	985	1	P	HSC	03/19/10 18:16	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.516	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.5	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.593	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770003

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8257

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.7

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	848000	ug/kg	N	6550	19300	19300	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-36-0	Antimony	963	ug/kg	U	318	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-38-2	Arsenic	989	ug/kg	U	198	989	989	2	MS	PRB	04/11/10 20:53	100411-2	957490
7440-39-3	Barium	6840	ug/kg		96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-41-7	Beryllium	227	ug/kg		19.8	98.9	98.9	2	MS	PRB	04/12/10 18:53	100412-3	957490
7440-43-9	Cadmium	481	ug/kg	U	96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-70-2	Calcium	573000	ug/kg		7700	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-47-3	Chromium	2110	ug/kg		144	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-48-4	Cobalt	265	ug/kg	J	144	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-50-8	Copper	1090	ug/kg		289	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-89-6	Iron	6780000	ug/kg		7700	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-92-1	Lead	2880	ug/kg		241	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-95-4	Magnesium	177000	ug/kg	N	8190	28900	28900	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-96-5	Manganese	183000	ug/kg		193	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488
7439-97-6	Mercury	10.5	ug/kg	U	3.56	10.5	10.5	1	AV	JXL1	03/08/10 10:43	030810S1-4	958689
7440-02-0	Nickel	366	ug/kg	J	98.9	396	396	2	MS	PRB	04/12/10 18:53	100412-3	957490
7440-09-7	Potassium	488000	ug/kg	N	6160	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7782-49-2	Selenium	989	ug/kg	U	495	989	989	2	MS	PRB	04/11/10 20:53	100411-2	957490
7440-22-4	Silver	229	ug/kg	J	96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-23-5	Sodium	339000	ug/kg	N	6740	24100	24100	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-28-0	Thallium	198	ug/kg	U	59.4	198	198	2	MS	PRB	04/11/10 20:53	100411-2	957490
7440-62-2	Vanadium	1620	ug/kg		96.3	481	481	1	P	HSC	03/19/10 18:23	031910-1	957488
7440-66-6	Zinc	40900	ug/kg		318	963	963	1	P	HSC	03/19/10 18:23	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.526	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.512	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.58	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770004

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8260

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.4

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1180000	ug/kg	N	6830	20100	20100	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-36-0	Antimony	1000	ug/kg	U	331	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-38-2	Arsenic	389	ug/kg	J	187	935	935	2	MS	PRB	04/11/10 20:57	100411-2	957490
7440-39-3	Barium	10600	ug/kg		100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-41-7	Beryllium	560	ug/kg		18.7	93.5	93.5	2	MS	PRB	04/12/10 18:56	100412-3	957490
7440-43-9	Cadmium	502	ug/kg	U	100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-70-2	Calcium	589000	ug/kg		8030	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-47-3	Chromium	18700	ug/kg		151	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-48-4	Cobalt	834	ug/kg		151	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-50-8	Copper	1110	ug/kg		301	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-89-6	Iron	6040000	ug/kg		8030	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-92-1	Lead	3870	ug/kg		251	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-95-4	Magnesium	103000	ug/kg	N	8530	30100	30100	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-96-5	Manganese	325000	ug/kg		201	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488
7439-97-6	Mercury	11.1	ug/kg	U	3.77	11.1	11.1	1	AV	JXL1	03/08/10 10:48	030810S1-4	958689
7440-02-0	Nickel	642	ug/kg		93.5	374	374	2	MS	PRB	04/12/10 18:56	100412-3	957490
7440-09-7	Potassium	736000	ug/kg	N	6420	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7782-49-2	Selenium	935	ug/kg	U	468	935	935	2	MS	PRB	04/11/10 20:57	100411-2	957490
7440-22-4	Silver	149	ug/kg	J	100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-23-5	Sodium	538000	ug/kg	N	7030	25100	25100	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-28-0	Thallium	187	ug/kg	U	56.1	187	187	2	MS	PRB	04/11/10 20:57	100411-2	957490
7440-62-2	Vanadium	1660	ug/kg		100	502	502	1	P	HSC	03/19/10 18:44	031910-1	957488
7440-66-6	Zinc	57900	ug/kg		331	1000	1000	1	P	HSC	03/19/10 18:44	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.506	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.543	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.55	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770005

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8258

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.3

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	644000	ug/kg	N	6650	19600	19600	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-36-0	Antimony	978	ug/kg	U	323	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-38-2	Arsenic	980	ug/kg	U	196	980	980	2	MS	PRB	04/11/10 21:01	100411-2	957490
7440-39-3	Barium	5450	ug/kg		97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-41-7	Beryllium	326	ug/kg		19.6	98	98	2	MS	PRB	04/12/10 18:58	100412-3	957490
7440-43-9	Cadmium	489	ug/kg	U	97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-70-2	Calcium	347000	ug/kg		7820	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-47-3	Chromium	991	ug/kg		147	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-48-4	Cobalt	192	ug/kg	J	147	489	489	J	P	HSC	03/19/10 18:51	031910-1	957488
7440-50-8	Copper	1000	ug/kg		293	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-89-6	Iron	4910000	ug/kg		7820	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-92-1	Lead	2760	ug/kg		245	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-95-4	Magnesium	112000	ug/kg	N	8310	29300	29300	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-96-5	Manganese	147000	ug/kg		196	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488
7439-97-6	Mercury	10.9	ug/kg	U	3.7	10.9	10.9	1	AV	JXLJ	03/08/10 10:50	030810S1-4	958689
7440-02-0	Nickel	503	ug/kg		98	392	392	2	MS	PRB	04/12/10 18:58	100412-3	957490
7440-09-7	Potassium	366000	ug/kg	N	6260	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7782-49-2	Selenium	980	ug/kg	U	490	980	980	2	MS	PRB	04/11/10 21:01	100411-2	957490
7440-22-4	Silver	489	ug/kg	U	97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-23-5	Sodium	279000	ug/kg	N	6850	24500	24500	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-28-0	Thallium	196	ug/kg	U	58.8	196	196	2	MS	PRB	04/11/10 21:01	100411-2	957490
7440-62-2	Vanadium	1230	ug/kg		97.8	489	489	1	P	HSC	03/19/10 18:51	031910-1	957488
7440-66-6	Zinc	31700	ug/kg		323	978	978	1	P	HSC	03/19/10 18:51	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.52	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.519	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.561	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770006

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8263

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	893000	ug/kg	N	6560	19300	19300	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-36-0	Antimony	965	ug/kg	U	318	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-38-2	Arsenic	242	ug/kg	J	192	961	961	2	MS	PRB	04/11/10 21:05	100411-2	957490
7440-39-3	Barium	7580	ug/kg		96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-41-7	Beryllium	451	ug/kg		19.2	96.1	96.1	2	MS	PRB	04/12/10 19:01	100412-3	957490
7440-43-9	Cadmium	482	ug/kg	U	96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-70-2	Calcium	509000	ug/kg		7720	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-47-3	Chromium	2090	ug/kg		145	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-48-4	Cobalt	146	ug/kg	J	145	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-50-8	Copper	1170	ug/kg		289	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-89-6	Iron	5760000	ug/kg		7720	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-92-1	Lead	4020	ug/kg		241	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-95-4	Magnesium	98100	ug/kg	N	8200	28900	28900	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-96-5	Manganese	268000	ug/kg		193	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488
7439-97-6	Mercury	10.6	ug/kg	U	3.61	10.6	10.6	1	AV	JXLJ	03/08/10 10:51	030810S1-4	958689
7440-02-0	Nickel	422	ug/kg		96.1	384	384	2	MS	PRB	04/12/10 19:01	100412-3	957490
7440-09-7	Potassium	510000	ug/kg	N	6170	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7782-49-2	Selenium	961	ug/kg	U	481	961	961	2	MS	PRB	04/11/10 21:05	100411-2	957490
7440-22-4	Silver	225	ug/kg	J	96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-23-5	Sodium	423000	ug/kg	N	6750	24100	24100	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-28-0	Thallium	192	ug/kg	U	57.7	192	192	2	MS	PRB	04/11/10 21:05	100411-2	957490
7440-62-2	Vanadium	1850	ug/kg		96.5	482	482	1	P	HSC	03/19/10 18:58	031910-1	957488
7440-66-6	Zinc	39400	ug/kg		318	965	965	1	P	HSC	03/19/10 18:58	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.528	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.53	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.576	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770007

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8255

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.8

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1070000	ug/kg	N	6790	20000	20000	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-36-0	Antimony	998	ug/kg	U	329	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-38-2	Arsenic	286	ug/kg	J	201	1000	1000	2	MS	PRB	04/11/10 21:09	100411-2	957490
7440-39-3	Barium	10100	ug/kg		99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-41-7	Beryllium	376	ug/kg		20.1	100	100	2	MS	PRB	04/12/10 19:10	100412-3	957490
7440-43-9	Cadmium	499	ug/kg	U	99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-70-2	Calcium	354000	ug/kg		7990	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-47-3	Chromium	1620	ug/kg		150	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-48-4	Cobalt	274	ug/kg	J	150	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-50-8	Copper	788	ug/kg	J	299	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-89-6	Iron	6670000	ug/kg		7990	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-92-1	Lead	2620	ug/kg		250	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-95-4	Magnesium	211000	ug/kg	N	8480	29900	29900	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-96-5	Manganese	184000	ug/kg		200	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488
7439-97-6	Mercury	11	ug/kg	U	3.73	11	11	1	AV	JXL1	03/08/10 10:53	030810S1-4	958689
7440-02-0	Nickel	646	ug/kg		100	402	402	2	MS	PRB	04/12/10 19:10	100412-3	957490
7440-09-7	Potassium	536000	ug/kg	N	6390	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7782-49-2	Selenium	1000	ug/kg	U	502	1000	1000	2	MS	PRB	04/11/10 21:09	100411-2	957490
7440-22-4	Silver	195	ug/kg	J	99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-23-5	Sodium	453000	ug/kg	N	6990	25000	25000	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-28-0	Thallium	201	ug/kg	U	60.2	201	201	2	MS	PRB	04/11/10 21:09	100411-2	957490
7440-62-2	Vanadium	1800	ug/kg		99.8	499	499	1	P	HSC	03/19/10 19:05	031910-1	957488
7440-66-6	Zinc	34300	ug/kg		329	998	998	1	P	HSC	03/19/10 19:05	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.507	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.504	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.554	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770008

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8256

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 97.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1160000	ug/kg	N	6830	20100	20100	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-36-0	Antimony	1000	ug/kg	U	332	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-38-2	Arsenic	972	ug/kg	U	194	972	972	2	MS	PRB	04/11/10 21:13	100411-2	957490
7440-39-3	Barium	8480	ug/kg		100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-41-7	Beryllium	289	ug/kg		19.4	97.2	97.2	2	MS	PRB	04/12/10 19:13	100412-3	957490
7440-43-9	Cadmium	502	ug/kg	U	100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-70-2	Calcium	301000	ug/kg		8040	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-47-3	Chromium	1780	ug/kg		151	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-48-4	Cobalt	260	ug/kg	J	151	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-50-8	Copper	919	ug/kg	J	301	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-89-6	Iron	6540000	ug/kg		8040	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-92-1	Lead	4410	ug/kg		251	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-95-4	Magnesium	185000	ug/kg	N	8540	30100	30100	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-96-5	Manganese	183000	ug/kg		201	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488
7439-97-6	Mercury	10.5	ug/kg	U	3.56	10.5	10.5	1	AV	JXL1	03/08/10 10:55	030810S1-4	958689
7440-02-0	Nickel	617	ug/kg		97.2	389	389	2	MS	PRB	04/12/10 19:13	100412-3	957490
7440-09-7	Potassium	623000	ug/kg	N	6430	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7782-49-2	Selenium	972	ug/kg	U	486	972	972	2	MS	PRB	04/11/10 21:13	100411-2	957490
7440-22-4	Silver	137	ug/kg	J	100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-23-5	Sodium	495000	ug/kg	N	7030	25100	25100	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-28-0	Thallium	194	ug/kg	U	58.3	194	194	2	MS	PRB	04/11/10 21:13	100411-2	957490
7440-62-2	Vanadium	1710	ug/kg		100	502	502	1	P	HSC	03/19/10 19:12	031910-1	957488
7440-66-6	Zinc	37300	ug/kg		332	1000	1000	1	P	HSC	03/19/10 19:12	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.512	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.529	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.59	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770009

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8262

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	899000	ug/kg	N	6580	19400	19400	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-36-0	Antimony	968	ug/kg	U	319	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-38-2	Arsenic	329	ug/kg	J	202	1010	1010	2	MS	PRB	04/11/10 21:17	100411-2	957490
7440-39-3	Barium	7490	ug/kg		96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-41-7	Beryllium	488	ug/kg		20.2	101	101	2	MS	PRB	04/12/10 19:16	100412-3	957490
7440-43-9	Cadmium	484	ug/kg	U	96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-70-2	Calcium	475000	ug/kg		7740	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-47-3	Chromium	2450	ug/kg		145	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-48-4	Cobalt	484	ug/kg	U	145	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-50-8	Copper	1000	ug/kg		290	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-89-6	Iron	5530000	ug/kg		7740	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-92-1	Lead	3590	ug/kg		242	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-95-4	Magnesium	84100	ug/kg	N	8230	29000	29000	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-96-5	Manganese	269000	ug/kg		194	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488
7439-97-6	Mercury	11.4	ug/kg	U	3.87	11.4	11.4	1	AV	JXL1	03/08/10 10:56	030810S1-4	958689
7440-02-0	Nickel	366	ug/kg	J	101	405	405	2	MS	PRB	04/12/10 19:16	100412-3	957490
7440-09-7	Potassium	511000	ug/kg	N	6190	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7782-49-2	Selenium	1010	ug/kg	U	506	1010	1010	2	MS	PRB	04/11/10 21:17	100411-2	957490
7440-22-4	Silver	484	ug/kg	U	96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-23-5	Sodium	368000	ug/kg	N	6770	24200	24200	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-28-0	Thallium	202	ug/kg	U	60.7	202	202	2	MS	PRB	04/11/10 21:17	100411-2	957490
7440-62-2	Vanadium	1730	ug/kg		96.8	484	484	1	P	HSC	03/19/10 19:19	031910-1	957488
7440-66-6	Zinc	39200	ug/kg		319	968	968	1	P	HSC	03/19/10 19:19	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.526	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.503	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.537	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770010

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8265

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.2

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	932000	ug/kg	N	6820	20000	20000	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-36-0	Antimony	1000	ug/kg	U	331	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-38-2	Arsenic	285	ug/kg	J	198	989	989	2	MS	PRB	04/11/10 21:22	100411-2	957490
7440-39-3	Barium	6970	ug/kg		100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-41-7	Beryllium	522	ug/kg		19.8	98.9	98.9	2	MS	PRB	04/12/10 19:19	100412-3	957490
7440-43-9	Cadmium	501	ug/kg	U	100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-70-2	Calcium	530000	ug/kg		8020	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-47-3	Chromium	3000	ug/kg		150	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-48-4	Cobalt	205	ug/kg	J	150	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-50-8	Copper	1060	ug/kg		301	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-89-6	Iron	6040000	ug/kg		8020	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-92-1	Lead	4900	ug/kg		251	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-95-4	Magnesium	110000	ug/kg	N	8520	30100	30100	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-96-5	Manganese	282000	ug/kg		200	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488
7439-97-6	Mercury	12.1	ug/kg	U	4.11	12.1	12.1	1	AV	JXL1	03/08/10 10:58	030810S1-4	958689
7440-02-0	Nickel	509	ug/kg		98.9	395	395	2	MS	PRB	04/12/10 19:19	100412-3	957490
7440-09-7	Potassium	464000	ug/kg	N	6410	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7782-49-2	Selenium	989	ug/kg	U	494	989	989	2	MS	PRB	04/11/10 21:22	100411-2	957490
7440-22-4	Silver	109	ug/kg	J	100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-23-5	Sodium	365000	ug/kg	N	7020	25100	25100	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-28-0	Thallium	198	ug/kg	U	59.3	198	198	2	MS	PRB	04/11/10 21:22	100411-2	957490
7440-62-2	Vanadium	1990	ug/kg		100	501	501	1	P	HSC	03/19/10 19:26	031910-1	957488
7440-66-6	Zinc	44300	ug/kg		331	1000	1000	1	P	HSC	03/19/10 19:26	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.508	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.515	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.505	g	30	mL	03/06/10	TXB3

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247770011

BASIS: Dry Weight

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8269

LEVEL: Low

DATE RECEIVED 23-FEB-10

MATRIX: SOIL

%SOLIDS: 98.1

CAS No.	Analyte	Result	Units	Qual	MDL	PQL	CRDL	DF	M*	Analyst	Run Date	Analytical Run	Analytical Batch
7429-90-5	Aluminum	1010000	ug/kg	N	6540	19200	19200	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-36-0	Antimony	961	ug/kg	U	317	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-38-2	Arsenic	262	ug/kg	J	200	1000	1000	2	MS	PRB	04/11/10 21:26	100411-2	957490
7440-39-3	Barium	7980	ug/kg		96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-41-7	Beryllium	590	ug/kg		20	100	100	2	MS	PRB	04/12/10 19:22	100412-3	957490
7440-43-9	Cadmium	481	ug/kg	U	96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-70-2	Calcium	584000	ug/kg		7690	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-47-3	Chromium	5720	ug/kg		144	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-48-4	Cobalt	216	ug/kg	J	144	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-50-8	Copper	1150	ug/kg		288	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-89-6	Iron	6130000	ug/kg		7690	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-92-1	Lead	4910	ug/kg		240	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-95-4	Magnesium	124000	ug/kg	N	8170	28800	28800	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-96-5	Manganese	309000	ug/kg		192	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488
7439-97-6	Mercury	11.6	ug/kg	U	3.93	11.6	11.6	1	AV	JXL1	03/08/10 11:00	030810S1-4	958689
7440-02-0	Nickel	721	ug/kg		100	400	400	2	MS	PRB	04/12/10 19:22	100412-3	957490
7440-09-7	Potassium	481000	ug/kg	N	6150	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7782-49-2	Selenium	1000	ug/kg	U	500	1000	1000	2	MS	PRB	04/11/10 21:26	100411-2	957490
7440-22-4	Silver	101	ug/kg	J	96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-23-5	Sodium	389000	ug/kg	N	6730	24000	24000	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-28-0	Thallium	200	ug/kg	U	60.1	200	200	2	MS	PRB	04/11/10 21:26	100411-2	957490
7440-62-2	Vanadium	2190	ug/kg		96.1	481	481	1	P	HSC	03/19/10 19:33	031910-1	957488
7440-66-6	Zinc	45900	ug/kg		317	961	961	1	P	HSC	03/19/10 19:33	031910-1	957488

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957488	957487	SW846 3050B	0.53	g	50	mL	02/26/10	AXG2
957490	957489	SW846 3050B	0.509	g	50	mL	02/26/10	AXG2
958689	958687	SW846 7471A Prep	0.529	g	30	mL	03/06/10	TXB3

Quality Control Summary

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEI.

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

Sample ID	Analyte	Result	Units	True Value	Units	% Recovery	Acceptance Window (%R)	M	Analysis Date/Time	Run Number
ICV01										
	Mercury	5.2	ug/L	5	ug/L	104	90.0 - 110.0	AV	08-MAR-10 09:19	030810S1-4
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Antimony	525	ug/L	500	ug/L	105	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Cadmium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Calcium	5170	ug/L	5000	ug/L	103.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Cobalt	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Copper	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Iron	5240	ug/L	5000	ug/L	104.9	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Lead	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Manganese	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Potassium	2560	ug/L	2500	ug/L	102.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Silver	260	ug/L	250	ug/L	104.2	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Zinc	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 07:43	031910-1
	Arsenic	51.9	ug/L	50	ug/L	103.7	90.0 - 110.0	MS	11-APR-10 15:41	100411-2
	Selenium	51.4	ug/L	50	ug/L	102.8	90.0 - 110.0	MS	11-APR-10 15:41	100411-2
	Thallium	52.7	ug/L	50	ug/L	105.4	90.0 - 110.0	MS	11-APR-10 15:41	100411-2
	Beryllium	49.6	ug/L	50	ug/L	99.1	90.0 - 110.0	MS	12-APR-10 17:55	100412-3
	Nickel	49	ug/L	50	ug/L	98	90.0 - 110.0	MS	12-APR-10 17:55	100412-3
CCV01										
	Mercury	5.18	ug/L	5	ug/L	103.5	80.0 - 120.0	AV	08-MAR-10 09:24	030810S1-4
	Aluminum	5010	ug/L	5000	ug/L	100.3	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Antimony	519	ug/L	500	ug/L	103.9	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Cadmium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.9	90.0 - 110.0	P	19-MAR-10 08:47	031910-1

SW846

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	496	ug/L	500	ug/L	99.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Iron	5300	ug/L	5000	ug/L	106	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Lead	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Magnesium	5370	ug/L	5000	ug/L	107.5	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Manganese	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Potassium	5210	ug/L	5000	ug/L	104.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Silver	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Vanadium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Zinc	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	19-MAR-10 08:47	031910-1
	Arsenic	54.2	ug/L	50	ug/L	108.4	90.0 - 110.0	MS	11-APR-10 16:01	100411-2
	Selenium	53.9	ug/L	50	ug/L	107.9	90.0 - 110.0	MS	11-APR-10 16:01	100411-2
	Thallium	55	ug/L	50	ug/L	110.1	90.0 - 110.0	MS	11-APR-10 16:01	100411-2
	Beryllium	48.7	ug/L	50	ug/L	97.4	90.0 - 110.0	MS	12-APR-10 18:09	100412-3
	Nickel	48.6	ug/L	50	ug/L	97.3	90.0 - 110.0	MS	12-APR-10 18:09	100412-3
CCV02										
	Mercury	5.3	ug/L	5	ug/L	106	80.0 - 120.0	AV	08-MAR-10 09:44	030810S1-4
	Aluminum	5140	ug/L	5000	ug/L	102.9	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Antimony	517	ug/L	500	ug/L	103.4	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Cadmium	501	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Chromium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Cobalt	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Iron	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Lead	500	ug/L	500	ug/L	99.9	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 - 110.0	P	19-MAR-10 09:08	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	492	ug/L	500	ug/L	98.4	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Silver	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	19-MAR-10 09:08	031910-1
	Arsenic	52.3	ug/L	50	ug/L	104.7	90.0 - 110.0	MS	11-APR-10 16:38	100411-2
	Selenium	51.8	ug/L	50	ug/L	103.6	90.0 - 110.0	MS	11-APR-10 16:38	100411-2
	Thallium	54.1	ug/L	50	ug/L	108.1	90.0 - 110.0	MS	11-APR-10 16:38	100411-2
	Beryllium	49.1	ug/L	50	ug/L	98.2	90.0 - 110.0	MS	12-APR-10 18:18	100412-3
	Nickel	51	ug/L	50	ug/L	102	90.0 - 110.0	MS	12-APR-10 18:18	100412-3
CCV03										
	Mercury	5.4	ug/L	5	ug/L	108	80.0 - 120.0	AV	08-MAR-10 10:04	030810S1-4
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Antimony	519	ug/L	500	ug/L	103.8	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Cadmium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Lead	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Magnesium	5390	ug/L	5000	ug/L	107.7	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Manganese	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.3	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Sodium	10500	ug/L	10000	ug/L	104.9	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 - 110.0	P	19-MAR-10 10:18	031910-1
	Zinc	495	ug/L	500	ug/L	99	90.0 - 110.0	P	19-MAR-10 10:18	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,JCPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Arsenic	53.1	ug/L	50	ug/L	106.2	90.0 – 110.0	MS	11-APR-10 17:19	100411-2
	Selenium	52.5	ug/L	50	ug/L	104.9	90.0 – 110.0	MS	11-APR-10 17:19	100411-2
	Thallium	54.6	ug/L	50	ug/L	109.2	90.0 – 110.0	MS	11-APR-10 17:19	100411-2
	Beryllium	51.7	ug/L	50	ug/L	103.5	90.0 – 110.0	MS	12-APR-10 18:44	100412-3
	Nickel	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	12-APR-10 18:44	100412-3
CCV04										
	Mercury	5.1	ug/L	5	ug/L	102	80.0 – 120.0	AV	08-MAR-10 10:25	030810S1-4
	Aluminum	5250	ug/L	5000	ug/L	105	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Antimony	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Chromium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Cobalt	512	ug/L	500	ug/L	102.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Iron	5270	ug/L	5000	ug/L	105.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Lead	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Manganese	494	ug/L	500	ug/L	98.9	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Potassium	5370	ug/L	5000	ug/L	107.4	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Silver	506	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Sodium	10200	ug/L	10000	ug/L	102.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-MAR-10 11:38	031910-1
	Arsenic	53.6	ug/L	50	ug/L	107.2	90.0 – 110.0	MS	11-APR-10 18:00	100411-2
	Selenium	53.2	ug/L	50	ug/L	106.4	90.0 – 110.0	MS	11-APR-10 18:00	100411-2
	Thallium	55.6	ug/L	50	ug/L	111.3	90.0 – 110.0	MS	11-APR-10 18:00	100411-2
	Beryllium	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	12-APR-10 19:04	100412-3
	Nickel	50.6	ug/L	50	ug/L	101.2	90.0 – 110.0	MS	12-APR-10 19:04	100412-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV05										
	Mercury	5.18	ug/L	5	ug/L	103.5	80.0 – 120.0	AV	08-MAR-10 10:45	030810S1-4
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Antimony	523	ug/L	500	ug/L	104.6	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Barium	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Cadmium	507	ug/L	500	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Calcium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Cobalt	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Iron	5290	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Lead	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Manganese	497	ug/L	500	ug/L	99.4	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Silver	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Zinc	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Arsenic	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	11-APR-10 18:37	100411-2
	Selenium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	11-APR-10 18:37	100411-2
	Thallium	52.7	ug/L	50	ug/L	105.4	90.0 – 110.0	MS	11-APR-10 18:37	100411-2
	Beryllium	51	ug/L	50	ug/L	102	90.0 – 110.0	MS	12-APR-10 19:25	100412-3
	Nickel	48.7	ug/L	50	ug/L	97.4	90.0 – 110.0	MS	12-APR-10 19:25	100412-3
CCV06										
	Mercury	5.2	ug/L	5	ug/L	104	80.0 – 120.0	AV	08-MAR-10 11:05	030810S1-4
	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Antimony	535	ug/L	500	ug/L	107	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Barium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Cadmium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	19-MAR-10 13:15	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3.ICPMS5.OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Cobalt	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Lead	514	ug/L	500	ug/L	102.9	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Magnesium	5290	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Manganese	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Potassium	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Silver	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Sodium	10000	ug/L	10000	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Vanadium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Arsenic	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	11-APR-10 19:18	100411-2
	Selenium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	11-APR-10 19:18	100411-2
	Thallium	53.2	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	11-APR-10 19:18	100411-2
CCV07	Aluminum	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Antimony	523	ug/L	500	ug/L	104.5	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Cadmium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Iron	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Lead	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Magnesium	5350	ug/L	5000	ug/L	107	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Manganese	490	ug/L	500	ug/L	98.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Potassium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 14:17	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	10300	ug/L	10000	ug/L	102.9	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Arsenic	52.3	ug/L	50	ug/L	104.5	90.0 – 110.0	MS	11-APR-10 20:03	100411-2
	Selenium	51.7	ug/L	50	ug/L	103.4	90.0 – 110.0	MS	11-APR-10 20:03	100411-2
	Thallium	53.2	ug/L	50	ug/L	106.3	90.0 – 110.0	MS	11-APR-10 20:03	100411-2
CCV08	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Antimony	526	ug/L	500	ug/L	105.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Cobalt	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Copper	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Lead	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Manganese	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Arsenic	49.3	ug/L	50	ug/L	98.5	90.0 – 110.0	MS	11-APR-10 20:40	100411-2
	Selenium	49.6	ug/L	50	ug/L	99.2	90.0 – 110.0	MS	11-APR-10 20:40	100411-2
	Thallium	51.2	ug/L	50	ug/L	102.4	90.0 – 110.0	MS	11-APR-10 20:40	100411-2
CCV09	Aluminum	4950	ug/L	5000	ug/L	99	90.0 – 110.0	P	19-MAR-10 16:16	031910-1
	Antimony	516	ug/L	500	ug/L	103.2	90.0 – 110.0	P	19-MAR-10 16:16	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Barium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Cadmium	506	ug/L	500	ug/L	101.3	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Calcium	4990	ug/L	5000	ug/L	99.9	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Chromium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Cobalt	513	ug/L	500	ug/L	102.6	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Copper	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Iron	5000	ug/L	5000	ug/L	100	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Lead	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Magnesium	5050	ug/L	5000	ug/L	101.1	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Manganese	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Potassium	5090	ug/L	5000	ug/L	101.8	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Sodium	9640	ug/L	10000	ug/L	96.4	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Vanadium	509	ug/L	500	ug/L	101.8	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Zinc	502	ug/L	500	ug/L	100.4	90.0 - 110.0	P	19-MAR-10 16:16	031910-1
	Arsenic	50.7	ug/L	50	ug/L	101.4	90.0 - 110.0	MS	11-APR-10 21:30	100411-2
	Selenium	51.2	ug/L	50	ug/L	102.4	90.0 - 110.0	MS	11-APR-10 21:30	100411-2
	Thallium	52.6	ug/L	50	ug/L	105.1	90.0 - 110.0	MS	11-APR-10 21:30	100411-2
CCV10	Aluminum	4980	ug/L	5000	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Antimony	523	ug/L	500	ug/L	104.5	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Cadmium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Calcium	5080	ug/L	5000	ug/L	101.6	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Chromium	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Cobalt	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Copper	494	ug/L	500	ug/L	98.7	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Iron	5170	ug/L	5000	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Lead	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Magnesium	5250	ug/L	5000	ug/L	105.1	90.0 - 110.0	P	19-MAR-10 17:13	031910-1

METALS

-2a-

Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV11	Manganese	502	ug/L	500	ug/L	100.3	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Potassium	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Silver	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Sodium	10100	ug/L	10000	ug/L	101.4	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Vanadium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 - 110.0	P	19-MAR-10 17:13	031910-1
CCV12	Aluminum	5200	ug/L	5000	ug/L	104	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Antimony	519	ug/L	500	ug/L	103.9	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Barium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Calcium	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Chromium	503	ug/L	500	ug/L	100.5	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Cobalt	511	ug/L	500	ug/L	102.1	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Iron	5270	ug/L	5000	ug/L	105.3	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Lead	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Magnesium	5400	ug/L	5000	ug/L	108	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Manganese	495	ug/L	500	ug/L	98.9	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Potassium	5400	ug/L	5000	ug/L	108	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Silver	507	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Sodium	9970	ug/L	10000	ug/L	99.7	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Vanadium	507	ug/L	500	ug/L	101.4	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
	Zinc	500	ug/L	500	ug/L	100	90.0 - 110.0	P	19-MAR-10 18:30	031910-1
CCV12	Aluminum	5100	ug/L	5000	ug/L	102.1	90.0 - 110.0	P	19-MAR-10 19:40	031910-1
	Antimony	516	ug/L	500	ug/L	103.3	90.0 - 110.0	P	19-MAR-10 19:40	031910-1
	Barium	503	ug/L	500	ug/L	100.7	90.0 - 110.0	P	19-MAR-10 19:40	031910-1
	Cadmium	505	ug/L	500	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 19:40	031910-1
	Calcium	5180	ug/L	5000	ug/L	103.6	90.0 - 110.0	P	19-MAR-10 19:40	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Cobalt	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Copper	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Iron	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Lead	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Magnesium	5240	ug/L	5000	ug/L	104.8	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Manganese	495	ug/L	500	ug/L	99	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Sodium	9920	ug/L	10000	ug/L	99.2	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 19:40	031910-1
	Zinc	501	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 19:40	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: HG3,JCPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.192	ug/L	.2	ug/L	96	70.0 – 130.0	AV	08-MAR-10 09:23	030810S1-4
	Thallium	1.31	ug/L	1	ug/L	130.8	70.0 – 130.0	MS	11-APR-10 15:49	100411-2
	Arsenic	6.48	ug/L	5	ug/L	129.5	70.0 – 130.0	MS	11-APR-10 15:49	100411-2
	Selenium	5.87	ug/L	5	ug/L	117.4	70.0 – 130.0	MS	11-APR-10 15:49	100411-2
	Nickel	2.34	ug/L	2	ug/L	116.9	70.0 – 130.0	MS	12-APR-10 18:00	100412-3
	Beryllium	.577	ug/L	.5	ug/L	115.4	70.0 – 130.0	MS	12-APR-10 18:00	100412-3
PQL01										
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Iron	117	ug/L	100	ug/L	116.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Lead	12.2	ug/L	10	ug/L	122.4	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Magnesium	344	ug/L	300	ug/L	114.8	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Potassium	170	ug/L	150	ug/L	113.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Sodium	286	ug/L	300	ug/L	95.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Calcium	223	ug/L	200	ug/L	111.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Zinc	13.7	ug/L	10	ug/L	137.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Vanadium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Copper	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Cobalt	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Chromium	5.11	ug/L	5	ug/L	102.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Cadmium	5.13	ug/L	5	ug/L	102.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Barium	5.23	ug/L	5	ug/L	104.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Antimony	10.5	ug/L	10	ug/L	104.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Silver	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Manganese	10.6	ug/L	10	ug/L	106.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
PQL02										
	Copper	10.1	ug/L	10	ug/L	101.2	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Vanadium	5.01	ug/L	5	ug/L	100.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Iron	107	ug/L	100	ug/L	107.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Magnesium	384	ug/L	300	ug/L	128	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Potassium	171	ug/L	150	ug/L	113.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: HG3,ICPMS5,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	287	ug/L	300	ug/L	95.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Cobalt	5.4	ug/L	5	ug/L	108.1	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Cadmium	5.26	ug/L	5	ug/L	105.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Barium	5.33	ug/L	5	ug/L	106.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Antimony	11.8	ug/L	10	ug/L	117.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Silver	5.08	ug/L	5	ug/L	101.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Manganese	10.6	ug/L	10	ug/L	106.4	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Lead	12.1	ug/L	10	ug/L	121.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Zinc	13.6	ug/L	10	ug/L	135.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Calcium	221	ug/L	200	ug/L	110.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Chromium	5.12	ug/L	5	ug/L	102.3	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 09:21	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 07:50	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 07:50	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 07:50	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 07:50	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 07:50	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 15:45	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 15:45	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 15:45	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	12-APR-10 17:58	100412-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-APR-10 17:58	100412-3
CCB01										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 09:26	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 08:54	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 08:54	031910-1

Metals
--3a--
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 08:54	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Potassium	79.8	+/-250	J	64.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 08:54	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 08:54	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 08:54	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 16:06	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 16:06	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 16:06	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	12-APR-10 18:12	100412-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-APR-10 18:12	100412-3
CCB02	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 09:46	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 09:15	031910-1
	Antimony	4.1	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 09:15	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 09:15	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 09:15	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 09:15	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 09:15	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 16:42	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 16:42	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 16:42	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	12-APR-10 18:21	100412-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-APR-10 18:21	100412-3
CCB03										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 10:06	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 10:32	031910-1
	Antimony	5.04	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 10:32	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 10:32	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 10:32	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 10:32	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 17:23	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 17:23	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 17:23	100411-2

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB04	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	12-APR-10 18:47	100412-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-APR-10 18:47	100412-3
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 10:26	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 11:45	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 11:45	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 11:45	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 11:45	031910-1
	Zinc	4.13	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 11:45	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 18:04	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 18:04	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 18:04	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	12-APR-10 19:07	100412-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-APR-10 19:07	100412-3
CCB05	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 10:46	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 12:56	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 12:56	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 12:56	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 12:56	031910-1
	Zinc	3.36	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 12:56	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 18:41	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 18:41	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 18:41	100411-2
	Beryllium	0.1	+/-5	U	0.1	0.5	SOL	MS	12-APR-10 19:28	100412-3
	Nickel	0.5	+/-2	U	0.5	2.0	SOL	MS	12-APR-10 19:28	100412-3
CCB06										
	Mercury	0.068	+/-2	U	0.068	0.2	SOL	AV	08-MAR-10 11:07	030810S1-4
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 13:22	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 13:22	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 13:22	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 13:22	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 13:22	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 13:22	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 19:22	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 19:22	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 19:22	100411-2
CCB07	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 14:24	031910-1
	Antimony	3.73	+/-10	J	3.3	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 14:24	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 14:24	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 14:24	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 14:24	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 20:07	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 20:07	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 20:07	100411-2

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB08										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 15:19	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 15:19	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 15:19	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 15:19	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 15:19	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 20:44	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 20:44	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 20:44	100411-2
CCB09										
	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 16:23	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 16:23	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 16:23	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 16:23	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 16:23	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 16:23	031910-1
	Arsenic	1.0	+/-5	U	1.0	5.0	SOL	MS	11-APR-10 21:34	100411-2
	Selenium	2.5	+/-5	U	2.5	5.0	SOL	MS	11-APR-10 21:34	100411-2
	Thallium	0.3	+/-1	U	0.3	1.0	SOL	MS	11-APR-10 21:34	100411-2
CCB10	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 17:20	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 17:20	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 17:20	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 17:20	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 17:20	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 17:20	031910-1
CCB11	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 18:37	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 18:37	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 18:37	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 18:37	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 18:37	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 18:37	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 18:37	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 18:37	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 18:37	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 18:37	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 18:37	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 18:37	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 18:37	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 18:37	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 18:37	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 18:37	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 18:37	031910-1
CCB12	Aluminum	68.0	+/-200	U	68.0	200	SOL	P	19-MAR-10 19:47	031910-1
	Antimony	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 19:47	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 19:47	031910-1
	Cadmium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 19:47	031910-1
	Calcium	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 19:47	031910-1
	Chromium	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 19:47	031910-1
	Cobalt	1.5	+/-5	U	1.5	5.0	SOL	P	19-MAR-10 19:47	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	SOL	P	19-MAR-10 19:47	031910-1
	Iron	80.0	+/-250	U	80.0	250	SOL	P	19-MAR-10 19:47	031910-1
	Lead	2.5	+/-10	U	2.5	10.0	SOL	P	19-MAR-10 19:47	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	SOL	P	19-MAR-10 19:47	031910-1
	Manganese	2.0	+/-10	U	2.0	10.0	SOL	P	19-MAR-10 19:47	031910-1
	Potassium	64.0	+/-250	U	64.0	250	SOL	P	19-MAR-10 19:47	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 19:47	031910-1
	Sodium	70.0	+/-250	U	70.0	250	SOL	P	19-MAR-10 19:47	031910-1

Metals
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Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Vanadium	1.0	+/-5	U	1.0	5.0	SOL	P	19-MAR-10 19:47	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	SOL	P	19-MAR-10 19:47	031910-1

METALS
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PREPARATION BLANK SUMMARY

SDG NO. 10-1973

Contract: LANL01004

Matrix: SOIL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202053041	Aluminum	6530	ug/kg	+/-19200	U	P	6530	19200
	Antimony	335	ug/kg	+/-960	J	P	317	960
	Barium	96	ug/kg	+/-480	U	P	96	480
	Cadmium	96	ug/kg	+/-480	U	P	96	480
	Calcium	7680	ug/kg	+/-24000	U	P	7680	24000
	Chromium	144	ug/kg	+/-480	U	P	144	480
	Cobalt	144	ug/kg	+/-480	U	P	144	480
	Copper	288	ug/kg	+/-960	U	P	288	960
	Iron	7680	ug/kg	+/-24000	U	P	7680	24000
	Lead	240	ug/kg	+/-960	U	P	240	960
	Magnesium	8160	ug/kg	+/-28800	U	P	8160	28800
	Manganese	192	ug/kg	+/-960	U	P	192	960
	Potassium	6140	ug/kg	+/-24000	U	P	6140	24000
	Silver	96	ug/kg	+/-480	U	P	96	480
	Sodium	6720	ug/kg	+/-24000	U	P	6720	24000
	Vanadium	96	ug/kg	+/-480	U	P	96	480
	Zinc	317	ug/kg	+/-960	U	P	317	960
1202053047	Arsenic	194	ug/kg	+/-969	U	MS	194	969
	Beryllium	19.4	ug/kg	+/-96.9	U	MS	19.4	96.9
	Nickel	96.9	ug/kg	+/-388	U	MS	96.9	388
	Selenium	484	ug/kg	+/-969	U	MS	484	969
	Thallium	58.1	ug/kg	+/-194	U	MS	58.1	194
1202056041	Mercury	3.97	ug/kg	+/-11.7	U	AV	3.97	11.7

METALS

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Interference Check Sample

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	512000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Antimony	0.061	ug/L					19-MAR-10 08:04	031910-1
	Barium	0.525	ug/L					19-MAR-10 08:04	031910-1
	Cadmium	0.764	ug/L					19-MAR-10 08:04	031910-1
	Calcium	473000	ug/L	500000	ug/L	94.6	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Chromium	0.655	ug/L					19-MAR-10 08:04	031910-1
	Cobalt	-1.25	ug/L					19-MAR-10 08:04	031910-1
	Copper	2.12	ug/L					19-MAR-10 08:04	031910-1
	Iron	185000	ug/L	200000	ug/L	92.5	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Lead	-10.6	ug/L					19-MAR-10 08:04	031910-1
	Magnesium	488000	ug/L	500000	ug/L	97.7	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Manganese	-2.72	ug/L					19-MAR-10 08:04	031910-1
	Potassium	-190.0	ug/L					19-MAR-10 08:04	031910-1
	Silver	-1.58	ug/L					19-MAR-10 08:04	031910-1
	Sodium	9.4	ug/L					19-MAR-10 08:04	031910-1
	Vanadium	-3.12	ug/L					19-MAR-10 08:04	031910-1
	Zinc	0.975	ug/L					19-MAR-10 08:04	031910-1
ICSA01									
	Aluminum	514000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Antimony	542	ug/L	500	ug/L	108	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Barium	492	ug/L	500	ug/L	98.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Cadmium	464	ug/L	500	ug/L	92.7	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Calcium	478000	ug/L	500000	ug/L	95.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Cobalt	445	ug/L	500	ug/L	89	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Copper	547	ug/L	500	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Iron	188000	ug/L	200000	ug/L	94	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Lead	451	ug/L	500	ug/L	90.3	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	19-MAR-10 08:11	031910-1

METALS
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Interference Check Sample

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Manganese	476	ug/L	500	ug/L	95.3	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Potassium	5280	ug/L	5000	ug/L	106	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Silver	274	ug/L	250	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Vanadium	508	ug/L	500	ug/L	102	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Zinc	493	ug/L	500	ug/L	98.5	80.0 – 120.0	19-MAR-10 08:11	031910-1

METALS
-4-
Interference Check Sample

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Arsenic	-0.294	ug/L					11-APR-10 15:53	100411-2
	Selenium	-1.09	ug/L					11-APR-10 15:53	100411-2
	Thallium	-0.036	ug/L					11-APR-10 15:53	100411-2
ICSAB01									
	Arsenic	19.5	ug/L	20	ug/L	97.7	80.0 - 120.0	11-APR-10 15:57	100411-2
	Selenium	19.1	ug/L	20	ug/L	95.4	80.0 - 120.0	11-APR-10 15:57	100411-2
	Thallium	19.4	ug/L	20	ug/L	96.9	80.0 - 120.0	11-APR-10 15:57	100411-2

METALS

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Interference Check Sample

SDG No: 10-1973

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Beryllium	0.091	ug/L					12-APR-10 18:03	100412-3
	Nickel	2.92	ug/L					12-APR-10 18:03	100412-3
ICSAB01	Beryllium	21.0	ug/L	20	ug/L	105	80.0 - 120.0	12-APR-10 18:06	100412-3
	Nickel	22.2	ug/L	23.31	ug/L	95.3	80.0 - 120.0	12-APR-10 18:06	100412-3

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1973 Client ID RE15-10-8259S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 97.3

Sample ID: 247770001 Spike ID: 1202053044

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg	75-125	2250000		935000		493000	267	N	P
Antimony	ug/kg	75-125	50000		327	U	49300	101		P
Barium	ug/kg	75-125	65800		10700		49300	112		P
Cadmium	ug/kg	75-125	48400		118	J	49300	97.8		P
Calcium	ug/kg	75-125	899000		287000		493000	124		P
Chromium	ug/kg	75-125	50400		1210		49300	99.7		P
Cobalt	ug/kg	75-125	48500		284	J	49300	97.8		P
Copper	ug/kg	75-125	53600		1420		49300	106		P
Iron	ug/kg		8430000		6850000		493000	320	N/A	P
Lead	ug/kg	75-125	55900		4200		49300	105		P
Magnesium	ug/kg	75-125	1080000		426000		493000	133	N	P
Manganese	ug/kg		371000		243000		49300	260	N/A	P
Potassium	ug/kg	75-125	1080000		267000		493000	165	N	P
Silver	ug/kg	75-125	49400		99.2	U	49300	100		P
Sodium	ug/kg	75-125	926000		145000		493000	158	N	P
Vanadium	ug/kg	75-125	51300		1950		49300	100		P
Zinc	ug/kg	75-125	86800		31900		49300	111		P

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1973 Client ID RE15-10-8259SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 97.3

Sample ID: 247770001 Spike ID: 1202053045

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/kg	75-125	2080000		935000		488000	236	N	P
Antimony	ug/kg	75-125	49500		327	U	48800	101		P
Barium	ug/kg	75-125	63000		10700		48800	107		P
Cadmium	ug/kg	75-125	47700		118	J	48800	97.6		P
Calcium	ug/kg	75-125	857000		287000		488000	117		P
Chromium	ug/kg	75-125	49300		1210		48800	98.7		P
Cobalt	ug/kg	75-125	47900		284	J	48800	97.7		P
Copper	ug/kg	75-125	52500		1420		48800	105		P
Iron	ug/kg		7730000		6850000		488000	182	N/A	P
Lead	ug/kg	75-125	54400		4200		48800	103		P
Magnesium	ug/kg	75-125	991000		426000		488000	116		P
Manganese	ug/kg		322000		243000		48800	163	N/A	P
Potassium	ug/kg	75-125	1040000		267000		488000	159	N	P
Silver	ug/kg	75-125	48600		99.2	U	48800	99.5		P
Sodium	ug/kg	75-125	874000		145000		488000	149	N	P
Vanadium	ug/kg	75-125	50100		1950		48800	98.7		P
Zinc	ug/kg	75-125	82700		31900		48800	104		P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1973 Client ID RE15-10-8259S

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 97.3

Sample ID: 247770001 Spike ID: 1202053050

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Beryllium	ug/kg	75-125	6140		804		5050	106		MS
Nickel	ug/kg	75-125	6120		737		5050	107		MS
Selenium	ug/kg	75-125	1900		502	U	2020	90.3		MS
Thallium	ug/kg	75-125	9970		60.6	J	10100	98.1		MS
Arsenic	ug/kg	75-125	8110		589	J	8080	93.1		MS

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1973 **Client ID** RE15-10-8259SD**Contract:** LANL01004 **Level:** Low**Matrix:** SOIL **% Solids:** 97.3**Sample ID:** 247770001 **Spike ID:** 1202053051

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Arsenic	ug/kg	75-125	7740		589	J	7970	89.7		MS
Beryllium	ug/kg	75-125	5790		804		4980	100		MS
Nickel	ug/kg	75-125	5650		737		4980	98.7		MS
Selenium	ug/kg	75-125	1700		502	U	1990	81.5		MS
Thallium	ug/kg	75-125	9440		60.6	J	9960	94.2		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1973

Client ID RE46-10-13324S

Contract: LANL01004

Level: Low

Matrix: SOIL

% Solids: 86

Sample ID: 247546001

Spike ID: 1202056044

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	148		9.78	J	126	109		AV

METALS

-5a-

Matrix Spike Duplicate Summary

SDG NO. 10-1973 Client ID RE46-10-13324SD

Contract: LANL01004 Level: Low

Matrix: SOIL % Solids: 86

Sample ID: 247546001 Spike ID: 1202056051

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/kg	75-125	154		9.78	J	129	112		AV

Metals

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Duplicate Sample Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8259D

Sample ID: 247770001

Duplicate ID: 1202053042

Percent Solids for Dup: 97.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20%	935000		1030000		9.85		P
Antimony	ug/kg		327 U		334 U				P
Barium	ug/kg	+/-20%	10700		11800		10.2		P
Cadmium	ug/kg		118 J		101 U		200		P
Calcium	ug/kg	+/-20%	287000		306000		6.49		P
Chromium	ug/kg	+/-506	1210		1380		12.9		P
Cobalt	ug/kg	+/-506	284 J		321 J		12.1		P
Copper	ug/kg	+/-1010	1420		1500		5.55		P
Iron	ug/kg	+/-20%	6850000		7540000		9.66		P
Lead	ug/kg	+/-1010	4200		4350		3.62		P
Magnesium	ug/kg	+/-20%	426000		484000		12.8		P
Manganese	ug/kg	+/-20%	243000		263000		8.03		P
Potassium	ug/kg	+/-20%	267000		304000		13.1		P
Silver	ug/kg		99.2 U		229 J		200		P
Sodium	ug/kg	+/-20%	145000		165000		12.6		P
Vanadium	ug/kg	+/-506	1950		1980		1.83		P
Zinc	ug/kg	+/-20%	31900		33300		4.3		P

Metals
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Duplicate Sample Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8259SD

Sample ID: 1202053044

Duplicate ID: 1202053045

Percent Solids for Dup: 97.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/kg	+/-20	2250000		2080000		7.79		P
Antimony	ug/kg	+/-20	50000		49500		.971		P
Barium	ug/kg	+/-20	65800		63000		4.29		P
Cadmium	ug/kg	+/-20	48400		47700		1.36		P
Calcium	ug/kg	+/-20	899000		857000		4.72		P
Chromium	ug/kg	+/-20	50400		49300		2.1		P
Cobalt	ug/kg	+/-20	48500		47900		1.25		P
Copper	ug/kg	+/-20	53600		52500		2		P
Iron	ug/kg	+/-20	8430000		7730000		8.58		P
Lead	ug/kg	+/-20	55900		54400		2.83		P
Magnesium	ug/kg	+/-20	1080000		991000		8.89		P
Manganese	ug/kg	+/-20	371000		322000		14		P
Potassium	ug/kg	+/-20	1080000		1040000		3.82		P
Silver	ug/kg	+/-20	49400		48600		1.72		P
Sodium	ug/kg	+/-20	926000		874000		5.82		P
Vanadium	ug/kg	+/-20	51300		50100		2.35		P
Zinc	ug/kg	+/-20	86800		82700		4.86		P

Metals

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Duplicate Sample Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8259D

Sample ID: 247770001

Duplicate ID: 1202053048

Percent Solids for Dup: 97.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-988	589 J		700 J		17.3		MS
Beryllium	ug/kg	+/-20%	804		848		5.32		MS
Nickel	ug/kg	+/-395	737		834		12.3		MS
Selenium	ug/kg		502 U		494 U				MS
Thallium	ug/kg		60.6 J		59.3 U		200		MS

Metals

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Duplicate Sample Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE15-10-8259SD

Sample ID: 1202053050

Duplicate ID: 1202053051

Percent Solids for Dup: 97.3

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Arsenic	ug/kg	+/-20	8110		7740		4.73		MS
Beryllium	ug/kg	+/-20	6140		5790		5.85		MS
Nickel	ug/kg	+/-20	6120		5650		7.87		MS
Selenium	ug/kg	+/-20	1900		1700		11.1		MS
Thallium	ug/kg	+/-20	9970		9440		5.43		MS

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Duplicate Sample Summary

SDG No.: 10-1973

Lab Code: GEL

Client ID: RE46-10-13324D

Percent Solids for Dup: 86

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-13.9	9.78 J		7.18 J		30.6		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1973

Contract: LANL01004

Lab Code: GEL

Matrix: SOLID

Level: Low

Client ID: RE46-10-13324SD

Sample ID: 1202056044

Duplicate ID: 1202056051

Percent Solids for Dup: 86

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Mercury	ug/kg	+/-20	148		154		4.6		AV

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1973

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202053046								
	Aluminum	ug/kg	10500000	9660000		92	56-144	P
	Antimony	ug/kg	173000	136000		78.9	71-130	P
	Barium	ug/kg	198000	216000		109	80-120	P
	Cadmium	ug/kg	60700	58600		96.5	81-120	P
	Calcium	ug/kg	9870000	9700000		98.3	83-117	P
	Chromium	ug/kg	236000	248000		105	80-120	P
	Cobalt	ug/kg	91200	92900		102	81-120	P
	Copper	ug/kg	174000	187000		107	81-118	P
	Iron	ug/kg	18000000	19100000		106	51-149	P
	Lead	ug/kg	86000	83000		96.6	79-121	P
	Magnesium	ug/kg	4000000	3930000		98.2	79-122	P
	Manganese	ug/kg	558000	535000		95.9	81-119	P
	Potassium	ug/kg	4300000	4450000		104	74-127	P
	Silver	ug/kg	30100	32300		107	66-134	P
	Sodium	ug/kg	1020000	1030000		101	74-127	P
	Vanadium	ug/kg	115000	127000		110	79-121	P
	Zinc	ug/kg	594000	598000		101	80-121	P

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1973

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202053052	Arsenic	ug/kg	104000	118000		113	78-123	MS
	Beryllium	ug/kg	77600	83800		108	84-116	MS
	Nickel	ug/kg	134000	153000		114	78-123	MS
	Selenium	ug/kg	286000	309000		108	77-123	MS
	Thallium	ug/kg	121000	134000		111	78-122	MS

METALS

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Laboratory Control Sample Summary

SDG NO. 10-1973

Contract: LANL01004

Aqueous LCS Source:

Solid LCS Source: ERA

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202056042	Mercury	ug/kg	5150	5420		105	71.6-128.3	AV

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1973 Client ID RE15-10-8259L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247770001 Serial Dilution ID: 1202053043

Analyte	Initial Value ng/L	C	Serial Value ng/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	9430		9850		4.45		10	P
Antimony	3.3	U	16.5	U				P
Barium	108		109		.463		10	P
Cadmium	1.19	J	5	U	100			P
Calcium	2890		3050		5.36			P
Chromium	12.2		14	J	14.3			P
Cobalt	2.86	J	7.5	U	100			P
Copper	14.3		15	U	100			P
Iron	69000		73500		6.52		10	P
Lead	42.3		41.2	J	2.6			P
Magnesium	4290		4210		1.86		10	P
Manganese	2440		2560		4.92		10	P
Potassium	2690		2900		7.62			P
Silver	1	U	5	U				P
Sodium	1460		1450		1.03			P
Vanadium	19.6		21.4	J	8.93			P
Zinc	321		325		1.25		10	P

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1973 **Client ID** RE15-10-8259L**Contract:** LANL01004**Matrix:** SOLID **Level:** Low**Sample ID:** 247770001 **Serial Dilution ID:** 1202053049

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Arsenic	2.93	J	5	U	100			MS
Beryllium	4.01		4.3		7.11			MS
Nickel	3.67		4.65	J	26.6			MS
Selenium	2.5	U	12.5	U				MS
Thallium	.302	J	1.5	U	100			MS

METALS

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Serial Dilution Sample Summary

SDG NO. 10-1973 Client ID RE46-10-13324L

Contract: LANL01004

Matrix: SOLID Level: Low

Sample ID: 247546001 Serial Dilution ID: 1202056050

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.154	J	.34	U	100			AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1973

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 957487							
1202053041	MB for batch 957487	MB	S	26-FEB-10	.521g	50mL	
1202053046	LCS for batch 957487	LCS	S	26-FEB-10	.506g	50mL	
1202053044	RE15-10-8259S	MS	S	26-FEB-10	.521g	50mL	
1202053045	RE15-10-8259SD	MSD	S	26-FEB-10	.527g	50mL	
1202053042	RE15-10-8259D	DUP	S	26-FEB-10	.508g	50mL	
247770001	RE15-10-8259	SAMPLE	S	26-FEB-10	.518g	50mL	
247770002	RE15-10-8261	SAMPLE	S	26-FEB-10	.516g	50mL	
247770003	RE15-10-8257	SAMPLE	S	26-FEB-10	.526g	50mL	
247770004	RE15-10-8260	SAMPLE	S	26-FEB-10	.506g	50mL	
247770005	RE15-10-8258	SAMPLE	S	26-FEB-10	.52g	50mL	
247770006	RE15-10-8263	SAMPLE	S	26-FEB-10	.528g	50mL	
247770007	RE15-10-8255	SAMPLE	S	26-FEB-10	.507g	50mL	
247770008	RE15-10-8256	SAMPLE	S	26-FEB-10	.512g	50mL	
247770009	RE15-10-8262	SAMPLE	S	26-FEB-10	.526g	50mL	
247770010	RE15-10-8265	SAMPLE	S	26-FEB-10	.508g	50mL	
247770011	RE15-10-8269	SAMPLE	S	26-FEB-10	.53g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1973

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 957489							
1202053047	MB for batch 957489	MB	S	26-FEB-10	.516g	50mL	
1202053052	LCS for batch 957489	LCS	S	26-FEB-10	.517g	50mL	
1202053050	RE15-10-8259S	MS	S	26-FEB-10	.509g	50mL	
1202053051	RE15-10-8259SD	MSD	S	26-FEB-10	.516g	50mL	
1202053048	RE15-10-8259D	DUP	S	26-FEB-10	.52g	50mL	
247770001	RE15-10-8259	SAMPLE	S	26-FEB-10	.512g	50mL	
247770002	RE15-10-8261	SAMPLE	S	26-FEB-10	.5g	50mL	
247770003	RE15-10-8257	SAMPLE	S	26-FEB-10	.512g	50mL	
247770004	RE15-10-8260	SAMPLE	S	26-FEB-10	.543g	50mL	
247770005	RE15-10-8258	SAMPLE	S	26-FEB-10	.519g	50mL	
247770006	RE15-10-8263	SAMPLE	S	26-FEB-10	.53g	50mL	
247770007	RE15-10-8255	SAMPLE	S	26-FEB-10	.504g	50mL	
247770008	RE15-10-8256	SAMPLE	S	26-FEB-10	.529g	50mL	
247770009	RE15-10-8262	SAMPLE	S	26-FEB-10	.503g	50mL	
247770010	RE15-10-8265	SAMPLE	S	26-FEB-10	.515g	50mL	
247770011	RE15-10-8269	SAMPLE	S	26-FEB-10	.509g	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1973

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 958687							
1202056041	MB for batch 958687	MB	S	06-MAR-10	.514g	30mL	
1202056042	LCS for batch 958687	LCS	S	06-MAR-10	.203g	30mL	
1202056044	RE46-10-13324S	MS	S	06-MAR-10	.553g	30mL	
1202056051	RE46-10-13324SD	MSD	S	06-MAR-10	.541g	30mL	
1202056043	RE46-10-13324D	DUP	S	06-MAR-10	.5g	30mL	
247770001	RE15-10-8259	SAMPLE	S	06-MAR-10	.545g	30mL	
247770002	RE15-10-8261	SAMPLE	S	06-MAR-10	.593g	30mL	
247770003	RE15-10-8257	SAMPLE	S	06-MAR-10	.58g	30mL	
247770004	RE15-10-8260	SAMPLE	S	06-MAR-10	.55g	30mL	
247770005	RE15-10-8258	SAMPLE	S	06-MAR-10	.561g	30mL	
247770006	RE15-10-8263	SAMPLE	S	06-MAR-10	.576g	30mL	
247770007	RE15-10-8255	SAMPLE	S	06-MAR-10	.554g	30mL	
247770008	RE15-10-8256	SAMPLE	S	06-MAR-10	.59g	30mL	
247770009	RE15-10-8262	SAMPLE	S	06-MAR-10	.537g	30mL	
247770010	RE15-10-8265	SAMPLE	S	06-MAR-10	.505g	30mL	
247770011	RE15-10-8269	SAMPLE	S	06-MAR-10	.529g	30mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 11-APR-10

End Date: 11-APR-10

Client Sdg: 10-1973

Method: MS

Data File: 100411-2

Samp No.	D/F	Run Time	Al	Sh	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn
S0.0	1	15:29:00			X															X			X		
S10	1	15:33:00			X															X			X		
S100	1	15:37:00			X															X			X		
ICV01	1	15:41:00			X															X			X		
ICB01	1	15:45:00			X															X			X		
CRDL01	1	15:49:00			X															X			X		
ICSA01	1	15:53:00			X															X			X		
ICSAB01	1	15:57:00			X															X			X		
CCV01	1	16:01:00			X															X			X		
CCB01	1	16:06:00			X															X			X		
ZZZZZZ	2	16:10:00																							
ZZZZZZ	40	16:14:00																							
ZZZZZZ	2	16:18:00																							
ZZZZZZ	2	16:22:00																							
ZZZZZZ	2	16:26:00																							
ZZZZZZ	2	16:30:00																							
ZZZZZZ	10	16:34:00																							
CCV02	1	16:38:00			X															X			X		
CCB02	1	16:42:00			X															X			X		
ZZZZZZ	2	16:46:00																							
ZZZZZZ	2	16:50:00																							
ZZZZZZ	2	16:55:00																							
ZZZZZZ	2	16:59:00																							
ZZZZZZ	2	17:03:00																							
ZZZZZZ	2	17:07:00																							
ZZZZZZ	2	17:11:00																							
ZZZZZZ	2	17:15:00																							
CCV03	1	17:19:00			X															X			X		
CCB03	1	17:23:00			X															X			X		
ZZZZZZ	2	17:27:00																							
ZZZZZZ	2	17:31:00																							
ZZZZZZ	2	17:35:00																							
ZZZZZZ	2	17:40:00																							
ZZZZZZ	2	17:44:00																							
ZZZZZZ	2	17:48:00																							
ZZZZZZ	2	17:52:00																							
ZZZZZZ	2	17:56:00																							
CCV04	1	18:00:00			X															X			X		
CCB04	1	18:04:00			X															X			X		
ZZZZZZ	2	18:08:00																							

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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	V	Zn
247770004	2	20:57:00			X															X			X		
247770005	2	21:01:00			X															X			X		
247770006	2	21:05:00			X															X			X		
247770007	2	21:09:00			X															X			X		
247770008	2	21:13:00			X															X			X		
247770009	2	21:17:00			X															X			X		
247770010	2	21:22:00			X															X			X		
247770011	2	21:26:00			X															X			X		
CCV09	1	21:30:00			X															X			X		
CCB09	1	21:34:00			X															X			X		

Metals
-14-
Analysis Run Log

Contract: LANL01004**Lab Code:** GEL**Inst Name:** ICPMS5**Start Date:** 12-APR-10**End Date:** 12-APR-10**Client Sdg:** 10-1973**Method:** MS**Data File:** 100412-3

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	V	Zn
S0.0	1	17:46:00					X											X							
S10	1	17:49:00					X											X							
S100	1	17:52:00					X											X							
ICV01	1	17:55:00					X											X							
ICB01	1	17:58:00					X											X							
CRDL01	1	18:00:00					X											X							
ICSA01	1	18:03:00					X											X							
ICSAB01	1	18:06:00					X											X							
CCV01	1	18:09:00					X											X							
CCB01	1	18:12:00					X											X							
LR01	1	18:15:00					X											X							
CCV02	1	18:18:00					X											X							
CCB02	1	18:21:00					X											X							
1202053047	2	18:23:00					X											X							
1202053052	40	18:26:00					X											X							
247770001	2	18:29:00					X											X							
1202053048	2	18:32:00					X											X							
1202053050	2	18:35:00					X											X							
1202053051	2	18:38:00					X											X							
1202053049	10	18:41:00					X											X							
CCV03	1	18:44:00					X											X							
CCB03	1	18:47:00					X											X							
247770002	2	18:50:00					X											X							
247770003	2	18:53:00					X											X							
247770004	2	18:56:00					X											X							
247770005	2	18:58:00					X											X							
247770006	2	19:01:00					X											X							
CCV04	1	19:04:00					X											X							
CCB04	1	19:07:00					X											X							
247770007	2	19:10:00					X											X							
247770008	2	19:13:00					X											X							
247770009	2	19:16:00					X											X							
247770010	2	19:19:00					X											X							
247770011	2	19:22:00					X											X							
CCV05	1	19:25:00					X											X							
CCB05	1	19:28:00					X											X							

Metals
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Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 19-MAR-10

End Date: 19-MAR-10

Client Sdg: 10-1973

Method: P

Data File: 031910-1

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	V	Zn
S0.0	1	07:10:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S0.1	1	07:17:00		X		X		X	X	X	X		X		X				X		X			X	X
S0.5	1	07:23:00	X	X		X		X	X	X	X	X		X	X	X			X		X			X	X
SCAL	1	07:30:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
S10	1	07:37:00	X						X				X		X								X		
ICV01	1	07:43:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICB01	1	07:50:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
PQL01	1	07:57:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSA01	1	08:04:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ICSAB01	1	08:11:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR01	1	08:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR02	1	08:24:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	08:31:00																							
ZZZZZZ	1	08:38:00																							
CCV01	1	08:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB01	1	08:54:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
LR03	1	09:01:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV02	1	09:08:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB02	1	09:15:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	09:29:00																							
ZZZZZZ	1	09:36:00																							
ZZZZZZ	1	09:43:00																							
ZZZZZZ	1	09:49:00																							
ZZZZZZ	20	09:56:00																							
ZZZZZZ	20	10:03:00																							
ZZZZZZ	10	10:11:00																							
CCV03	1	10:18:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
PQL02	1	10:25:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB03	1	10:32:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	10:42:00																							
ZZZZZZ	1	10:49:00																							
ZZZZZZ	1	10:56:00																							
ZZZZZZ	1	11:03:00																							
ZZZZZZ	1	11:10:00																							
ZZZZZZ	1	11:17:00																							
ZZZZZZ	5	11:24:00																							
ZZZZZZ	1	11:31:00																							
CCV04	1	11:38:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB04	1	11:45:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
ZZZZZZ	1	11:52:00																							

Samp No.	D/F	Run Time																		
ZZZZZZ	1	11:59:00																		
ZZZZZZ	1	12:07:00																		
ZZZZZZ	1	12:14:00																		
ZZZZZZ	1	12:21:00																		
ZZZZZZ	1	12:28:00																		
ZZZZZZ	1	12:35:00																		
ZZZZZZ	1	12:42:00																		
CCV05	1	12:49:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
CCB05	1	12:56:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
CCV06	1	13:15:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
CCB06	1	13:22:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
ZZZZZZ	1	13:29:00																		
ZZZZZZ	1	13:36:00																		
ZZZZZZ	1	13:43:00																		
ZZZZZZ	1	13:50:00																		
ZZZZZZ	1	13:56:00																		
ZZZZZZ	1	14:03:00																		
ZZZZZZ	1	14:10:00																		
CCV07	1	14:17:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
CCB07	1	14:24:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
ZZZZZZ	1	14:31:00																		
ZZZZZZ	1	14:38:00																		
ZZZZZZ	1	14:45:00																		
ZZZZZZ	1	14:52:00																		
ZZZZZZ	5	14:59:00																		
ZZZZZZ	1	15:05:00																		
CCV08	1	15:12:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
CCB08	1	15:19:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
ZZZZZZ	1	15:27:00																		
ZZZZZZ	1	15:34:00																		
ZZZZZZ	1	15:41:00																		
ZZZZZZ	1	15:48:00																		
ZZZZZZ	1	15:55:00																		
ZZZZZZ	1	16:02:00																		
ZZZZZZ	5	16:09:00																		
CCV09	1	16:16:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
CCB09	1	16:23:00	X	X		X		X	X	X	X	X	X	X	X		X		X	X
ZZZZZZ	1	16:30:00																		
ZZZZZZ	1	16:38:00																		
ZZZZZZ	1	16:45:00																		

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	V	Zn
ZZZZZZ	1	16:52:00																							
ZZZZZZ	1	16:59:00																							
ZZZZZZ	1	17:06:00																							
CCV10	1	17:13:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB10	1	17:20:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1202053041	1	17:27:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1202053046	1	17:34:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770001	1	17:41:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1202053042	1	17:48:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1202053044	1	17:55:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1202053045	1	18:02:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
1202053043	5	18:09:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770002	1	18:16:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770003	1	18:23:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV11	1	18:30:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB11	1	18:37:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770004	1	18:44:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770005	1	18:51:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770006	1	18:58:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770007	1	19:05:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770008	1	19:12:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770009	1	19:19:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770010	1	19:26:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
247770011	1	19:33:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCV12	1	19:40:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X
CCB12	1	19:47:00	X	X		X		X	X	X	X	X	X	X	X	X			X		X	X		X	X

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: HG3

Start Date: 08-MAR-10

End Date: 08-MAR-10

Client Sdg: 10-1973

Method: AV

Data File: 030810S1-4

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	V	Zn
S0.0	1	09:09:00															X								
S0.2	1	09:11:00															X								
S0.5	1	09:13:00															X								
S2.0	1	09:14:00															X								
S5.0	1	09:16:00															X								
S10.0	1	09:18:00															X								
ICV01	1	09:19:00															X								
ICB01	1	09:21:00															X								
CRDL01	1	09:23:00															X								
CCV01	1	09:24:00															X								
CCB01	1	09:26:00															X								
ZZZZZZ	1	09:28:00																							
ZZZZZZ	10	09:29:00																							
ZZZZZZ	1	09:31:00																							
ZZZZZZ	1	09:33:00																							
ZZZZZZ	1	09:34:00																							
ZZZZZZ	1	09:36:00																							
ZZZZZZ	5	09:38:00																							
ZZZZZZ	1	09:39:00																							
ZZZZZZ	1	09:41:00																							
ZZZZZZ	1	09:43:00																							
CCV02	1	09:44:00															X								
CCB02	1	09:46:00															X								
ZZZZZZ	1	09:48:00																							
ZZZZZZ	1	09:49:00																							
ZZZZZZ	1	09:51:00																							
ZZZZZZ	1	09:53:00																							
ZZZZZZ	1	09:54:00																							
ZZZZZZ	1	09:56:00																							
ZZZZZZ	1	09:58:00																							
ZZZZZZ	1	09:59:00																							
ZZZZZZ	1	10:01:00																							
ZZZZZZ	1	10:03:00																							
CCV03	1	10:04:00															X								
CCB03	1	10:06:00															X								
ZZZZZZ	1	10:08:00																							
ZZZZZZ	1	10:09:00																							
ZZZZZZ	1	10:11:00																							
1202056041	1	10:13:00															X								
1202056042	10	10:15:00															X								

Samp No.	D/F	Run Time
ZZZZZZ	1	10:16:00
1202056043	1	10:18:00
1202056044	1	10:20:00
1202056051	1	10:21:00
1202056050	5	10:23:00
CCV04	1	10:25:00
CCB04	1	10:26:00
ZZZZZZ	1	10:28:00
ZZZZZZ	1	10:30:00
ZZZZZZ	1	10:31:00
ZZZZZZ	1	10:33:00
ZZZZZZ	1	10:35:00
ZZZZZZ	1	10:36:00
ZZZZZZ	1	10:38:00
247770001	1	10:40:00
247770002	1	10:41:00
247770003	1	10:43:00
CCV05	1	10:45:00
CCB05	1	10:46:00
247770004	1	10:48:00
247770005	1	10:50:00
247770006	1	10:51:00
247770007	1	10:53:00
247770008	1	10:55:00
247770009	1	10:56:00
247770010	1	10:58:00
247770011	1	11:00:00
ZZZZZZ	1	11:01:00
ZZZZZZ	10	11:03:00
CCV06	1	11:05:00
CCB06	1	11:07:00

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1973

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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
	Vanadium		2.0	10
	Zinc		2.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1973

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 15-JUN-09

	<u>Analyte</u>	<u>Wavelength</u> (nm)	<u>MDL</u> ug/L	<u>RDL</u> ug/L
MERCURY				
SOLID	Mercury		0.068	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1973

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
SOLID	Aluminum	396.153	68.0	200
	Antimony	206.836	3.3	10
	Arsenic	188.979	5.0	30
	Barium	233.527	1.0	5
	Beryllium	313.107	1.0	5
	Cadmium	226.502	1.0	5
	Calcium	317.933	80.0	250
	Chromium	267.716	1.5	5
	Cobalt	228.616	1.5	5
	Copper	324.752	3.0	10
	Iron	238.204	80.0	250
	Lead	220.353	2.5	10
	Magnesium	279.077	85.0	300
	Manganese	257.61	2.0	10
	Nickel	231.604	1.5	5
	Potassium	766.49	64.0	250
	Selenium	196.026	5.0	30
	Silver	328.068	1.0	5
	Sodium	589.592	70.0	250
	Thallium	190.801	5.0	20
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1973**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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: GELGEL Job No: **10-1973**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB--10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	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
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Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1973**

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
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Interelement Correction Factors

Lab Code: GELGEL Job No: **10-1973**

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: GELGEL Job No: **10-1973**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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: GELGEL Job No: **10-1973**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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. 10-1973

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1973

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
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

Raw Data

3/19/2010 06:54:45 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 0

Analysis Begun

Start Time: 3/19/2010 07:10:13

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/18/2010 18:42:02

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 396.153 Radial	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 317.933 Radial	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: 8

Sample ID: S0

Date Collected: 3/19/2010 07:10:15

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Net

Corrected

Calib.

Analysis

Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	4353.7	4353.7	0.000 %	07:12:08
1	Y RADIAL	4701.2	4701.2	0.000 %	07:12:08
1	Al 396.153Radial†	-70.7	-71.4	[0.00] ug/L	07:12:28
1	Ca 317.933Radial†	17.3	17.5	[0.00] ug/L	07:12:28
1	Fe 238.204 Radial†	9.7	9.8	[0.00] ug/L	07:12:28
1	K 766.490 Radial†	2594.9	2619.5	[0.00] ug/L	07:12:08
1	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	07:12:28
1	Na 589.592 Radial†	-880.1	-888.4	[0.00] ug/L	07:12:08
1	Sr 421.552†	28.7	28.9	[0.00] ug/L	07:12:08
1	Sc 361.383	813923.1	813923.1	0.0000 %	07:13:24
1	Y 371.029	687856.7	687856.7	0.0000 %	07:13:24
1	Ag 328.068†	163.2	164.2	[0.00] ug/L	07:13:24
1	As 188.979†	-27.2	-27.4	[0.00] ug/L	07:13:44
1	B 249.677†	-533.0	-536.2	[0.00] ug/L	07:13:44
1	Ba 233.527†	-6.3	-6.3	[0.00] ug/L	07:13:44
1	Be 313.107†	-3672.2	-3694.3	[0.00] ug/L	07:13:24
1	Cd 226.502†	-177.2	-178.3	[0.00] ug/L	07:13:44
1	Co 228.616†	-39.2	-39.4	[0.00] ug/L	07:13:44
1	Cr 267.716†	70.5	70.9	[0.00] ug/L	07:13:44
1	Cu 324.752†	5494.6	5527.6	[0.00] ug/L	07:13:24
1	Mn 257.610†	391.2	393.5	[0.00] ug/L	07:13:44
1	Mo 202.031†	4.3	4.3	[0.00] ug/L	07:13:44
1	Ni 231.604†	78.3	78.8	[0.00] ug/L	07:13:44
1	P 214.914†	181.5	182.6	[0.00] ug/L	07:13:44
1	Pb 220.353†	-56.8	-57.2	[0.00] ug/L	07:13:44
1	S 181.975 Axial†	28.5	28.7	[0.00] ug/L	07:13:44
1	Sb 206.836†	27.2	27.4	[0.00] ug/L	07:13:44
1	Se 196.026†	-14.5	-14.6	[0.00] ug/L	07:13:44
1	Si 251.611†	480.1	483.0	[0.00] ug/L	07:13:44
1	Sn 189.927†	11.1	11.2	[0.00] ug/L	07:13:44
1	Ti 334.940†	-1120.6	-1127.3	[0.00] ug/L	07:13:24
1	Tl 190.801†	-33.9	-34.1	[0.00] ug/L	07:13:44
1	U 409.014†	-2254.8	-2268.4	[0.00] ug/L	07:13:24
1	V 292.402†	-1344.0	-1352.1	[0.00] ug/L	07:13:24
1	Zn 213.857†	561.6	565.0	[0.00] ug/L	07:13:44
1	SiO2†	511.8	514.9	[0.00] ug/L	07:14:55
2	Sc Radial	4414.0	4414.0	0.000 %	07:12:33
2	Y RADIAL	4778.8	4778.8	0.000 %	07:12:33
2	Al 396.153Radial†	-78.8	-78.5	[0.00] ug/L	07:12:53
2	Ca 317.933Radial†	16.9	16.9	[0.00] ug/L	07:12:53
2	Fe 238.204 Radial†	7.2	7.2	[0.00] ug/L	07:12:53
2	K 766.490 Radial†	2539.4	2528.4	[0.00] ug/L	07:12:33
2	Mg 279.077 IEC†	1.1	1.0	[0.00] ug/L	07:12:53
2	Na 589.592 Radial†	-865.3	-861.6	[0.00] ug/L	07:12:33
2	Sr 421.552†	13.8	13.7	[0.00] ug/L	07:12:33
2	Sc 361.383	820260.9	820260.9	0.0000 %	07:13:50
2	Y 371.029	692610.2	692610.2	0.0000 %	07:13:50
2	Ag 328.068†	188.4	188.1	[0.00] ug/L	07:13:50
2	As 188.979†	-24.0	-23.9	[0.00] ug/L	07:14:10
2	B 249.677†	-538.2	-537.3	[0.00] ug/L	07:14:10
2	Ba 233.527†	-4.3	-4.3	[0.00] ug/L	07:14:10
2	Be 313.107†	-3734.7	-3728.2	[0.00] ug/L	07:13:50
2	Cd 226.502†	-161.4	-161.2	[0.00] ug/L	07:14:10
2	Co 228.616†	-38.5	-38.4	[0.00] ug/L	07:14:10
2	Cr 267.716†	73.2	73.0	[0.00] ug/L	07:14:10
2	Cu 324.752†	5607.8	5597.9	[0.00] ug/L	07:13:50
2	Mn 257.610†	387.1	386.5	[0.00] ug/L	07:14:10
2	Mo 202.031†	6.2	6.2	[0.00] ug/L	07:14:10
2	Ni 231.604†	95.9	95.7	[0.00] ug/L	07:14:10
2	P 214.914†	197.1	196.7	[0.00] ug/L	07:14:10
2	Pb 220.353†	-49.7	-49.6	[0.00] ug/L	07:14:10
2	S 181.975 Axial†	30.2	30.2	[0.00] ug/L	07:14:10
2	Sb 206.836†	22.6	22.5	[0.00] ug/L	07:14:10
2	Se 196.026†	-17.3	-17.3	[0.00] ug/L	07:14:10
2	Si 251.611†	500.7	499.8	[0.00] ug/L	07:14:10
2	Sn 189.927†	4.3	4.3	[0.00] ug/L	07:14:10
2	Ti 334.940†	-1112.7	-1110.8	[0.00] ug/L	07:13:50
2	Tl 190.801†	-27.8	-27.8	[0.00] ug/L	07:14:10
2	U 409.014†	-2181.2	-2177.4	[0.00] ug/L	07:13:50
2	V 292.402†	-1308.1	-1305.8	[0.00] ug/L	07:13:50

2	Zn 213.857†	572.4	571.4	[0.00]	ug/L	07:14:10
2	SiO2†	481.0	480.2	[0.00]	ug/L	07:15:15
3	Sc Radial	4417.5	4417.5	0.000	%	07:12:58
3	Y RADIAL	4801.7	4801.7	0.000	%	07:12:58
3	Al 396.153Radial†	-84.8	-84.4	[0.00]	ug/L	07:13:18
3	Ca 317.933Radial†	12.8	12.8	[0.00]	ug/L	07:13:18
3	Fe 238.204 Radial†	8.5	8.4	[0.00]	ug/L	07:13:18
3	K 766.490 Radial†	2661.8	2648.3	[0.00]	ug/L	07:12:58
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	07:13:18
3	Na 589.592 Radial†	-879.8	-875.3	[0.00]	ug/L	07:12:58
3	Sr 421.552†	19.9	19.8	[0.00]	ug/L	07:12:58
3	Sc 361.383	822290.3	822290.3	0.0000	%	07:14:15
3	Y 371.029	694473.4	694473.4	0.0000	%	07:14:15
3	Ag 328.068†	204.0	203.1	[0.00]	ug/L	07:14:15
3	As 188.979†	-29.2	-29.1	[0.00]	ug/L	07:14:35
3	B 249.677†	-540.9	-538.6	[0.00]	ug/L	07:14:35
3	Ba 233.527†	8.5	8.5	[0.00]	ug/L	07:14:35
3	Be 313.107†	-3786.6	-3770.6	[0.00]	ug/L	07:14:15
3	Cd 226.502†	-173.2	-172.5	[0.00]	ug/L	07:14:35
3	Co 228.616†	-61.1	-60.8	[0.00]	ug/L	07:14:35
3	Cr 267.716†	70.8	70.5	[0.00]	ug/L	07:14:35
3	Cu 324.752†	5553.8	5530.4	[0.00]	ug/L	07:14:15
3	Mn 257.610†	388.8	387.2	[0.00]	ug/L	07:14:35
3	Mo 202.031†	15.1	15.1	[0.00]	ug/L	07:14:35
3	Ni 231.604†	78.0	77.7	[0.00]	ug/L	07:14:35
3	P 214.914†	183.3	182.6	[0.00]	ug/L	07:14:35
3	Pb 220.353†	-68.4	-68.2	[0.00]	ug/L	07:14:35
3	S 181.975 Axial†	31.8	31.7	[0.00]	ug/L	07:14:35
3	Sb 206.836†	21.2	21.1	[0.00]	ug/L	07:14:35
3	Se 196.026†	-19.1	-19.0	[0.00]	ug/L	07:14:35
3	Si 251.611†	483.8	481.8	[0.00]	ug/L	07:14:35
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	07:14:35
3	Ti 334.940†	-1130.3	-1125.5	[0.00]	ug/L	07:14:15
3	Tl 190.801†	-25.5	-25.4	[0.00]	ug/L	07:14:35
3	U 409.014†	-2176.0	-2166.9	[0.00]	ug/L	07:14:15
3	V 292.402†	-1299.9	-1294.4	[0.00]	ug/L	07:14:15
3	Zn 213.857†	576.3	573.9	[0.00]	ug/L	07:14:35
3	SiO2†	505.1	502.9	[0.00]	ug/L	07:15:35

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	818824.8	4364.54	0.53%	0.0000 %
Sc Radial	4395.1	35.85	0.82%	0.000 %
Y 371.029	691646.8	3411.92	0.49%	0.0000 %
Y RADIAL	4760.6	52.66	1.11%	0.000 %
Ag 328.068†	185.1	19.62	10.60%	[0.00] ug/L
Al 396.153Radial†	-78.1	6.49	8.31%	[0.00] ug/L
As 188.979†	-26.8	2.63	9.80%	[0.00] ug/L
B 249.677†	-537.4	1.22	0.23%	[0.00] ug/L
Ba 233.527†	-0.7	8.03	>999.9%	[0.00] ug/L
Be 313.107†	-3731.0	38.23	1.02%	[0.00] ug/L
Ca 317.933Radial†	15.7	2.56	16.28%	[0.00] ug/L
Cd 226.502†	-170.6	8.70	5.10%	[0.00] ug/L
Co 228.616†	-46.2	12.65	27.38%	[0.00] ug/L
Cr 267.716†	71.5	1.34	1.87%	[0.00] ug/L
Cu 324.752†	5552.0	39.81	0.72%	[0.00] ug/L
Fe 238.204 Radial†	8.5	1.30	15.32%	[0.00] ug/L
K 766.490 Radial†	2598.8	62.57	2.41%	[0.00] ug/L
Mg 279.077 IEC†	1.5	1.42	93.27%	[0.00] ug/L
Mn 257.610†	389.1	3.91	1.00%	[0.00] ug/L
Mo 202.031†	8.5	5.74	67.28%	[0.00] ug/L
Na 589.592 Radial†	-875.1	13.40	1.53%	[0.00] ug/L
Ni 231.604†	84.1	10.11	12.03%	[0.00] ug/L
P 214.914†	187.3	8.17	4.36%	[0.00] ug/L
Pb 220.353†	-58.3	9.33	16.01%	[0.00] ug/L
S 181.975 Axial†	30.2	1.49	4.94%	[0.00] ug/L
Sb 206.836†	23.7	3.28	13.84%	[0.00] ug/L
Se 196.026†	-17.0	2.24	13.19%	[0.00] ug/L
Si 251.611†	488.2	10.08	2.06%	[0.00] ug/L

Sn 189.927†	7.2	3.58	49.92%	[0.00]	ug/L
Sr 421.552†	20.8	7.65	36.76%	[0.00]	ug/L
Ti 334.940†	-1121.2	9.07	0.81%	[0.00]	ug/L
Tl 190.801†	-29.1	4.53	15.58%	[0.00]	ug/L
U 409.014†	-2204.2	55.80	2.53%	[0.00]	ug/L
V 292.402†	-1317.4	30.53	2.32%	[0.00]	ug/L
Zn 213.857†	570.1	4.60	0.81%	[0.00]	ug/L
SiO2†	499.3	17.63	3.53%	[0.00]	ug/L

Sequence No.: 2

Sample ID: S0.1

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 2

Date Collected: 3/19/2010 07:17:46

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4299.2	4299.2	97.8 %	07:19:44
1	Y RADIAL	4673.1	4673.1	98.16 %	07:19:44
1	K 766.490 Radial†	7813.6	5389.1	[1000] ug/L	07:19:39
1	Sr 421.552†	12088.1	12336.8	[100] ug/L	07:19:44
1	Sc 361.383	819565.4	819565.4	100.09 %	07:20:11
1	Y 371.029	689971.2	689971.2	99.758 %	07:20:11
1	Ag 328.068†	19793.2	19590.2	[100] ug/L	07:20:11
1	As 188.979†	168.5	195.1	[100] ug/L	07:20:31
1	B 249.677†	2888.3	3423.0	[100] ug/L	07:20:11
1	Ba 233.527†	10948.2	10939.0	[100] ug/L	07:20:11
1	Be 313.107†	234967.8	238486.5	[100] ug/L	07:20:11
1	Cd 226.502†	6701.2	6865.8	[100] ug/L	07:20:31
1	Co 228.616†	3917.8	3960.4	[100] ug/L	07:20:31
1	Cr 267.716†	7686.1	7607.7	[100] ug/L	07:20:11
1	Cu 324.752†	36199.8	30615.1	[100] ug/L	07:20:11
1	Mn 257.610†	79100.7	78640.2	[100] ug/L	07:20:11
1	Mo 202.031†	1143.2	1133.6	[100] ug/L	07:20:31
1	Ni 231.604†	3285.2	3198.1	[100] ug/L	07:20:31
1	P 214.914†	856.5	668.4	[500] ug/L	07:20:31
1	Pb 220.353†	619.7	677.4	[100] ug/L	07:20:31
1	S 181.975 Axial†	142.1	111.8	[200] ug/L	07:20:31
1	Sb 206.836†	263.5	239.6	[100] ug/L	07:20:31
1	Se 196.026†	105.0	121.8	[100] ug/L	07:20:31
1	Si 251.611†	13768.7	13268.1	[500] ug/L	07:20:11
1	Sn 189.927†	444.8	437.2	[100] ug/L	07:20:31
1	Ti 334.940†	56944.7	58014.5	[100] ug/L	07:20:11
1	Tl 190.801†	236.6	265.5	[100] ug/L	07:20:31
1	U 409.014†	1277.7	3480.8	[100] ug/L	07:20:11
1	V 292.402†	11266.0	12573.2	[100] ug/L	07:20:11
1	Zn 213.857†	8992.7	8414.5	[100] ug/L	07:20:11
1	SiO2†	13699.9	13188.2	[1069.5] ug/L	07:21:27
2	Sc Radial	4351.7	4351.7	99.0 %	07:19:54
2	Y RADIAL	4736.2	4736.2	99.49 %	07:19:54
2	K 766.490 Radial†	7639.5	5116.9	[1000] ug/L	07:19:49
2	Sr 421.552†	12186.1	12286.7	[100] ug/L	07:19:54
2	Sc 361.383	806559.5	806559.5	98.502 %	07:20:36
2	Y 371.029	679008.4	679008.4	98.173 %	07:20:36
2	Ag 328.068†	19410.1	19520.1	[100] ug/L	07:20:36
2	As 188.979†	160.0	189.2	[100] ug/L	07:20:57
2	B 249.677†	2853.4	3434.1	[100] ug/L	07:20:36
2	Ba 233.527†	10778.3	10943.0	[100] ug/L	07:20:36
2	Be 313.107†	231279.8	238527.9	[100] ug/L	07:20:36
2	Cd 226.502†	6685.7	6958.0	[100] ug/L	07:20:57
2	Co 228.616†	3912.0	4017.7	[100] ug/L	07:20:57
2	Cr 267.716†	7564.8	7608.4	[100] ug/L	07:20:36
2	Cu 324.752†	35581.8	30570.9	[100] ug/L	07:20:36
2	Mn 257.610†	77938.0	78734.1	[100] ug/L	07:20:36
2	Mo 202.031†	1144.1	1152.9	[100] ug/L	07:20:57
2	Ni 231.604†	3297.2	3263.3	[100] ug/L	07:20:57
2	P 214.914†	848.3	673.9	[500] ug/L	07:20:57
2	Pb 220.353†	620.7	688.5	[100] ug/L	07:20:57
2	S 181.975 Axial†	146.4	118.4	[200] ug/L	07:20:57
2	Sb 206.836†	264.3	244.6	[100] ug/L	07:20:57
2	Se 196.026†	107.5	126.1	[100] ug/L	07:20:57
2	Si 251.611†	13541.3	13259.0	[500] ug/L	07:20:36
2	Sn 189.927†	446.3	445.9	[100] ug/L	07:20:57
2	Ti 334.940†	56083.7	58057.7	[100] ug/L	07:20:36
2	Tl 190.801†	232.7	265.4	[100] ug/L	07:20:57
2	U 409.014†	1337.0	3561.5	[100] ug/L	07:20:36

2	V 292.402†	11053.6	12539.2	[100]	ug/L	07:20:36
2	Zn 213.857†	8858.1	8422.7	[100]	ug/L	07:20:36
2	SiO2†	13722.0	13431.3	[1069.5]	ug/L	07:21:32
3	Sc Radial	4298.2	4298.2	97.8	%	07:20:04
3	Y RADIAL	4680.6	4680.6	98.32	%	07:20:04
3	K 766.490 Radial†	7824.1	5401.6	[1000]	ug/L	07:19:59
3	Sr 421.552†	12067.8	12318.9	[100]	ug/L	07:20:04
3	Sc 361.383	819475.4	819475.4	100.08	%	07:21:02
3	Y 371.029	690004.4	690004.4	99.763	%	07:21:02
3	Ag 328.068†	19783.4	19582.5	[100]	ug/L	07:21:02
3	As 188.979†	160.2	186.9	[100]	ug/L	07:21:22
3	B 249.677†	2918.4	3453.5	[100]	ug/L	07:21:02
3	Ba 233.527†	10967.6	10959.6	[100]	ug/L	07:21:02
3	Be 313.107†	234959.9	238504.4	[100]	ug/L	07:21:02
3	Cd 226.502†	6644.2	6809.6	[100]	ug/L	07:21:22
3	Co 228.616†	3875.7	3918.8	[100]	ug/L	07:21:22
3	Cr 267.716†	7681.2	7603.6	[100]	ug/L	07:21:02
3	Cu 324.752†	36243.6	30662.8	[100]	ug/L	07:21:02
3	Mn 257.610†	79237.9	78785.9	[100]	ug/L	07:21:02
3	Mo 202.031†	1142.7	1133.3	[100]	ug/L	07:21:22
3	Ni 231.604†	3256.6	3170.0	[100]	ug/L	07:21:22
3	P 214.914†	855.5	667.5	[500]	ug/L	07:21:22
3	Pb 220.353†	594.6	652.4	[100]	ug/L	07:21:22
3	S 181.975 Axial†	141.7	111.4	[200]	ug/L	07:21:22
3	Sb 206.836†	256.8	232.9	[100]	ug/L	07:21:22
3	Se 196.026†	97.7	114.6	[100]	ug/L	07:21:22
3	Si 251.611†	13838.2	13339.0	[500]	ug/L	07:21:02
3	Sn 189.927†	447.8	440.3	[100]	ug/L	07:21:22
3	Ti 334.940†	57007.2	58083.1	[100]	ug/L	07:21:02
3	Tl 190.801†	233.6	262.6	[100]	ug/L	07:21:22
3	U 409.014†	1393.7	3596.8	[100]	ug/L	07:21:02
3	V 292.402†	11249.5	12558.0	[100]	ug/L	07:21:02
3	Zn 213.857†	9030.1	8452.9	[100]	ug/L	07:21:02
3	SiO2†	13379.9	12869.9	[1069.5]	ug/L	07:21:37

Mean Data: S0.1

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	815200.1	7483.11	0.92%	99.557	%
Sc Radial	4316.4	30.60	0.71%	98.2	%
Y 371.029	686328.0	6339.00	0.92%	99.231	%
Y RADIAL	4696.6	34.45	0.73%	98.66	%
Ag 328.068†	19564.3	38.44	0.20%	[100]	ug/L
As 188.979†	190.4	4.23	2.22%	[100]	ug/L
B 249.677†	3436.9	15.41	0.45%	[100]	ug/L
Ba 233.527†	10947.2	10.95	0.10%	[100]	ug/L
Be 313.107†	238506.3	20.75	0.01%	[100]	ug/L
Cd 226.502†	6877.8	74.92	1.09%	[100]	ug/L
Co 228.616†	3965.6	49.63	1.25%	[100]	ug/L
Cr 267.716†	7606.6	2.55	0.03%	[100]	ug/L
Cu 324.752†	30616.3	45.95	0.15%	[100]	ug/L
K 766.490 Radial†	5302.5	160.89	3.03%	[1000]	ug/L
Mn 257.610†	78720.1	73.87	0.09%	[100]	ug/L
Mo 202.031†	1139.9	11.27	0.99%	[100]	ug/L
Ni 231.604†	3210.5	47.86	1.49%	[100]	ug/L
P 214.914†	670.0	3.47	0.52%	[500]	ug/L
Pb 220.353†	672.8	18.46	2.74%	[100]	ug/L
S 181.975 Axial†	113.9	3.97	3.49%	[200]	ug/L
Sb 206.836†	239.0	5.88	2.46%	[100]	ug/L
Se 196.026†	120.8	5.83	4.83%	[100]	ug/L
Si 251.611†	13288.7	43.81	0.33%	[500]	ug/L
Sn 189.927†	441.1	4.43	1.00%	[100]	ug/L
Sr 421.552†	12314.1	25.41	0.21%	[100]	ug/L
Ti 334.940†	58051.8	34.72	0.06%	[100]	ug/L
Tl 190.801†	264.5	1.66	0.63%	[100]	ug/L
U 409.014†	3546.4	59.46	1.68%	[100]	ug/L
V 292.402†	12556.8	17.06	0.14%	[100]	ug/L
Zn 213.857†	8430.0	20.23	0.24%	[100]	ug/L
SiO2†	13163.2	281.55	2.14%	[1069.5]	ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 3/19/2010 07:23:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Analysis Time
1	Sc Radial	4176.8	4176.8	95.0	%	07:26:01
1	Y RADIAL	4651.6	4651.6	97.71	%	07:25:41
1	Al 396.153Radial†	4914.3	5249.1	[5000]	ug/L	07:25:41
1	Ca 317.933Radial†	2634.9	2756.9	[5000]	ug/L	07:26:01
1	K 766.490 Radial†	28253.2	27130.7	[5000]	ug/L	07:25:41
1	Mg 279.077 IEC†	121.5	126.4	[5000]	ug/L	07:26:01
1	Sr 421.552†	60226.2	63352.3	[500]	ug/L	07:25:41
1	Sc 361.383	821637.6	821637.6	100.34	%	07:26:58
1	Y 371.029	685019.0	685019.0	99.042	%	07:26:58
1	Ag 328.068†	98692.4	98169.4	[500]	ug/L	07:27:03
1	As 188.979†	887.8	911.5	[500]	ug/L	07:27:23
1	B 249.677†	17522.6	18000.0	[500]	ug/L	07:27:03
1	Ba 233.527†	54446.1	54260.5	[500]	ug/L	07:27:03
1	Be 313.107†	1185449.4	1185122.2	[500]	ug/L	07:26:58
1	Cd 226.502†	35110.5	35160.9	[500]	ug/L	07:27:03
1	Co 228.616†	20009.0	19986.7	[500]	ug/L	07:27:03
1	Cr 267.716†	38103.4	37901.5	[500]	ug/L	07:27:03
1	Cu 324.752†	159261.1	153163.9	[500]	ug/L	07:27:03
1	Mn 257.610†	382996.5	381296.3	[500]	ug/L	07:26:58
1	Mo 202.031†	5661.9	5634.0	[500]	ug/L	07:27:23
1	Ni 231.604†	16362.9	16222.8	[500]	ug/L	07:27:03
1	P 214.914†	3554.2	3354.8	[2500]	ug/L	07:27:23
1	Pb 220.353†	3215.7	3263.0	[500]	ug/L	07:27:23
1	S 181.975 Axial†	589.7	557.5	[1000]	ug/L	07:27:23
1	Sb 206.836†	1218.1	1190.2	[500]	ug/L	07:27:23
1	Se 196.026†	576.1	591.1	[500]	ug/L	07:27:23
1	Si 251.611†	67712.5	66992.5	[2500]	ug/L	07:27:03
1	Sn 189.927†	2220.6	2205.8	[500]	ug/L	07:27:23
1	Ti 334.940†	286976.2	287114.9	[500]	ug/L	07:27:03
1	Tl 190.801†	1277.6	1302.4	[500]	ug/L	07:27:23
1	U 409.014†	14882.9	17036.1	[500]	ug/L	07:27:03
1	V 292.402†	62512.7	63616.1	[500]	ug/L	07:27:03
1	Zn 213.857†	42904.3	42187.4	[500]	ug/L	07:27:03
1	SiO2†	66118.3	65392.6	[5347.5]	ug/L	07:28:31
2	Sc Radial	4187.9	4187.9	95.3	%	07:26:26
2	Y RADIAL	4622.9	4622.9	97.11	%	07:26:06
2	Al 396.153Radial†	4898.9	5219.3	[5000]	ug/L	07:26:06
2	Ca 317.933Radial†	2632.3	2746.8	[5000]	ug/L	07:26:26
2	K 766.490 Radial†	28051.2	26840.0	[5000]	ug/L	07:26:06
2	Mg 279.077 IEC†	123.8	128.4	[5000]	ug/L	07:26:26
2	Sr 421.552†	59628.2	62556.9	[500]	ug/L	07:26:06
2	Sc 361.383	825022.8	825022.8	100.76	%	07:27:29
2	Y 371.029	687439.8	687439.8	99.392	%	07:27:29
2	Ag 328.068†	97697.4	96778.3	[500]	ug/L	07:27:34
2	As 188.979†	890.6	910.7	[500]	ug/L	07:27:54
2	B 249.677†	17330.0	17737.2	[500]	ug/L	07:27:34
2	Ba 233.527†	53830.4	53426.7	[500]	ug/L	07:27:34
2	Be 313.107†	1189558.3	1184352.8	[500]	ug/L	07:27:29
2	Cd 226.502†	34616.6	34527.2	[500]	ug/L	07:27:34
2	Co 228.616†	19815.7	19713.0	[500]	ug/L	07:27:34
2	Cr 267.716†	37703.7	37349.0	[500]	ug/L	07:27:34
2	Cu 324.752†	157566.2	150830.5	[500]	ug/L	07:27:34
2	Mn 257.610†	384618.0	381339.5	[500]	ug/L	07:27:29
2	Mo 202.031†	5644.3	5593.4	[500]	ug/L	07:27:54
2	Ni 231.604†	16177.2	15971.6	[500]	ug/L	07:27:34
2	P 214.914†	3569.2	3355.1	[2500]	ug/L	07:27:54
2	Pb 220.353†	3211.8	3245.9	[500]	ug/L	07:27:54
2	S 181.975 Axial†	589.2	554.6	[1000]	ug/L	07:27:54
2	Sb 206.836†	1221.4	1188.5	[500]	ug/L	07:27:54

2	Se 196.026†	590.5	603.1	[500]	ug/L	07:27:54
2	Si 251.611†	66983.6	65992.2	[2500]	ug/L	07:27:34
2	Sn 189.927†	2206.0	2182.2	[500]	ug/L	07:27:54
2	Ti 334.940†	284172.9	283159.3	[500]	ug/L	07:27:34
2	Tl 190.801†	1271.4	1291.0	[500]	ug/L	07:27:54
2	U 409.014†	14780.1	16873.3	[500]	ug/L	07:27:34
2	V 292.402†	61704.6	62558.5	[500]	ug/L	07:27:34
2	Zn 213.857†	42493.9	41604.6	[500]	ug/L	07:27:34
2	SiO2†	66791.9	65790.8	[5347.5]	ug/L	07:28:36
3	Sc Radial	4203.5	4203.5	95.6	%	07:26:51
3	Y RADIAL	4694.9	4694.9	98.62	%	07:26:31
3	Al 396.153Radial†	4935.9	5239.0	[5000]	ug/L	07:26:31
3	Ca 317.933Radial†	2631.7	2735.9	[5000]	ug/L	07:26:51
3	K 766.490 Radial†	28217.2	26904.4	[5000]	ug/L	07:26:31
3	Mg 279.077 IEC†	124.5	128.6	[5000]	ug/L	07:26:51
3	Sr 421.552†	60103.1	62821.5	[500]	ug/L	07:26:31
3	Sc 361.383	826571.9	826571.9	100.95	%	07:28:00
3	Y 371.029	687898.7	687898.7	99.458	%	07:28:00
3	Ag 328.068†	99152.7	98038.2	[500]	ug/L	07:28:05
3	As 188.979†	889.6	908.1	[500]	ug/L	07:28:25
3	B 249.677†	17693.7	18065.2	[500]	ug/L	07:28:05
3	Ba 233.527†	54817.6	54304.6	[500]	ug/L	07:28:05
3	Be 313.107†	1190349.2	1182923.6	[500]	ug/L	07:28:00
3	Cd 226.502†	35274.6	35114.6	[500]	ug/L	07:28:05
3	Co 228.616†	20091.0	19948.9	[500]	ug/L	07:28:05
3	Cr 267.716†	38295.2	37864.7	[500]	ug/L	07:28:05
3	Cu 324.752†	160283.3	153229.1	[500]	ug/L	07:28:05
3	Mn 257.610†	385572.6	381569.8	[500]	ug/L	07:28:00
3	Mo 202.031†	5688.1	5626.2	[500]	ug/L	07:28:25
3	Ni 231.604†	16456.1	16217.8	[500]	ug/L	07:28:05
3	P 214.914†	3559.1	3338.4	[2500]	ug/L	07:28:25
3	Pb 220.353†	3226.6	3254.6	[500]	ug/L	07:28:25
3	S 181.975 Axial†	594.2	558.4	[1000]	ug/L	07:28:25
3	Sb 206.836†	1241.9	1206.6	[500]	ug/L	07:28:25
3	Se 196.026†	590.7	602.1	[500]	ug/L	07:28:25
3	Si 251.611†	68168.0	67040.9	[2500]	ug/L	07:28:05
3	Sn 189.927†	2212.7	2184.8	[500]	ug/L	07:28:25
3	Ti 334.940†	289122.7	287534.1	[500]	ug/L	07:28:05
3	Tl 190.801†	1277.8	1294.9	[500]	ug/L	07:28:25
3	U 409.014†	15107.2	17169.8	[500]	ug/L	07:28:05
3	V 292.402†	62733.4	63462.9	[500]	ug/L	07:28:05
3	Zn 213.857†	43215.4	42240.3	[500]	ug/L	07:28:05
3	SiO2†	66865.0	65739.0	[5347.5]	ug/L	07:28:41

Mean Data: S0.5

Analyte	Mean Corrected			Calib	
	Intensity	Std.Dev.	RSD	Conc.	Units
Sc 361.383	824410.7	2523.46	0.31%	100.68	%
Sc Radial	4189.4	13.40	0.32%	95.3	%
Y 371.029	686785.8	1547.25	0.23%	99.297	%
Y RADIAL	4656.5	36.25	0.78%	97.81	%
Ag 328.068†	97662.0	768.09	0.79%	[500]	ug/L
Al 396.153Radial†	5235.8	15.16	0.29%	[5000]	ug/L
As 188.979†	910.1	1.80	0.20%	[500]	ug/L
B 249.677†	17934.1	173.65	0.97%	[500]	ug/L
Ba 233.527†	53997.2	494.58	0.92%	[500]	ug/L
Be 313.107†	1184132.9	1115.71	0.09%	[500]	ug/L
Ca 317.933Radial†	2746.5	10.52	0.38%	[5000]	ug/L
Cd 226.502†	34934.2	353.27	1.01%	[500]	ug/L
Co 228.616†	19882.9	148.31	0.75%	[500]	ug/L
Cr 267.716†	37705.1	308.91	0.82%	[500]	ug/L
Cu 324.752†	152407.8	1366.39	0.90%	[500]	ug/L
K 766.490 Radial†	26958.4	152.71	0.57%	[5000]	ug/L
Mg 279.077 IEC†	127.8	1.24	0.97%	[5000]	ug/L
Mn 257.610†	381401.8	147.04	0.04%	[500]	ug/L
Mo 202.031†	5617.9	21.56	0.38%	[500]	ug/L
Ni 231.604†	16137.4	143.62	0.89%	[500]	ug/L
P 214.914†	3349.4	9.54	0.28%	[2500]	ug/L
Pb 220.353†	3254.5	8.54	0.26%	[500]	ug/L
S 181.975 Axial†	556.8	1.98	0.36%	[1000]	ug/L

Sb 206.836†	1195.1	9.96	0.83%	[500] ug/L
Se 196.026†	598.8	6.64	1.11%	[500] ug/L
Si 251.611†	66675.2	592.00	0.89%	[2500] ug/L
Sn 189.927†	2190.9	12.95	0.59%	[500] ug/L
Sr 421.552†	62910.2	405.09	0.64%	[500] ug/L
Ti 334.940†	285936.1	2413.92	0.84%	[500] ug/L
Tl 190.801†	1296.1	5.78	0.45%	[500] ug/L
U 409.014†	17026.4	148.49	0.87%	[500] ug/L
V 292.402†	63212.5	571.55	0.90%	[500] ug/L
Zn 213.857†	42010.8	352.73	0.84%	[500] ug/L
SiO2†	65640.8	216.53	0.33%	[5347.5] ug/L

Sequence No.: 4

Sample ID: SCAL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 4

Date Collected: 3/19/2010 07:30:51

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: SCAL

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Analysis Time
1	Sc Radial	4344.4	4344.4	98.8 %	07:32:44
1	Y RADIAL	4668.8	4668.8	98.07 %	07:32:44
1	Al 396.153Radial†	9900.0	10093.5	[10000] ug/L	07:32:44
1	Ca 317.933Radial†	5333.2	5379.7	[10000] ug/L	07:32:44
1	Fe 238.204 Radial†	855.1	856.7	[10000] ug/L	07:33:04
1	K 766.490 Radial†	54124.1	52156.7	[10000] ug/L	07:32:44
1	Mg 279.077 IEC†	245.6	246.9	[10000] ug/L	07:33:04
1	Na 589.592 Radial†	26296.6	27478.5	[10000] ug/L	07:32:44
1	Sr 421.552†	122992.3	124406.1	[1000] ug/L	07:32:44
1	Sc 361.383	819368.6	819368.6	100.07 %	07:34:03
1	Y 371.029	681762.9	681762.9	98.571 %	07:34:03
1	Ag 328.068†	192124.2	191811.5	[1000] ug/L	07:34:03
1	As 188.979†	1787.9	1813.5	[1000] ug/L	07:34:23
1	B 249.677†	35038.7	35552.8	[1000] ug/L	07:34:03
1	Ba 233.527†	106549.2	106479.2	[1000] ug/L	07:34:03
1	Be 313.107†	2343163.6	2345339.4	[1000] ug/L	07:34:03
1	Cd 226.502†	68574.5	68699.6	[1000] ug/L	07:34:03
1	Co 228.616†	38220.4	38241.3	[1000] ug/L	07:34:23
1	Cr 267.716†	74436.4	74315.5	[1000] ug/L	07:34:03
1	Cu 324.752†	307593.6	301837.4	[1000] ug/L	07:34:03
1	Mn 257.610†	760183.6	759290.0	[1000] ug/L	07:34:03
1	Mo 202.031†	11214.5	11198.6	[1000] ug/L	07:34:23
1	Ni 231.604†	31271.9	31167.1	[1000] ug/L	07:34:23
1	P 214.914†	6883.9	6692.0	[5000] ug/L	07:34:23
1	Pb 220.353†	6420.7	6474.7	[1000] ug/L	07:34:23
1	S 181.975 Axial†	1148.2	1117.2	[2000] ug/L	07:34:23
1	Sb 206.836†	2390.0	2364.7	[1000] ug/L	07:34:23
1	Se 196.026†	1177.1	1193.2	[1000] ug/L	07:34:23
1	Si 251.611†	131710.3	131134.7	[5000] ug/L	07:34:03
1	Sn 189.927†	4409.0	4398.9	[1000] ug/L	07:34:23
1	Ti 334.940†	574509.8	575249.8	[1000] ug/L	07:34:03
1	Tl 190.801†	2539.4	2566.8	[1000] ug/L	07:34:23
1	U 409.014†	30310.0	32494.1	[1000] ug/L	07:34:03
1	V 292.402†	123779.9	125015.2	[1000] ug/L	07:34:03
1	Zn 213.857†	82765.8	82140.8	[1000] ug/L	07:34:03
1	SiO2†	132053.9	131467.0	[10695] ug/L	07:35:24
2	Sc Radial	4357.0	4357.0	99.1 %	07:33:09
2	Y RADIAL	4710.6	4710.6	98.95 %	07:33:09
2	Al 396.153Radial†	9962.0	10127.1	[10000] ug/L	07:33:09
2	Ca 317.933Radial†	5341.3	5372.3	[10000] ug/L	07:33:09
2	Fe 238.204 Radial†	854.5	853.6	[10000] ug/L	07:33:29
2	K 766.490 Radial†	54185.4	52060.1	[10000] ug/L	07:33:09
2	Mg 279.077 IEC†	247.3	247.9	[10000] ug/L	07:33:29
2	Na 589.592 Radial†	26245.8	27350.2	[10000] ug/L	07:33:09
2	Sr 421.552†	123608.6	124667.8	[1000] ug/L	07:33:09
2	Sc 361.383	825030.9	825030.9	100.76 %	07:34:31
2	Y 371.029	685551.0	685551.0	99.119 %	07:34:31
2	Ag 328.068†	193526.5	191885.6	[1000] ug/L	07:34:31
2	As 188.979†	1800.1	1813.4	[1000] ug/L	07:34:51
2	B 249.677†	35389.2	35660.3	[1000] ug/L	07:34:31
2	Ba 233.527†	107337.0	106530.3	[1000] ug/L	07:34:31
2	Be 313.107†	2360060.0	2346038.1	[1000] ug/L	07:34:31
2	Cd 226.502†	69252.4	68902.1	[1000] ug/L	07:34:31
2	Co 228.616†	38675.7	38431.0	[1000] ug/L	07:34:51
2	Cr 267.716†	75156.9	74520.0	[1000] ug/L	07:34:31
2	Cu 324.752†	310179.0	302293.8	[1000] ug/L	07:34:31
2	Mn 257.610†	766947.4	760789.2	[1000] ug/L	07:34:31
2	Mo 202.031†	11357.1	11263.1	[1000] ug/L	07:34:51
2	Ni 231.604†	31613.1	31291.2	[1000] ug/L	07:34:51

2	P 214.914†	6950.8	6711.2	[5000]	ug/L	07:34:51
2	Pb 220.353†	6501.7	6511.1	[1000]	ug/L	07:34:51
2	S 181.975 Axial†	1154.9	1116.1	[2000]	ug/L	07:34:51
2	Sb 206.836†	2442.5	2400.4	[1000]	ug/L	07:34:51
2	Se 196.026†	1199.8	1207.7	[1000]	ug/L	07:34:51
2	Si 251.611†	132902.2	131414.3	[5000]	ug/L	07:34:31
2	Sn 189.927†	4443.2	4402.6	[1000]	ug/L	07:34:51
2	Ti 334.940†	579279.1	576042.9	[1000]	ug/L	07:34:31
2	Tl 190.801†	2581.0	2590.7	[1000]	ug/L	07:34:51
2	U 409.014†	30791.4	32764.0	[1000]	ug/L	07:34:31
2	V 292.402†	124696.3	125075.7	[1000]	ug/L	07:34:31
2	Zn 213.857†	83432.2	82234.5	[1000]	ug/L	07:34:31
2	SiO2†	132062.1	130569.4	[10695]	ug/L	07:35:29
3	Sc Radial	4286.2	4286.2	97.5	%	07:33:35
3	Y RADIAL	4648.8	4648.8	97.65	%	07:33:35
3	Al 396.153Radial†	9858.2	10186.7	[10000]	ug/L	07:33:35
3	Ca 317.933Radial†	5285.1	5403.6	[10000]	ug/L	07:33:35
3	Fe 238.204 Radial†	857.4	870.7	[10000]	ug/L	07:33:55
3	K 766.490 Radial†	53393.5	52151.0	[10000]	ug/L	07:33:35
3	Mg 279.077 IEC†	248.5	253.3	[10000]	ug/L	07:33:55
3	Na 589.592 Radial†	25596.1	27121.3	[10000]	ug/L	07:33:35
3	Sr 421.552†	121376.4	124438.7	[1000]	ug/L	07:33:35
3	Sc 361.383	819528.5	819528.5	100.09	%	07:34:58
3	Y 371.029	680490.9	680490.9	98.387	%	07:34:58
3	Ag 328.068†	192351.3	192001.0	[1000]	ug/L	07:34:58
3	As 188.979†	1810.4	1835.6	[1000]	ug/L	07:35:18
3	B 249.677†	35087.9	35595.1	[1000]	ug/L	07:34:58
3	Ba 233.527†	106371.3	106280.7	[1000]	ug/L	07:34:58
3	Be 313.107†	2336429.7	2338154.4	[1000]	ug/L	07:34:58
3	Cd 226.502†	68339.3	68451.2	[1000]	ug/L	07:34:58
3	Co 228.616†	38543.9	38557.0	[1000]	ug/L	07:35:18
3	Cr 267.716†	74336.2	74200.8	[1000]	ug/L	07:34:58
3	Cu 324.752†	308824.8	303007.6	[1000]	ug/L	07:34:58
3	Mn 257.610†	760159.6	759117.9	[1000]	ug/L	07:34:58
3	Mo 202.031†	11311.6	11293.3	[1000]	ug/L	07:35:18
3	Ni 231.604†	31511.2	31400.1	[1000]	ug/L	07:35:18
3	P 214.914†	6937.1	6743.8	[5000]	ug/L	07:35:18
3	Pb 220.353†	6481.7	6534.5	[1000]	ug/L	07:35:18
3	S 181.975 Axial†	1151.4	1120.2	[2000]	ug/L	07:35:18
3	Sb 206.836†	2431.5	2405.7	[1000]	ug/L	07:35:18
3	Se 196.026†	1185.9	1201.9	[1000]	ug/L	07:35:18
3	Si 251.611†	131907.0	131305.6	[5000]	ug/L	07:34:58
3	Sn 189.927†	4448.1	4437.1	[1000]	ug/L	07:35:18
3	Ti 334.940†	575356.7	575983.9	[1000]	ug/L	07:34:58
3	Tl 190.801†	2562.9	2589.7	[1000]	ug/L	07:35:18
3	U 409.014†	30555.8	32733.8	[1000]	ug/L	07:34:58
3	V 292.402†	123490.0	124701.4	[1000]	ug/L	07:34:58
3	Zn 213.857†	82686.9	82045.8	[1000]	ug/L	07:34:58
3	SiO2†	131524.8	130912.6	[10695]	ug/L	07:35:34

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	821309.3	3223.93	0.39%	100.30 %
Sc Radial	4329.2	37.77	0.87%	98.5 %
Y 371.029	682601.6	2632.21	0.39%	98.692 %
Y RADIAL	4676.1	31.56	0.67%	98.22 %
Ag 328.068†	191899.4	95.49	0.05%	[1000] ug/L
Al 396.153Radial†	10135.8	47.17	0.47%	[10000] ug/L
As 188.979†	1820.9	12.80	0.70%	[1000] ug/L
B 249.677†	35602.8	54.15	0.15%	[1000] ug/L
Ba 233.527†	106430.1	131.89	0.12%	[1000] ug/L
Be 313.107†	2343177.3	4363.95	0.19%	[1000] ug/L
Ca 317.933Radial†	5385.2	16.38	0.30%	[10000] ug/L
Cd 226.502†	68684.3	225.84	0.33%	[1000] ug/L
Co 228.616†	38409.7	158.92	0.41%	[1000] ug/L
Cr 267.716†	74345.5	161.70	0.22%	[1000] ug/L
Cu 324.752†	302379.6	589.80	0.20%	[1000] ug/L
Fe 238.204 Radial†	860.3	9.13	1.06%	[10000] ug/L
K 766.490 Radial†	52122.6	54.20	0.10%	[10000] ug/L

Mg 279.077 IEC†	249.4	3.39	1.36%	[10000]	ug/L
Mn 257.610†	759732.4	919.29	0.12%	[1000]	ug/L
Mo 202.031†	11251.7	48.40	0.43%	[1000]	ug/L
Na 589.592 Radial†	27316.7	180.92	0.66%	[10000]	ug/L
Ni 231.604†	31286.1	116.56	0.37%	[1000]	ug/L
P 214.914†	6715.7	26.19	0.39%	[5000]	ug/L
Pb 220.353†	6506.8	30.09	0.46%	[1000]	ug/L
S 181.975 Axial†	1117.8	2.14	0.19%	[2000]	ug/L
Sb 206.836†	2390.3	22.30	0.93%	[1000]	ug/L
Se 196.026†	1201.0	7.29	0.61%	[1000]	ug/L
Si 251.611†	131284.9	140.98	0.11%	[5000]	ug/L
Sn 189.927†	4412.9	21.08	0.48%	[1000]	ug/L
Sr 421.552†	124504.2	142.63	0.11%	[1000]	ug/L
Ti 334.940†	575758.8	441.87	0.08%	[1000]	ug/L
Tl 190.801†	2582.4	13.54	0.52%	[1000]	ug/L
U 409.014†	32663.9	147.89	0.45%	[1000]	ug/L
V 292.402†	124930.8	200.93	0.16%	[1000]	ug/L
Zn 213.857†	82140.4	94.36	0.11%	[1000]	ug/L
SiO2†	130983.0	452.91	0.35%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/19/2010 07:37:45
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4263.0	4263.0	97.0 %		07:39:59
1	Y RADIAL	4575.6	4575.6	96.11 %		07:39:59
1	Al 396.153Radial†	49831.2	51453.0	[50000] ug/L		07:39:39
1	Ca 317.933Radial†	25954.1	26742.4	[50000] ug/L		07:39:39
1	Fe 238.204 Radial†	1687.7	1731.5	[20000] ug/L		07:39:59
1	Mg 279.077 IEC†	1178.7	1213.7	[50000] ug/L		07:39:59
1	Na 589.592 Radial†	55567.4	58164.0	[20000] ug/L		07:39:39
1	Sc 361.383	789692.1	789692.1	96.442 %		07:40:56
1	Y 371.029	653528.4	653528.4	94.489 %		07:40:56
2	Sc Radial	4290.8	4290.8	97.6 %		07:40:24
2	Y RADIAL	4619.8	4619.8	97.04 %		07:40:24
2	Al 396.153Radial†	48689.3	49950.4	[50000] ug/L		07:40:04
2	Ca 317.933Radial†	25266.7	25864.9	[50000] ug/L		07:40:04
2	Fe 238.204 Radial†	1692.1	1724.8	[20000] ug/L		07:40:24
2	Mg 279.077 IEC†	1181.2	1208.4	[50000] ug/L		07:40:24
2	Na 589.592 Radial†	54008.3	56195.6	[20000] ug/L		07:40:04
2	Sc 361.383	793240.2	793240.2	96.875 %		07:41:02
2	Y 371.029	656699.3	656699.3	94.947 %		07:41:02
2	Sc Radial	4280.8	4280.8	97.4 %		07:40:49
3	Y RADIAL	4602.7	4602.7	96.68 %		07:40:49
3	Al 396.153Radial†	49877.2	51287.3	[50000] ug/L		07:40:29
3	Ca 317.933Radial†	25897.8	26573.7	[50000] ug/L		07:40:29
3	Fe 238.204 Radial†	1689.6	1726.2	[20000] ug/L		07:40:49
3	Mg 279.077 IEC†	1178.0	1207.9	[50000] ug/L		07:40:49
3	Na 589.592 Radial†	55072.5	57418.3	[20000] ug/L		07:40:29
3	Sc 361.383	800906.3	800906.3	97.812 %		07:41:07
3	Y 371.029	662694.7	662694.7	95.814 %		07:41:07

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc. Units	Calib
Sc 361.383	794612.9	5731.76	0.72%	97.043 %	
Sc Radial	4278.2	14.08	0.33%	97.3 %	
Y 371.029	657640.8	4655.12	0.71%	95.083 %	
Y RADIAL	4599.4	22.30	0.48%	96.61 %	
Al 396.153Radial†	50896.9	823.85	1.62%	[50000] ug/L	
Ca 317.933Radial†	26393.7	465.66	1.76%	[50000] ug/L	
Fe 238.204 Radial†	1727.5	3.53	0.20%	[20000] ug/L	
Mg 279.077 IEC†	1210.0	3.21	0.27%	[50000] ug/L	
Na 589.592 Radial†	57259.3	993.78	1.74%	[20000] ug/L	

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	192.6	0.00000	0.999974	
Al 396.153Radial	3	Lin Thru 0	0.0	1.018	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	1.821	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	35.65	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	106.8	0.00000	0.999980	
Be 313.107	3	Lin Thru 0	0.0	2348	0.00000	0.999990	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5285	0.00000	0.999985	
Cd 226.502	3	Lin Thru 0	0.0	68.92	0.00000	0.999977	
Co 228.616	3	Lin Thru 0	0.0	38.69	0.00000	0.999900	
Cr 267.716	3	Lin Thru 0	0.0	74.57	0.00000	0.999982	
Cu 324.752	3	Lin Thru 0	0.0	302.9	0.00000	0.999994	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0863	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.249	0.00000	0.999907	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0242	0.00000	0.999969
Mn 257.610	3	Lin Thru 0	0.0	760.6	0.00000	0.999994
Mo 202.031	3	Lin Thru 0	0.0	11.25	0.00000	0.999999
Na 589.592 Radia	2	Lin Thru 0	0.0	2.837	0.00000	0.999829
Ni 231.604	3	Lin Thru 0	0.0	31.49	0.00000	0.999920
P 214.914	3	Lin Thru 0	0.0	1.342	0.00000	0.999999
Pb 220.353	3	Lin Thru 0	0.0	6.509	0.00000	0.999995
S 181.975 Axial	3	Lin Thru 0	0.0	0.5586	0.00000	0.999997
Sb 206.836	3	Lin Thru 0	0.0	2.390	0.00000	1.000000
Se 196.026	3	Lin Thru 0	0.0	1.200	0.00000	0.999999
Si 251.611	3	Lin Thru 0	0.0	26.34	0.00000	0.999980
Sn 189.927	3	Lin Thru 0	0.0	4.407	0.00000	0.999996
Sr 421.552	3	Lin Thru 0	0.0	124.8	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	575.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	2.585	0.00000	0.999997
U 409.014	3	Lin Thru 0	0.0	32.96	0.00000	0.999836
V 292.402	3	Lin Thru 0	0.0	125.2	0.00000	0.999989
Zn 213.857	3	Lin Thru 0	0.0	82.53	0.00000	0.999957
SiO2	3	Lin Thru 0	0.0	12.25	0.00000	1.000000

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/19/2010 07:43:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4236.5	4236.5	96.4 %		07:45:31
1	Y RADIAL	4746.7	4746.7	99.71 %		07:45:11
1	Al 396.153Radial†	5043.7	5310.7	5190.6 ug/L	5190.6 ppb	07:45:11
1	Ca 317.933Radial†	2646.9	2730.3	5166.3 ug/L	5166.3 ppb	07:45:31
1	Fe 238.204 Radial†	443.6	451.8	5249.8 ug/L	5249.8 ppb	07:45:31
1	K 766.490 Radial†	15378.7	13355.8	2541.1 ug/L	2541.1 ppb	07:45:11
1	Mg 279.077 IEC†	129.9	133.2	5494.7 ug/L	5494.7 ppb	07:45:31
1	Na 589.592 Radial†	5945.3	7043.0	2482.8 ug/L	2482.8 ppb	07:45:11
1	Sr 421.552†	65683.4	68121.9	546.01 ug/L	546.01 ppb	07:45:11
1	Sc 361.383	828020.8	828020.8	101.12 %		07:46:29
1	Y 371.029	691853.4	691853.4	100.03 %		07:46:29
1	Ag 328.068†	50281.0	49537.5	260.39 ug/L	260.39 ppb	07:46:29
1	As 188.979†	842.0	859.4	476.13 ug/L	476.13 ppb	07:46:49
1	B 249.677†	18333.9	18667.6	521.37 ug/L	521.37 ppb	07:46:29
1	Ba 233.527†	55293.2	54679.8	513.44 ug/L	513.44 ppb	07:46:29
1	Be 313.107†	620824.3	617660.4	264.14 ug/L	264.14 ppb	07:46:29
1	Cd 226.502†	34825.2	34609.1	502.04 ug/L	502.04 ppb	07:46:29
1	Co 228.616†	20188.0	20010.0	517.35 ug/L	517.35 ppb	07:46:29
1	Cr 267.716†	37007.0	36524.5	490.87 ug/L	490.87 ppb	07:46:29
1	Cu 324.752†	161407.2	154062.6	508.63 ug/L	508.63 ppb	07:46:29
1	Mn 257.610†	397858.6	393050.9	517.08 ug/L	517.08 ppb	07:46:29
1	Mo 202.031†	6082.7	6006.6	534.40 ug/L	534.40 ppb	07:46:49
1	Ni 231.604†	16297.5	16032.5	508.84 ug/L	508.84 ppb	07:46:29
1	P 214.914†	3585.3	3358.2	2402.7 ug/L	2402.7 ppb	07:46:49
1	Pb 220.353†	3230.6	3253.0	501.29 ug/L	501.29 ppb	07:46:49
1	S 181.975 Axial†	1435.1	1389.0	2485.7 ug/L	2485.7 ppb	07:46:49
1	Sb 206.836†	1237.1	1199.7	521.16 ug/L	521.16 ppb	07:46:49
1	Se 196.026†	3117.5	3099.8	2600.8 ug/L	2600.8 ppb	07:46:49
1	Si 251.611†	132565.1	130604.6	4951.6 ug/L	4951.6 ppb	07:46:29
1	Sn 189.927†	2396.2	2362.4	536.72 ug/L	536.72 ppb	07:46:49
1	Ti 334.940†	289993.6	287894.1	500.51 ug/L	500.51 ppb	07:46:29
1	Tl 190.801†	1336.3	1350.6	525.90 ug/L	525.90 ppb	07:46:49
1	U 409.014†	14608.3	16650.2	503.45 ug/L	503.45 ppb	07:46:29
1	V 292.402†	63227.7	63842.9	516.94 ug/L	516.94 ppb	07:46:29
1	Zn 213.857†	43406.0	42353.9	508.47 ug/L	508.47 ppb	07:46:29
1	SiO2†	131517.0	129557.0	10559 ug/L	10559 ppb	07:47:47
2	Sc Radial	4236.2	4236.2	96.4 %		07:45:57
2	Y RADIAL	4735.0	4735.0	99.46 %		07:45:37
2	Al 396.153Radial†	5034.3	5301.2	5181.0 ug/L	5181.0 ppb	07:45:37
2	Ca 317.933Radial†	2653.7	2737.5	5180.0 ug/L	5180.0 ppb	07:45:57
2	Fe 238.204 Radial†	444.4	452.6	5259.7 ug/L	5259.7 ppb	07:45:57
2	K 766.490 Radial†	15389.8	13368.3	2543.5 ug/L	2543.5 ppb	07:45:37
2	Mg 279.077 IEC†	128.0	131.2	5414.3 ug/L	5414.3 ppb	07:45:57
2	Na 589.592 Radial†	5861.5	6956.4	2452.3 ug/L	2452.3 ppb	07:45:37
2	Sr 421.552†	65138.0	67560.5	541.51 ug/L	541.51 ppb	07:45:37
2	Sc 361.383	820882.8	820882.8	100.25 %		07:46:55
2	Y 371.029	687024.5	687024.5	99.332 %		07:46:55
2	Ag 328.068†	49859.0	49548.8	260.46 ug/L	260.46 ppb	07:46:55
2	As 188.979†	857.3	882.0	488.48 ug/L	488.48 ppb	07:47:15
2	B 249.677†	18074.8	18566.8	518.55 ug/L	518.55 ppb	07:46:55
2	Ba 233.527†	54807.3	54670.6	513.35 ug/L	513.35 ppb	07:46:55
2	Be 313.107†	615521.6	617709.5	264.16 ug/L	264.16 ppb	07:46:55
2	Cd 226.502†	34435.0	34519.3	500.74 ug/L	500.74 ppb	07:46:55
2	Co 228.616†	19937.1	19933.4	515.39 ug/L	515.39 ppb	07:46:55
2	Cr 267.716†	36766.8	36603.1	491.93 ug/L	491.93 ppb	07:46:55
2	Cu 324.752†	159435.0	153483.3	506.73 ug/L	506.73 ppb	07:46:55
2	Mn 257.610†	393797.0	392420.7	516.26 ug/L	516.26 ppb	07:46:55
2	Mo 202.031†	6112.4	6088.6	541.69 ug/L	541.69 ppb	07:47:15
2	Ni 231.604†	16226.6	16101.8	511.04 ug/L	511.04 ppb	07:46:55

2	P 214.914†	3616.6	3420.3	2449.3 ug/L	2449.3 ppb	07:47:15
2	Pb 220.353†	3236.1	3286.3	506.43 ug/L	506.43 ppb	07:47:15
2	S 181.975 Axial†	1446.8	1413.0	2528.5 ug/L	2528.5 ppb	07:47:15
2	Sb 206.836†	1247.3	1220.5	530.13 ug/L	530.13 ppb	07:47:15
2	Se 196.026†	3136.4	3145.5	2638.9 ug/L	2638.9 ppb	07:47:15
2	Si 251.611†	131086.9	130270.1	4938.8 ug/L	4938.8 ppb	07:46:55
2	Sn 189.927†	2402.1	2388.9	542.72 ug/L	542.72 ppb	07:47:15
2	Ti 334.940†	287075.9	287477.4	499.80 ug/L	499.80 ppb	07:46:55
2	Tl 190.801†	1363.4	1389.1	540.79 ug/L	540.79 ppb	07:47:15
2	U 409.014†	14162.5	16331.2	493.76 ug/L	493.76 ppb	07:46:55
2	V 292.402†	62608.2	63768.7	516.43 ug/L	516.43 ppb	07:46:55
2	Zn 213.857†	42973.0	42295.1	507.75 ug/L	507.75 ppb	07:46:55
2	SiO2†	129984.9	129159.7	10526 ug/L	10526 ppb	07:47:52
3	Sc Radial	4249.4	4249.4	96.7 %		07:46:22
3	Y RADIAL	4742.6	4742.6	99.62 %		07:46:02
3	Al 396.153Radial†	5051.7	5303.0	5183.1 ug/L	5183.1 ppb	07:46:02
3	Ca 317.933Radial†	2658.2	2733.6	5172.6 ug/L	5172.6 ppb	07:46:22
3	Fe 238.204 Radial†	442.5	449.2	5220.7 ug/L	5220.7 ppb	07:46:22
3	K 766.490 Radial†	15649.2	13587.0	2585.2 ug/L	2585.2 ppb	07:46:02
3	Mg 279.077 IEC†	128.5	131.3	5417.7 ug/L	5417.7 ppb	07:46:22
3	Na 589.592 Radial†	5869.2	6945.6	2448.5 ug/L	2448.5 ppb	07:46:02
3	Sr 421.552†	65487.0	67711.5	542.72 ug/L	542.72 ppb	07:46:02
3	Sc 361.383	827095.9	827095.9	101.01 %		07:47:21
3	Y 371.029	692361.2	692361.2	100.10 %		07:47:21
3	Ag 328.068†	50259.5	49571.7	260.55 ug/L	260.55 ppb	07:47:21
3	As 188.979†	842.1	860.4	476.66 ug/L	476.66 ppb	07:47:41
3	B 249.677†	18172.4	18528.1	517.47 ug/L	517.47 ppb	07:47:21
3	Ba 233.527†	55205.3	54653.9	513.19 ug/L	513.19 ppb	07:47:21
3	Be 313.107†	620935.3	618456.9	264.48 ug/L	264.48 ppb	07:47:21
3	Cd 226.502†	34701.6	34525.3	500.83 ug/L	500.83 ppb	07:47:21
3	Co 228.616†	20116.9	19961.9	516.11 ug/L	516.11 ppb	07:47:21
3	Cr 267.716†	37016.0	36574.3	491.54 ug/L	491.54 ppb	07:47:21
3	Cu 324.752†	160873.9	153713.2	507.48 ug/L	507.48 ppb	07:47:21
3	Mn 257.610†	396517.7	392163.4	515.92 ug/L	515.92 ppb	07:47:21
3	Mo 202.031†	6064.4	5995.2	533.39 ug/L	533.39 ppb	07:47:41
3	Ni 231.604†	16302.2	16055.1	509.55 ug/L	509.55 ppb	07:47:21
3	P 214.914†	3576.3	3353.2	2399.2 ug/L	2399.2 ppb	07:47:41
3	Pb 220.353†	3197.5	3223.8	496.81 ug/L	496.81 ppb	07:47:41
3	S 181.975 Axial†	1440.1	1395.5	2497.3 ug/L	2497.3 ppb	07:47:41
3	Sb 206.836†	1240.5	1204.4	523.11 ug/L	523.11 ppb	07:47:41
3	Se 196.026†	3103.0	3088.9	2591.7 ug/L	2591.7 ppb	07:47:41
3	Si 251.611†	131993.1	130185.0	4935.6 ug/L	4935.6 ppb	07:47:21
3	Sn 189.927†	2394.1	2363.0	536.84 ug/L	536.84 ppb	07:47:41
3	Ti 334.940†	289182.3	287411.7	499.68 ug/L	499.68 ppb	07:47:21
3	Tl 190.801†	1341.9	1357.6	528.61 ug/L	528.61 ppb	07:47:41
3	U 409.014†	14513.2	16572.3	501.08 ug/L	501.08 ppb	07:47:21
3	V 292.402†	62962.4	63650.2	515.39 ug/L	515.39 ppb	07:47:21
3	Zn 213.857†	43202.6	42200.5	506.62 ug/L	506.62 ppb	07:47:21
3	SiO2†	131712.1	129895.6	10586 ug/L	10586 ppb	07:47:57

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825333.2	100.79 %	0.474			0.47%
Sc Radial	4240.7	96.5 %	0.17			0.18%
Y 371.029	690413.1	99.822 %	0.4259			0.43%
Y RADIAL	4741.4	99.60 %	0.126			0.13%
Ag 328.068†	49552.7	260.47 ug/L	0.083	260.47 ppb	0.083	0.03%
QC value within limits for Ag 328.068 Recovery = 104.19%						
Al 396.153Radial†	5304.9	5184.9 ug/L	5.08	5184.9 ppb	5.08	0.10%
QC value within limits for Al 396.153Radial Recovery = 103.70%						
As 188.979†	867.3	480.42 ug/L	6.979	480.42 ppb	6.979	1.45%
QC value within limits for As 188.979 Recovery = 96.08%						
B 249.677†	18587.5	519.13 ug/L	2.017	519.13 ppb	2.017	0.39%
QC value within limits for B 249.677 Recovery = 103.83%						
Ba 233.527†	54668.1	513.32 ug/L	0.125	513.32 ppb	0.125	0.02%
QC value within limits for Ba 233.527 Recovery = 102.66%						
Be 313.107†	617942.3	264.26 ug/L	0.189	264.26 ppb	0.189	0.07%
QC value within limits for Be 313.107 Recovery = 105.70%						
Ca 317.933Radial†	2733.8	5173.0 ug/L	6.84	5173.0 ppb	6.84	0.13%

QC value within limits for Ca 317.933 Radial Recovery = 103.46%

Cd 226.502†	34551.2	501.21 ug/L	0.728	501.21 ppb	0.728	0.15%
QC value within limits for Cd 226.502 Recovery = 100.24%						
Co 228.616†	19968.4	516.29 ug/L	0.993	516.29 ppb	0.993	0.19%
QC value within limits for Co 228.616 Recovery = 103.26%						
Cr 267.716†	36567.3	491.45 ug/L	0.535	491.45 ppb	0.535	0.11%
QC value within limits for Cr 267.716 Recovery = 98.29%						
Cu 324.752†	153753.0	507.61 ug/L	0.960	507.61 ppb	0.960	0.19%
QC value within limits for Cu 324.752 Recovery = 101.52%						
Fe 238.204 Radial†	451.2	5243.4 ug/L	20.29	5243.4 ppb	20.29	0.39%
QC value within limits for Fe 238.204 Radial Recovery = 104.87%						
K 766.490 Radial†	13437.0	2556.6 ug/L	24.79	2556.6 ppb	24.79	0.97%
QC value within limits for K 766.490 Radial Recovery = 102.26%						
Mg 279.077 IEC†	131.9	5442.2 ug/L	45.49	5442.2 ppb	45.49	0.84%
QC value within limits for Mg 279.077 IEC Recovery = 108.84%						
Mn 257.610†	392545.0	516.42 ug/L	0.600	516.42 ppb	0.600	0.12%
QC value within limits for Mn 257.610 Recovery = 103.28%						
Mo 202.031†	6030.1	536.49 ug/L	4.528	536.49 ppb	4.528	0.84%
QC value within limits for Mo 202.031 Recovery = 107.30%						
Na 589.592 Radial†	6981.7	2461.2 ug/L	18.82	2461.2 ppb	18.82	0.76%
QC value within limits for Na 589.592 Radial Recovery = 98.45%						
Ni 231.604†	16063.1	509.81 ug/L	1.124	509.81 ppb	1.124	0.22%
QC value within limits for Ni 231.604 Recovery = 101.96%						
P 214.914†	3377.2	2417.1 ug/L	27.99	2417.1 ppb	27.99	1.16%
QC value within limits for P 214.914 Recovery = 96.68%						
Pb 220.353†	3254.4	501.51 ug/L	4.813	501.51 ppb	4.813	0.96%
QC value within limits for Pb 220.353 Recovery = 100.30%						
S 181.975 Axial†	1399.2	2503.8 ug/L	22.17	2503.8 ppb	22.17	0.89%
QC value within limits for S 181.975 Axial Recovery = 100.15%						
Sb 206.836†	1208.2	524.80 ug/L	4.720	524.80 ppb	4.720	0.90%
QC value within limits for Sb 206.836 Recovery = 104.96%						
Se 196.026†	3111.4	2610.5 ug/L	25.06	2610.5 ppb	25.06	0.96%
QC value within limits for Se 196.026 Recovery = 104.42%						
Si 251.611†	130353.2	4942.0 ug/L	8.43	4942.0 ppb	8.43	0.17%
QC value within limits for Si 251.611 Recovery = 98.84%						
Sn 189.927†	2371.4	538.76 ug/L	3.429	538.76 ppb	3.429	0.64%
QC value within limits for Sn 189.927 Recovery = 107.75%						
Sr 421.552†	67798.0	543.41 ug/L	2.329	543.41 ppb	2.329	0.43%
QC value within limits for Sr 421.552 Recovery = 108.68%						
Ti 334.940†	287594.4	499.99 ug/L	0.450	499.99 ppb	0.450	0.09%
QC value within limits for Ti 334.940 Recovery = 100.00%						
Tl 190.801†	1365.7	531.77 ug/L	7.929	531.77 ppb	7.929	1.49%
QC value within limits for Tl 190.801 Recovery = 106.35%						
U 409.014†	16517.9	499.43 ug/L	5.048	499.43 ppb	5.048	1.01%
QC value within limits for U 409.014 Recovery = 99.89%						
V 292.402†	63753.9	516.25 ug/L	0.792	516.25 ppb	0.792	0.15%
QC value within limits for V 292.402 Recovery = 103.25%						
Zn 213.857†	42283.2	507.61 ug/L	0.936	507.61 ppb	0.936	0.18%
QC value within limits for Zn 213.857 Recovery = 101.52%						
SiO2†	129537.4	10557 ug/L	30.2	10557 ppb	30.2	0.29%
QC value within limits for SiO2 Recovery = 98.71%						

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/19/2010 07:50:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4227.6	4227.6	96.2 %		07:52:21
1	Y RADIAL	4774.1	4774.1	100.3 %		07:52:01
1	Al 396.153Radial†	-68.9	6.4	6.3185 ug/L	6.3185 ppb	07:52:21
1	Ca 317.933Radial†	18.9	4.0	7.5299 ug/L	7.5299 ppb	07:52:21
1	Fe 238.204 Radial†	9.1	1.0	11.562 ug/L	11.562 ppb	07:52:21
1	K 766.490 Radial†	2602.7	107.0	20.388 ug/L	20.388 ppb	07:52:01
1	Mg 279.077 IEC†	1.1	-0.4	-16.653 ug/L	-16.653 ppb	07:52:21
1	Na 589.592 Radial†	-877.3	-37.0	-13.028 ug/L	-13.028 ppb	07:52:01
1	Sr 421.552†	-2.3	-23.2	-0.1857 ug/L	-0.1857 ppb	07:52:01
1	Sc 361.383	822500.8	822500.8	100.45 %		07:53:18
1	Y 371.029	694388.9	694388.9	100.40 %		07:53:18
1	Ag 328.068†	219.4	33.2	0.1721 ug/L	0.1721 ppb	07:53:18
1	As 188.979†	-14.3	12.6	6.8925 ug/L	6.8925 ppb	07:53:38
1	B 249.677†	-143.2	394.8	11.075 ug/L	11.075 ppb	07:53:38
1	Ba 233.527†	3.8	4.5	0.0412 ug/L	0.0412 ppb	07:53:38
1	Be 313.107†	-3620.9	126.3	0.0535 ug/L	0.0535 ppb	07:53:18
1	Cd 226.502†	-170.4	1.0	0.0130 ug/L	0.0130 ppb	07:53:38
1	Co 228.616†	-53.3	-6.9	-0.1775 ug/L	-0.1775 ppb	07:53:38
1	Cr 267.716†	81.7	9.8	0.1311 ug/L	0.1311 ppb	07:53:38
1	Cu 324.752†	5460.0	-116.4	-0.3851 ug/L	-0.3851 ppb	07:53:18
1	Mn 257.610†	435.0	44.0	0.0597 ug/L	0.0597 ppb	07:53:38
1	Mo 202.031†	12.1	3.5	0.3106 ug/L	0.3106 ppb	07:53:38
1	Ni 231.604†	74.1	-10.3	-0.3261 ug/L	-0.3261 ppb	07:53:38
1	P 214.914†	199.0	10.8	8.1501 ug/L	8.1501 ppb	07:53:38
1	Pb 220.353†	-64.9	-6.3	-0.9611 ug/L	-0.9611 ppb	07:53:38
1	S 181.975 Axial†	28.0	-2.3	-4.1877 ug/L	-4.1877 ppb	07:53:38
1	Sb 206.836†	25.3	1.5	0.6355 ug/L	0.6355 ppb	07:53:38
1	Se 196.026†	-18.2	-1.2	-0.9475 ug/L	-0.9475 ppb	07:53:38
1	Si 251.611†	523.3	32.7	1.2394 ug/L	1.2394 ppb	07:53:38
1	Sn 189.927†	9.4	2.2	0.5039 ug/L	0.5039 ppb	07:53:38
1	Ti 334.940†	-1203.2	-76.6	-0.1322 ug/L	-0.1322 ppb	07:53:18
1	Tl 190.801†	-32.0	-2.7	-1.0626 ug/L	-1.0626 ppb	07:53:38
1	U 409.014†	-2124.4	89.3	2.7075 ug/L	2.7075 ppb	07:53:18
1	V 292.402†	-1376.1	-52.5	-0.4113 ug/L	-0.4113 ppb	07:53:18
1	Zn 213.857†	569.1	-3.5	-0.0418 ug/L	-0.0418 ppb	07:53:38
1	SiO2†	542.5	40.7	3.3134 ug/L	3.3134 ppb	07:54:49
2	Sc Radial	4262.1	4262.1	97.0 %		07:52:47
2	Y RADIAL	4708.4	4708.4	98.90 %		07:52:27
2	Al 396.153Radial†	-75.6	0.2	0.1122 ug/L	0.1122 ppb	07:52:47
2	Ca 317.933Radial†	15.6	0.4	0.7040 ug/L	0.7040 ppb	07:52:47
2	Fe 238.204 Radial†	8.1	-0.1	-1.2667 ug/L	-1.2667 ppb	07:52:47
2	K 766.490 Radial†	2562.5	43.7	8.3262 ug/L	8.3262 ppb	07:52:27
2	Mg 279.077 IEC†	0.5	-1.0	-43.214 ug/L	-43.214 ppb	07:52:47
2	Na 589.592 Radial†	-902.5	-55.5	-19.565 ug/L	-19.565 ppb	07:52:27
2	Sr 421.552†	-0.1	-20.9	-0.1676 ug/L	-0.1676 ppb	07:52:27
2	Sc 361.383	809397.3	809397.3	98.849 %		07:53:44
2	Y 371.029	684094.8	684094.8	98.908 %		07:53:44
2	Ag 328.068†	108.4	-75.5	-0.3948 ug/L	-0.3948 ppb	07:53:44
2	As 188.979†	-26.5	-0.0	-0.0164 ug/L	-0.0164 ppb	07:54:04
2	B 249.677†	-133.5	402.3	11.288 ug/L	11.288 ppb	07:54:04
2	Ba 233.527†	-10.0	-9.4	-0.0882 ug/L	-0.0882 ppb	07:54:04
2	Be 313.107†	-3759.4	-72.2	-0.0306 ug/L	-0.0306 ppb	07:53:44
2	Cd 226.502†	-175.0	-6.4	-0.0927 ug/L	-0.0927 ppb	07:54:04
2	Co 228.616†	-54.4	-8.9	-0.2262 ug/L	-0.2262 ppb	07:54:04
2	Cr 267.716†	75.5	4.9	0.0640 ug/L	0.0640 ppb	07:54:04
2	Cu 324.752†	5612.9	126.3	0.4151 ug/L	0.4151 ppb	07:53:44
2	Mn 257.610†	405.8	21.5	0.0299 ug/L	0.0299 ppb	07:54:04
2	Mo 202.031†	22.9	14.6	1.3019 ug/L	1.3019 ppb	07:54:04
2	Ni 231.604†	81.9	-1.2	-0.0393 ug/L	-0.0393 ppb	07:54:04

2	P 214.914†	176.7	-8.5	-6.4383 ug/L	-6.4383 ppb	07:54:04
2	Pb 220.353†	-50.1	7.6	1.1742 ug/L	1.1742 ppb	07:54:04
2	S 181.975 Axial†	28.6	-1.2	-2.1912 ug/L	-2.1912 ppb	07:54:04
2	Sb 206.836†	26.4	3.0	1.2919 ug/L	1.2919 ppb	07:54:04
2	Se 196.026†	-26.5	-9.8	-8.1711 ug/L	-8.1711 ppb	07:54:04
2	Si 251.611†	511.4	29.2	1.0927 ug/L	1.0927 ppb	07:54:04
2	Sn 189.927†	7.7	0.6	0.1470 ug/L	0.1470 ppb	07:54:04
2	Ti 334.940†	-1067.3	41.5	0.0743 ug/L	0.0743 ppb	07:53:44
2	Tl 190.801†	-29.0	-0.3	-0.1073 ug/L	-0.1073 ppb	07:54:04
2	U 409.014†	-2072.2	107.9	3.2725 ug/L	3.2725 ppb	07:53:44
2	V 292.402†	-1292.4	10.0	0.1038 ug/L	0.1038 ppb	07:53:44
2	Zn 213.857†	554.3	-9.3	-0.1129 ug/L	-0.1129 ppb	07:54:04
2	SiO2†	534.3	41.2	3.3239 ug/L	3.3239 ppb	07:55:09
3	Sc Radial	4234.0	4234.0	96.3 %		07:53:12
3	Y RADIAL	4724.6	4724.6	99.24 %		07:52:52
3	Al 396.153Radial†	-81.6	-6.6	-6.5359 ug/L	-6.5359 ppb	07:53:12
3	Ca 317.933Radial†	16.3	1.3	2.3818 ug/L	2.3818 ppb	07:53:12
3	Fe 238.204 Radial†	9.4	1.3	15.504 ug/L	15.504 ppb	07:53:12
3	K 766.490 Radial†	2538.1	35.9	6.8490 ug/L	6.8490 ppb	07:52:52
3	Mg 279.077 IEC†	4.4	3.0	123.58 ug/L	123.58 ppb	07:53:12
3	Na 589.592 Radial†	-910.3	-69.8	-24.604 ug/L	-24.604 ppb	07:52:52
3	Sr 421.552†	52.7	33.9	0.2718 ug/L	0.2718 ppb	07:52:52
3	Sc 361.383	824073.6	824073.6	100.64 %		07:54:09
3	Y 371.029	697428.4	697428.4	100.84 %		07:54:09
3	Ag 328.068†	260.6	73.8	0.3839 ug/L	0.3839 ppb	07:54:09
3	As 188.979†	-24.2	2.7	1.4956 ug/L	1.4956 ppb	07:54:29
3	B 249.677†	-133.9	404.3	11.340 ug/L	11.340 ppb	07:54:29
3	Ba 233.527†	24.9	25.4	0.2395 ug/L	0.2395 ppb	07:54:29
3	Be 313.107†	-3640.4	113.8	0.0487 ug/L	0.0487 ppb	07:54:09
3	Cd 226.502†	-164.0	7.7	0.1121 ug/L	0.1121 ppb	07:54:29
3	Co 228.616†	-49.5	-3.0	-0.0776 ug/L	-0.0776 ppb	07:54:29
3	Cr 267.716†	78.7	6.7	0.0889 ug/L	0.0889 ppb	07:54:29
3	Cu 324.752†	5545.9	-41.4	-0.1401 ug/L	-0.1401 ppb	07:54:09
3	Mn 257.610†	423.7	31.9	0.0384 ug/L	0.0384 ppb	07:54:29
3	Mo 202.031†	12.7	4.1	0.3639 ug/L	0.3639 ppb	07:54:29
3	Ni 231.604†	92.7	8.1	0.2558 ug/L	0.2558 ppb	07:54:29
3	P 214.914†	185.9	-2.6	-1.9063 ug/L	-1.9063 ppb	07:54:29
3	Pb 220.353†	-55.4	3.3	0.4986 ug/L	0.4986 ppb	07:54:29
3	S 181.975 Axial†	25.6	-4.7	-8.4722 ug/L	-8.4722 ppb	07:54:29
3	Sb 206.836†	24.2	0.4	0.1882 ug/L	0.1882 ppb	07:54:29
3	Se 196.026†	-16.5	0.5	0.4855 ug/L	0.4855 ppb	07:54:29
3	Si 251.611†	522.6	31.1	1.1761 ug/L	1.1761 ppb	07:54:29
3	Sn 189.927†	14.3	7.0	1.5931 ug/L	1.5931 ppb	07:54:29
3	Ti 334.940†	-1072.1	56.0	0.0843 ug/L	0.0843 ppb	07:54:09
3	Tl 190.801†	-26.9	2.3	0.9032 ug/L	0.9032 ppb	07:54:29
3	U 409.014†	-1972.4	244.3	7.4112 ug/L	7.4112 ppb	07:54:09
3	V 292.402†	-1263.2	62.3	0.5170 ug/L	0.5170 ppb	07:54:09
3	Zn 213.857†	568.9	-4.8	-0.0621 ug/L	-0.0621 ppb	07:54:29
3	SiO2†	526.0	23.4	1.8968 ug/L	1.8968 ppb	07:55:29

Mean Data: ICB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818657.3	99.980 %		0.9841			0.98%
Sc Radial	4241.2	96.5 %		0.42			0.43%
Y 371.029	691970.7	100.05 %		1.010			1.01%
Y RADIAL	4735.7	99.48 %		0.719			0.72%
Ag 328.068†	10.5	0.0537 ug/L		0.40263	0.0537 ppb	0.40263	749.28%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-0.0	-0.0351 ug/L		6.42850	-0.0351 ppb	6.42850	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.1	2.7906 ug/L		3.63190	2.7906 ppb	3.63190	130.15%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	400.5	11.235 ug/L		0.1403	11.235 ppb	0.1403	1.25%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.8	0.0642 ug/L		0.16504	0.0642 ppb	0.16504	257.23%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	56.0	0.0239 ug/L		0.04720	0.0239 ppb	0.04720	197.83%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.9	3.5386 ug/L		3.55694	3.5386 ppb	3.55694	100.52%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.7	0.0108 ug/L	0.10245	0.0108 ppb	0.10245	947.92%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-6.3	-0.1604 ug/L	0.07575	-0.1604 ppb	0.07575	47.21%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	7.1	0.0947 ug/L	0.03391	0.0947 ppb	0.03391	35.82%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-10.5	-0.0367 ug/L	0.41001	-0.0367 ppb	0.41001	>999.9%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.7	8.5999 ug/L	8.76910	8.5999 ppb	8.76910	101.97%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	62.2	11.854 ug/L	7.4269	11.854 ppb	7.4269	62.65%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.5	21.237 ug/L	89.6187	21.237 ppb	89.6187	422.00%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	32.5	0.0427 ug/L	0.01531	0.0427 ppb	0.01531	35.88%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.4	0.6588 ug/L	0.55759	0.6588 ppb	0.55759	84.64%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-54.1	-19.066 ug/L	5.8042	-19.066 ppb	5.8042	30.44%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-1.2	-0.0366 ug/L	0.29096	-0.0366 ppb	0.29096	795.90%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.1	-0.0648 ug/L	7.46648	-0.0648 ppb	7.46648	>999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	1.5	0.2372 ug/L	1.09140	0.2372 ppb	1.09140	460.05%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.8	-4.9504 ug/L	3.20920	-4.9504 ppb	3.20920	64.83%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.6	0.7052 ug/L	0.55515	0.7052 ppb	0.55515	78.72%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.5	-2.8777 ug/L	4.63988	-2.8777 ppb	4.63988	161.23%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	31.0	1.1694 ug/L	0.07358	1.1694 ppb	0.07358	6.29%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	3.3	0.7480 ug/L	0.75332	0.7480 ppb	0.75332	100.71%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-3.4	-0.0272 ug/L	0.25907	-0.0272 ppb	0.25907	952.37%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.9	0.0088 ug/L	0.12217	0.0088 ppb	0.12217	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-0.2	-0.0889 ug/L	0.98302	-0.0889 ppb	0.98302	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	147.2	4.4637 ug/L	2.56816	4.4637 ppb	2.56816	57.53%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	6.6	0.0698 ug/L	0.46509	0.0698 ppb	0.46509	666.11%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-5.9	-0.0723 ug/L	0.03665	-0.0723 ppb	0.03665	50.72%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	35.1	2.8447 ug/L	0.82097	2.8447 ppb	0.82097	28.86%
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: 3/19/2010 07:57:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4245.6	4245.6	96.6 %		07:59:54
1	Y RADIAL	4767.8	4767.8	100.2 %		07:59:34
1	Al 396.153Radial†	133.0	215.8	211.49 ug/L	211.49 ppb	07:59:54
1	Ca 317.933Radial†	126.9	115.7	218.92 ug/L	218.92 ppb	07:59:54
1	Fe 238.204 Radial†	17.7	9.9	114.61 ug/L	114.61 ppb	07:59:54
1	K 766.490 Radial†	3386.5	907.0	172.60 ug/L	172.60 ppb	07:59:34
1	Mg 279.077 IEC†	8.9	7.7	318.80 ug/L	318.80 ppb	07:59:54
1	Na 589.592 Radial†	-60.9	812.1	286.28 ug/L	286.28 ppb	07:59:34
1	Sr 421.552†	640.5	642.3	5.1465 ug/L	5.1465 ppb	07:59:34
1	Sc 361.383	812136.9	812136.9	99.183 %		08:00:50
1	Y 371.029	686807.1	686807.1	99.300 %		08:00:50
1	Ag 328.068†	1209.8	1034.6	5.3773 ug/L	5.3773 ppb	08:00:50
1	As 188.979†	35.4	62.5	34.339 ug/L	34.339 ppb	08:01:10
1	B 249.677†	1543.2	2093.3	58.692 ug/L	58.692 ppb	08:00:50
1	Ba 233.527†	549.9	555.1	5.2128 ug/L	5.2128 ppb	08:01:10
1	Be 313.107†	8135.1	11933.1	5.0926 ug/L	5.0926 ppb	08:00:50
1	Cd 226.502†	189.2	361.4	5.2462 ug/L	5.2462 ppb	08:01:10
1	Co 228.616†	146.1	193.5	5.0142 ug/L	5.0142 ppb	08:01:10
1	Cr 267.716†	456.1	388.3	5.2039 ug/L	5.2039 ppb	08:01:10
1	Cu 324.752†	8656.8	3176.1	10.462 ug/L	10.462 ppb	08:00:50
1	Mn 257.610†	8403.4	8083.6	10.627 ug/L	10.627 ppb	08:00:50
1	Mo 202.031†	123.8	116.3	10.352 ug/L	10.352 ppb	08:01:10
1	Ni 231.604†	241.6	159.5	5.0629 ug/L	5.0629 ppb	08:01:10
1	P 214.914†	390.7	206.6	151.89 ug/L	151.89 ppb	08:01:10
1	Pb 220.353†	30.8	89.3	13.777 ug/L	13.777 ppb	08:01:10
1	S 181.975 Axial†	80.2	50.7	90.708 ug/L	90.708 ppb	08:01:10
1	Sb 206.836†	48.7	25.4	10.975 ug/L	10.975 ppb	08:01:10
1	Se 196.026†	23.6	40.7	34.377 ug/L	34.377 ppb	08:01:10
1	Si 251.611†	3086.7	2623.9	99.485 ug/L	99.485 ppb	08:01:10
1	Sn 189.927†	45.2	38.4	8.7521 ug/L	8.7521 ppb	08:01:10
1	Ti 334.940†	1751.7	2887.3	4.9985 ug/L	4.9985 ppb	08:00:50
1	Tl 190.801†	25.5	54.8	21.246 ug/L	21.246 ppb	08:01:10
1	U 409.014†	-392.1	1808.8	54.852 ug/L	54.852 ppb	08:00:50
1	V 292.402†	-753.3	557.9	4.6884 ug/L	4.6884 ppb	08:00:50
1	Zn 213.857†	1676.7	1120.5	13.513 ug/L	13.513 ppb	08:01:10
1	SiO2†	3159.0	2685.6	218.90 ug/L	218.90 ppb	08:02:07
2	Sc Radial	4256.7	4256.7	96.9 %		08:00:19
2	Y RADIAL	4740.6	4740.6	99.58 %		07:59:59
2	Al 396.153Radial†	133.7	216.1	211.76 ug/L	211.76 ppb	08:00:19
2	Ca 317.933Radial†	133.1	121.7	230.30 ug/L	230.30 ppb	08:00:19
2	Fe 238.204 Radial†	19.0	11.2	129.88 ug/L	129.88 ppb	08:00:19
2	K 766.490 Radial†	3378.3	889.3	169.24 ug/L	169.24 ppb	07:59:59
2	Mg 279.077 IEC†	10.6	9.4	386.96 ug/L	386.96 ppb	08:00:19
2	Na 589.592 Radial†	-44.7	829.0	292.24 ug/L	292.24 ppb	07:59:59
2	Sr 421.552†	676.8	678.0	5.4327 ug/L	5.4327 ppb	07:59:59
2	Sc 361.383	801259.4	801259.4	97.855 %		08:01:16
2	Y 371.029	678307.1	678307.1	98.071 %		08:01:16
2	Ag 328.068†	1161.0	1001.3	5.2110 ug/L	5.2110 ppb	08:01:16
2	As 188.979†	31.1	58.6	32.207 ug/L	32.207 ppb	08:01:36
2	B 249.677†	1398.3	1966.3	55.127 ug/L	55.127 ppb	08:01:16
2	Ba 233.527†	552.1	564.9	5.3055 ug/L	5.3055 ppb	08:01:36
2	Be 313.107†	7983.7	11889.7	5.0737 ug/L	5.0737 ppb	08:01:16
2	Cd 226.502†	167.9	342.2	4.9656 ug/L	4.9656 ppb	08:01:36
2	Co 228.616†	157.6	207.3	5.3712 ug/L	5.3712 ppb	08:01:36
2	Cr 267.716†	439.2	377.4	5.0596 ug/L	5.0596 ppb	08:01:36
2	Cu 324.752†	8568.0	3203.8	10.554 ug/L	10.554 ppb	08:01:16
2	Mn 257.610†	8238.3	8029.8	10.555 ug/L	10.555 ppb	08:01:16
2	Mo 202.031†	129.4	123.7	11.006 ug/L	11.006 ppb	08:01:36
2	Ni 231.604†	255.4	176.9	5.6155 ug/L	5.6155 ppb	08:01:36

2	P 214.914†	384.2	205.3	150.90 ug/L	150.90 ppb	08:01:36
2	Pb 220.353†	12.7	71.3	11.005 ug/L	11.005 ppb	08:01:36
2	S 181.975 Axial†	79.4	50.9	91.168 ug/L	91.168 ppb	08:01:36
2	Sb 206.836†	45.8	23.1	10.044 ug/L	10.044 ppb	08:01:36
2	Se 196.026†	19.7	37.1	31.393 ug/L	31.393 ppb	08:01:36
2	Si 251.611†	3082.1	2661.5	100.90 ug/L	100.90 ppb	08:01:36
2	Sn 189.927†	45.7	39.6	9.0109 ug/L	9.0109 ppb	08:01:36
2	Ti 334.940†	1629.0	2785.9	4.8185 ug/L	4.8185 ppb	08:01:16
2	Tl 190.801†	25.8	55.4	21.494 ug/L	21.494 ppb	08:01:36
2	U 409.014†	-410.1	1785.1	54.130 ug/L	54.130 ppb	08:01:16
2	V 292.402†	-698.7	603.5	5.0593 ug/L	5.0593 ppb	08:01:16
2	Zn 213.857†	1690.2	1157.1	13.951 ug/L	13.951 ppb	08:01:36
2	SiO2†	3155.7	2725.5	222.13 ug/L	222.13 ppb	08:02:12
3	Sc Radial	4251.9	4251.9	96.7 %		08:00:44
3	Y RADIAL	4745.3	4745.3	99.68 %		08:00:24
3	Al 396.153Radial†	131.9	214.4	210.14 ug/L	210.14 ppb	08:00:44
3	Ca 317.933Radial†	128.1	116.7	220.87 ug/L	220.87 ppb	08:00:44
3	Fe 238.204 Radial†	17.0	9.1	105.35 ug/L	105.35 ppb	08:00:44
3	K 766.490 Radial†	3366.8	881.4	167.74 ug/L	167.74 ppb	08:00:24
3	Mg 279.077 IEC†	9.2	7.9	327.36 ug/L	327.36 ppb	08:00:44
3	Na 589.592 Radial†	-82.1	790.3	278.59 ug/L	278.59 ppb	08:00:24
3	Sr 421.552†	676.9	678.9	5.4400 ug/L	5.4400 ppb	08:00:24
3	Sc 361.383	809668.4	809668.4	98.882 %		08:01:41
3	Y 371.029	684999.1	684999.1	99.039 %		08:01:41
3	Ag 328.068†	1111.9	939.3	4.8848 ug/L	4.8848 ppb	08:01:41
3	As 188.979†	39.5	66.8	36.695 ug/L	36.695 ppb	08:02:01
3	B 249.677†	1432.9	1986.5	55.697 ug/L	55.697 ppb	08:01:41
3	Ba 233.527†	543.7	550.5	5.1700 ug/L	5.1700 ppb	08:02:01
3	Be 313.107†	8221.7	12045.7	5.1405 ug/L	5.1405 ppb	08:01:41
3	Cd 226.502†	183.8	356.5	5.1759 ug/L	5.1759 ppb	08:02:01
3	Co 228.616†	148.7	196.6	5.0937 ug/L	5.0937 ppb	08:02:01
3	Cr 267.716†	443.8	377.3	5.0573 ug/L	5.0573 ppb	08:02:01
3	Cu 324.752†	8543.8	3088.5	10.174 ug/L	10.174 ppb	08:01:41
3	Mn 257.610†	8388.1	8093.9	10.639 ug/L	10.639 ppb	08:01:41
3	Mo 202.031†	121.9	114.7	10.207 ug/L	10.207 ppb	08:02:01
3	Ni 231.604†	260.7	179.6	5.7006 ug/L	5.7006 ppb	08:02:01
3	P 214.914†	386.5	203.6	149.69 ug/L	149.69 ppb	08:02:01
3	Pb 220.353†	18.8	77.4	11.941 ug/L	11.941 ppb	08:02:01
3	S 181.975 Axial†	81.1	51.8	92.740 ug/L	92.740 ppb	08:02:01
3	Sb 206.836†	47.2	24.0	10.393 ug/L	10.393 ppb	08:02:01
3	Se 196.026†	12.7	29.8	25.236 ug/L	25.236 ppb	08:02:01
3	Si 251.611†	3109.9	2656.9	100.74 ug/L	100.74 ppb	08:02:01
3	Sn 189.927†	47.7	41.0	9.3474 ug/L	9.3474 ppb	08:02:01
3	Ti 334.940†	1745.7	2886.7	4.9992 ug/L	4.9992 ppb	08:01:41
3	Tl 190.801†	26.8	56.2	21.792 ug/L	21.792 ppb	08:02:01
3	U 409.014†	-546.4	1651.6	50.085 ug/L	50.085 ppb	08:01:41
3	V 292.402†	-711.5	597.9	4.9984 ug/L	4.9984 ppb	08:01:41
3	Zn 213.857†	1689.0	1138.0	13.723 ug/L	13.723 ppb	08:02:01
3	SiO2†	3182.7	2719.4	221.65 ug/L	221.65 ppb	08:02:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	807688.2	98.640 %	0.6965			0.71%
Sc Radial	4251.4	96.7 %	0.13			0.13%
Y 371.029	683371.1	98.803 %	0.6474			0.66%
Y RADIAL	4751.3	99.80 %	0.306			0.31%
Ag 328.068†	991.8	5.1577 ug/L	0.25053	5.1577 ppb	0.25053	4.86%
QC value within limits for Ag 328.068 Recovery = 103.15%						
Al 396.153Radial†	215.5	211.13 ug/L	0.870	211.13 ppb	0.870	0.41%
QC value within limits for Al 396.153Radial Recovery = 105.57%						
As 188.979†	62.6	34.414 ug/L	2.2453	34.414 ppb	2.2453	6.52%
QC value within limits for As 188.979 Recovery = 114.71%						
B 249.677†	2015.4	56.505 ug/L	1.9154	56.505 ppb	1.9154	3.39%
QC value within limits for B 249.677 Recovery = 113.01%						
Ba 233.527†	556.8	5.2294 ug/L	0.06925	5.2294 ppb	0.06925	1.32%
QC value within limits for Ba 233.527 Recovery = 104.59%						
Be 313.107†	11956.2	5.1023 ug/L	0.03444	5.1023 ppb	0.03444	0.68%
QC value within limits for Be 313.107 Recovery = 102.05%						
Ca 317.933Radial†	118.0	223.36 ug/L	6.081	223.36 ppb	6.081	2.72%

QC value within limits for Ca 317.933 Radial Recovery = 111.68%

Cd 226.502†	353.4	5.1292 ug/L	0.14600	5.1292 ppb	0.14600	2.85%
QC value within limits for Cd 226.502 Recovery = 102.58%						
Co 228.616†	199.1	5.1597 ug/L	0.18742	5.1597 ppb	0.18742	3.63%
QC value within limits for Co 228.616 Recovery = 103.19%						
Cr 267.716†	381.0	5.1070 ug/L	0.08399	5.1070 ppb	0.08399	1.64%
QC value within limits for Cr 267.716 Recovery = 102.14%						
Cu 324.752†	3156.1	10.397 ug/L	0.1981	10.397 ppb	0.1981	1.91%
QC value within limits for Cu 324.752 Recovery = 103.97%						
Fe 238.204 Radial†	10.1	116.61 ug/L	12.388	116.61 ppb	12.388	10.62%
QC value within limits for Fe 238.204 Radial Recovery = 116.61%						
K 766.490 Radial†	892.6	169.86 ug/L	2.490	169.86 ppb	2.490	1.47%
QC value within limits for K 766.490 Radial Recovery = 113.24%						
Mg 279.077 IEC†	8.3	344.37 ug/L	37.126	344.37 ppb	37.126	10.78%
QC value within limits for Mg 279.077 IEC Recovery = 114.79%						
Mn 257.610†	8069.1	10.607 ug/L	0.0455	10.607 ppb	0.0455	0.43%
QC value within limits for Mn 257.610 Recovery = 106.07%						
Mo 202.031†	118.2	10.522 ug/L	0.4257	10.522 ppb	0.4257	4.05%
QC value within limits for Mo 202.031 Recovery = 105.22%						
Na 589.592 Radial†	810.5	285.70 ug/L	6.845	285.70 ppb	6.845	2.40%
QC value within limits for Na 589.592 Radial Recovery = 95.23%						
Ni 231.604†	172.0	5.4597 ug/L	0.34627	5.4597 ppb	0.34627	6.34%
QC value within limits for Ni 231.604 Recovery = 109.19%						
P 214.914†	205.2	150.83 ug/L	1.104	150.83 ppb	1.104	0.73%
QC value within limits for P 214.914 Recovery = 100.55%						
Pb 220.353†	79.3	12.241 ug/L	1.4102	12.241 ppb	1.4102	11.52%
QC value within limits for Pb 220.353 Recovery = 122.41%						
S 181.975 Axial†	51.2	91.538 ug/L	1.0656	91.538 ppb	1.0656	1.16%
QC value within limits for S 181.975 Axial Recovery = 91.54%						
Sb 206.836†	24.2	10.471 ug/L	0.4701	10.471 ppb	0.4701	4.49%
QC value within limits for Sb 206.836 Recovery = 104.71%						
Se 196.026†	35.9	30.335 ug/L	4.6611	30.335 ppb	4.6611	15.37%
QC value within limits for Se 196.026 Recovery = 101.12%						
Si 251.611†	2647.5	100.38 ug/L	0.775	100.38 ppb	0.775	0.77%
QC value within limits for Si 251.611 Recovery = 100.38%						
Sn 189.927†	39.7	9.0368 ug/L	0.29853	9.0368 ppb	0.29853	3.30%
QC value within limits for Sn 189.927 Recovery = 90.37%						
Sr 421.552†	666.4	5.3397 ug/L	0.16737	5.3397 ppb	0.16737	3.13%
QC value within limits for Sr 421.552 Recovery = 106.79%						
Ti 334.940†	2853.3	4.9388 ug/L	0.10410	4.9388 ppb	0.10410	2.11%
QC value within limits for Ti 334.940 Recovery = 98.78%						
Tl 190.801†	55.4	21.511 ug/L	0.2730	21.511 ppb	0.2730	1.27%
QC value within limits for Tl 190.801 Recovery = 107.55%						
U 409.014†	1748.5	53.022 ug/L	2.5696	53.022 ppb	2.5696	4.85%
QC value within limits for U 409.014 Recovery = 106.04%						
V 292.402†	586.4	4.9153 ug/L	0.19891	4.9153 ppb	0.19891	4.05%
QC value within limits for V 292.402 Recovery = 98.31%						
Zn 213.857†	1138.5	13.729 ug/L	0.2193	13.729 ppb	0.2193	1.60%
QC value greater than the upper limit for Zn 213.857 Recovery = 137.29%						
SiO2†	2710.2	220.90 ug/L	1.746	220.90 ppb	1.746	0.79%
QC value within limits for SiO2 Recovery = 103.71%						

QC Failed. Continue with analysis.

Sequence No.: 9
 Sample ID: ICSA
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 13
 Date Collected: 3/19/2010 08:04:28
 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	3920.8	3920.8	89.2 %		08:06:41
1	Y RADIAL	4255.0	4255.0	89.38 %		08:06:41
1	Al 396.153Radial†	468586.1	525352.2	516040 ug/L	516040 ppb	08:06:21
1	Ca 317.933Radial†	224935.9	252132.2	477090 ug/L	477090 ppb	08:06:21
1	Fe 238.204 Radial†	14279.3	15998.3	185370 ug/L	185370 ppb	08:06:41
1	K 766.490 Radial†	2233.0	-95.6	-177.79 ug/L	-177.79 ppb	08:06:21
1	Mg 279.077 IEC†	10594.3	11874.5	489650 ug/L	489650 ppb	08:06:41
1	Na 589.592 Radial†	-736.1	50.0	17.626 ug/L	17.626 ppb	08:06:41
1	Sr 421.552†	455.0	489.2	0.3587 ug/L	0.3587 ppb	08:06:41
1	Sc 361.383	711859.2	711859.2	86.937 %		08:07:38
1	Y 371.029	589005.7	589005.7	85.160 %		08:07:38
1	Ag 328.068†	-8544.0	-10013.0	-1.1206 ug/L	-1.1206 ppb	08:07:38
1	As 188.979†	-91.2	-78.1	0.3558 ug/L	0.3558 ppb	08:07:58
1	B 249.677†	234.3	806.9	-7.4693 ug/L	-7.4693 ppb	08:07:38
1	Ba 233.527†	-483.4	-555.4	0.4708 ug/L	0.4708 ppb	08:07:58
1	Be 313.107†	-3961.7	-826.0	-0.4074 ug/L	-0.4074 ppb	08:07:38
1	Cd 226.502†	1036.4	1362.8	0.6368 ug/L	0.6368 ppb	08:07:58
1	Co 228.616†	-1.8	44.2	-1.5292 ug/L	-1.5292 ppb	08:07:58
1	Cr 267.716†	-1170.5	-1417.9	0.6295 ug/L	0.6295 ppb	08:07:58
1	Cu 324.752†	2762.6	-2374.2	1.9508 ug/L	1.9508 ppb	08:07:58
1	Mn 257.610†	-266.0	-695.1	-2.6341 ug/L	-2.6341 ppb	08:07:38
1	Mo 202.031†	-207.6	-247.3	-1.9158 ug/L	-1.9158 ppb	08:07:58
1	Ni 231.604†	165.6	106.5	3.3806 ug/L	3.3806 ppb	08:07:58
1	P 214.914†	163.7	1.0	-19.106 ug/L	-19.106 ppb	08:07:58
1	Pb 220.353†	-643.0	-681.3	-10.248 ug/L	-10.248 ppb	08:07:58
1	S 181.975 Axial†	34.7	9.8	-79.226 ug/L	-79.226 ppb	08:07:58
1	Sb 206.836†	61.2	46.7	1.8899 ug/L	1.8899 ppb	08:07:58
1	Se 196.026†	-737.5	-831.3	4.6258 ug/L	4.6258 ppb	08:07:58
1	Si 251.611†	353.1	-82.0	-2.8425 ug/L	-2.8425 ppb	08:07:58
1	Sn 189.927†	-323.4	-379.2	-11.932 ug/L	-11.932 ppb	08:07:58
1	Ti 334.940†	-13245.3	-14114.4	-0.5760 ug/L	-0.5760 ppb	08:07:38
1	Tl 190.801†	-56.4	-35.8	-14.081 ug/L	-14.081 ppb	08:07:58
1	U 409.014†	-766.4	1322.6	19.037 ug/L	19.037 ppb	08:07:38
1	V 292.402†	470.2	1858.3	-2.8990 ug/L	-2.8990 ppb	08:07:58
1	Zn 213.857†	2564.8	2380.1	1.0881 ug/L	1.0881 ppb	08:07:58
1	SiO2†	380.9	-61.2	-4.3969 ug/L	-4.3969 ppb	08:08:55
2	Sc Radial	3895.3	3895.3	88.6 %		08:07:06
2	Y RADIAL	4206.8	4206.8	88.37 %		08:07:06
2	Al 396.153Radial†	461570.8	520869.5	511640 ug/L	511640 ppb	08:06:46
2	Ca 317.933Radial†	221149.1	249507.4	472120 ug/L	472120 ppb	08:06:46
2	Fe 238.204 Radial†	14177.3	15987.8	185250 ug/L	185250 ppb	08:07:06
2	K 766.490 Radial†	2093.1	-237.1	-203.08 ug/L	-203.08 ppb	08:06:46
2	Mg 279.077 IEC†	10491.8	11836.4	488080 ug/L	488080 ppb	08:07:06
2	Na 589.592 Radial†	-755.5	22.6	7.9842 ug/L	7.9842 ppb	08:07:06
2	Sr 421.552†	436.5	471.7	0.2555 ug/L	0.2555 ppb	08:07:06
2	Sc 361.383	718309.4	718309.4	87.724 %		08:08:04
2	Y 371.029	594864.3	594864.3	86.007 %		08:08:04
2	Ag 328.068†	-8802.7	-10219.6	-2.1639 ug/L	-2.1639 ppb	08:08:04
2	As 188.979†	-71.1	-54.2	13.461 ug/L	13.461 ppb	08:08:24
2	B 249.677†	320.1	902.3	-4.7766 ug/L	-4.7766 ppb	08:08:04
2	Ba 233.527†	-494.1	-562.5	0.3993 ug/L	0.3993 ppb	08:08:24
2	Be 313.107†	-3916.5	-733.5	-0.3687 ug/L	-0.3687 ppb	08:08:04
2	Cd 226.502†	1052.8	1370.8	0.7640 ug/L	0.7640 ppb	08:08:24
2	Co 228.616†	24.8	74.5	-0.7426 ug/L	-0.7426 ppb	08:08:24
2	Cr 267.716†	-1176.9	-1413.1	0.6812 ug/L	0.6812 ppb	08:08:24
2	Cu 324.752†	2830.9	-2325.0	2.1075 ug/L	2.1075 ppb	08:08:24
2	Mn 257.610†	-401.1	-846.3	-2.7806 ug/L	-2.7806 ppb	08:08:04
2	Mo 202.031†	-202.8	-239.7	-1.3101 ug/L	-1.3101 ppb	08:08:24
2	Ni 231.604†	157.8	95.8	3.0425 ug/L	3.0425 ppb	08:08:24

2	P 214.914†	142.0	-25.4	-39.810 ug/L	-39.810 ppb	08:08:24
2	Pb 220.353†	-626.2	-655.5	-7.3083 ug/L	-7.3083 ppb	08:08:24
2	S 181.975 Axial†	33.1	7.6	-82.324 ug/L	-82.324 ppb	08:08:24
2	Sb 206.836†	57.9	42.3	0.2175 ug/L	0.2175 ppb	08:08:24
2	Se 196.026†	-747.2	-834.8	-0.0402 ug/L	-0.0402 ppb	08:08:24
2	Si 251.611†	394.3	-38.6	-1.2048 ug/L	-1.2048 ppb	08:08:24
2	Sn 189.927†	-320.8	-372.8	-11.367 ug/L	-11.367 ppb	08:08:24
2	Ti 334.940†	-13503.6	-14272.0	-1.3874 ug/L	-1.3874 ppb	08:08:04
2	Tl 190.801†	-66.2	-46.4	-18.205 ug/L	-18.205 ppb	08:08:24
2	U 409.014†	-803.9	1287.9	17.995 ug/L	17.995 ppb	08:08:04
2	V 292.402†	431.2	1808.9	-3.2983 ug/L	-3.2983 ppb	08:08:24
2	Zn 213.857†	2544.3	2330.3	0.5041 ug/L	0.5041 ppb	08:08:24
2	SiO2†	365.5	-82.7	-6.1658 ug/L	-6.1658 ppb	08:09:00
3	Sc Radial	3942.4	3942.4	89.7 %		08:07:32
3	Y RADIAL	4260.7	4260.7	89.50 %		08:07:32
3	Al 396.153Radial†	465460.7	518986.8	509790 ug/L	509790 ppb	08:07:12
3	Ca 317.933Radial†	222404.3	247926.9	469130 ug/L	469130 ppb	08:07:12
3	Fe 238.204 Radial†	14272.6	15903.0	184260 ug/L	184260 ppb	08:07:32
3	K 766.490 Radial†	2182.7	-165.4	-188.41 ug/L	-188.41 ppb	08:07:12
3	Mg 279.077 IEC†	10595.7	11810.8	487020 ug/L	487020 ppb	08:07:32
3	Na 589.592 Radial†	-778.4	7.4	2.5977 ug/L	2.5977 ppb	08:07:32
3	Sr 421.552†	437.6	467.0	0.2402 ug/L	0.2402 ppb	08:07:32
3	Sc 361.383	710682.9	710682.9	86.793 %		08:08:29
3	Y 371.029	587564.2	587564.2	84.951 %		08:08:29
3	Ag 328.068†	-8544.3	-10029.6	-1.4420 ug/L	-1.4420 ppb	08:08:29
3	As 188.979†	-70.5	-54.5	13.089 ug/L	13.089 ppb	08:08:49
3	B 249.677†	259.8	836.6	-6.4560 ug/L	-6.4560 ppb	08:08:29
3	Ba 233.527†	-457.9	-526.8	0.7037 ug/L	0.7037 ppb	08:08:49
3	Be 313.107†	-3965.0	-837.3	-0.4118 ug/L	-0.4118 ppb	08:08:29
3	Cd 226.502†	1043.0	1372.4	0.8901 ug/L	0.8901 ppb	08:08:49
3	Co 228.616†	-1.0	45.0	-1.4890 ug/L	-1.4890 ppb	08:08:49
3	Cr 267.716†	-1159.4	-1407.3	0.6536 ug/L	0.6536 ppb	08:08:49
3	Cu 324.752†	2863.3	-2253.0	2.2920 ug/L	2.2920 ppb	08:08:49
3	Mn 257.610†	-330.0	-769.3	-2.7332 ug/L	-2.7332 ppb	08:08:29
3	Mo 202.031†	-196.9	-235.4	-1.0397 ug/L	-1.0397 ppb	08:08:49
3	Ni 231.604†	178.7	121.9	3.8690 ug/L	3.8690 ppb	08:08:49
3	P 214.914†	162.7	0.1	-20.545 ug/L	-20.545 ppb	08:08:49
3	Pb 220.353†	-656.2	-697.7	-14.099 ug/L	-14.099 ppb	08:08:49
3	S 181.975 Axial†	42.3	18.6	-62.284 ug/L	-62.284 ppb	08:08:49
3	Sb 206.836†	52.8	37.1	-1.9255 ug/L	-1.9255 ppb	08:08:49
3	Se 196.026†	-745.0	-841.4	-8.9102 ug/L	-8.9102 ppb	08:08:49
3	Si 251.611†	372.9	-58.6	-1.9659 ug/L	-1.9659 ppb	08:08:49
3	Sn 189.927†	-328.8	-386.0	-14.835 ug/L	-14.835 ppb	08:08:49
3	Ti 334.940†	-13136.3	-14014.0	-1.2548 ug/L	-1.2548 ppb	08:08:29
3	Tl 190.801†	-69.7	-51.2	-20.066 ug/L	-20.066 ppb	08:08:49
3	U 409.014†	-736.8	1355.3	20.153 ug/L	20.153 ppb	08:08:29
3	V 292.402†	426.1	1808.4	-3.1711 ug/L	-3.1711 ppb	08:08:49
3	Zn 213.857†	2566.5	2386.9	1.3317 ug/L	1.3317 ppb	08:08:49
3	SiO2†	334.0	-114.6	-8.7798 ug/L	-8.7798 ppb	08:09:05

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	713617.2	87.151 %	0.5014			0.58%
Sc Radial	3919.5	89.2 %	0.54			0.60%
Y 371.029	590478.1	85.373 %	0.5590			0.65%
Y RADIAL	4240.8	89.08 %	0.622			0.70%
Ag 328.068†	-10087.4	-1.5755 ug/L	0.53429	-1.5755 ppb	0.53429	33.91%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	521736.2	512490 ug/L	3212.1	512490 ppb	3212.1	0.63%
QC value within limits for Al 396.153Radial Recovery = 102.50%						
As 188.979†	-62.3	8.9685 ug/L	7.46115	8.9685 ppb	7.46115	83.19%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	848.6	-6.2340 ug/L	1.36000	-6.2340 ppb	1.36000	21.82%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	-548.2	0.5246 ug/L	0.15915	0.5246 ppb	0.15915	30.34%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	-798.9	-0.3960 ug/L	0.02374	-0.3960 ppb	0.02374	5.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	249855.5	472780 ug/L	4019.3	472780 ppb	4019.3	0.85%

QC value within limits for Ca 317.933 Radial Recovery = 94.56%							
Cd	226.502†	1368.7	0.7636 ug/L	0.12665	0.7636 ppb	0.12665	16.59%
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co	228.616†	54.6	-1.2536 ug/L	0.44296	-1.2536 ppb	0.44296	35.33%
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	-1412.8	0.6548 ug/L	0.02586	0.6548 ppb	0.02586	3.95%
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	324.752†	-2317.4	2.1168 ug/L	0.17081	2.1168 ppb	0.17081	8.07%
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe	238.204 Radial†	15963.0	184960 ug/L	605.0	184960 ppb	605.0	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 92.48%							
K	766.490 Radial†	-166.0	-189.76 ug/L	12.700	-189.76 ppb	12.700	6.69%
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg	279.077 IEC†	11840.6	488250 ug/L	1320.7	488250 ppb	1320.7	0.27%
QC value within limits for Mg 279.077 IEC Recovery = 97.65%							
Mn	257.610†	-770.2	-2.7160 ug/L	0.07477	-2.7160 ppb	0.07477	2.75%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	-240.8	-1.4219 ug/L	0.44861	-1.4219 ppb	0.44861	31.55%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na	589.592 Radial†	26.7	9.4025 ug/L	7.61365	9.4025 ppb	7.61365	80.97%
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni	231.604†	108.1	3.4307 ug/L	0.41549	3.4307 ppb	0.41549	12.11%
QC value within limits for Ni 231.604 Recovery = Not calculated							
P	214.914†	-8.1	-26.487 ug/L	11.5606	-26.487 ppb	11.5606	43.65%
QC value within limits for P 214.914 Recovery = Not calculated							
Pb	220.353†	-678.2	-10.552 ug/L	3.4057	-10.552 ppb	3.4057	32.28%
QC value within limits for Pb 220.353 Recovery = Not calculated							
S	181.975 Axial†	12.0	-74.612 ug/L	10.7874	-74.612 ppb	10.7874	14.46%
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb	206.836†	42.0	0.0607 ug/L	1.91250	0.0607 ppb	1.91250	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-835.9	-1.4415 ug/L	6.87597	-1.4415 ppb	6.87597	476.99%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	-59.7	-2.0044 ug/L	0.81955	-2.0044 ppb	0.81955	40.89%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-379.4	-12.711 ug/L	1.8610	-12.711 ppb	1.8610	14.64%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr	421.552†	475.9	0.2848 ug/L	0.06445	0.2848 ppb	0.06445	22.63%
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti	334.940†	-14133.4	-1.0727 ug/L	0.43523	-1.0727 ppb	0.43523	40.57%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-44.5	-17.450 ug/L	3.0630	-17.450 ppb	3.0630	17.55%
QC value within limits for Tl 190.801 Recovery = Not calculated							
U	409.014†	1321.9	19.062 ug/L	1.0788	19.062 ppb	1.0788	5.66%
QC value within limits for U 409.014 Recovery = Not calculated							
V	292.402†	1825.2	-3.1228 ug/L	0.20398	-3.1228 ppb	0.20398	6.53%
QC value within limits for V 292.402 Recovery = Not calculated							
Zn	213.857†	2365.8	0.9747 ug/L	0.42531	0.9747 ppb	0.42531	43.64%
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†		-86.1	-6.4475 ug/L	2.20499	-6.4475 ppb	2.20499	34.20%
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: 3/19/2010 08:11:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3929.4	3929.4	89.4 %		08:13:28
1	Y RADIAL	4274.8	4274.8	89.80 %		08:13:28
1	Al 396.153Radial†	461471.5	516235.9	507060 ug/L	507060 ppb	08:13:08
1	Ca 317.933Radial†	222675.9	249048.2	471250 ug/L	471250 ppb	08:13:08
1	Fe 238.204 Radial†	14573.7	16292.3	188790 ug/L	188790 ppb	08:13:28
1	K 766.490 Radial†	27582.5	28252.3	5222.4 ug/L	5222.4 ppb	08:13:08
1	Mg 279.077 IEC†	10715.6	11983.9	494160 ug/L	494160 ppb	08:13:28
1	Na 589.592 Radial†	12902.7	15306.9	5396.0 ug/L	5396.0 ppb	08:13:08
1	Sr 421.552†	56906.9	63629.8	506.52 ug/L	506.52 ppb	08:13:08
1	Sc 361.383	720288.2	720288.2	87.966 %		08:14:26
1	Y 371.029	594435.6	594435.6	85.945 %		08:14:26
1	Ag 328.068†	37624.4	42586.3	274.73 ug/L	274.73 ppb	08:14:26
1	As 188.979†	754.1	884.0	532.66 ug/L	532.66 ppb	08:14:46
1	B 249.677†	16639.1	19452.7	513.79 ug/L	513.79 ppb	08:14:26
1	Ba 233.527†	45572.8	51808.0	492.14 ug/L	492.14 ppb	08:14:26
1	Be 313.107†	509360.8	582773.2	249.25 ug/L	249.25 ppb	08:14:26
1	Cd 226.502†	29115.2	33268.9	463.61 ug/L	463.61 ppb	08:14:46
1	Co 228.616†	15201.6	17327.4	445.24 ug/L	445.24 ppb	08:14:46
1	Cr 267.716†	30631.0	34749.9	486.52 ug/L	486.52 ppb	08:14:26
1	Cu 324.752†	148588.6	163363.8	549.04 ug/L	549.04 ppb	08:14:26
1	Mn 257.610†	320306.8	363736.2	476.68 ug/L	476.68 ppb	08:14:26
1	Mo 202.031†	4633.3	5258.6	487.71 ug/L	487.71 ppb	08:14:46
1	Ni 231.604†	12601.2	14241.0	451.98 ug/L	451.98 ppb	08:14:46
1	P 214.914†	3139.5	3381.7	2390.1 ug/L	2390.1 ppb	08:14:46
1	Pb 220.353†	1997.6	2329.2	450.62 ug/L	450.62 ppb	08:14:46
1	S 181.975 Axial†	1333.5	1485.8	2564.9 ug/L	2564.9 ppb	08:14:46
1	Sb 206.836†	1162.5	1297.9	543.31 ug/L	543.31 ppb	08:14:46
1	Se 196.026†	1939.8	2222.1	2556.9 ug/L	2556.9 ppb	08:14:46
1	Si 251.611†	121964.3	138161.0	5239.2 ug/L	5239.2 ppb	08:14:26
1	Sn 189.927†	1579.3	1788.2	478.67 ug/L	478.67 ppb	08:14:46
1	Ti 334.940†	244598.2	279180.8	507.93 ug/L	507.93 ppb	08:14:26
1	Tl 190.801†	961.9	1122.5	437.65 ug/L	437.65 ppb	08:14:46
1	U 409.014†	13648.4	17719.7	515.02 ug/L	515.02 ppb	08:14:26
1	V 292.402†	56031.7	65014.4	508.15 ug/L	508.15 ppb	08:14:26
1	Zn 213.857†	38636.8	43352.3	493.43 ug/L	493.43 ppb	08:14:26
1	SiO2†	120760.5	136781.4	11150 ug/L	11150 ppb	08:15:44
2	Sc Radial	3946.5	3946.5	89.8 %		08:13:54
2	Y RADIAL	4277.8	4277.8	89.86 %		08:13:54
2	Al 396.153Radial†	472937.5	526772.2	517410 ug/L	517410 ppb	08:13:34
2	Ca 317.933Radial†	228578.7	254544.5	481650 ug/L	481650 ppb	08:13:34
2	Fe 238.204 Radial†	14556.7	16202.9	187750 ug/L	187750 ppb	08:13:54
2	K 766.490 Radial†	28173.1	28776.6	5318.7 ug/L	5318.7 ppb	08:13:34
2	Mg 279.077 IEC†	10699.3	11913.9	491280 ug/L	491280 ppb	08:13:54
2	Na 589.592 Radial†	13381.9	15778.1	5562.1 ug/L	5562.1 ppb	08:13:34
2	Sr 421.552†	58340.8	64951.3	517.04 ug/L	517.04 ppb	08:13:34
2	Sc 361.383	719730.9	719730.9	87.898 %		08:14:52
2	Y 371.029	594594.5	594594.5	85.968 %		08:14:52
2	Ag 328.068†	37665.4	42666.1	274.69 ug/L	274.69 ppb	08:14:52
2	As 188.979†	733.5	861.3	519.90 ug/L	519.90 ppb	08:15:12
2	B 249.677†	16494.5	19302.8	509.76 ug/L	509.76 ppb	08:14:52
2	Ba 233.527†	45632.5	51915.9	493.12 ug/L	493.12 ppb	08:14:52
2	Be 313.107†	509580.7	583471.7	249.55 ug/L	249.55 ppb	08:14:52
2	Cd 226.502†	29008.1	33172.6	462.32 ug/L	462.32 ppb	08:15:12
2	Co 228.616†	15102.4	17227.9	442.69 ug/L	442.69 ppb	08:15:12
2	Cr 267.716†	30639.4	34786.4	486.90 ug/L	486.90 ppb	08:14:52
2	Cu 324.752†	148069.9	162904.5	547.47 ug/L	547.47 ppb	08:14:52
2	Mn 257.610†	319951.8	363614.3	476.54 ug/L	476.54 ppb	08:14:52
2	Mo 202.031†	4644.0	5274.9	489.20 ug/L	489.20 ppb	08:15:12
2	Ni 231.604†	12562.9	14208.5	450.95 ug/L	450.95 ppb	08:15:12

2	P 214.914†	3115.9	3357.6	2375.9 ug/L	2375.9 ppb	08:15:12
2	Pb 220.353†	1987.6	2319.6	451.73 ug/L	451.73 ppb	08:15:12
2	S 181.975 Axial†	1323.2	1475.2	2544.0 ug/L	2544.0 ppb	08:15:12
2	Sb 206.836†	1137.8	1270.8	531.74 ug/L	531.74 ppb	08:15:12
2	Se 196.026†	1929.4	2212.0	2548.8 ug/L	2548.8 ppb	08:15:12
2	Si 251.611†	121859.8	138149.5	5238.8 ug/L	5238.8 ppb	08:14:52
2	Sn 189.927†	1577.9	1788.0	480.53 ug/L	480.53 ppb	08:15:12
2	Ti 334.940†	244000.0	278715.6	508.76 ug/L	508.76 ppb	08:14:52
2	Tl 190.801†	973.5	1136.6	443.10 ug/L	443.10 ppb	08:15:12
2	U 409.014†	13501.3	17564.4	510.42 ug/L	510.42 ppb	08:14:52
2	V 292.402†	56069.0	65106.1	508.99 ug/L	508.99 ppb	08:14:52
2	Zn 213.857†	38575.9	43317.0	493.16 ug/L	493.16 ppb	08:14:52
2	SiO2†	121690.4	137945.6	11245 ug/L	11245 ppb	08:15:49
3	Sc Radial	3955.1	3955.1	90.0 %		08:14:19
3	Y RADIAL	4282.0	4282.0	89.95 %		08:14:19
3	Al 396.153Radial†	473789.5	526577.2	517220 ug/L	517220 ppb	08:13:59
3	Ca 317.933Radial†	228286.7	253668.2	479990 ug/L	479990 ppb	08:13:59
3	Fe 238.204 Radial†	14574.2	16187.1	187570 ug/L	187570 ppb	08:14:19
3	K 766.490 Radial†	28154.5	28687.9	5302.4 ug/L	5302.4 ppb	08:13:59
3	Mg 279.077 IEC†	10706.9	11896.6	490560 ug/L	490560 ppb	08:14:19
3	Na 589.592 Radial†	13327.1	15684.9	5529.2 ug/L	5529.2 ppb	08:13:59
3	Sr 421.552†	58635.9	65138.4	518.55 ug/L	518.55 ppb	08:13:59
3	Sc 361.383	717692.3	717692.3	87.649 %		08:15:18
3	Y 371.029	592016.4	592016.4	85.595 %		08:15:18
3	Ag 328.068†	37419.2	42507.0	273.82 ug/L	273.82 ppb	08:15:18
3	As 188.979†	734.9	865.3	522.04 ug/L	522.04 ppb	08:15:38
3	B 249.677†	16478.1	19337.4	510.75 ug/L	510.75 ppb	08:15:18
3	Ba 233.527†	45400.4	51798.6	492.01 ug/L	492.01 ppb	08:15:18
3	Be 313.107†	505147.9	580061.1	248.09 ug/L	248.09 ppb	08:15:18
3	Cd 226.502†	29070.9	33338.0	464.74 ug/L	464.74 ppb	08:15:38
3	Co 228.616†	15202.6	17391.1	446.92 ug/L	446.92 ppb	08:15:38
3	Cr 267.716†	30397.7	34609.6	484.51 ug/L	484.51 ppb	08:15:18
3	Cu 324.752†	147241.9	162438.3	545.92 ug/L	545.92 ppb	08:15:18
3	Mn 257.610†	318560.0	363060.3	475.82 ug/L	475.82 ppb	08:15:18
3	Mo 202.031†	4659.6	5307.7	492.08 ug/L	492.08 ppb	08:15:38
3	Ni 231.604†	12615.1	14308.6	454.13 ug/L	454.13 ppb	08:15:38
3	P 214.914†	3126.1	3379.3	2392.5 ug/L	2392.5 ppb	08:15:38
3	Pb 220.353†	1981.7	2319.2	451.65 ug/L	451.65 ppb	08:15:38
3	S 181.975 Axial†	1326.1	1482.7	2557.5 ug/L	2557.5 ppb	08:15:38
3	Sb 206.836†	1177.2	1319.5	552.20 ug/L	552.20 ppb	08:15:38
3	Se 196.026†	1947.1	2238.4	2570.2 ug/L	2570.2 ppb	08:15:38
3	Si 251.611†	121149.0	137732.4	5222.9 ug/L	5222.9 ppb	08:15:18
3	Sn 189.927†	1579.5	1795.0	481.83 ug/L	481.83 ppb	08:15:38
3	Ti 334.940†	242971.7	278330.9	507.93 ug/L	507.93 ppb	08:15:18
3	Tl 190.801†	945.2	1107.5	431.81 ug/L	431.81 ppb	08:15:38
3	U 409.014†	13527.8	17638.3	512.69 ug/L	512.69 ppb	08:15:18
3	V 292.402†	55602.3	64754.9	506.25 ug/L	506.25 ppb	08:15:18
3	Zn 213.857†	38305.4	43133.0	490.94 ug/L	490.94 ppb	08:15:18
3	SiO2†	121243.0	137828.4	11236 ug/L	11236 ppb	08:15:54

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	719237.2	87.838 %	0.1669			0.19%
Sc Radial	3943.7	89.7 %	0.30			0.33%
Y 371.029	593682.2	85.836 %	0.2089			0.24%
Y RADIAL	4278.2	89.87 %	0.076			0.08%
Ag 328.068†	42586.5	274.42 ug/L	0.516	274.42 ppb	0.516	0.19%
QC value within limits for Ag 328.068 Recovery = 109.77%						
Al 396.153Radial†	523195.1	513900 ug/L	5920.7	513900 ppb	5920.7	1.15%
QC value within limits for Al 396.153Radial Recovery = 102.78%						
As 188.979†	870.2	524.87 ug/L	6.835	524.87 ppb	6.835	1.30%
QC value within limits for As 188.979 Recovery = 104.97%						
B 249.677†	19364.3	511.43 ug/L	2.100	511.43 ppb	2.100	0.41%
QC value within limits for B 249.677 Recovery = 102.29%						
Ba 233.527†	51840.8	492.43 ug/L	0.607	492.43 ppb	0.607	0.12%
QC value within limits for Ba 233.527 Recovery = 98.49%						
Be 313.107†	582102.0	248.96 ug/L	0.768	248.96 ppb	0.768	0.31%
QC value within limits for Be 313.107 Recovery = 99.59%						
Ca 317.933Radial†	252420.3	477630 ug/L	5587.7	477630 ppb	5587.7	1.17%

QC value within limits for Ca 317.933 Radial Recovery = 95.53%							
Cd 226.502†	33259.8	463.56 ug/L	1.211	463.56 ppb	1.211	0.26%	
QC value within limits for Cd 226.502 Recovery = 92.71%							
Co 228.616†	17315.5	444.95 ug/L	2.129	444.95 ppb	2.129	0.48%	
QC value within limits for Co 228.616 Recovery = 88.99%							
Cr 267.716†	34715.3	485.98 ug/L	1.287	485.98 ppb	1.287	0.26%	
QC value within limits for Cr 267.716 Recovery = 97.20%							
Cu 324.752†	162902.2	547.48 ug/L	1.559	547.48 ppb	1.559	0.28%	
QC value within limits for Cu 324.752 Recovery = 109.50%							
Fe 238.204 Radial†	16227.4	188040 ug/L	657.2	188040 ppb	657.2	0.35%	
QC value within limits for Fe 238.204 Radial Recovery = 94.02%							
K 766.490 Radial†	28572.3	5281.2 ug/L	51.56	5281.2 ppb	51.56	0.98%	
QC value within limits for K 766.490 Radial Recovery = 105.62%							
Mg 279.077 IEC†	11931.5	492000 ug/L	1907.0	492000 ppb	1907.0	0.39%	
QC value within limits for Mg 279.077 IEC Recovery = 98.40%							
Mn 257.610†	363470.3	476.34 ug/L	0.461	476.34 ppb	0.461	0.10%	
QC value within limits for Mn 257.610 Recovery = 95.27%							
Mo 202.031†	5280.4	489.66 ug/L	2.224	489.66 ppb	2.224	0.45%	
QC value within limits for Mo 202.031 Recovery = 97.93%							
Na 589.592 Radial†	15589.9	5495.8 ug/L	87.97	5495.8 ppb	87.97	1.60%	
QC value within limits for Na 589.592 Radial Recovery = 109.92%							
Ni 231.604†	14252.7	452.36 ug/L	1.621	452.36 ppb	1.621	0.36%	
QC value within limits for Ni 231.604 Recovery = 90.47%							
P 214.914†	3372.9	2386.2 ug/L	8.95	2386.2 ppb	8.95	0.38%	
QC value within limits for P 214.914 Recovery = 95.45%							
Pb 220.353†	2322.7	451.34 ug/L	0.618	451.34 ppb	0.618	0.14%	
QC value within limits for Pb 220.353 Recovery = 90.27%							
S 181.975 Axial†	1481.2	2555.4 ug/L	10.60	2555.4 ppb	10.60	0.41%	
QC value within limits for S 181.975 Axial Recovery = 102.22%							
Sb 206.836†	1296.0	542.42 ug/L	10.256	542.42 ppb	10.256	1.89%	
QC value within limits for Sb 206.836 Recovery = 108.48%							
Se 196.026†	2224.2	2558.7 ug/L	10.81	2558.7 ppb	10.81	0.42%	
QC value within limits for Se 196.026 Recovery = 102.35%							
Si 251.611†	138014.3	5233.7 ug/L	9.30	5233.7 ppb	9.30	0.18%	
QC value within limits for Si 251.611 Recovery = 104.67%							
Sn 189.927†	1790.4	480.34 ug/L	1.588	480.34 ppb	1.588	0.33%	
QC value within limits for Sn 189.927 Recovery = 96.07%							
Sr 421.552†	64573.1	514.03 ug/L	6.551	514.03 ppb	6.551	1.27%	
QC value within limits for Sr 421.552 Recovery = 102.81%							
Ti 334.940†	278742.4	508.21 ug/L	0.478	508.21 ppb	0.478	0.09%	
QC value within limits for Ti 334.940 Recovery = 101.64%							
Tl 190.801†	1122.2	437.52 ug/L	5.646	437.52 ppb	5.646	1.29%	
QC value within limits for Tl 190.801 Recovery = 87.50%							
U 409.014†	17640.8	512.71 ug/L	2.298	512.71 ppb	2.298	0.45%	
QC value within limits for U 409.014 Recovery = 102.54%							
V 292.402†	64958.4	507.80 ug/L	1.406	507.80 ppb	1.406	0.28%	
QC value within limits for V 292.402 Recovery = 101.56%							
Zn 213.857†	43267.4	492.51 ug/L	1.364	492.51 ppb	1.364	0.28%	
QC value within limits for Zn 213.857 Recovery = 98.50%							
Sio2†	137518.5	11210 ug/L	52.3	11210 ppb	52.3	0.47%	
QC value within limits for Sio2 Recovery = 104.82%							
All analyte(s) passed QC.							

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 3/19/2010 08:18:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3858.3	3858.3	87.8 %		08:20:17
1	Y RADIAL	4204.0	4204.0	88.31 %		08:20:17
1	Al 396.153Radial†	464225.3	528893.5	519520 ug/L	519520 ppb	08:19:57
1	Ca 317.933Radial†	223881.2	255015.3	482540 ug/L	482540 ppb	08:19:57
1	Fe 238.204 Radial†	33047.8	37637.5	436100 ug/L	436100 ppb	08:20:17
1	K 766.490 Radial†	2465.2	209.4	-328.44 ug/L	-328.44 ppb	08:19:57
1	Mg 279.077 IEC†	10432.1	11882.0	489700 ug/L	489700 ppb	08:20:17
1	Na 589.592 Radial†	1320643.5	1505266.9	530640 ug/L	530640 ppb	08:19:57
1	Sr 421.552†	1394.9	1568.2	8.9670 ug/L	8.9670 ppb	08:20:17
1	Sc 361.383	692124.4	692124.4	84.527 %		08:21:15
1	Y 371.029	573747.0	573747.0	82.954 %		08:21:15
1	Ag 328.068†	-19613.3	-23388.8	-5.2352 ug/L	-5.2352 ppb	08:21:15
1	As 188.979†	-142.9	-142.3	23.974 ug/L	23.974 ppb	08:21:35
1	B 249.677†	872.5	1569.6	-26.808 ug/L	-26.808 ppb	08:21:15
1	Ba 233.527†	-1321.0	-1562.1	-1.3183 ug/L	-1.3183 ppb	08:21:35
1	Be 313.107†	-9468.2	-7470.4	-3.2304 ug/L	-3.2304 ppb	08:21:15
1	Cd 226.502†	2655.0	3311.7	5.9163 ug/L	5.9163 ppb	08:21:35
1	Co 228.616†	194.4	276.1	0.7761 ug/L	0.7761 ppb	08:21:35
1	Cr 267.716†	-1023.6	-1282.5	23.115 ug/L	23.115 ppb	08:21:35
1	Cu 324.752†	582.4	-4862.9	-1.2373 ug/L	-1.2373 ppb	08:21:15
1	Mn 257.610†	-20079.9	-24144.8	-8.7155 ug/L	-8.7155 ppb	08:21:15
1	Mo 202.031†	-437.4	-526.0	-7.1607 ug/L	-7.1607 ppb	08:21:35
1	Ni 231.604†	224.5	181.6	5.7615 ug/L	5.7615 ppb	08:21:35
1	P 214.914†	473.6	373.1	58.508 ug/L	58.508 ppb	08:21:35
1	Pb 220.353†	-449.8	-473.9	-13.265 ug/L	-13.265 ppb	08:21:35
1	S 181.975 Axial†	45.7	23.9	-54.613 ug/L	-54.613 ppb	08:21:35
1	Sb 206.836†	49.4	34.7	-6.5923 ug/L	-6.5923 ppb	08:21:35
1	Se 196.026†	-1806.4	-2120.1	-347.16 ug/L	-347.16 ppb	08:21:35
1	Si 251.611†	-299.5	-842.5	-31.407 ug/L	-31.407 ppb	08:21:35
1	Sn 189.927†	-339.4	-408.7	-32.054 ug/L	-32.054 ppb	08:21:35
1	Ti 334.940†	-11536.9	-12527.6	-3.6494 ug/L	-3.6494 ppb	08:21:15
1	Tl 190.801†	-84.5	-70.9	-27.844 ug/L	-27.844 ppb	08:21:35
1	U 409.014†	414094.0	492102.3	14880 ug/L	14880 ppb	08:21:15
1	V 292.402†	1055.9	2566.7	-5.6116 ug/L	-5.6116 ppb	08:21:35
1	Zn 213.857†	4619.7	4895.3	-5.9615 ug/L	-5.9615 ppb	08:21:35
1	SiO2†	-253.8	-799.6	-63.985 ug/L	-63.985 ppb	08:22:32
2	Sc Radial	3862.7	3862.7	87.9 %		08:20:43
2	Y RADIAL	4199.0	4199.0	88.20 %		08:20:43
2	Al 396.153Radial†	461838.3	525564.2	516250 ug/L	516250 ppb	08:20:23
2	Ca 317.933Radial†	223024.1	253744.3	480140 ug/L	480140 ppb	08:20:23
2	Fe 238.204 Radial†	33136.1	37694.2	436750 ug/L	436750 ppb	08:20:43
2	K 766.490 Radial†	2317.4	38.0	-359.39 ug/L	-359.39 ppb	08:20:23
2	Mg 279.077 IEC†	10466.5	11907.4	490740 ug/L	490740 ppb	08:20:43
2	Na 589.592 Radial†	1316291.1	1498569.5	528280 ug/L	528280 ppb	08:20:23
2	Sr 421.552†	1406.5	1579.6	9.0762 ug/L	9.0762 ppb	08:20:43
2	Sc 361.383	730532.2	730532.2	89.217 %		08:21:41
2	Y 371.029	605265.0	605265.0	87.511 %		08:21:41
2	Ag 328.068†	-19445.3	-21980.6	2.9810 ug/L	2.9810 ppb	08:21:41
2	As 188.979†	-136.7	-126.4	32.829 ug/L	32.829 ppb	08:22:01
2	B 249.677†	952.3	1604.8	-25.925 ug/L	-25.925 ppb	08:21:41
2	Ba 233.527†	-1364.7	-1528.9	-0.9888 ug/L	-0.9888 ppb	08:22:01
2	Be 313.107†	-9512.7	-6931.4	-3.0000 ug/L	-3.0000 ppb	08:21:41
2	Cd 226.502†	2640.5	3130.3	3.0561 ug/L	3.0561 ppb	08:22:01
2	Co 228.616†	193.3	262.9	0.4413 ug/L	0.4413 ppb	08:22:01
2	Cr 267.716†	-1053.2	-1252.0	23.918 ug/L	23.918 ppb	08:22:01
2	Cu 324.752†	530.5	-4957.4	-1.0589 ug/L	-1.0589 ppb	08:21:41
2	Mn 257.610†	-20279.0	-23119.0	-7.3448 ug/L	-7.3448 ppb	08:21:41
2	Mo 202.031†	-388.0	-443.4	0.2051 ug/L	0.2051 ppb	08:22:01
2	Ni 231.604†	244.4	189.9	6.0255 ug/L	6.0255 ppb	08:22:01

2	P 214.914†	460.8	329.2	24.570 ug/L	24.570 ppb	08:22:01
2	Pb 220.353†	-451.1	-447.3	-10.020 ug/L	-10.020 ppb	08:22:01
2	S 181.975 Axial†	65.6	43.3	-19.239 ug/L	-19.239 ppb	08:22:01
2	Sb 206.836†	71.3	56.2	2.7172 ug/L	2.7172 ppb	08:22:01
2	Se 196.026†	-1799.4	-2000.0	-246.22 ug/L	-246.22 ppb	08:22:01
2	Si 251.611†	-238.1	-755.1	-28.180 ug/L	-28.180 ppb	08:22:01
2	Sn 189.927†	-334.8	-382.4	-26.547 ug/L	-26.547 ppb	08:22:01
2	Ti 334.940†	-11966.2	-12291.2	-3.2854 ug/L	-3.2854 ppb	08:21:41
2	Tl 190.801†	-81.0	-61.7	-24.259 ug/L	-24.259 ppb	08:22:01
2	U 409.014†	412871.2	464975.3	14057 ug/L	14057 ppb	08:21:41
2	V 292.402†	1032.4	2474.6	-7.8937 ug/L	-7.8937 ppb	08:22:01
2	Zn 213.857†	4602.5	4588.7	-9.7762 ug/L	-9.7762 ppb	08:22:01
2	SiO2†	-292.8	-827.5	-66.459 ug/L	-66.459 ppb	08:22:37
3	Sc Radial	3792.3	3792.3	86.3 %		08:21:08
3	Y RADIAL	4133.1	4133.1	86.82 %		08:21:08
3	Al 396.153Radial†	464025.1	537857.3	528320 ug/L	528320 ppb	08:20:48
3	Ca 317.933Radial†	223657.0	259190.2	490440 ug/L	490440 ppb	08:20:48
3	Fe 238.204 Radial†	32562.1	37729.2	437160 ug/L	437160 ppb	08:21:08
3	K 766.490 Radial†	2391.3	172.7	-341.14 ug/L	-341.14 ppb	08:20:48
3	Mg 279.077 IEC†	10258.7	11887.7	489930 ug/L	489930 ppb	08:21:08
3	Na 589.592 Radial†	1317202.9	1527439.6	538460 ug/L	538460 ppb	08:20:48
3	Sr 421.552†	1379.4	1577.8	8.9853 ug/L	8.9853 ppb	08:21:08
3	Sc 361.383	694267.4	694267.4	84.788 %		08:22:07
3	Y 371.029	575265.2	575265.2	83.173 %		08:22:07
3	Ag 328.068†	-19833.7	-23577.2	-6.0148 ug/L	-6.0148 ppb	08:22:07
3	As 188.979†	-136.5	-134.2	28.664 ug/L	28.664 ppb	08:22:27
3	B 249.677†	971.8	1683.5	-23.784 ug/L	-23.784 ppb	08:22:07
3	Ba 233.527†	-1352.4	-1594.4	-1.5876 ug/L	-1.5876 ppb	08:22:27
3	Be 313.107†	-9518.2	-7494.8	-3.2398 ug/L	-3.2398 ppb	08:22:07
3	Cd 226.502†	2641.5	3286.0	5.4396 ug/L	5.4396 ppb	08:22:27
3	Co 228.616†	198.7	280.6	0.8817 ug/L	0.8817 ppb	08:22:27
3	Cr 267.716†	-1048.2	-1307.7	22.878 ug/L	22.878 ppb	08:22:27
3	Cu 324.752†	478.2	-4988.0	-1.6100 ug/L	-1.6100 ppb	08:22:07
3	Mn 257.610†	-20061.9	-24050.2	-8.4958 ug/L	-8.4958 ppb	08:22:07
3	Mo 202.031†	-407.4	-489.1	-3.7020 ug/L	-3.7020 ppb	08:22:27
3	Ni 231.604†	237.1	195.5	6.2055 ug/L	6.2055 ppb	08:22:27
3	P 214.914†	471.4	368.6	56.630 ug/L	56.630 ppb	08:22:27
3	Pb 220.353†	-461.8	-486.3	-13.261 ug/L	-13.261 ppb	08:22:27
3	S 181.975 Axial†	57.5	37.6	-31.678 ug/L	-31.678 ppb	08:22:27
3	Sb 206.836†	68.6	57.3	2.6559 ug/L	2.6559 ppb	08:22:27
3	Se 196.026†	-1780.3	-2082.7	-310.14 ug/L	-310.14 ppb	08:22:27
3	Si 251.611†	-272.2	-809.2	-30.184 ug/L	-30.184 ppb	08:22:27
3	Sn 189.927†	-340.5	-408.7	-30.723 ug/L	-30.723 ppb	08:22:27
3	Ti 334.940†	-11350.1	-12265.2	-2.1655 ug/L	-2.1655 ppb	08:22:07
3	Tl 190.801†	-95.1	-83.0	-32.522 ug/L	-32.522 ppb	08:22:27
3	U 409.014†	416181.0	493051.5	14909 ug/L	14909 ppb	08:22:07
3	V 292.402†	1073.7	2583.8	-5.5239 ug/L	-5.5239 ppb	08:22:27
3	Zn 213.857†	4591.0	4844.6	-6.7377 ug/L	-6.7377 ppb	08:22:27
3	SiO2†	-295.7	-848.1	-68.030 ug/L	-68.030 ppb	08:22:42

Mean Data: LRI

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	705641.3	86.177 %	2.6358			3.06%
Sc Radial	3837.8	87.3 %	0.90			1.03%
Y 371.029	584759.1	84.546 %	2.5699			3.04%
Y RADIAL	4178.7	87.78 %	0.831			0.95%
Ag 328.068†	-22982.2	-2.7564 ug/L	4.98395	-2.7564 ppb	4.98395	180.82%
Al 396.153Radial†	530771.7	521360 ug/L	6245.4	521360 ppb	6245.4	1.20%
QC value within limits for Al 396.153Radial Recovery = 104.27%						
As 188.979†	-134.3	28.489 ug/L	4.4300	28.489 ppb	4.4300	15.55%
B 249.677†	1619.3	-25.506 ug/L	1.5552	-25.506 ppb	1.5552	6.10%
Ba 233.527†	-1561.8	-1.2983 ug/L	0.29988	-1.2983 ppb	0.29988	23.10%
Be 313.107†	-7298.9	-3.1567 ug/L	0.13583	-3.1567 ppb	0.13583	4.30%
Ca 317.933Radial†	255983.3	484370 ug/L	5391.1	484370 ppb	5391.1	1.11%
QC value within limits for Ca 317.933Radial Recovery = 96.87%						
Cd 226.502†	3242.6	4.8040 ug/L	1.53236	4.8040 ppb	1.53236	31.90%
Co 228.616†	273.2	0.6997 ug/L	0.22995	0.6997 ppb	0.22995	32.86%
Cr 267.716†	-1280.7	23.303 ug/L	0.5453	23.303 ppb	0.5453	2.34%
Cu 324.752†	-4936.1	-1.3021 ug/L	0.28121	-1.3021 ppb	0.28121	21.60%

Fe 238.204 Radial†	37687.0	436670 ug/L	536.3	436670 ppb	536.3	0.12%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.33%						
K 766.490 Radial†	140.0	-342.99 ug/L	15.557	-342.99 ppb	15.557	4.54%
Mg 279.077 IEC†	11892.4	490120 ug/L	550.1	490120 ppb	550.1	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 98.02%						
Mn 257.610†	-23771.3	-8.1853 ug/L	0.73620	-8.1853 ppb	0.73620	8.99%
Mo 202.031†	-486.1	-3.5526 ug/L	3.68516	-3.5526 ppb	3.68516	103.73%
Na 589.592 Radial†	1510425.3	532460 ug/L	5326.8	532460 ppb	5326.8	1.00%
QC value within limits for Na 589.592 Radial Recovery = 106.49%						
Ni 231.604†	189.0	5.9975 ug/L	0.22333	5.9975 ppb	0.22333	3.72%
P 214.914†	357.0	46.570 ug/L	19.0751	46.570 ppb	19.0751	40.96%
Pb 220.353†	-469.2	-12.182 ug/L	1.8719	-12.182 ppb	1.8719	15.37%
S 181.975 Axial†	34.9	-35.177 ug/L	17.9448	-35.177 ppb	17.9448	51.01%
Sb 206.836†	49.4	-0.4064 ug/L	5.35721	-0.4064 ppb	5.35721	>999.9%
Se 196.026†	-2067.6	-301.17 ug/L	51.066	-301.17 ppb	51.066	16.96%
Si 251.611†	-802.2	-29.924 ug/L	1.6288	-29.924 ppb	1.6288	5.44%
Sn 189.927†	-399.9	-29.775 ug/L	2.8732	-29.775 ppb	2.8732	9.65%
Sr 421.552†	1575.2	9.0095 ug/L	0.05848	9.0095 ppb	0.05848	0.65%
Ti 334.940†	-12361.3	-3.0334 ug/L	0.77339	-3.0334 ppb	0.77339	25.50%
Tl 190.801†	-71.9	-28.208 ug/L	4.1435	-28.208 ppb	4.1435	14.69%
U 409.014†	483376.4	14615 ug/L	483.7	14615 ppb	483.7	3.31%
QC value within limits for U 409.014 Recovery = 97.43%						
V 292.402†	2541.7	-6.3431 ug/L	1.34363	-6.3431 ppb	1.34363	21.18%
Zn 213.857†	4776.2	-7.4918 ug/L	2.01607	-7.4918 ppb	2.01607	26.91%
SiO2†	-825.1	-66.158 ug/L	2.0394	-66.158 ppb	2.0394	3.08%

QC Failed. Continue with analysis.

Sequence No.: 12

Sample ID: LR2

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 16

Date Collected: 3/19/2010 08:24:52

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4137.8	4137.8	94.1 %		08:27:10
1	Y RADIAL	4644.1	4644.1	97.55 %		08:26:50
1	Al 396.153Radial†	390.0	492.3	15.191 ug/L	15.191 ppb	08:26:50
1	Ca 317.933Radial†	33.8	20.2	38.282 ug/L	38.282 ppb	08:27:10
1	Fe 238.204 Radial†	-17.3	-26.9	-23.574 ug/L	-23.574 ppb	08:27:10
1	K 766.490 Radial†	1547401.2	1641029.2	312650 ug/L	312650 ppb	08:26:45
1	Mg 279.077 IEC†	-3.3	-5.0	-105.68 ug/L	-105.68 ppb	08:27:10
1	Na 589.592 Radial†	-347.1	506.4	178.52 ug/L	178.52 ppb	08:26:50
1	Sr 421.552†	1216543.4	1292174.6	10358 ug/L	10358 ppb	08:26:45
1	Sc 361.383	804970.1	804970.1	98.308 %		08:28:28
1	Y 371.029	666238.5	666238.5	96.326 %		08:28:28
1	Ag 328.068†	-6177.1	-6468.5	7.0301 ug/L	7.0301 ppb	08:28:33
1	As 188.979†	17708.3	18039.8	9966.6 ug/L	9966.6 ppb	08:28:33
1	B 249.677†	175916.7	179481.8	5007.7 ug/L	5007.7 ppb	08:28:28
1	Ba 233.527†	1479029.4	1504486.3	14114 ug/L	14114 ppb	08:28:28
1	Be 313.107†	6728544.3	6848082.8	2938.4 ug/L	2938.4 ppb	08:28:21
1	Cd 226.502†	658581.0	670086.7	9729.0 ug/L	9729.0 ppb	08:28:28
1	Co 228.616†	365808.7	372151.0	9616.9 ug/L	9616.9 ppb	08:28:28
1	Cr 267.716†	1773359.1	1803809.5	24204 ug/L	24204 ppb	08:28:28
1	Cu 324.752†	6042194.5	6140637.0	20273 ug/L	20273 ppb	08:28:21
1	Mn 257.610†	7074413.2	7195784.5	9461.1 ug/L	9461.1 ppb	08:28:21
1	Mo 202.031†	106826.9	108657.0	9658.6 ug/L	9658.6 ppb	08:28:33
1	Ni 231.604†	306782.5	311978.6	9901.8 ug/L	9901.8 ppb	08:28:28
1	P 214.914†	23485.0	23701.9	13724 ug/L	13724 ppb	08:28:33
1	Pb 220.353†	155065.2	157792.4	24255 ug/L	24255 ppb	08:28:28
1	S 181.975 Axial†	28593.5	29055.4	52015 ug/L	52015 ppb	08:28:33
1	Sb 206.836†	24495.7	24893.6	10774 ug/L	10774 ppb	08:28:33
1	Se 196.026†	12052.6	12277.0	10257 ug/L	10257 ppb	08:28:33
1	Si 251.611†	1232990.0	1253723.3	47476 ug/L	47476 ppb	08:28:28
1	Sn 189.927†	43906.6	44655.1	10133 ug/L	10133 ppb	08:28:33
1	Ti 334.940†	5587153.3	5684437.1	9876.8 ug/L	9876.8 ppb	08:28:21
1	Tl 190.801†	24418.9	24868.3	9687.0 ug/L	9687.0 ppb	08:28:33
1	U 409.014†	-1200.6	983.0	-24.275 ug/L	-24.275 ppb	08:28:28
1	V 292.402†	1238824.8	1261464.1	10190 ug/L	10190 ppb	08:28:28
1	Zn 213.857†	1148798.8	1168001.2	14062 ug/L	14062 ppb	08:28:28
1	SiO2†	1231318.9	1252012.3	101920 ug/L	101920 ppb	08:29:19
2	Sc Radial	4145.5	4145.5	94.3 %		08:27:41
2	Y RADIAL	4527.2	4527.2	95.10 %		08:27:21
2	Al 396.153Radial†	369.2	469.5	-8.7245 ug/L	-8.7245 ppb	08:27:21
2	Ca 317.933Radial†	32.2	18.5	34.943 ug/L	34.943 ppb	08:27:41
2	Fe 238.204 Radial†	-18.2	-27.8	-32.856 ug/L	-32.856 ppb	08:27:41
2	K 766.490 Radial†	1542370.3	1632628.8	311050 ug/L	311050 ppb	08:27:16
2	Mg 279.077 IEC†	-5.6	-7.4	-205.17 ug/L	-205.17 ppb	08:27:41
2	Na 589.592 Radial†	-354.2	499.6	176.11 ug/L	176.11 ppb	08:27:21
2	Sr 421.552†	1209601.5	1282403.8	10279 ug/L	10279 ppb	08:27:16
2	Sc 361.383	811868.5	811868.5	99.150 %		08:28:48
2	Y 371.029	670978.1	670978.1	97.012 %		08:28:48
2	Ag 328.068†	-6279.8	-6518.8	6.8157 ug/L	6.8157 ppb	08:28:53
2	As 188.979†	17949.0	18129.6	10015 ug/L	10015 ppb	08:28:53
2	B 249.677†	177983.5	180045.9	5023.5 ug/L	5023.5 ppb	08:28:48
2	Ba 233.527†	1494980.9	1507790.9	14145 ug/L	14145 ppb	08:28:48
2	Be 313.107†	6732933.5	6794353.7	2915.3 ug/L	2915.3 ppb	08:28:41
2	Cd 226.502†	666918.4	672803.4	9768.4 ug/L	9768.4 ppb	08:28:48
2	Co 228.616†	370193.2	373411.3	9649.8 ug/L	9649.8 ppb	08:28:48
2	Cr 267.716†	1791743.9	1807024.5	24247 ug/L	24247 ppb	08:28:48
2	Cu 324.752†	6030940.7	6077063.1	20063 ug/L	20063 ppb	08:28:41
2	Mn 257.610†	7074899.8	7135130.0	9381.4 ug/L	9381.4 ppb	08:28:41
2	Mo 202.031†	108087.3	109004.9	9689.6 ug/L	9689.6 ppb	08:28:53
2	Ni 231.604†	310630.5	313208.0	9940.8 ug/L	9940.8 ppb	08:28:48

2	P 214.914†	23794.6	23811.2	13848 ug/L	13848 ppb	08:28:53
2	Pb 220.353†	156895.5	158298.2	24333 ug/L	24333 ppb	08:28:48
2	S 181.975 Axial†	29039.9	29258.5	52379 ug/L	52379 ppb	08:28:53
2	Sb 206.836†	24818.6	25007.5	10823 ug/L	10823 ppb	08:28:53
2	Se 196.026†	12224.9	12346.6	10315 ug/L	10315 ppb	08:28:53
2	Si 251.611†	1246148.3	1256337.3	47575 ug/L	47575 ppb	08:28:48
2	Sn 189.927†	44475.4	44849.3	10178 ug/L	10178 ppb	08:28:53
2	Ti 334.940†	5582866.5	5631822.9	9785.3 ug/L	9785.3 ppb	08:28:41
2	Tl 190.801†	24653.6	24894.0	9695.6 ug/L	9695.6 ppb	08:28:53
2	U 409.014†	-1298.1	895.0	-27.040 ug/L	-27.040 ppb	08:28:48
2	V 292.402†	1250891.0	1262926.4	10202 ug/L	10202 ppb	08:28:48
2	Zn 213.857†	1161089.0	1170467.4	14092 ug/L	14092 ppb	08:28:48
2	SiO2†	1234688.1	1244767.8	101320 ug/L	101320 ppb	08:29:25
3	Sc Radial	4156.1	4156.1	94.6 %		08:28:11
3	Y RADIAL	4593.1	4593.1	96.48 %		08:27:51
3	Al 396.153Radial†	406.4	507.9	24.084 ug/L	24.084 ppb	08:27:51
3	Ca 317.933Radial†	32.6	18.8	35.616 ug/L	35.616 ppb	08:28:11
3	Fe 238.204 Radial†	-11.3	-20.4	53.420 ug/L	53.420 ppb	08:28:11
3	K 766.490 Radial†	1534339.9	1619978.5	308640 ug/L	308640 ppb	08:27:46
3	Mg 279.077 IEC†	-5.4	-7.2	-196.31 ug/L	-196.31 ppb	08:28:11
3	Na 589.592 Radial†	-370.0	483.8	170.55 ug/L	170.55 ppb	08:27:51
3	Sr 421.552†	1205944.7	1275275.8	10222 ug/L	10222 ppb	08:27:46
3	Sc 361.383	799541.9	799541.9	97.645 %		08:29:08
3	Y 371.029	660328.4	660328.4	95.472 %		08:29:08
3	Ag 328.068†	-6237.4	-6572.9	6.6426 ug/L	6.6426 ppb	08:29:13
3	As 188.979†	17849.2	18306.5	10114 ug/L	10114 ppb	08:29:13
3	B 249.677†	175494.5	180264.3	5029.5 ug/L	5029.5 ppb	08:29:08
3	Ba 233.527†	1476470.2	1512079.6	14185 ug/L	14185 ppb	08:29:08
3	Be 313.107†	6787317.6	6954741.4	2984.1 ug/L	2984.1 ppb	08:29:01
3	Cd 226.502†	659516.8	675593.3	9808.9 ug/L	9808.9 ppb	08:29:08
3	Co 228.616†	365913.6	374784.7	9685.0 ug/L	9685.0 ppb	08:29:08
3	Cr 267.716†	1770674.5	1813307.1	24331 ug/L	24331 ppb	08:29:08
3	Cu 324.752†	6079322.5	6220388.3	20537 ug/L	20537 ppb	08:29:01
3	Mn 257.610†	7133186.6	7304831.8	9604.5 ug/L	9604.5 ppb	08:29:01
3	Mo 202.031†	107562.7	110148.3	9791.2 ug/L	9791.2 ppb	08:29:13
3	Ni 231.604†	306847.3	314163.7	9971.1 ug/L	9971.1 ppb	08:29:08
3	P 214.914†	23753.0	24138.6	13999 ug/L	13999 ppb	08:29:13
3	Pb 220.353†	155100.2	158899.1	24425 ug/L	24425 ppb	08:29:08
3	S 181.975 Axial†	28855.2	29520.9	52849 ug/L	52849 ppb	08:29:13
3	Sb 206.836†	24631.3	25201.6	10908 ug/L	10908 ppb	08:29:13
3	Se 196.026†	12064.9	12372.8	10337 ug/L	10337 ppb	08:29:13
3	Si 251.611†	1229504.0	1258668.3	47662 ug/L	47662 ppb	08:29:08
3	Sn 189.927†	44342.4	45404.7	10304 ug/L	10304 ppb	08:29:13
3	Ti 334.940†	5623242.8	5759982.3	10008 ug/L	10008 ppb	08:29:01
3	Tl 190.801†	24541.9	25162.9	9802.4 ug/L	9802.4 ppb	08:29:13
3	U 409.014†	-1135.1	1041.7	-22.786 ug/L	-22.786 ppb	08:29:08
3	V 292.402†	1234480.5	1265570.5	10225 ug/L	10225 ppb	08:29:08
3	Zn 213.857†	1148149.8	1175270.1	14149 ug/L	14149 ppb	08:29:08
3	SiO2†	1217210.0	1246066.7	101430 ug/L	101430 ppb	08:29:31

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	805460.2	98.368 %	0.7545			0.77%
Sc Radial	4146.4	94.3 %	0.21			0.22%
Y 371.029	665848.3	96.270 %	0.7714			0.80%
Y RADIAL	4588.1	96.38 %	1.231			1.28%
Ag 328.068†	-6520.1	6.8295 ug/L	0.19414	6.8295 ppb	0.19414	2.84%
Al 396.153Radial†	489.9	10.184 ug/L	16.9680	10.184 ppb	16.9680	166.62%
As 188.979†	18158.6	10032 ug/L	75.0	10032 ppb	75.0	0.75%
QC value within limits for As 188.979 Recovery = 100.32%						
B 249.677†	179930.7	5020.2 ug/L	11.23	5020.2 ppb	11.23	0.22%
QC value within limits for B 249.677 Recovery = 100.40%						
Ba 233.527†	1508118.9	14148 ug/L	35.7	14148 ppb	35.7	0.25%
QC value within limits for Ba 233.527 Recovery = 94.32%						
Be 313.107†	6865726.0	2945.9 ug/L	35.01	2945.9 ppb	35.01	1.19%
QC value within limits for Be 313.107 Recovery = 98.20%						
Ca 317.933Radial†	19.2	36.280 ug/L	1.7659	36.280 ppb	1.7659	4.87%
Cd 226.502†	672827.8	9768.8 ug/L	39.97	9768.8 ppb	39.97	0.41%
QC value within limits for Cd 226.502 Recovery = 97.69%						

Co 228.616†	373449.0	9650.6 ug/L	34.05	9650.6 ppb	34.05	0.35%
QC value within limits for Co 228.616 Recovery = 96.51%						
Cr 267.716†	1808047.0	24260 ug/L	64.8	24260 ppb	64.8	0.27%
QC value within limits for Cr 267.716 Recovery = 97.04%						
Cu 324.752†	6146029.5	20291 ug/L	237.1	20291 ppb	237.1	1.17%
QC value within limits for Cu 324.752 Recovery = 101.46%						
Fe 238.204 Radial†	-25.0	-1.0033 ug/L	47.36013	-1.0033 ppb	47.36013	>999.9%
K 766.490 Radial†	1631212.1	310780 ug/L	2019.1	310780 ppb	2019.1	0.65%
QC value within limits for K 766.490 Radial Recovery = 103.59%						
Mg 279.077 IEC†	-6.6	-169.05 ug/L	55.058	-169.05 ppb	55.058	32.57%
Mn 257.610†	7211915.4	9482.4 ug/L	113.07	9482.4 ppb	113.07	1.19%
QC value within limits for Mn 257.610 Recovery = 94.82%						
Mo 202.031†	109270.1	9713.1 ug/L	69.35	9713.1 ppb	69.35	0.71%
QC value within limits for Mo 202.031 Recovery = 97.13%						
Na 589.592 Radial†	496.6	175.06 ug/L	4.087	175.06 ppb	4.087	2.33%
Ni 231.604†	313116.8	9937.9 ug/L	34.77	9937.9 ppb	34.77	0.35%
QC value within limits for Ni 231.604 Recovery = 99.38%						
P 214.914†	23883.9	13857 ug/L	137.5	13857 ppb	137.5	0.99%
QC value within limits for P 214.914 Recovery = 92.38%						
Pb 220.353†	158329.9	24337 ug/L	85.2	24337 ppb	85.2	0.35%
QC value within limits for Pb 220.353 Recovery = 97.35%						
S 181.975 Axial†	29278.3	52414 ug/L	417.8	52414 ppb	417.8	0.80%
QC value within limits for S 181.975 Axial Recovery = 104.83%						
Sb 206.836†	25034.3	10835 ug/L	67.7	10835 ppb	67.7	0.63%
QC value within limits for Sb 206.836 Recovery = 108.35%						
Se 196.026†	12332.1	10303 ug/L	41.5	10303 ppb	41.5	0.40%
QC value within limits for Se 196.026 Recovery = 103.03%						
Si 251.611†	1256243.0	47571 ug/L	93.1	47571 ppb	93.1	0.20%
QC value within limits for Si 251.611 Recovery = 95.14%						
Sn 189.927†	44969.7	10205 ug/L	88.3	10205 ppb	88.3	0.87%
QC value within limits for Sn 189.927 Recovery = 102.05%						
Sr 421.552†	1283284.7	10286 ug/L	68.0	10286 ppb	68.0	0.66%
QC value within limits for Sr 421.552 Recovery = 102.86%						
Ti 334.940†	5692080.8	9890.1 ug/L	112.01	9890.1 ppb	112.01	1.13%
QC value within limits for Ti 334.940 Recovery = 98.90%						
Tl 190.801†	24975.1	9728.3 ug/L	64.27	9728.3 ppb	64.27	0.66%
QC value within limits for Tl 190.801 Recovery = 97.28%						
U 409.014†	973.2	-24.700 ug/L	2.1584	-24.700 ppb	2.1584	8.74%
V 292.402†	1263320.3	10206 ug/L	17.5	10206 ppb	17.5	0.17%
QC value within limits for V 292.402 Recovery = 102.06%						
Zn 213.857†	1171246.2	14101 ug/L	44.3	14101 ppb	44.3	0.31%
QC value within limits for Zn 213.857 Recovery = 94.01%						
SiO2†	1247615.6	101560 ug/L	316.3	101560 ppb	316.3	0.31%
QC value within limits for SiO2 Recovery = 94.91%						

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/19/2010 08:47:07

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

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Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/19/2010 07:15:37

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: 3/19/2010 08:47:08

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	4305.8	4305.8	98.0 %		08:49:20
1	Y RADIAL	4716.7	4716.7	99.08 %		08:49:00
1	Al 396.153Radial†	4931.5	5111.8	4997.3 ug/L	4997.3 ppb	08:49:00

1	Ca 317.933Radial†	2710.1	2750.6	5204.7 ug/L	5204.7 ppb	08:49:20
1	Fe 238.204 Radial†	455.7	456.7	5306.4 ug/L	5306.4 ppb	08:49:20
1	K 766.490 Radial†	29165.1	27171.3	5170.4 ug/L	5170.4 ppb	08:49:00
1	Mg 279.077 IEC†	127.8	129.0	5319.9 ug/L	5319.9 ppb	08:49:20
1	Na 589.592 Radial†	27601.2	29048.8	10240 ug/L	10240 ppb	08:49:00
1	Sr 421.552†	62875.2	64158.5	514.24 ug/L	514.24 ppb	08:49:00
1	Sc 361.383	842688.6	842688.6	102.91 %		08:50:18
1	Y 371.029	702082.9	702082.9	101.51 %		08:50:18
1	Ag 328.068†	97152.7	94216.3	492.30 ug/L	492.30 ppb	08:50:23
1	As 188.979†	915.3	916.2	507.22 ug/L	507.22 ppb	08:50:43
1	B 249.677†	17731.7	17766.9	496.15 ug/L	496.15 ppb	08:50:23
1	Ba 233.527†	53823.5	52300.0	491.10 ug/L	491.10 ppb	08:50:23
1	Be 313.107†	1211376.0	1180802.4	503.88 ug/L	503.88 ppb	08:50:18
1	Cd 226.502†	34646.6	33836.1	490.81 ug/L	490.81 ppb	08:50:23
1	Co 228.616†	19740.5	19227.7	497.07 ug/L	497.07 ppb	08:50:23
1	Cr 267.716†	37683.1	36544.5	491.12 ug/L	491.12 ppb	08:50:23
1	Cu 324.752†	156492.6	146509.0	483.70 ug/L	483.70 ppb	08:50:23
1	Mn 257.610†	390297.8	378856.0	498.43 ug/L	498.43 ppb	08:50:18
1	Mo 202.031†	5708.4	5538.2	492.77 ug/L	492.77 ppb	08:50:43
1	Ni 231.604†	16164.2	15622.4	495.83 ug/L	495.83 ppb	08:50:23
1	P 214.914†	3592.6	3303.6	2366.4 ug/L	2366.4 ppb	08:50:43
1	Pb 220.353†	3247.3	3213.6	495.10 ug/L	495.10 ppb	08:50:43
1	S 181.975 Axial†	591.1	544.2	973.26 ug/L	973.26 ppb	08:50:43
1	Sb 206.836†	1250.0	1190.9	516.03 ug/L	516.03 ppb	08:50:43
1	Se 196.026†	596.8	596.8	515.55 ug/L	515.55 ppb	08:50:43
1	Si 251.611†	66710.0	64332.6	2436.2 ug/L	2436.2 ppb	08:50:23
1	Sn 189.927†	2261.3	2190.1	497.61 ug/L	497.61 ppb	08:50:43
1	Ti 334.940†	283251.6	276351.5	480.46 ug/L	480.46 ppb	08:50:23
1	Tl 190.801†	1282.3	1275.1	496.57 ug/L	496.57 ppb	08:50:43
1	U 409.014†	14644.3	16433.8	496.87 ug/L	496.87 ppb	08:50:23
1	V 292.402†	61720.7	61290.3	495.97 ug/L	495.97 ppb	08:50:23
1	Zn 213.857†	42521.3	40747.1	489.11 ug/L	489.11 ppb	08:50:23
1	SiO2†	66780.4	64389.9	5241.6 ug/L	5241.6 ppb	08:51:50
2	Sc Radial	4310.3	4310.3	98.1 %		08:49:46
2	Y RADIAL	4803.0	4803.0	100.9 %		08:49:26
2	Al 396.153Radial†	5008.9	5185.5	5069.2 ug/L	5069.2 ppb	08:49:26
2	Ca 317.933Radial†	2706.8	2744.3	5192.8 ug/L	5192.8 ppb	08:49:46
2	Fe 238.204 Radial†	454.3	454.8	5284.6 ug/L	5284.6 ppb	08:49:46
2	K 766.490 Radial†	29710.5	27696.0	5270.2 ug/L	5270.2 ppb	08:49:26
2	Mg 279.077 IEC†	130.0	131.0	5404.3 ug/L	5404.3 ppb	08:49:46
2	Na 589.592 Radial†	28243.8	29674.3	10461 ug/L	10461 ppb	08:49:26
2	Sr 421.552†	64090.9	65330.4	523.63 ug/L	523.63 ppb	08:49:26
2	Sc 361.383	835415.1	835415.1	102.03 %		08:50:49
2	Y 371.029	696746.4	696746.4	100.74 %		08:50:49
2	Ag 328.068†	98655.9	96511.5	504.24 ug/L	504.24 ppb	08:50:54
2	As 188.979†	915.8	924.4	511.79 ug/L	511.79 ppb	08:51:14
2	B 249.677†	18161.0	18337.7	512.14 ug/L	512.14 ppb	08:50:54
2	Ba 233.527†	54512.5	53430.6	501.72 ug/L	501.72 ppb	08:50:54
2	Be 313.107†	1202410.4	1182263.0	504.53 ug/L	504.53 ppb	08:50:49
2	Cd 226.502†	35172.4	34644.5	502.56 ug/L	502.56 ppb	08:50:54
2	Co 228.616†	20017.6	19666.3	508.40 ug/L	508.40 ppb	08:50:54
2	Cr 267.716†	38195.4	37365.3	502.14 ug/L	502.14 ppb	08:50:54
2	Cu 324.752†	159175.9	150462.8	496.75 ug/L	496.75 ppb	08:50:54
2	Mn 257.610†	387381.3	379299.3	499.01 ug/L	499.01 ppb	08:50:49
2	Mo 202.031†	5767.0	5643.9	502.17 ug/L	502.17 ppb	08:51:14
2	Ni 231.604†	16383.4	15974.0	506.99 ug/L	506.99 ppb	08:50:54
2	P 214.914†	3601.9	3343.1	2393.4 ug/L	2393.4 ppb	08:51:14
2	Pb 220.353†	3277.1	3270.3	503.85 ug/L	503.85 ppb	08:51:14
2	S 181.975 Axial†	602.5	560.3	1002.1 ug/L	1002.1 ppb	08:51:14
2	Sb 206.836†	1254.1	1205.5	522.43 ug/L	522.43 ppb	08:51:14
2	Se 196.026†	611.7	616.6	531.97 ug/L	531.97 ppb	08:51:14
2	Si 251.611†	67838.4	66003.0	2499.5 ug/L	2499.5 ppb	08:50:54
2	Sn 189.927†	2268.7	2216.5	503.59 ug/L	503.59 ppb	08:51:14
2	Ti 334.940†	287345.1	282760.0	491.58 ug/L	491.58 ppb	08:50:54
2	Tl 190.801†	1298.2	1301.6	506.83 ug/L	506.83 ppb	08:51:14
2	U 409.014†	15075.3	16980.2	513.43 ug/L	513.43 ppb	08:50:54
2	V 292.402†	62616.3	62690.3	507.30 ug/L	507.30 ppb	08:50:54
2	Zn 213.857†	43043.2	41618.3	499.58 ug/L	499.58 ppb	08:50:54
2	SiO2†	67536.8	65696.3	5347.9 ug/L	5347.9 ppb	08:51:56
3	Sc Radial	4320.9	4320.9	98.3 %		08:50:11
3	Y RADIAL	4722.3	4722.3	99.20 %		08:49:51

3	Al 396.153Radial†	4930.1	5092.8	4978.3 ug/L	4978.3 ppb	08:49:51
3	Ca 317.933Radial†	2709.3	2740.1	5184.9 ug/L	5184.9 ppb	08:50:11
3	Fe 238.204 Radial†	457.4	456.8	5308.2 ug/L	5308.2 ppb	08:50:11
3	K 766.490 Radial†	29302.8	27207.3	5177.2 ug/L	5177.2 ppb	08:49:51
3	Mg 279.077 IEC†	130.2	130.9	5398.3 ug/L	5398.3 ppb	08:50:11
3	Na 589.592 Radial†	27688.5	29039.1	10237 ug/L	10237 ppb	08:49:51
3	Sr 421.552†	62909.5	63969.0	512.72 ug/L	512.72 ppb	08:49:51
3	Sc 361.383	833064.0	833064.0	101.74 %		08:51:20
3	Y 371.029	694093.3	694093.3	100.35 %		08:51:20
3	Ag 328.068†	96658.0	94820.7	495.44 ug/L	495.44 ppb	08:51:25
3	As 188.979†	909.2	920.4	509.56 ug/L	509.56 ppb	08:51:45
3	B 249.677†	17772.0	18005.6	502.84 ug/L	502.84 ppb	08:51:25
3	Ba 233.527†	53540.6	52626.1	494.16 ug/L	494.16 ppb	08:51:25
3	Be 313.107†	1198980.6	1182217.9	504.49 ug/L	504.49 ppb	08:51:20
3	Cd 226.502†	34489.0	34070.1	494.21 ug/L	494.21 ppb	08:51:25
3	Co 228.616†	19647.2	19357.6	500.44 ug/L	500.44 ppb	08:51:25
3	Cr 267.716†	37544.8	36831.6	494.97 ug/L	494.97 ppb	08:51:25
3	Cu 324.752†	155601.0	147389.4	486.61 ug/L	486.61 ppb	08:51:25
3	Mn 257.610†	386953.3	379950.2	499.87 ug/L	499.87 ppb	08:51:20
3	Mo 202.031†	5728.1	5621.6	500.19 ug/L	500.19 ppb	08:51:45
3	Ni 231.604†	16137.8	15777.9	500.76 ug/L	500.76 ppb	08:51:25
3	P 214.914†	3584.6	3336.0	2390.0 ug/L	2390.0 ppb	08:51:45
3	Pb 220.353†	3264.9	3267.4	503.37 ug/L	503.37 ppb	08:51:45
3	S 181.975 Axial†	592.3	552.0	987.22 ug/L	987.22 ppb	08:51:45
3	Sb 206.836†	1243.0	1198.1	519.27 ug/L	519.27 ppb	08:51:45
3	Se 196.026†	592.4	599.2	517.57 ug/L	517.57 ppb	08:51:45
3	Si 251.611†	66318.2	64696.5	2449.9 ug/L	2449.9 ppb	08:51:25
3	Sn 189.927†	2253.3	2207.6	501.58 ug/L	501.58 ppb	08:51:45
3	Ti 334.940†	281695.2	278001.5	483.32 ug/L	483.32 ppb	08:51:25
3	Tl 190.801†	1289.9	1297.0	505.05 ug/L	505.05 ppb	08:51:45
3	U 409.014†	14513.9	16470.0	497.96 ug/L	497.96 ppb	08:51:25
3	V 292.402†	61261.2	61531.5	498.00 ug/L	498.00 ppb	08:51:25
3	Zn 213.857†	42320.7	41027.2	492.47 ug/L	492.47 ppb	08:51:25
3	SiO2†	66750.8	65110.6	5300.2 ug/L	5300.2 ppb	08:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837055.9	102.23 %	0.613			0.60%
Sc Radial	4312.3	98.1 %	0.18			0.18%
Y 371.029	697640.9	100.87 %	0.588			0.58%
Y RADIAL	4747.3	99.72 %	1.014			1.02%
Ag 328.068†	95182.9	497.33 ug/L	6.190	497.33 ppb	6.190	1.24%
QC value within limits for Ag 328.068 Recovery = 99.47%						
Al 396.153Radial†	5130.0	5014.9 ug/L	47.95	5014.9 ppb	47.95	0.96%
QC value within limits for Al 396.153Radial Recovery = 100.30%						
As 188.979†	920.3	509.52 ug/L	2.282	509.52 ppb	2.282	0.45%
QC value within limits for As 188.979 Recovery = 101.90%						
B 249.677†	18036.7	503.71 ug/L	8.027	503.71 ppb	8.027	1.59%
QC value within limits for B 249.677 Recovery = 100.74%						
Ba 233.527†	52785.6	495.66 ug/L	5.463	495.66 ppb	5.463	1.10%
QC value within limits for Ba 233.527 Recovery = 99.13%						
Be 313.107†	1181761.1	504.30 ug/L	0.363	504.30 ppb	0.363	0.07%
QC value within limits for Be 313.107 Recovery = 100.86%						
Ca 317.933Radial†	2745.0	5194.1 ug/L	9.96	5194.1 ppb	9.96	0.19%
QC value within limits for Ca 317.933Radial Recovery = 103.88%						
Cd 226.502†	34183.6	495.86 ug/L	6.043	495.86 ppb	6.043	1.22%
QC value within limits for Cd 226.502 Recovery = 99.17%						
Co 228.616†	19417.2	501.97 ug/L	5.822	501.97 ppb	5.822	1.16%
QC value within limits for Co 228.616 Recovery = 100.39%						
Cr 267.716†	36913.8	496.08 ug/L	5.590	496.08 ppb	5.590	1.13%
QC value within limits for Cr 267.716 Recovery = 99.22%						
Cu 324.752†	148120.4	489.02 ug/L	6.848	489.02 ppb	6.848	1.40%
QC value within limits for Cu 324.752 Recovery = 97.80%						
Fe 238.204 Radial†	456.1	5299.7 ug/L	13.14	5299.7 ppb	13.14	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 105.99%						
K 766.490 Radial†	27358.2	5205.9 ug/L	55.79	5205.9 ppb	55.79	1.07%
QC value within limits for K 766.490 Radial Recovery = 104.12%						
Mg 279.077 IEC†	130.3	5374.1 ug/L	47.09	5374.1 ppb	47.09	0.88%
QC value within limits for Mg 279.077 IEC Recovery = 107.48%						

Mn 257.610†	379368.5	499.10 ug/L	0.722	499.10 ppb	0.722	0.14%
QC value within limits for Mn 257.610 Recovery = 99.82%						
Mo 202.031†	5601.2	498.37 ug/L	4.955	498.37 ppb	4.955	0.99%
QC value within limits for Mo 202.031 Recovery = 99.67%						
Na 589.592 Radial†	29254.1	10313 ug/L	128.3	10313 ppb	128.3	1.24%
QC value within limits for Na 589.592 Radial Recovery = 103.13%						
Ni 231.604†	15791.4	501.19 ug/L	5.592	501.19 ppb	5.592	1.12%
QC value within limits for Ni 231.604 Recovery = 100.24%						
P 214.914†	3327.6	2383.3 ug/L	14.70	2383.3 ppb	14.70	0.62%
QC value within limits for P 214.914 Recovery = 95.33%						
Pb 220.353†	3250.5	500.77 ug/L	4.917	500.77 ppb	4.917	0.98%
QC value within limits for Pb 220.353 Recovery = 100.15%						
S 181.975 Axial†	552.2	987.54 ug/L	14.439	987.54 ppb	14.439	1.46%
QC value within limits for S 181.975 Axial Recovery = 98.75%						
Sb 206.836†	1198.2	519.24 ug/L	3.201	519.24 ppb	3.201	0.62%
QC value within limits for Sb 206.836 Recovery = 103.85%						
Se 196.026†	604.2	521.70 ug/L	8.953	521.70 ppb	8.953	1.72%
QC value within limits for Se 196.026 Recovery = 104.34%						
Si 251.611†	65010.7	2461.9 ug/L	33.30	2461.9 ppb	33.30	1.35%
QC value within limits for Si 251.611 Recovery = 98.47%						
Sn 189.927†	2204.7	500.93 ug/L	3.046	500.93 ppb	3.046	0.61%
QC value within limits for Sn 189.927 Recovery = 100.19%						
Sr 421.552†	64486.0	516.86 ug/L	5.911	516.86 ppb	5.911	1.14%
QC value within limits for Sr 421.552 Recovery = 103.37%						
Ti 334.940†	279037.7	485.12 ug/L	5.777	485.12 ppb	5.777	1.19%
QC value within limits for Ti 334.940 Recovery = 97.02%						
Tl 190.801†	1291.2	502.82 ug/L	5.485	502.82 ppb	5.485	1.09%
QC value within limits for Tl 190.801 Recovery = 100.56%						
U 409.014†	16628.0	502.75 ug/L	9.259	502.75 ppb	9.259	1.84%
QC value within limits for U 409.014 Recovery = 100.55%						
V 292.402†	61837.4	500.42 ug/L	6.043	500.42 ppb	6.043	1.21%
QC value within limits for V 292.402 Recovery = 100.08%						
Zn 213.857†	41130.9	493.72 ug/L	5.346	493.72 ppb	5.346	1.08%
QC value within limits for Zn 213.857 Recovery = 98.74%						
SiO2†	65065.6	5296.6 ug/L	53.27	5296.6 ppb	53.27	1.01%
QC value within limits for SiO2 Recovery = 99.05%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 08:54:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.0	4278.0	97.3 %		08:56:23
1	Y RADIAL	4838.9	4838.9	101.6 %		08:56:03
1	Al 396.153Radial†	-75.6	0.4	0.3184 ug/L	0.3184 ppb	08:56:23
1	Ca 317.933Radial†	23.5	8.5	16.044 ug/L	16.044 ppb	08:56:23
1	Fe 238.204 Radial†	8.5	0.3	3.4993 ug/L	3.4993 ppb	08:56:23
1	K 766.490 Radial†	2965.1	447.5	85.252 ug/L	85.252 ppb	08:56:03
1	Mg 279.077 IEC†	0.2	-1.3	-54.781 ug/L	-54.781 ppb	08:56:23
1	Na 589.592 Radial†	-832.8	19.5	6.8849 ug/L	6.8849 ppb	08:56:03
1	Sr 421.552†	5.5	-15.1	-0.1214 ug/L	-0.1214 ppb	08:56:03
1	Sc 361.383	825108.5	825108.5	100.77 %		08:57:20
1	Y 371.029	697408.9	697408.9	100.83 %		08:57:20
1	Ag 328.068†	183.8	-2.8	-0.0178 ug/L	-0.0178 ppb	08:57:20
1	As 188.979†	-22.6	4.4	2.4163 ug/L	2.4163 ppb	08:57:40
1	B 249.677†	152.9	689.1	19.332 ug/L	19.332 ppb	08:57:40
1	Ba 233.527†	8.3	9.0	0.0838 ug/L	0.0838 ppb	08:57:40
1	Be 313.107†	-3650.8	108.0	0.0460 ug/L	0.0460 ppb	08:57:20
1	Cd 226.502†	-153.3	18.5	0.2683 ug/L	0.2683 ppb	08:57:40
1	Co 228.616†	-54.3	-7.7	-0.1957 ug/L	-0.1957 ppb	08:57:40
1	Cr 267.716†	76.4	4.3	0.0557 ug/L	0.0557 ppb	08:57:40
1	Cu 324.752†	5642.6	47.6	0.1550 ug/L	0.1550 ppb	08:57:20
1	Mn 257.610†	411.6	19.4	0.0280 ug/L	0.0280 ppb	08:57:40
1	Mo 202.031†	21.9	13.2	1.1724 ug/L	1.1724 ppb	08:57:40
1	Ni 231.604†	74.1	-10.5	-0.3340 ug/L	-0.3340 ppb	08:57:40
1	P 214.914†	178.9	-9.7	-7.2705 ug/L	-7.2705 ppb	08:57:40
1	Pb 220.353†	-46.9	11.7	1.8038 ug/L	1.8038 ppb	08:57:40
1	S 181.975 Axial†	20.4	-10.0	-17.833 ug/L	-17.833 ppb	08:57:40
1	Sb 206.836†	27.2	3.4	1.4349 ug/L	1.4349 ppb	08:57:40
1	Se 196.026†	-14.3	2.8	2.3246 ug/L	2.3246 ppb	08:57:40
1	Si 251.611†	553.7	61.4	2.3149 ug/L	2.3149 ppb	08:57:40
1	Sn 189.927†	9.9	2.6	0.6033 ug/L	0.6033 ppb	08:57:40
1	Ti 334.940†	-1116.7	13.0	0.0274 ug/L	0.0274 ppb	08:57:20
1	Tl 190.801†	-32.2	-2.9	-1.1249 ug/L	-1.1249 ppb	08:57:40
1	U 409.014†	-2076.1	144.0	4.3671 ug/L	4.3671 ppb	08:57:20
1	V 292.402†	-1348.4	-20.7	-0.1418 ug/L	-0.1418 ppb	08:57:20
1	Zn 213.857†	714.3	138.7	1.6825 ug/L	1.6825 ppb	08:57:40
1	SiO2†	559.1	55.5	4.4993 ug/L	4.4993 ppb	08:58:51
2	Sc Radial	4424.5	4424.5	101 %		08:56:48
2	Y RADIAL	4835.4	4835.4	101.6 %		08:56:28
2	Al 396.153Radial†	-71.2	7.3	7.2099 ug/L	7.2099 ppb	08:56:48
2	Ca 317.933Radial†	25.5	9.7	18.317 ug/L	18.317 ppb	08:56:48
2	Fe 238.204 Radial†	8.6	0.1	0.7604 ug/L	0.7604 ppb	08:56:48
2	K 766.490 Radial†	2915.1	296.9	56.563 ug/L	56.563 ppb	08:56:28
2	Mg 279.077 IEC†	3.1	1.5	63.159 ug/L	63.159 ppb	08:56:48
2	Na 589.592 Radial†	-851.2	29.6	10.439 ug/L	10.439 ppb	08:56:28
2	Sr 421.552†	16.7	-4.2	-0.0342 ug/L	-0.0342 ppb	08:56:28
2	Sc 361.383	825546.1	825546.1	100.82 %		08:57:45
2	Y 371.029	698004.5	698004.5	100.92 %		08:57:45
2	Ag 328.068†	154.1	-32.2	-0.1736 ug/L	-0.1736 ppb	08:57:45
2	As 188.979†	-11.3	15.6	8.5484 ug/L	8.5484 ppb	08:58:05
2	B 249.677†	122.5	658.9	18.485 ug/L	18.485 ppb	08:58:05
2	Ba 233.527†	17.0	17.6	0.1635 ug/L	0.1635 ppb	08:58:05
2	Be 313.107†	-3632.3	128.3	0.0547 ug/L	0.0547 ppb	08:57:45
2	Cd 226.502†	-153.8	18.0	0.2625 ug/L	0.2625 ppb	08:58:05
2	Co 228.616†	-45.7	0.9	0.0233 ug/L	0.0233 ppb	08:58:05
2	Cr 267.716†	76.5	4.4	0.0564 ug/L	0.0564 ppb	08:58:05
2	Cu 324.752†	5580.6	-16.8	-0.0581 ug/L	-0.0581 ppb	08:57:45
2	Mn 257.610†	421.9	29.4	0.0362 ug/L	0.0362 ppb	08:58:05
2	Mo 202.031†	10.0	1.3	0.1193 ug/L	0.1193 ppb	08:58:05
2	Ni 231.604†	82.3	-2.4	-0.0773 ug/L	-0.0773 ppb	08:58:05

2	P 214.914†	185.7	-3.1	-2.2742 ug/L	-2.2742 ppb	08:58:05
2	Pb 220.353†	-49.8	8.9	1.3690 ug/L	1.3690 ppb	08:58:05
2	S 181.975 Axial†	27.7	-2.8	-4.9384 ug/L	-4.9384 ppb	08:58:05
2	Sb 206.836†	29.2	5.3	2.2297 ug/L	2.2297 ppb	08:58:05
2	Se 196.026†	-19.2	-2.0	-1.6916 ug/L	-1.6916 ppb	08:58:05
2	Si 251.611†	540.1	47.5	1.8023 ug/L	1.8023 ppb	08:58:05
2	Sn 189.927†	16.4	9.1	2.0790 ug/L	2.0790 ppb	08:58:05
2	Ti 334.940†	-1116.9	13.4	0.0185 ug/L	0.0185 ppb	08:57:45
2	Tl 190.801†	-24.0	5.3	2.0373 ug/L	2.0373 ppb	08:58:05
2	U 409.014†	-2063.9	157.2	4.7674 ug/L	4.7674 ppb	08:57:45
2	V 292.402†	-1400.4	-71.6	-0.5599 ug/L	-0.5599 ppb	08:57:45
2	Zn 213.857†	717.9	141.9	1.7202 ug/L	1.7202 ppb	08:58:05
2	SiO2†	559.9	56.0	4.5655 ug/L	4.5655 ppb	08:59:11
3	Sc Radial	4211.4	4211.4	95.8 %		08:57:13
3	Y RADIAL	4686.7	4686.7	98.45 %		08:56:53
3	Al 396.153Radial†	-80.5	-5.9	-5.8397 ug/L	-5.8397 ppb	08:57:13
3	Ca 317.933Radial†	17.0	2.1	3.9096 ug/L	3.9096 ppb	08:57:13
3	Fe 238.204 Radial†	8.0	-0.1	-1.4023 ug/L	-1.4023 ppb	08:57:13
3	K 766.490 Radial†	2980.9	512.2	97.574 ug/L	97.574 ppb	08:56:53
3	Mg 279.077 IEC†	0.9	-0.6	-23.241 ug/L	-23.241 ppb	08:57:13
3	Na 589.592 Radial†	-766.9	74.7	26.347 ug/L	26.347 ppb	08:56:53
3	Sr 421.552†	23.5	3.7	0.0298 ug/L	0.0298 ppb	08:56:53
3	Sc 361.383	820504.7	820504.7	100.21 %		08:58:10
3	Y 371.029	693341.7	693341.7	100.25 %		08:58:10
3	Ag 328.068†	152.8	-32.7	-0.1715 ug/L	-0.1715 ppb	08:58:10
3	As 188.979†	-18.3	8.5	4.6781 ug/L	4.6781 ppb	08:58:30
3	B 249.677†	121.5	658.6	18.475 ug/L	18.475 ppb	08:58:30
3	Ba 233.527†	8.5	9.2	0.0850 ug/L	0.0850 ppb	08:58:30
3	Be 313.107†	-3659.6	78.9	0.0335 ug/L	0.0335 ppb	08:58:10
3	Cd 226.502†	-158.0	13.0	0.1883 ug/L	0.1883 ppb	08:58:30
3	Co 228.616†	-37.5	8.8	0.2269 ug/L	0.2269 ppb	08:58:30
3	Cr 267.716†	79.8	8.1	0.1083 ug/L	0.1083 ppb	08:58:30
3	Cu 324.752†	5690.0	126.4	0.4174 ug/L	0.4174 ppb	08:58:10
3	Mn 257.610†	401.9	12.0	0.0166 ug/L	0.0166 ppb	08:58:30
3	Mo 202.031†	9.7	1.2	0.1027 ug/L	0.1027 ppb	08:58:30
3	Ni 231.604†	74.0	-10.2	-0.3245 ug/L	-0.3245 ppb	08:58:30
3	P 214.914†	199.3	11.7	8.5967 ug/L	8.5967 ppb	08:58:30
3	Pb 220.353†	-37.5	20.9	3.2128 ug/L	3.2128 ppb	08:58:30
3	S 181.975 Axial†	33.5	3.2	5.7488 ug/L	5.7488 ppb	08:58:30
3	Sb 206.836†	23.2	-0.5	-0.2012 ug/L	-0.2012 ppb	08:58:30
3	Se 196.026†	-15.7	1.3	1.0768 ug/L	1.0768 ppb	08:58:30
3	Si 251.611†	542.7	53.5	2.0283 ug/L	2.0283 ppb	08:58:30
3	Sn 189.927†	7.9	0.8	0.1757 ug/L	0.1757 ppb	08:58:30
3	Ti 334.940†	-1147.9	-24.4	-0.0399 ug/L	-0.0399 ppb	08:58:10
3	Tl 190.801†	-29.0	0.2	0.0650 ug/L	0.0650 ppb	08:58:30
3	U 409.014†	-2219.3	-10.6	-0.3213 ug/L	-0.3213 ppb	08:58:10
3	V 292.402†	-1372.5	-52.2	-0.4166 ug/L	-0.4166 ppb	08:58:10
3	Zn 213.857†	704.0	132.5	1.6069 ug/L	1.6069 ppb	08:58:30
3	SiO2†	572.1	71.6	5.8426 ug/L	5.8426 ppb	08:59:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823719.8	100.60 %		0.341			0.34%
Sc Radial	4304.6	97.9 %		2.48			2.53%
Y 371.029	696251.7	100.67 %		0.367			0.36%
Y RADIAL	4787.0	100.6 %		1.83			1.82%
Ag 328.068†	-22.6	-0.1210 ug/L		0.08936	-0.1210 ppb	0.08936	73.87%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5629 ug/L		6.52825	0.5629 ppb	6.52825	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	9.5	5.2142 ug/L		3.10101	5.2142 ppb	3.10101	59.47%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	668.9	18.764 ug/L		0.4917	18.764 ppb	0.4917	2.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.9	0.1107 ug/L		0.04564	0.1107 ppb	0.04564	41.21%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	105.1	0.0447 ug/L		0.01065	0.0447 ppb	0.01065	23.81%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.7	12.757 ug/L		7.7459	12.757 ppb	7.7459	60.72%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	16.5	0.2397 ug/L	0.04458	0.2397 ppb	0.04458	18.60%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.7	0.0182 ug/L	0.21136	0.0182 ppb	0.21136	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	5.6	0.0734 ug/L	0.03018	0.0734 ppb	0.03018	41.09%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.4	0.1714 ug/L	0.23815	0.1714 ppb	0.23815	138.91%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.1	0.9525 ug/L	2.45646	0.9525 ppb	2.45646	257.90%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	418.9	79.796 ug/L	21.0429	79.796 ppb	21.0429	26.37%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.1	-4.9541 ug/L	61.05970	-4.9541 ppb	61.05970	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	20.3	0.0269 ug/L	0.00982	0.0269 ppb	0.00982	36.45%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.2	0.4648 ug/L	0.61286	0.4648 ppb	0.61286	131.86%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	41.3	14.557 ug/L	10.3641	14.557 ppb	10.3641	71.20%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.7	-0.2453 ug/L	0.14554	-0.2453 ppb	0.14554	59.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.4	-0.3160 ug/L	8.11280	-0.3160 ppb	8.11280	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	13.8	2.1285 ug/L	0.96384	2.1285 ppb	0.96384	45.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-3.2	-5.6743 ug/L	11.80827	-5.6743 ppb	11.80827	208.10%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.7	1.1544 ug/L	1.23947	1.1544 ppb	1.23947	107.37%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.5699 ug/L	2.05554	0.5699 ppb	2.05554	360.68%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	54.1	2.0485 ug/L	0.25687	2.0485 ppb	0.25687	12.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.2	0.9526 ug/L	0.99861	0.9526 ppb	0.99861	104.83%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-5.2	-0.0419 ug/L	0.07592	-0.0419 ppb	0.07592	181.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	0.7	0.0020 ug/L	0.03653	0.0020 ppb	0.03653	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.8	0.3258 ug/L	1.59716	0.3258 ppb	1.59716	490.27%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	96.8	2.9377 ug/L	2.82949	2.9377 ppb	2.82949	96.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-48.2	-0.3728 ug/L	0.21249	-0.3728 ppb	0.21249	57.01%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	137.7	1.6699 ug/L	0.05769	1.6699 ppb	0.05769	3.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	61.0	4.9691 ug/L	0.75715	4.9691 ppb	0.75715	15.24%	
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: 37

Date Collected: 3/19/2010 09:01:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4168.4	4168.4	94.8 %		09:03:54
1	Y RADIAL	4671.2	4671.2	98.12 %		09:03:34
1	Al 396.153Radial†	-95.9	-23.0	-21.536 ug/L	-21.536 ppb	09:03:54
1	Ca 317.933Radial†	10.9	-4.2	-7.9891 ug/L	-7.9891 ppb	09:03:54
1	Fe 238.204 Radial†	31552.6	33259.8	385370 ug/L	385370 ppb	09:03:34
1	K 766.490 Radial†	2463.6	-1.2	-0.1828 ug/L	-0.1828 ppb	09:03:34
1	Mg 279.077 IEC†	8.2	7.1	-111.04 ug/L	-111.04 ppb	09:03:54
1	Na 589.592 Radial†	-839.1	-9.6	-3.3743 ug/L	-3.3743 ppb	09:03:34
1	Sr 421.552†	108.5	93.6	0.7503 ug/L	0.7503 ppb	09:03:34
1	Sc 361.383	804663.0	804663.0	98.270 %		09:04:52
1	Y 371.029	675570.8	675570.8	97.676 %		09:04:52
1	Ag 328.068†	-22147.7	-22722.6	1.3619 ug/L	1.3619 ppb	09:04:52
1	As 188.979†	-157.8	-133.8	16.851 ug/L	16.851 ppb	09:05:12
1	B 249.677†	1573.3	2138.4	-2.6414 ug/L	-2.6414 ppb	09:04:52
1	Ba 233.527†	-1501.1	-1526.9	-2.4607 ug/L	-2.4607 ppb	09:04:52
1	Be 313.107†	-3547.0	121.6	0.0516 ug/L	0.0516 ppb	09:04:52
1	Cd 226.502†	2545.1	2760.5	0.2621 ug/L	0.2621 ppb	09:04:52
1	Co 228.616†	597.4	654.1	11.286 ug/L	11.286 ppb	09:05:12
1	Cr 267.716†	-466.6	-546.3	33.551 ug/L	33.551 ppb	09:05:12
1	Cu 324.752†	-1345.0	-6920.6	-2.4866 ug/L	-2.4866 ppb	09:04:52
1	Mn 257.610†	-31215.4	-32153.8	-4.2266 ug/L	-4.2266 ppb	09:04:52
1	Mo 202.031†	-238.6	-251.3	7.5762 ug/L	7.5762 ppb	09:04:52
1	Ni 231.604†	179.0	98.1	3.1049 ug/L	3.1049 ppb	09:05:12
1	P 214.914†	594.2	417.4	5.0000 ug/L	5.0000 ppb	09:05:12
1	Pb 220.353†	167.3	228.6	-19.764 ug/L	-19.764 ppb	09:05:12
1	S 181.975 Axial†	39.8	10.3	18.462 ug/L	18.462 ppb	09:05:12
1	Sb 206.836†	21.4	-1.9	-5.4959 ug/L	-5.4959 ppb	09:05:12
1	Se 196.026†	-1587.1	-1598.1	-223.50 ug/L	-223.50 ppb	09:05:12
1	Si 251.611†	-466.5	-962.8	-36.277 ug/L	-36.277 ppb	09:04:52
1	Sn 189.927†	-22.6	-30.2	-28.971 ug/L	-28.971 ppb	09:05:12
1	Ti 334.940†	-1147.3	-46.2	-0.1313 ug/L	-0.1313 ppb	09:04:52
1	Tl 190.801†	-24.1	4.6	1.3905 ug/L	1.3905 ppb	09:05:12
1	U 409.014†	-57.2	2146.0	21.189 ug/L	21.189 ppb	09:04:52
1	V 292.402†	5156.9	6565.1	-3.8861 ug/L	-3.8861 ppb	09:04:52
1	Zn 213.857†	3563.3	3056.0	-20.632 ug/L	-20.632 ppb	09:05:12
1	SiO2†	-531.6	-1040.3	-84.290 ug/L	-84.290 ppb	09:06:09
2	Sc Radial	4220.4	4220.4	96.0 %		09:04:19
2	Y RADIAL	4695.8	4695.8	98.64 %		09:03:59
2	Al 396.153Radial†	-97.7	-23.6	-22.030 ug/L	-22.030 ppb	09:04:19
2	Ca 317.933Radial†	15.8	0.8	1.4196 ug/L	1.4196 ppb	09:04:19
2	Fe 238.204 Radial†	31639.3	32940.5	381670 ug/L	381670 ppb	09:03:59
2	K 766.490 Radial†	2419.9	-78.7	-14.957 ug/L	-14.957 ppb	09:03:59
2	Mg 279.077 IEC†	9.6	8.5	-49.042 ug/L	-49.042 ppb	09:04:19
2	Na 589.592 Radial†	-819.9	21.3	7.4941 ug/L	7.4941 ppb	09:03:59
2	Sr 421.552†	73.1	55.3	0.4436 ug/L	0.4436 ppb	09:03:59
2	Sc 361.383	814772.9	814772.9	99.505 %		09:05:18
2	Y 371.029	684115.4	684115.4	98.911 %		09:05:18
2	Ag 328.068†	-22528.6	-22825.8	-0.3166 ug/L	-0.3166 ppb	09:05:18
2	As 188.979†	-170.1	-144.2	10.308 ug/L	10.308 ppb	09:05:38
2	B 249.677†	1557.8	2102.9	-3.0390 ug/L	-3.0390 ppb	09:05:18
2	Ba 233.527†	-1537.5	-1544.4	-2.7386 ug/L	-2.7386 ppb	09:05:18
2	Be 313.107†	-3576.5	136.7	0.0579 ug/L	0.0579 ppb	09:05:18
2	Cd 226.502†	2505.0	2688.1	-0.4074 ug/L	-0.4074 ppb	09:05:18
2	Co 228.616†	636.8	686.2	12.164 ug/L	12.164 ppb	09:05:38
2	Cr 267.716†	-490.7	-564.7	32.914 ug/L	32.914 ppb	09:05:38
2	Cu 324.752†	-1389.0	-6947.9	-2.7705 ug/L	-2.7705 ppb	09:05:18
2	Mn 257.610†	-31480.4	-32026.0	-4.4264 ug/L	-4.4264 ppb	09:05:18
2	Mo 202.031†	-265.9	-275.8	5.1133 ug/L	5.1133 ppb	09:05:18
2	Ni 231.604†	160.0	76.7	2.4260 ug/L	2.4260 ppb	09:05:38

2	P 214.914†	604.0	419.7	9.7533 ug/L	9.7533 ppb	09:05:38
2	Pb 220.353†	148.9	207.9	-22.419 ug/L	-22.419 ppb	09:05:38
2	S 181.975 Axial†	36.7	6.7	12.001 ug/L	12.001 ppb	09:05:38
2	Sb 206.836†	26.7	3.2	-3.3702 ug/L	-3.3702 ppb	09:05:38
2	Se 196.026†	-1602.6	-1593.6	-230.43 ug/L	-230.43 ppb	09:05:38
2	Si 251.611†	-451.6	-942.0	-35.459 ug/L	-35.459 ppb	09:05:18
2	Sn 189.927†	-21.3	-28.6	-28.391 ug/L	-28.391 ppb	09:05:38
2	Ti 334.940†	-1185.9	-70.6	-0.1755 ug/L	-0.1755 ppb	09:05:18
2	Tl 190.801†	-35.9	-7.0	-3.0798 ug/L	-3.0798 ppb	09:05:38
2	U 409.014†	-170.3	2033.0	18.184 ug/L	18.184 ppb	09:05:18
2	V 292.402†	5184.7	6527.9	-3.6800 ug/L	-3.6800 ppb	09:05:18
2	Zn 213.857†	3582.0	3029.7	-20.392 ug/L	-20.392 ppb	09:05:38
2	SiO2†	-332.9	-833.9	-67.390 ug/L	-67.390 ppb	09:06:14
3	Sc Radial	4150.7	4150.7	94.4 %		09:04:44
3	Y RADIAL	4717.7	4717.7	99.10 %		09:04:24
3	Al 396.153Radial†	-105.7	-33.8	-31.932 ug/L	-31.932 ppb	09:04:44
3	Ca 317.933Radial†	13.3	-1.6	-3.0737 ug/L	-3.0737 ppb	09:04:44
3	Fe 238.204 Radial†	31506.1	33352.3	386440 ug/L	386440 ppb	09:04:24
3	K 766.490 Radial†	2562.8	114.9	21.945 ug/L	21.945 ppb	09:04:24
3	Mg 279.077 IEC†	10.3	9.3	-19.131 ug/L	-19.131 ppb	09:04:44
3	Na 589.592 Radial†	-841.1	-15.4	-5.4450 ug/L	-5.4450 ppb	09:04:24
3	Sr 421.552†	63.7	46.6	0.3735 ug/L	0.3735 ppb	09:04:24
3	Sc 361.383	818472.2	818472.2	99.957 %		09:05:44
3	Y 371.029	686196.9	686196.9	99.212 %		09:05:44
3	Ag 328.068†	-22590.8	-22785.7	1.3597 ug/L	1.3597 ppb	09:05:44
3	As 188.979†	-159.6	-132.8	17.658 ug/L	17.658 ppb	09:06:04
3	B 249.677†	1700.5	2238.6	-0.0015 ug/L	-0.0015 ppb	09:05:44
3	Ba 233.527†	-1597.3	-1597.3	-3.0907 ug/L	-3.0907 ppb	09:05:44
3	Be 313.107†	-3601.1	128.4	0.0547 ug/L	0.0547 ppb	09:05:44
3	Cd 226.502†	2563.1	2734.9	-0.2206 ug/L	-0.2206 ppb	09:05:44
3	Co 228.616†	596.2	642.6	10.963 ug/L	10.963 ppb	09:06:04
3	Cr 267.716†	-477.4	-549.1	33.624 ug/L	33.624 ppb	09:06:04
3	Cu 324.752†	-1475.3	-7027.9	-2.7850 ug/L	-2.7850 ppb	09:05:44
3	Mn 257.610†	-31871.3	-32274.1	-4.2829 ug/L	-4.2829 ppb	09:05:44
3	Mo 202.031†	-289.1	-297.8	3.5310 ug/L	3.5310 ppb	09:05:44
3	Ni 231.604†	163.4	79.4	2.5118 ug/L	2.5118 ppb	09:06:04
3	P 214.914†	601.0	414.0	1.6780 ug/L	1.6780 ppb	09:06:04
3	Pb 220.353†	165.2	223.6	-20.698 ug/L	-20.698 ppb	09:06:04
3	S 181.975 Axial†	38.6	8.5	15.150 ug/L	15.150 ppb	09:06:04
3	Sb 206.836†	22.5	-1.2	-5.3079 ug/L	-5.3079 ppb	09:06:04
3	Se 196.026†	-1604.4	-1588.1	-212.13 ug/L	-212.13 ppb	09:06:04
3	Si 251.611†	-406.7	-895.1	-33.654 ug/L	-33.654 ppb	09:05:44
3	Sn 189.927†	-25.3	-32.4	-29.546 ug/L	-29.546 ppb	09:06:04
3	Ti 334.940†	-1114.8	5.9	-0.0482 ug/L	-0.0482 ppb	09:05:44
3	Tl 190.801†	-40.4	-11.4	-4.7656 ug/L	-4.7656 ppb	09:06:04
3	U 409.014†	-3.7	2200.5	22.719 ug/L	22.719 ppb	09:05:44
3	V 292.402†	5104.1	6423.7	-5.2245 ug/L	-5.2245 ppb	09:05:44
3	Zn 213.857†	3569.3	3000.7	-21.457 ug/L	-21.457 ppb	09:06:04
3	SiO2†	-395.4	-894.9	-72.310 ug/L	-72.310 ppb	09:06:19

Mean Data: LR1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	812636.0	99.244 %		0.8730			0.88%
Sc Radial	4179.8	95.1 %		0.82			0.87%
Y 371.029	681961.1	98.600 %		0.8142			0.83%
Y RADIAL	4694.9	98.62 %		0.488			0.49%
Ag 328.068†	-22778.0	0.8017 ug/L		0.96844	0.8017 ppb	0.96844	120.80%
Al 396.153Radial†	-26.8	-25.166 ug/L		5.8648	-25.166 ppb	5.8648	23.30%
As 188.979†	-136.9	14.939 ug/L		4.0310	14.939 ppb	4.0310	26.98%
B 249.677†	2160.0	-1.8940 ug/L		1.65089	-1.8940 ppb	1.65089	87.17%
Ba 233.527†	-1556.2	-2.7633 ug/L		0.31570	-2.7633 ppb	0.31570	11.42%
Be 313.107†	128.9	0.0547 ug/L		0.00317	0.0547 ppb	0.00317	5.79%
Ca 317.933Radial†	-1.7	-3.2144 ug/L		4.70597	-3.2144 ppb	4.70597	146.40%
Cd 226.502†	2727.8	-0.1220 ug/L		0.34551	-0.1220 ppb	0.34551	283.27%
Co 228.616†	661.0	11.471 ug/L		0.6212	11.471 ppb	0.6212	5.42%
Cr 267.716†	-553.4	33.363 ug/L		0.3909	33.363 ppb	0.3909	1.17%
Cu 324.752†	-6965.5	-2.6807 ug/L		0.16824	-2.6807 ppb	0.16824	6.28%
Fe 238.204 Radial†	33184.2	384500 ug/L		2503.3	384500 ppb	2503.3	0.65%
K 766.490 Radial†	11.7	2.2685 ug/L		18.57239	2.2685 ppb	18.57239	818.72%

Mg 279.077 IEC†	8.3	-59.738 ug/L	46.8800	-59.738 ppb	46.8800	78.48%
Mn 257.610†	-32151.3	-4.3119 ug/L	0.10299	-4.3119 ppb	0.10299	2.39%
Mo 202.031†	-275.0	5.4068 ug/L	2.03849	5.4068 ppb	2.03849	37.70%
Na 589.592 Radial†	-1.3	-0.4417 ug/L	6.95019	-0.4417 ppb	6.95019	>999.9%
Ni 231.604†	84.7	2.6809 ug/L	0.36971	2.6809 ppb	0.36971	13.79%
P 214.914†	417.1	5.4771 ug/L	4.05878	5.4771 ppb	4.05878	74.10%
Pb 220.353†	220.0	-20.960 ug/L	1.3465	-20.960 ppb	1.3465	6.42%
S 181.975 Axial†	8.5	15.204 ug/L	3.2307	15.204 ppb	3.2307	21.25%
Sb 206.836†	0.0	-4.7247 ug/L	1.17674	-4.7247 ppb	1.17674	24.91%
Se 196.026†	-1593.3	-222.02 ug/L	9.239	-222.02 ppb	9.239	4.16%
Si 251.611†	-933.3	-35.130 ug/L	1.3424	-35.130 ppb	1.3424	3.82%
Sn 189.927†	-30.4	-28.970 ug/L	0.5777	-28.970 ppb	0.5777	1.99%
Sr 421.552†	65.2	0.5225 ug/L	0.20038	0.5225 ppb	0.20038	38.35%
Ti 334.940†	-37.0	-0.1184 ug/L	0.06463	-0.1184 ppb	0.06463	54.61%
Tl 190.801†	-4.6	-2.1516 ug/L	3.18128	-2.1516 ppb	3.18128	147.86%
U 409.014†	2126.5	20.697 ug/L	2.3074	20.697 ppb	2.3074	11.15%
V 292.402†	6505.6	-4.2635 ug/L	0.83854	-4.2635 ppb	0.83854	19.67%
Zn 213.857†	3028.8	-20.827 ug/L	0.5589	-20.827 ppb	0.5589	2.68%
SiO2†	-923.0	-74.663 ug/L	8.6924	-74.663 ppb	8.6924	11.64%

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 09:08:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4270.1	4270.1	97.2 %			09:10:44
1	Y RADIAL	4722.2	4722.2	99.19 %			09:10:24
1	Al 396.153Radial†	5015.6	5240.5	5123.3 ug/L		5123.3 ppb	09:10:24
1	Ca 317.933Radial†	2685.2	2748.1	5200.0 ug/L		5200.0 ppb	09:10:44
1	Fe 238.204 Radial†	444.5	449.0	5218.2 ug/L		5218.2 ppb	09:10:44
1	K 766.490 Radial†	29180.3	27435.6	5220.8 ug/L		5220.8 ppb	09:10:24
1	Mg 279.077 IEC†	125.9	128.1	5282.8 ug/L		5282.8 ppb	09:10:44
1	Na 589.592 Radial†	26587.3	28240.6	9955.4 ug/L		9955.4 ppb	09:10:24
1	Sr 421.552†	62098.4	63895.1	512.13 ug/L		512.13 ppb	09:10:24
1	Sc 361.383	835263.3	835263.3	102.01 %			09:11:41
1	Y 371.029	695826.9	695826.9	100.60 %			09:11:41
1	Ag 328.068†	98312.6	96192.6	502.56 ug/L		502.56 ppb	09:11:46
1	As 188.979†	917.6	926.3	512.83 ug/L		512.83 ppb	09:12:06
1	B 249.677†	17862.9	18048.7	504.04 ug/L		504.04 ppb	09:11:46
1	Ba 233.527†	54434.3	53363.7	501.08 ug/L		501.08 ppb	09:11:46
1	Be 313.107†	1200300.9	1180409.2	503.74 ug/L		503.74 ppb	09:11:41
1	Cd 226.502†	35059.9	34540.6	501.05 ug/L		501.05 ppb	09:11:46
1	Co 228.616†	20023.4	19675.5	508.65 ug/L		508.65 ppb	09:11:46
1	Cr 267.716†	38027.8	37207.9	500.02 ug/L		500.02 ppb	09:11:46
1	Cu 324.752†	158463.8	149793.1	494.54 ug/L		494.54 ppb	09:11:46
1	Mn 257.610†	382150.2	374240.2	492.36 ug/L		492.36 ppb	09:11:46
1	Mo 202.031†	5765.9	5643.9	502.16 ug/L		502.16 ppb	09:12:06
1	Ni 231.604†	16343.9	15938.2	505.85 ug/L		505.85 ppb	09:11:46
1	P 214.914†	3636.1	3377.2	2419.3 ug/L		2419.3 ppb	09:12:06
1	Pb 220.353†	3269.8	3263.8	502.86 ug/L		502.86 ppb	09:12:06
1	S 181.975 Axial†	600.7	558.7	999.26 ug/L		999.26 ppb	09:12:06
1	Sb 206.836†	1248.4	1200.2	520.17 ug/L		520.17 ppb	09:12:06
1	Se 196.026†	601.5	606.7	523.56 ug/L		523.56 ppb	09:12:06
1	Si 251.611†	67607.5	65788.7	2491.4 ug/L		2491.4 ppb	09:11:46
1	Sn 189.927†	2258.0	2206.4	501.31 ug/L		501.31 ppb	09:12:06
1	Ti 334.940†	286341.1	281827.0	489.97 ug/L		489.97 ppb	09:11:46
1	Tl 190.801†	1304.7	1308.1	509.32 ug/L		509.32 ppb	09:12:06
1	U 409.014†	14816.5	16729.1	505.82 ug/L		505.82 ppb	09:11:46
1	V 292.402†	62225.1	62317.9	504.32 ug/L		504.32 ppb	09:11:46
1	Zn 213.857†	42974.6	41558.7	498.88 ug/L		498.88 ppb	09:11:46
1	SiO2†	67784.3	65950.9	5368.7 ug/L		5368.7 ppb	09:13:13
2	Sc Radial	4267.1	4267.1	97.1 %			09:11:09
2	Y RADIAL	4754.5	4754.5	99.87 %			09:10:49
2	Al 396.153Radial†	5038.4	5267.6	5150.2 ug/L		5150.2 ppb	09:10:49
2	Ca 317.933Radial†	2668.0	2732.4	5170.2 ug/L		5170.2 ppb	09:11:09
2	Fe 238.204 Radial†	442.2	447.0	5194.2 ug/L		5194.2 ppb	09:11:09
2	K 766.490 Radial†	29100.8	27375.1	5209.4 ug/L		5209.4 ppb	09:10:49
2	Mg 279.077 IEC†	129.6	131.9	5441.6 ug/L		5441.6 ppb	09:11:09
2	Na 589.592 Radial†	26364.9	28031.0	9881.5 ug/L		9881.5 ppb	09:10:49
2	Sr 421.552†	62039.1	63879.7	512.00 ug/L		512.00 ppb	09:10:49
2	Sc 361.383	836951.4	836951.4	102.21 %			09:12:12
2	Y 371.029	697139.4	697139.4	100.79 %			09:12:12
2	Ag 328.068†	97894.3	95589.0	499.41 ug/L		499.41 ppb	09:12:17
2	As 188.979†	901.5	908.8	503.18 ug/L		503.18 ppb	09:12:37
2	B 249.677†	17816.6	17968.1	501.79 ug/L		501.79 ppb	09:12:17
2	Ba 233.527†	54115.2	52943.9	497.14 ug/L		497.14 ppb	09:12:17
2	Be 313.107†	1204879.6	1182515.5	504.63 ug/L		504.63 ppb	09:12:12
2	Cd 226.502†	34879.3	34294.5	497.48 ug/L		497.48 ppb	09:12:17
2	Co 228.616†	19921.4	19536.2	505.04 ug/L		505.04 ppb	09:12:17
2	Cr 267.716†	37895.4	37003.2	497.27 ug/L		497.27 ppb	09:12:17
2	Cu 324.752†	157529.2	148565.4	490.48 ug/L		490.48 ppb	09:12:17
2	Mn 257.610†	380465.2	371836.1	489.19 ug/L		489.19 ppb	09:12:17
2	Mo 202.031†	5705.9	5573.8	495.93 ug/L		495.93 ppb	09:12:37
2	Ni 231.604†	16330.3	15892.5	504.40 ug/L		504.40 ppb	09:12:17

2	P 214.914†	3580.1	3315.3	2373.9 ug/L	2373.9 ppb	09:12:37
2	Pb 220.353†	3237.2	3225.4	496.97 ug/L	496.97 ppb	09:12:37
2	S 181.975 Axial†	591.9	548.9	981.65 ug/L	981.65 ppb	09:12:37
2	Sb 206.836†	1238.0	1187.5	514.66 ug/L	514.66 ppb	09:12:37
2	Se 196.026†	596.5	600.5	518.35 ug/L	518.35 ppb	09:12:37
2	Si 251.611†	67153.8	65211.2	2469.5 ug/L	2469.5 ppb	09:12:17
2	Sn 189.927†	2240.3	2184.6	496.37 ug/L	496.37 ppb	09:12:37
2	Ti 334.940†	284868.9	279820.4	486.47 ug/L	486.47 ppb	09:12:17
2	Tl 190.801†	1280.9	1282.3	499.31 ug/L	499.31 ppb	09:12:37
2	U 409.014†	14705.3	16591.0	501.64 ug/L	501.64 ppb	09:12:17
2	V 292.402†	62071.6	62044.7	502.05 ug/L	502.05 ppb	09:12:17
2	Zn 213.857†	42755.3	41259.3	495.27 ug/L	495.27 ppb	09:12:17
2	SiO2†	68107.0	66132.6	5383.7 ug/L	5383.7 ppb	09:13:18
3	Sc Radial	4261.7	4261.7	97.0 %		09:11:34
3	Y RADIAL	4762.6	4762.6	100.0 %		09:11:14
3	Al 396.153Radial†	5041.6	5277.5	5159.8 ug/L	5159.8 ppb	09:11:14
3	Ca 317.933Radial†	2678.0	2746.1	5196.2 ug/L	5196.2 ppb	09:11:34
3	Fe 238.204 Radial†	449.7	455.3	5290.6 ug/L	5290.6 ppb	09:11:34
3	K 766.490 Radial†	29132.2	27445.0	5222.7 ug/L	5222.7 ppb	09:11:14
3	Mg 279.077 IEC†	130.7	133.3	5498.4 ug/L	5498.4 ppb	09:11:34
3	Na 589.592 Radial†	26247.0	27943.4	9850.6 ug/L	9850.6 ppb	09:11:14
3	Sr 421.552†	62138.9	64062.5	513.47 ug/L	513.47 ppb	09:11:14
3	Sc 361.383	831297.4	831297.4	101.52 %		09:12:42
3	Y 371.029	692170.0	692170.0	100.08 %		09:12:42
3	Ag 328.068†	98276.5	96616.8	504.80 ug/L	504.80 ppb	09:12:48
3	As 188.979†	900.4	913.7	505.94 ug/L	505.94 ppb	09:13:08
3	B 249.677†	17875.0	18144.2	506.70 ug/L	506.70 ppb	09:12:48
3	Ba 233.527†	54411.2	53595.5	503.26 ug/L	503.26 ppb	09:12:48
3	Be 313.107†	1194741.7	1180547.0	503.80 ug/L	503.80 ppb	09:12:42
3	Cd 226.502†	35068.4	34712.9	503.55 ug/L	503.55 ppb	09:12:48
3	Co 228.616†	19944.2	19691.1	509.03 ug/L	509.03 ppb	09:12:48
3	Cr 267.716†	38090.4	37447.4	503.24 ug/L	503.24 ppb	09:12:48
3	Cu 324.752†	158408.5	150479.8	496.81 ug/L	496.81 ppb	09:12:48
3	Mn 257.610†	381751.2	375634.4	494.19 ug/L	494.19 ppb	09:12:48
3	Mo 202.031†	5698.4	5604.4	498.66 ug/L	498.66 ppb	09:13:08
3	Ni 231.604†	16336.3	16007.2	508.04 ug/L	508.04 ppb	09:12:48
3	P 214.914†	3559.0	3318.3	2374.9 ug/L	2374.9 ppb	09:13:08
3	Pb 220.353†	3230.4	3240.2	499.23 ug/L	499.23 ppb	09:13:08
3	S 181.975 Axial†	591.9	552.9	988.76 ug/L	988.76 ppb	09:13:08
3	Sb 206.836†	1233.3	1191.2	516.26 ug/L	516.26 ppb	09:13:08
3	Se 196.026†	600.5	608.5	525.25 ug/L	525.25 ppb	09:13:08
3	Si 251.611†	67511.8	66010.7	2499.8 ug/L	2499.8 ppb	09:12:48
3	Sn 189.927†	2230.4	2189.7	497.53 ug/L	497.53 ppb	09:13:08
3	Ti 334.940†	286639.6	283460.1	492.80 ug/L	492.80 ppb	09:12:48
3	Tl 190.801†	1274.1	1284.1	500.05 ug/L	500.05 ppb	09:13:08
3	U 409.014†	14726.7	16710.0	505.23 ug/L	505.23 ppb	09:12:48
3	V 292.402†	62390.5	62771.8	507.88 ug/L	507.88 ppb	09:12:48
3	Zn 213.857†	42899.3	41685.6	500.39 ug/L	500.39 ppb	09:12:48
3	SiO2†	68263.8	66740.2	5433.2 ug/L	5433.2 ppb	09:13:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834504.1	101.91 %	0.354			0.35%
Sc Radial	4266.3	97.1 %	0.10			0.10%
Y 371.029	695045.4	100.49 %	0.372			0.37%
Y RADIAL	4746.4	99.70 %	0.449			0.45%
Ag 328.068†	96132.8	502.25 ug/L	2.706	502.25 ppb	2.706	0.54%
QC value within limits for Ag 328.068 Recovery = 100.45%						
Al 396.153Radial†	5261.9	5144.4 ug/L	18.91	5144.4 ppb	18.91	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.89%						
As 188.979†	916.3	507.32 ug/L	4.968	507.32 ppb	4.968	0.98%
QC value within limits for As 188.979 Recovery = 101.46%						
B 249.677†	18053.7	504.18 ug/L	2.459	504.18 ppb	2.459	0.49%
QC value within limits for B 249.677 Recovery = 100.84%						
Ba 233.527†	53301.0	500.49 ug/L	3.101	500.49 ppb	3.101	0.62%
QC value within limits for Ba 233.527 Recovery = 100.10%						
Be 313.107†	1181157.2	504.06 ug/L	0.496	504.06 ppb	0.496	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2742.2	5188.8 ug/L	16.23	5188.8 ppb	16.23	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 103.78%

Cd 226.502†	34516.0	500.69 ug/L	3.048	500.69 ppb	3.048	0.61%
QC value within limits for Cd 226.502 Recovery = 100.14%						
Co 228.616†	19634.3	507.57 ug/L	2.204	507.57 ppb	2.204	0.43%
QC value within limits for Co 228.616 Recovery = 101.51%						
Cr 267.716†	37219.5	500.17 ug/L	2.991	500.17 ppb	2.991	0.60%
QC value within limits for Cr 267.716 Recovery = 100.03%						
Cu 324.752†	149612.8	493.94 ug/L	3.203	493.94 ppb	3.203	0.65%
QC value within limits for Cu 324.752 Recovery = 98.79%						
Fe 238.204 Radial†	450.4	5234.3 ug/L	50.20	5234.3 ppb	50.20	0.96%
QC value within limits for Fe 238.204 Radial Recovery = 104.69%						
K 766.490 Radial†	27418.6	5217.6 ug/L	7.22	5217.6 ppb	7.22	0.14%
QC value within limits for K 766.490 Radial Recovery = 104.35%						
Mg 279.077 IEC†	131.1	5407.6 ug/L	111.73	5407.6 ppb	111.73	2.07%
QC value within limits for Mg 279.077 IEC Recovery = 108.15%						
Mn 257.610†	373903.6	491.91 ug/L	2.530	491.91 ppb	2.530	0.51%
QC value within limits for Mn 257.610 Recovery = 98.38%						
Mo 202.031†	5607.4	498.92 ug/L	3.125	498.92 ppb	3.125	0.63%
QC value within limits for Mo 202.031 Recovery = 99.78%						
Na 589.592 Radial†	28071.7	9895.9 ug/L	53.83	9895.9 ppb	53.83	0.54%
QC value within limits for Na 589.592 Radial Recovery = 98.96%						
Ni 231.604†	15946.0	506.09 ug/L	1.832	506.09 ppb	1.832	0.36%
QC value within limits for Ni 231.604 Recovery = 101.22%						
P 214.914†	3336.9	2389.4 ug/L	25.93	2389.4 ppb	25.93	1.09%
QC value within limits for P 214.914 Recovery = 95.57%						
Pb 220.353†	3243.1	499.68 ug/L	2.973	499.68 ppb	2.973	0.59%
QC value within limits for Pb 220.353 Recovery = 99.94%						
S 181.975 Axial†	553.5	989.89 ug/L	8.861	989.89 ppb	8.861	0.90%
QC value within limits for S 181.975 Axial Recovery = 98.99%						
Sb 206.836†	1193.0	517.03 ug/L	2.832	517.03 ppb	2.832	0.55%
QC value within limits for Sb 206.836 Recovery = 103.41%						
Se 196.026†	605.2	522.39 ug/L	3.594	522.39 ppb	3.594	0.69%
QC value within limits for Se 196.026 Recovery = 104.48%						
Si 251.611†	65670.2	2486.9 ug/L	15.64	2486.9 ppb	15.64	0.63%
QC value within limits for Si 251.611 Recovery = 99.48%						
Sn 189.927†	2193.6	498.40 ug/L	2.582	498.40 ppb	2.582	0.52%
QC value within limits for Sn 189.927 Recovery = 99.68%						
Sr 421.552†	63945.7	512.53 ug/L	0.813	512.53 ppb	0.813	0.16%
QC value within limits for Sr 421.552 Recovery = 102.51%						
Ti 334.940†	281702.5	489.75 ug/L	3.169	489.75 ppb	3.169	0.65%
QC value within limits for Ti 334.940 Recovery = 97.95%						
Tl 190.801†	1291.5	502.89 ug/L	5.573	502.89 ppb	5.573	1.11%
QC value within limits for Tl 190.801 Recovery = 100.58%						
U 409.014†	16676.7	504.23 ug/L	2.261	504.23 ppb	2.261	0.45%
QC value within limits for U 409.014 Recovery = 100.85%						
V 292.402†	62378.1	504.75 ug/L	2.939	504.75 ppb	2.939	0.58%
QC value within limits for V 292.402 Recovery = 100.95%						
Zn 213.857†	41501.2	498.18 ug/L	2.631	498.18 ppb	2.631	0.53%
QC value within limits for Zn 213.857 Recovery = 99.64%						
SiO2†	66274.6	5395.2 ug/L	33.76	5395.2 ppb	33.76	0.63%
QC value within limits for SiO2 Recovery = 100.89%						

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 09:15:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4271.6	4271.6	97.2 %		09:17:46
1	Y RADIAL	4777.6	4777.6	100.4 %		09:17:26
1	Al 396.153Radial†	-79.6	-3.9	-3.8423 ug/L	-3.8423 ppb	09:17:46
1	Ca 317.933Radial†	19.6	4.5	8.4521 ug/L	8.4521 ppb	09:17:46
1	Fe 238.204 Radial†	6.5	-1.8	-20.460 ug/L	-20.460 ppb	09:17:46
1	K 766.490 Radial†	2764.2	245.3	46.730 ug/L	46.730 ppb	09:17:26
1	Mg 279.077 IEC†	2.5	1.0	42.322 ug/L	42.322 ppb	09:17:46
1	Na 589.592 Radial†	-782.7	69.8	24.603 ug/L	24.603 ppb	09:17:26
1	Sr 421.552†	33.1	13.2	0.1058 ug/L	0.1058 ppb	09:17:26
1	Sc 361.383	814482.5	814482.5	99.470 %		09:18:43
1	Y 371.029	687746.5	687746.5	99.436 %		09:18:43
1	Ag 328.068†	219.3	35.3	0.1775 ug/L	0.1775 ppb	09:18:43
1	As 188.979†	-17.3	9.4	5.1795 ug/L	5.1795 ppb	09:19:03
1	B 249.677†	-3.5	533.8	14.980 ug/L	14.980 ppb	09:19:03
1	Ba 233.527†	9.2	10.0	0.0933 ug/L	0.0933 ppb	09:19:03
1	Be 313.107†	-3582.3	129.6	0.0550 ug/L	0.0550 ppb	09:18:43
1	Cd 226.502†	-164.5	5.3	0.0788 ug/L	0.0788 ppb	09:19:03
1	Co 228.616†	-51.3	-5.3	-0.1349 ug/L	-0.1349 ppb	09:19:03
1	Cr 267.716†	75.2	4.1	0.0529 ug/L	0.0529 ppb	09:19:03
1	Cu 324.752†	5609.0	87.0	0.2858 ug/L	0.2858 ppb	09:18:43
1	Mn 257.610†	401.8	14.9	0.0159 ug/L	0.0159 ppb	09:19:03
1	Mo 202.031†	20.3	11.9	1.0542 ug/L	1.0542 ppb	09:19:03
1	Ni 231.604†	83.5	-0.1	-0.0036 ug/L	-0.0036 ppb	09:19:03
1	P 214.914†	187.8	1.5	1.0765 ug/L	1.0765 ppb	09:19:03
1	Pb 220.353†	-53.2	4.8	0.7489 ug/L	0.7489 ppb	09:19:03
1	S 181.975 Axial†	27.3	-2.7	-4.8368 ug/L	-4.8368 ppb	09:19:03
1	Sb 206.836†	39.0	15.5	6.5154 ug/L	6.5154 ppb	09:19:03
1	Se 196.026†	-12.3	4.6	3.7725 ug/L	3.7725 ppb	09:19:03
1	Si 251.611†	533.6	48.3	1.8197 ug/L	1.8197 ppb	09:19:03
1	Sn 189.927†	8.7	1.6	0.3694 ug/L	0.3694 ppb	09:19:03
1	Ti 334.940†	-1171.1	-56.1	-0.1001 ug/L	-0.1001 ppb	09:18:43
1	Tl 190.801†	-28.6	0.4	0.1418 ug/L	0.1418 ppb	09:19:03
1	U 409.014†	-2178.9	13.7	0.4170 ug/L	0.4170 ppb	09:18:43
1	V 292.402†	-1286.3	24.2	0.2131 ug/L	0.2131 ppb	09:18:43
1	Zn 213.857†	690.5	124.1	1.5064 ug/L	1.5064 ppb	09:19:03
1	SiO2†	541.5	45.1	3.6495 ug/L	3.6495 ppb	09:19:59
2	Sc Radial	4262.8	4262.8	97.0 %		09:18:11
2	Y RADIAL	4796.9	4796.9	100.8 %		09:17:51
2	Al 396.153Radial†	-78.0	-2.3	-2.3148 ug/L	-2.3148 ppb	09:18:11
2	Ca 317.933Radial†	19.3	4.3	8.0475 ug/L	8.0475 ppb	09:18:11
2	Fe 238.204 Radial†	7.2	-1.0	-11.440 ug/L	-11.440 ppb	09:18:11
2	K 766.490 Radial†	2748.7	235.2	44.821 ug/L	44.821 ppb	09:17:51
2	Mg 279.077 IEC†	2.8	1.3	55.437 ug/L	55.437 ppb	09:18:11
2	Na 589.592 Radial†	-871.9	-23.9	-8.4179 ug/L	-8.4179 ppb	09:17:51
2	Sr 421.552†	16.5	-3.9	-0.0310 ug/L	-0.0310 ppb	09:17:51
2	Sc 361.383	817570.3	817570.3	99.847 %		09:19:08
2	Y 371.029	690582.6	690582.6	99.846 %		09:19:08
2	Ag 328.068†	196.2	11.4	0.0530 ug/L	0.0530 ppb	09:19:08
2	As 188.979†	-27.6	-0.8	-0.4463 ug/L	-0.4463 ppb	09:19:28
2	B 249.677†	-4.1	533.3	14.962 ug/L	14.962 ppb	09:19:28
2	Ba 233.527†	26.6	27.4	0.2550 ug/L	0.2550 ppb	09:19:28
2	Be 313.107†	-3673.1	52.3	0.0223 ug/L	0.0223 ppb	09:19:08
2	Cd 226.502†	-163.4	7.0	0.1028 ug/L	0.1028 ppb	09:19:28
2	Co 228.616†	-52.3	-6.2	-0.1578 ug/L	-0.1578 ppb	09:19:28
2	Cr 267.716†	111.6	40.2	0.5373 ug/L	0.5373 ppb	09:19:28
2	Cu 324.752†	5650.1	106.8	0.3513 ug/L	0.3513 ppb	09:19:08
2	Mn 257.610†	409.8	21.4	0.0247 ug/L	0.0247 ppb	09:19:28
2	Mo 202.031†	15.6	7.1	0.6264 ug/L	0.6264 ppb	09:19:28
2	Ni 231.604†	69.7	-14.3	-0.4542 ug/L	-0.4542 ppb	09:19:28

2	P 214.914†	180.2	-6.8	-5.1075 ug/L	-5.1075 ppb	09:19:28
2	Pb 220.353†	-55.0	3.2	0.4903 ug/L	0.4903 ppb	09:19:28
2	S 181.975 Axial†	28.5	-1.6	-2.9431 ug/L	-2.9431 ppb	09:19:28
2	Sb 206.836†	34.7	11.1	4.6710 ug/L	4.6710 ppb	09:19:28
2	Se 196.026†	-15.5	1.4	1.1515 ug/L	1.1515 ppb	09:19:28
2	Si 251.611†	555.3	68.0	2.5719 ug/L	2.5719 ppb	09:19:28
2	Sn 189.927†	8.7	1.6	0.3569 ug/L	0.3569 ppb	09:19:28
2	Ti 334.940†	-1114.5	5.0	0.0047 ug/L	0.0047 ppb	09:19:08
2	Tl 190.801†	-19.5	9.5	3.6905 ug/L	3.6905 ppb	09:19:28
2	U 409.014†	-2170.8	30.1	0.9119 ug/L	0.9119 ppb	09:19:08
2	V 292.402†	-1366.1	-50.8	-0.3922 ug/L	-0.3922 ppb	09:19:08
2	Zn 213.857†	683.1	114.1	1.3864 ug/L	1.3864 ppb	09:19:28
2	SiO2†	541.1	42.6	3.4608 ug/L	3.4608 ppb	09:20:04
3	Sc Radial	4286.3	4286.3	97.5 %		09:18:36
3	Y RADIAL	4854.7	4854.7	102.0 %		09:18:16
3	Al 396.153Radial†	-90.4	-14.6	-14.360 ug/L	-14.360 ppb	09:18:36
3	Ca 317.933Radial†	24.9	9.9	18.648 ug/L	18.648 ppb	09:18:36
3	Fe 238.204 Radial†	7.6	-0.7	-7.7386 ug/L	-7.7386 ppb	09:18:36
3	K 766.490 Radial†	2787.2	259.2	49.398 ug/L	49.398 ppb	09:18:16
3	Mg 279.077 IEC†	3.8	2.3	96.474 ug/L	96.474 ppb	09:18:36
3	Na 589.592 Radial†	-957.9	-107.1	-37.767 ug/L	-37.767 ppb	09:18:16
3	Sr 421.552†	10.2	-10.4	-0.0832 ug/L	-0.0832 ppb	09:18:16
3	Sc 361.383	814846.7	814846.7	99.514 %		09:19:34
3	Y 371.029	688863.2	688863.2	99.598 %		09:19:34
3	Ag 328.068†	112.3	-72.3	-0.3809 ug/L	-0.3809 ppb	09:19:34
3	As 188.979†	-19.8	6.9	3.8016 ug/L	3.8016 ppb	09:19:54
3	B 249.677†	-11.6	525.7	14.748 ug/L	14.748 ppb	09:19:54
3	Ba 233.527†	13.2	14.0	0.1296 ug/L	0.1296 ppb	09:19:54
3	Be 313.107†	-3646.0	67.2	0.0286 ug/L	0.0286 ppb	09:19:34
3	Cd 226.502†	-174.8	-5.1	-0.0723 ug/L	-0.0723 ppb	09:19:54
3	Co 228.616†	-45.4	0.6	0.0137 ug/L	0.0137 ppb	09:19:54
3	Cr 267.716†	81.6	10.5	0.1380 ug/L	0.1380 ppb	09:19:54
3	Cu 324.752†	5635.8	111.3	0.3662 ug/L	0.3662 ppb	09:19:34
3	Mn 257.610†	399.2	12.1	0.0112 ug/L	0.0112 ppb	09:19:54
3	Mo 202.031†	4.4	-4.1	-0.3630 ug/L	-0.3630 ppb	09:19:54
3	Ni 231.604†	77.0	-6.7	-0.2117 ug/L	-0.2117 ppb	09:19:54
3	P 214.914†	186.2	-0.2	-0.1874 ug/L	-0.1874 ppb	09:19:54
3	Pb 220.353†	-67.8	-9.8	-1.5113 ug/L	-1.5113 ppb	09:19:54
3	S 181.975 Axial†	31.5	1.5	2.6801 ug/L	2.6801 ppb	09:19:54
3	Sb 206.836†	26.2	2.7	1.1279 ug/L	1.1279 ppb	09:19:54
3	Se 196.026†	-24.8	-7.9	-6.6490 ug/L	-6.6490 ppb	09:19:54
3	Si 251.611†	539.9	54.4	2.0696 ug/L	2.0696 ppb	09:19:54
3	Sn 189.927†	11.4	4.3	0.9890 ug/L	0.9890 ppb	09:19:54
3	Ti 334.940†	-1124.0	-8.2	-0.0205 ug/L	-0.0205 ppb	09:19:34
3	Tl 190.801†	-21.4	7.6	2.9459 ug/L	2.9459 ppb	09:19:54
3	U 409.014†	-2140.4	53.3	1.6188 ug/L	1.6188 ppb	09:19:34
3	V 292.402†	-1367.7	-56.9	-0.4537 ug/L	-0.4537 ppb	09:19:34
3	Zn 213.857†	679.6	112.8	1.3688 ug/L	1.3688 ppb	09:19:54
3	SiO2†	581.9	85.4	6.9819 ug/L	6.9819 ppb	09:20:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815633.2	99.610 %		0.2061			0.21%
Sc Radial	4273.6	97.2 %		0.27			0.28%
Y 371.029	689064.1	99.627 %		0.2066			0.21%
Y RADIAL	4809.8	101.0 %		0.84			0.83%
Ag 328.068†	-8.5	-0.0502 ug/L		0.29315	-0.0502 ppb	0.29315	584.39%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-6.9	-6.8391 ug/L		6.55807	-6.8391 ppb	6.55807	95.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.2	2.8450 ug/L		2.93238	2.8450 ppb	2.93238	103.07%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	530.9	14.897 ug/L		0.1288	14.897 ppb	0.1288	0.86%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	17.1	0.1593 ug/L		0.08483	0.1593 ppb	0.08483	53.25%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	83.0	0.0353 ug/L		0.01733	0.0353 ppb	0.01733	49.14%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.2	11.716 ug/L		6.0069	11.716 ppb	6.0069	51.27%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	2.4	0.0364 ug/L	0.09492	0.0364 ppb	0.09492 260.66%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-3.6	-0.0930 ug/L	0.09311	-0.0930 ppb	0.09311 100.13%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	18.3	0.2428 ug/L	0.25864	0.2428 ppb	0.25864 106.54%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	101.7	0.3344 ug/L	0.04278	0.3344 ppb	0.04278 12.79%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-1.1	-13.213 ug/L	6.5433	-13.213 ppb	6.5433 49.52%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	246.6	46.983 ug/L	2.2993	46.983 ppb	2.2993 4.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	1.6	64.745 ug/L	28.2505	64.745 ppb	28.2505 43.63%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	16.1	0.0173 ug/L	0.00685	0.0173 ppb	0.00685 39.68%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	5.0	0.4392 ug/L	0.72693	0.4392 ppb	0.72693 165.51%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-20.4	-7.1939 ug/L	31.20291	-7.1939 ppb	31.20291 433.74%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-7.0	-0.2232 ug/L	0.22549	-0.2232 ppb	0.22549 101.04%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-1.8	-1.4062 ug/L	3.26718	-1.4062 ppb	3.26718 232.35%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	-0.6	-0.0907 ug/L	1.23706	-0.0907 ppb	1.23706 >999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-1.0	-1.6999 ug/L	3.90961	-1.6999 ppb	3.90961 229.99%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	9.8	4.1048 ug/L	2.73805	4.1048 ppb	2.73805 66.70%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.6	-0.5750 ug/L	5.42099	-0.5750 ppb	5.42099 942.80%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	56.9	2.1537 ug/L	0.38312	2.1537 ppb	0.38312 17.79%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	2.5	0.5717 ug/L	0.36138	0.5717 ppb	0.36138 63.21%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-0.3	-0.0028 ug/L	0.09757	-0.0028 ppb	0.09757 >999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	-19.8	-0.0386 ug/L	0.05470	-0.0386 ppb	0.05470 141.60%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	5.8	2.2594 ug/L	1.87131	2.2594 ppb	1.87131 82.82%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	32.4	0.9826 ug/L	0.60400	0.9826 ppb	0.60400 61.47%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-27.8	-0.2109 ug/L	0.36853	-0.2109 ppb	0.36853 174.72%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	117.0	1.4205 ug/L	0.07489	1.4205 ppb	0.07489 5.27%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	57.7	4.6974 ug/L	1.98072	4.6974 ppb	1.98072 42.17%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 10:18:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4308.1	4308.1	98.0 %		10:20:30
1	Y RADIAL	4796.2	4796.2	100.7 %		10:20:10
1	Al 396.153Radial†	5020.5	5200.0	5083.7 ug/L	5083.7 ppb	10:20:10
1	Ca 317.933Radial†	2703.2	2742.1	5188.6 ug/L	5188.6 ppb	10:20:30
1	Fe 238.204 Radial†	458.1	458.9	5332.4 ug/L	5332.4 ppb	10:20:30
1	K 766.490 Radial†	29265.8	27258.0	5186.8 ug/L	5186.8 ppb	10:20:10
1	Mg 279.077 IEC†	128.8	129.9	5357.8 ug/L	5357.8 ppb	10:20:30
1	Na 589.592 Radial†	28262.5	29708.3	10473 ug/L	10473 ppb	10:20:10
1	Sr 421.552†	64065.1	65338.0	523.69 ug/L	523.69 ppb	10:20:10
1	Sc 361.383	840877.0	840877.0	102.69 %		10:21:27
1	Y 371.029	700106.4	700106.4	101.22 %		10:21:27
1	Ag 328.068†	98277.1	95514.6	499.06 ug/L	499.06 ppb	10:21:32
1	As 188.979†	922.7	925.3	512.29 ug/L	512.29 ppb	10:21:52
1	B 249.677†	17605.6	17681.2	493.72 ug/L	493.72 ppb	10:21:32
1	Ba 233.527†	54539.2	53109.6	498.70 ug/L	498.70 ppb	10:21:32
1	Be 313.107†	1210018.3	1182016.3	504.42 ug/L	504.42 ppb	10:21:27
1	Cd 226.502†	35152.8	34401.5	499.02 ug/L	499.02 ppb	10:21:32
1	Co 228.616†	20041.6	19562.2	505.71 ug/L	505.71 ppb	10:21:32
1	Cr 267.716†	38225.6	37151.6	499.27 ug/L	499.27 ppb	10:21:32
1	Cu 324.752†	158350.9	148646.1	490.76 ug/L	490.76 ppb	10:21:32
1	Mn 257.610†	390746.5	380110.0	500.08 ug/L	500.08 ppb	10:21:27
1	Mo 202.031†	5748.3	5589.0	497.29 ug/L	497.29 ppb	10:21:52
1	Ni 231.604†	16393.2	15879.2	503.98 ug/L	503.98 ppb	10:21:32
1	P 214.914†	3610.4	3328.4	2383.6 ug/L	2383.6 ppb	10:21:52
1	Pb 220.353†	3267.4	3240.1	499.18 ug/L	499.18 ppb	10:21:52
1	S 181.975 Axial†	599.3	553.4	989.74 ug/L	989.74 ppb	10:21:52
1	Sb 206.836†	1241.7	1185.5	513.90 ug/L	513.90 ppb	10:21:52
1	Se 196.026†	601.0	602.2	520.13 ug/L	520.13 ppb	10:21:52
1	Si 251.611†	67756.7	65491.6	2480.1 ug/L	2480.1 ppb	10:21:32
1	Sn 189.927†	2265.7	2199.2	499.66 ug/L	499.66 ppb	10:21:52
1	Ti 334.940†	286425.2	280034.8	486.85 ug/L	486.85 ppb	10:21:32
1	Tl 190.801†	1289.6	1284.9	500.36 ug/L	500.36 ppb	10:21:52
1	U 409.014†	14815.8	16631.5	502.85 ug/L	502.85 ppb	10:21:32
1	V 292.402†	62323.9	62006.9	501.75 ug/L	501.75 ppb	10:21:32
1	Zn 213.857†	42998.2	41300.5	495.75 ug/L	495.75 ppb	10:21:32
1	SiO2†	68433.6	66139.6	5384.2 ug/L	5384.2 ppb	10:23:00
2	Sc Radial	4303.6	4303.6	97.9 %		10:20:55
2	Y RADIAL	4888.7	4888.7	102.7 %		10:20:35
2	Al 396.153Radial†	5077.0	5263.0	5145.6 ug/L	5145.6 ppb	10:20:35
2	Ca 317.933Radial†	2703.5	2745.3	5194.6 ug/L	5194.6 ppb	10:20:55
2	Fe 238.204 Radial†	454.5	455.7	5294.9 ug/L	5294.9 ppb	10:20:55
2	K 766.490 Radial†	29796.5	27831.0	5295.9 ug/L	5295.9 ppb	10:20:35
2	Mg 279.077 IEC†	129.3	130.5	5384.2 ug/L	5384.2 ppb	10:20:55
2	Na 589.592 Radial†	28793.9	30281.0	10675 ug/L	10675 ppb	10:20:35
2	Sr 421.552†	65177.3	66541.7	533.34 ug/L	533.34 ppb	10:20:35
2	Sc 361.383	841989.2	841989.2	102.83 %		10:21:58
2	Y 371.029	701176.2	701176.2	101.38 %		10:21:58
2	Ag 328.068†	98955.0	96047.5	501.82 ug/L	501.82 ppb	10:22:03
2	As 188.979†	911.1	912.8	505.43 ug/L	505.43 ppb	10:22:23
2	B 249.677†	17727.0	17776.7	496.40 ug/L	496.40 ppb	10:22:03
2	Ba 233.527†	54790.6	53284.0	500.33 ug/L	500.33 ppb	10:22:03
2	Be 313.107†	1215519.9	1185810.1	506.04 ug/L	506.04 ppb	10:21:58
2	Cd 226.502†	35405.2	34601.8	501.93 ug/L	501.93 ppb	10:22:03
2	Co 228.616†	20165.2	19656.6	508.15 ug/L	508.15 ppb	10:22:03
2	Cr 267.716†	38383.2	37255.7	500.66 ug/L	500.66 ppb	10:22:03
2	Cu 324.752†	159218.3	149285.9	492.87 ug/L	492.87 ppb	10:22:03
2	Mn 257.610†	392163.2	380985.2	501.23 ug/L	501.23 ppb	10:21:58
2	Mo 202.031†	5763.9	5596.8	497.98 ug/L	497.98 ppb	10:22:23
2	Ni 231.604†	16452.0	15915.3	505.12 ug/L	505.12 ppb	10:22:03

2	P 214.914†	3642.1	3354.6	2402.7 ug/L	2402.7 ppb	10:22:23
2	Pb 220.353†	3262.6	3231.1	497.83 ug/L	497.83 ppb	10:22:23
2	S 181.975 Axial†	607.5	560.6	1002.6 ug/L	1002.6 ppb	10:22:23
2	Sb 206.836†	1261.5	1203.1	521.27 ug/L	521.27 ppb	10:22:23
2	Se 196.026†	606.4	606.7	523.77 ug/L	523.77 ppb	10:22:23
2	Si 251.611†	68049.2	65688.9	2487.6 ug/L	2487.6 ppb	10:22:03
2	Sn 189.927†	2268.5	2198.9	499.61 ug/L	499.61 ppb	10:22:23
2	Ti 334.940†	288221.2	281413.1	489.25 ug/L	489.25 ppb	10:22:03
2	Tl 190.801†	1312.0	1305.0	508.15 ug/L	508.15 ppb	10:22:23
2	U 409.014†	14914.3	16708.1	505.18 ug/L	505.18 ppb	10:22:03
2	V 292.402†	62602.0	62197.1	503.29 ug/L	503.29 ppb	10:22:03
2	Zn 213.857†	43197.0	41438.5	497.42 ug/L	497.42 ppb	10:22:03
2	SiO2†	68330.5	65951.3	5368.8 ug/L	5368.8 ppb	10:23:05
3	Sc Radial	4308.5	4308.5	98.0 %		10:21:20
3	Y RADIAL	4759.8	4759.8	99.98 %		10:21:00
3	Al 396.153Radial†	4982.1	5160.3	5044.7 ug/L	5044.7 ppb	10:21:00
3	Ca 317.933Radial†	2717.2	2756.1	5215.0 ug/L	5215.0 ppb	10:21:20
3	Fe 238.204 Radial†	458.5	459.2	5336.0 ug/L	5336.0 ppb	10:21:20
3	K 766.490 Radial†	29151.9	27138.8	5164.1 ug/L	5164.1 ppb	10:21:00
3	Mg 279.077 IEC†	130.2	131.2	5413.8 ug/L	5413.8 ppb	10:21:20
3	Na 589.592 Radial†	27882.2	29317.5	10335 ug/L	10335 ppb	10:21:00
3	Sr 421.552†	63477.4	64731.9	518.84 ug/L	518.84 ppb	10:21:00
3	Sc 361.383	841584.9	841584.9	102.78 %		10:22:29
3	Y 371.029	700121.4	700121.4	101.23 %		10:22:29
3	Ag 328.068†	97908.8	95075.7	496.77 ug/L	496.77 ppb	10:22:34
3	As 188.979†	915.3	917.4	507.90 ug/L	507.90 ppb	10:22:54
3	B 249.677†	17549.2	17611.9	491.79 ug/L	491.79 ppb	10:22:34
3	Ba 233.527†	54162.2	52698.1	494.84 ug/L	494.84 ppb	10:22:34
3	Be 313.107†	1208532.2	1179579.3	503.37 ug/L	503.37 ppb	10:22:29
3	Cd 226.502†	34838.9	34067.3	494.17 ug/L	494.17 ppb	10:22:34
3	Co 228.616†	19861.8	19370.8	500.77 ug/L	500.77 ppb	10:22:34
3	Cr 267.716†	37945.5	36847.8	495.19 ug/L	495.19 ppb	10:22:34
3	Cu 324.752†	157797.9	147978.4	488.55 ug/L	488.55 ppb	10:22:34
3	Mn 257.610†	390735.5	379779.2	499.65 ug/L	499.65 ppb	10:22:29
3	Mo 202.031†	5752.3	5588.2	497.22 ug/L	497.22 ppb	10:22:54
3	Ni 231.604†	16284.0	15759.5	500.18 ug/L	500.18 ppb	10:22:34
3	P 214.914†	3613.2	3328.2	2383.8 ug/L	2383.8 ppb	10:22:54
3	Pb 220.353†	3273.8	3243.6	499.72 ug/L	499.72 ppb	10:22:54
3	S 181.975 Axial†	608.0	561.3	1004.0 ug/L	1004.0 ppb	10:22:54
3	Sb 206.836†	1261.0	1203.2	521.27 ug/L	521.27 ppb	10:22:54
3	Se 196.026†	609.0	609.5	526.24 ug/L	526.24 ppb	10:22:54
3	Si 251.611†	67209.5	64903.6	2457.8 ug/L	2457.8 ppb	10:22:34
3	Sn 189.927†	2261.1	2192.7	498.21 ug/L	498.21 ppb	10:22:54
3	Ti 334.940†	284900.4	278316.7	483.86 ug/L	483.86 ppb	10:22:34
3	Tl 190.801†	1308.4	1302.1	507.01 ug/L	507.01 ppb	10:22:54
3	U 409.014†	14819.6	16623.0	502.60 ug/L	502.60 ppb	10:22:34
3	V 292.402†	61893.7	61537.3	498.00 ug/L	498.00 ppb	10:22:34
3	Zn 213.857†	42671.0	40946.9	491.50 ug/L	491.50 ppb	10:22:34
3	SiO2†	68350.8	66003.0	5373.1 ug/L	5373.1 ppb	10:23:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841483.7	102.77 %	0.069			0.07%
Sc Radial	4306.7	98.0 %	0.06			0.06%
Y 371.029	700468.0	101.28 %	0.089			0.09%
Y RADIAL	4814.9	101.1 %	1.40			1.38%
Ag 328.068†	95546.0	499.22 ug/L	2.529	499.22 ppb	2.529	0.51%
QC value within limits for Ag 328.068 Recovery = 99.84%						
Al 396.153Radial†	5207.8	5091.3 ug/L	50.85	5091.3 ppb	50.85	1.00%
QC value within limits for Al 396.153Radial Recovery = 101.83%						
As 188.979†	918.5	508.54 ug/L	3.473	508.54 ppb	3.473	0.68%
QC value within limits for As 188.979 Recovery = 101.71%						
B 249.677†	17689.9	493.97 ug/L	2.314	493.97 ppb	2.314	0.47%
QC value within limits for B 249.677 Recovery = 98.79%						
Ba 233.527†	53030.6	497.96 ug/L	2.823	497.96 ppb	2.823	0.57%
QC value within limits for Ba 233.527 Recovery = 99.59%						
Be 313.107†	1182468.6	504.61 ug/L	1.343	504.61 ppb	1.343	0.27%
QC value within limits for Be 313.107 Recovery = 100.92%						
Ca 317.933Radial†	2747.8	5199.4 ug/L	13.84	5199.4 ppb	13.84	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 103.99%							
Cd	226.502†	34356.9	498.37 ug/L	3.922	498.37 ppb	3.922	0.79%
QC value within limits for Cd 226.502 Recovery = 99.67%							
Co	228.616†	19529.9	504.88 ug/L	3.759	504.88 ppb	3.759	0.74%
QC value within limits for Co 228.616 Recovery = 100.98%							
Cr	267.716†	37085.1	498.38 ug/L	2.844	498.38 ppb	2.844	0.57%
QC value within limits for Cr 267.716 Recovery = 99.68%							
Cu	324.752†	148636.8	490.73 ug/L	2.157	490.73 ppb	2.157	0.44%
QC value within limits for Cu 324.752 Recovery = 98.15%							
Fe	238.204 Radial†	457.9	5321.1 ug/L	22.78	5321.1 ppb	22.78	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 106.42%							
K	766.490 Radial†	27409.3	5215.6 ug/L	70.44	5215.6 ppb	70.44	1.35%
QC value within limits for K 766.490 Radial Recovery = 104.31%							
Mg	279.077 IEC†	130.6	5385.2 ug/L	28.03	5385.2 ppb	28.03	0.52%
QC value within limits for Mg 279.077 IEC Recovery = 107.70%							
Mn	257.610†	380291.5	500.32 ug/L	0.817	500.32 ppb	0.817	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%							
Mo	202.031†	5591.3	497.49 ug/L	0.422	497.49 ppb	0.422	0.08%
QC value within limits for Mo 202.031 Recovery = 99.50%							
Na	589.592 Radial†	29768.9	10494 ug/L	170.8	10494 ppb	170.8	1.63%
QC value within limits for Na 589.592 Radial Recovery = 104.94%							
Ni	231.604†	15851.3	503.09 ug/L	2.588	503.09 ppb	2.588	0.51%
QC value within limits for Ni 231.604 Recovery = 100.62%							
P	214.914†	3337.1	2390.0 ug/L	10.97	2390.0 ppb	10.97	0.46%
QC value within limits for P 214.914 Recovery = 95.60%							
Pb	220.353†	3238.3	498.91 ug/L	0.975	498.91 ppb	0.975	0.20%
QC value within limits for Pb 220.353 Recovery = 99.78%							
S	181.975 Axial†	558.4	998.75 ug/L	7.834	998.75 ppb	7.834	0.78%
QC value within limits for S 181.975 Axial Recovery = 99.88%							
Sb	206.836†	1197.3	518.82 ug/L	4.257	518.82 ppb	4.257	0.82%
QC value within limits for Sb 206.836 Recovery = 103.76%							
Se	196.026†	606.1	523.38 ug/L	3.070	523.38 ppb	3.070	0.59%
QC value within limits for Se 196.026 Recovery = 104.68%							
Si	251.611†	65361.4	2475.2 ug/L	15.50	2475.2 ppb	15.50	0.63%
QC value within limits for Si 251.611 Recovery = 99.01%							
Sn	189.927†	2196.9	499.16 ug/L	0.823	499.16 ppb	0.823	0.16%
QC value within limits for Sn 189.927 Recovery = 99.83%							
Sr	421.552†	65537.2	525.29 ug/L	7.384	525.29 ppb	7.384	1.41%
QC value within limits for Sr 421.552 Recovery = 105.06%							
Ti	334.940†	279921.5	486.65 ug/L	2.696	486.65 ppb	2.696	0.55%
QC value within limits for Ti 334.940 Recovery = 97.33%							
Tl	190.801†	1297.3	505.18 ug/L	4.211	505.18 ppb	4.211	0.83%
QC value within limits for Tl 190.801 Recovery = 101.04%							
U	409.014†	16654.2	503.54 ug/L	1.421	503.54 ppb	1.421	0.28%
QC value within limits for U 409.014 Recovery = 100.71%							
V	292.402†	61913.8	501.01 ug/L	2.717	501.01 ppb	2.717	0.54%
QC value within limits for V 292.402 Recovery = 100.20%							
Zn	213.857†	41228.6	494.89 ug/L	3.055	494.89 ppb	3.055	0.62%
QC value within limits for Zn 213.857 Recovery = 98.98%							
SiO2†		66031.3	5375.4 ug/L	7.95	5375.4 ppb	7.95	0.15%
QC value within limits for SiO2 Recovery = 100.52%							

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/19/2010 10:25:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4401.9	4401.9	100 %		10:27:15
1	Y RADIAL	4788.6	4788.6	100.6 %		10:27:15
1	Al 396.153Radial†	146.5	224.3	219.87 ug/L	219.87 ppb	10:27:35
1	Ca 317.933Radial†	136.1	120.2	227.52 ug/L	227.52 ppb	10:27:35
1	Fe 238.204 Radial†	19.2	10.7	124.60 ug/L	124.60 ppb	10:27:35
1	K 766.490 Radial†	3512.0	907.8	172.76 ug/L	172.76 ppb	10:27:15
1	Mg 279.077 IEC†	10.2	8.7	357.89 ug/L	357.89 ppb	10:27:35
1	Na 589.592 Radial†	-57.8	817.4	288.14 ug/L	288.14 ppb	10:27:15
1	Sr 421.552†	647.2	625.4	5.0111 ug/L	5.0111 ppb	10:27:15
1	Sc 361.383	822284.0	822284.0	100.42 %		10:28:32
1	Y 371.029	695589.3	695589.3	100.57 %		10:28:32
1	Ag 328.068†	1144.7	954.7	4.9620 ug/L	4.9620 ppb	10:28:32
1	As 188.979†	36.5	63.1	34.698 ug/L	34.698 ppb	10:28:52
1	B 249.677†	1493.9	2025.0	56.772 ug/L	56.772 ppb	10:28:32
1	Ba 233.527†	582.9	581.2	5.4571 ug/L	5.4571 ppb	10:28:52
1	Be 313.107†	8407.8	12103.5	5.1650 ug/L	5.1650 ppb	10:28:32
1	Cd 226.502†	205.0	374.8	5.4403 ug/L	5.4403 ppb	10:28:52
1	Co 228.616†	171.5	216.9	5.6192 ug/L	5.6192 ppb	10:28:52
1	Cr 267.716†	442.0	368.7	4.9398 ug/L	4.9398 ppb	10:28:52
1	Cu 324.752†	8629.8	3041.5	10.015 ug/L	10.015 ppb	10:28:32
1	Mn 257.610†	8561.3	8136.2	10.695 ug/L	10.695 ppb	10:28:32
1	Mo 202.031†	123.8	114.8	10.213 ug/L	10.213 ppb	10:28:52
1	Ni 231.604†	263.1	177.9	5.6471 ug/L	5.6471 ppb	10:28:52
1	P 214.914†	398.2	209.3	153.94 ug/L	153.94 ppb	10:28:52
1	Pb 220.353†	22.2	80.4	12.408 ug/L	12.408 ppb	10:28:52
1	S 181.975 Axial†	91.1	60.5	108.34 ug/L	108.34 ppb	10:28:52
1	Sb 206.836†	52.8	28.9	12.468 ug/L	12.468 ppb	10:28:52
1	Se 196.026†	20.4	37.2	31.477 ug/L	31.477 ppb	10:28:52
1	Si 251.611†	3185.3	2683.8	101.76 ug/L	101.76 ppb	10:28:52
1	Sn 189.927†	52.1	44.7	10.174 ug/L	10.174 ppb	10:28:52
1	Ti 334.940†	1753.5	2867.3	4.9598 ug/L	4.9598 ppb	10:28:32
1	Tl 190.801†	14.1	43.1	16.750 ug/L	16.750 ppb	10:28:52
1	U 409.014†	-246.9	1958.4	59.388 ug/L	59.388 ppb	10:28:32
1	V 292.402†	-752.2	568.4	4.7786 ug/L	4.7786 ppb	10:28:32
1	Zn 213.857†	1728.5	1151.2	13.880 ug/L	13.880 ppb	10:28:52
1	SiO2†	3288.3	2775.2	226.21 ug/L	226.21 ppb	10:29:48
2	Sc Radial	4445.8	4445.8	101 %		10:27:40
2	Y RADIAL	4794.0	4794.0	100.7 %		10:27:40
2	Al 396.153Radial†	128.3	204.9	200.78 ug/L	200.78 ppb	10:28:00
2	Ca 317.933Radial†	134.8	117.6	222.53 ug/L	222.53 ppb	10:28:00
2	Fe 238.204 Radial†	17.2	8.5	99.164 ug/L	99.164 ppb	10:28:00
2	K 766.490 Radial†	3570.5	931.1	177.19 ug/L	177.19 ppb	10:27:40
2	Mg 279.077 IEC†	10.9	9.3	382.08 ug/L	382.08 ppb	10:28:00
2	Na 589.592 Radial†	-46.0	829.6	292.46 ug/L	292.46 ppb	10:27:40
2	Sr 421.552†	645.8	617.6	4.9488 ug/L	4.9488 ppb	10:27:40
2	Sc 361.383	837271.4	837271.4	102.25 %		10:28:57
2	Y 371.029	706698.5	706698.5	102.18 %		10:28:57
2	Ag 328.068†	1173.1	962.1	4.9980 ug/L	4.9980 ppb	10:28:57
2	As 188.979†	26.2	52.4	28.810 ug/L	28.810 ppb	10:29:17
2	B 249.677†	1558.8	2061.8	57.810 ug/L	57.810 ppb	10:28:57
2	Ba 233.527†	574.9	562.9	5.2872 ug/L	5.2872 ppb	10:29:17
2	Be 313.107†	8476.9	12021.1	5.1302 ug/L	5.1302 ppb	10:28:57
2	Cd 226.502†	192.3	358.7	5.2089 ug/L	5.2089 ppb	10:29:17
2	Co 228.616†	160.2	202.9	5.2573 ug/L	5.2573 ppb	10:29:17
2	Cr 267.716†	476.6	394.6	5.2868 ug/L	5.2868 ppb	10:29:17
2	Cu 324.752†	8870.3	3122.9	10.284 ug/L	10.284 ppb	10:28:57
2	Mn 257.610†	8683.2	8102.8	10.648 ug/L	10.648 ppb	10:28:57
2	Mo 202.031†	129.1	117.7	10.475 ug/L	10.475 ppb	10:29:17
2	Ni 231.604†	264.0	174.1	5.5251 ug/L	5.5251 ppb	10:29:17

2	P 214.914†	395.3	199.3	146.52 ug/L	146.52 ppb	10:29:17
2	Pb 220.353†	27.6	85.3	13.165 ug/L	13.165 ppb	10:29:17
2	S 181.975 Axial†	84.9	52.8	94.531 ug/L	94.531 ppb	10:29:17
2	Sb 206.836†	44.5	19.9	8.7098 ug/L	8.7098 ppb	10:29:17
2	Se 196.026†	19.1	35.7	30.097 ug/L	30.097 ppb	10:29:17
2	Si 251.611†	3158.6	2600.8	98.606 ug/L	98.606 ppb	10:29:17
2	Sn 189.927†	61.3	52.8	12.017 ug/L	12.017 ppb	10:29:17
2	Ti 334.940†	1832.6	2913.4	5.0386 ug/L	5.0386 ppb	10:28:57
2	Tl 190.801†	27.5	56.0	21.724 ug/L	21.724 ppb	10:29:17
2	U 409.014†	-357.4	1854.6	56.243 ug/L	56.243 ppb	10:28:57
2	V 292.402†	-677.4	654.9	5.4708 ug/L	5.4708 ppb	10:28:57
2	Zn 213.857†	1716.0	1108.1	13.363 ug/L	13.363 ppb	10:29:17
2	SiO2†	3289.2	2717.4	221.49 ug/L	221.49 ppb	10:29:53
3	Sc Radial	4483.3	4483.3	102 %		10:28:05
3	Y RADIAL	4841.5	4841.5	101.7 %		10:28:05
3	Al 396.153Radial†	141.9	217.2	212.85 ug/L	212.85 ppb	10:28:25
3	Ca 317.933Radial†	130.9	112.7	213.20 ug/L	213.20 ppb	10:28:25
3	Fe 238.204 Radial†	17.3	8.5	98.662 ug/L	98.662 ppb	10:28:25
3	K 766.490 Radial†	3517.4	849.4	161.64 ug/L	161.64 ppb	10:28:05
3	Mg 279.077 IBC†	11.7	10.0	411.68 ug/L	411.68 ppb	10:28:25
3	Na 589.592 Radial†	-82.3	794.4	280.04 ug/L	280.04 ppb	10:28:05
3	Sr 421.552†	670.9	636.9	5.1036 ug/L	5.1036 ppb	10:28:05
3	Sc 361.383	836240.4	836240.4	102.13 %		10:29:23
3	Y 371.029	705188.3	705188.3	101.96 %		10:29:23
3	Ag 328.068†	1229.5	1018.7	5.2884 ug/L	5.2884 ppb	10:29:23
3	As 188.979†	36.9	62.9	34.584 ug/L	34.584 ppb	10:29:43
3	B 249.677†	1533.7	2039.1	57.173 ug/L	57.173 ppb	10:29:23
3	Ba 233.527†	569.0	557.9	5.2383 ug/L	5.2383 ppb	10:29:43
3	Be 313.107†	8522.5	12076.1	5.1539 ug/L	5.1539 ppb	10:29:23
3	Cd 226.502†	187.5	354.2	5.1435 ug/L	5.1435 ppb	10:29:43
3	Co 228.616†	163.0	205.8	5.3306 ug/L	5.3306 ppb	10:29:43
3	Cr 267.716†	463.5	382.4	5.1218 ug/L	5.1218 ppb	10:29:43
3	Cu 324.752†	8786.4	3051.5	10.048 ug/L	10.048 ppb	10:29:23
3	Mn 257.610†	8625.6	8056.9	10.586 ug/L	10.586 ppb	10:29:23
3	Mo 202.031†	124.3	113.2	10.075 ug/L	10.075 ppb	10:29:43
3	Ni 231.604†	259.0	169.5	5.3803 ug/L	5.3803 ppb	10:29:43
3	P 214.914†	398.5	202.9	149.24 ug/L	149.24 ppb	10:29:43
3	Pb 220.353†	12.0	70.1	10.819 ug/L	10.819 ppb	10:29:43
3	S 181.975 Axial†	85.1	53.1	95.060 ug/L	95.060 ppb	10:29:43
3	Sb 206.836†	57.7	32.9	14.105 ug/L	14.105 ppb	10:29:43
3	Se 196.026†	20.8	37.3	31.498 ug/L	31.498 ppb	10:29:43
3	Si 251.611†	3182.8	2628.4	99.656 ug/L	99.656 ppb	10:29:43
3	Sn 189.927†	53.7	45.4	10.337 ug/L	10.337 ppb	10:29:43
3	Ti 334.940†	1907.5	2989.0	5.1660 ug/L	5.1660 ppb	10:29:23
3	Tl 190.801†	25.8	54.4	21.092 ug/L	21.092 ppb	10:29:43
3	U 409.014†	-327.0	1884.0	57.134 ug/L	57.134 ppb	10:29:23
3	V 292.402†	-763.5	569.9	4.7882 ug/L	4.7882 ppb	10:29:23
3	Zn 213.857†	1721.2	1115.3	13.451 ug/L	13.451 ppb	10:29:43
3	SiO2†	3260.7	2693.5	219.55 ug/L	219.55 ppb	10:29:58

Mean Data: PQL

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831931.9	101.60 %	1.022			1.01%
Sc Radial	4443.7	101 %	0.9			0.92%
Y 371.029	702492.0	101.57 %	0.871			0.86%
Y RADIAL	4808.0	101.0 %	0.61			0.61%
Ag 328.068†	978.5	5.0828 ug/L	0.17895	5.0828 ppb	0.17895	3.52%
QC value within limits for Ag 328.068 Recovery = 101.66%						
Al 396.153Radial†	215.5	211.17 ug/L	9.660	211.17 ppb	9.660	4.57%
QC value within limits for Al 396.153Radial Recovery = 105.58%						
As 188.979†	59.5	32.697 ug/L	3.3670	32.697 ppb	3.3670	10.30%
QC value within limits for As 188.979 Recovery = 108.99%						
B 249.677†	2041.9	57.252 ug/L	0.5232	57.252 ppb	0.5232	0.91%
QC value within limits for B 249.677 Recovery = 114.50%						
Ba 233.527†	567.3	5.3275 ug/L	0.11484	5.3275 ppb	0.11484	2.16%
QC value within limits for Ba 233.527 Recovery = 106.55%						
Be 313.107†	12066.9	5.1497 ug/L	0.01781	5.1497 ppb	0.01781	0.35%
QC value within limits for Be 313.107 Recovery = 102.99%						
Ca 317.933Radial†	116.8	221.08 ug/L	7.270	221.08 ppb	7.270	3.29%

QC value within limits for Ca 317.933 Radial Recovery = 110.54%

Cd 226.502†	362.6	5.2642 ug/L	0.15594	5.2642 ppb	0.15594	2.96%
QC value within limits for Cd 226.502 Recovery = 105.28%						
Co 228.616†	208.5	5.4024 ug/L	0.19132	5.4024 ppb	0.19132	3.54%
QC value within limits for Co 228.616 Recovery = 108.05%						
Cr 267.716†	381.9	5.1161 ug/L	0.17357	5.1161 ppb	0.17357	3.39%
QC value within limits for Cr 267.716 Recovery = 102.32%						
Cu 324.752†	3071.9	10.116 ug/L	0.1468	10.116 ppb	0.1468	1.45%
QC value within limits for Cu 324.752 Recovery = 101.16%						
Fe 238.204 Radial†	9.3	107.47 ug/L	14.830	107.47 ppb	14.830	13.80%
QC value within limits for Fe 238.204 Radial Recovery = 107.47%						
K 766.490 Radial†	896.1	170.53 ug/L	8.011	170.53 ppb	8.011	4.70%
QC value within limits for K 766.490 Radial Recovery = 113.69%						
Mg 279.077 IEC†	9.3	383.89 ug/L	26.941	383.89 ppb	26.941	7.02%
QC value within limits for Mg 279.077 IEC Recovery = 127.96%						
Mn 257.610†	8098.6	10.643 ug/L	0.0547	10.643 ppb	0.0547	0.51%
QC value within limits for Mn 257.610 Recovery = 106.43%						
Mo 202.031†	115.2	10.254 ug/L	0.2030	10.254 ppb	0.2030	1.98%
QC value within limits for Mo 202.031 Recovery = 102.54%						
Na 589.592 Radial†	813.8	286.88 ug/L	6.307	286.88 ppb	6.307	2.20%
QC value within limits for Na 589.592 Radial Recovery = 95.63%						
Ni 231.604†	173.8	5.5175 ug/L	0.13352	5.5175 ppb	0.13352	2.42%
QC value within limits for Ni 231.604 Recovery = 110.35%						
P 214.914†	203.8	149.90 ug/L	3.755	149.90 ppb	3.755	2.50%
QC value within limits for P 214.914 Recovery = 99.93%						
Pb 220.353†	78.6	12.131 ug/L	1.1974	12.131 ppb	1.1974	9.87%
QC value within limits for Pb 220.353 Recovery = 121.31%						
S 181.975 Axial†	55.5	99.309 ug/L	7.8229	99.309 ppb	7.8229	7.88%
QC value within limits for S 181.975 Axial Recovery = 99.31%						
Sb 206.836†	27.2	11.761 ug/L	2.7662	11.761 ppb	2.7662	23.52%
QC value within limits for Sb 206.836 Recovery = 117.61%						
Se 196.026†	36.8	31.024 ug/L	0.8032	31.024 ppb	0.8032	2.59%
QC value within limits for Se 196.026 Recovery = 103.41%						
Si 251.611†	2637.7	100.01 ug/L	1.605	100.01 ppb	1.605	1.60%
QC value within limits for Si 251.611 Recovery = 100.01%						
Sn 189.927†	47.6	10.843 ug/L	1.0204	10.843 ppb	1.0204	9.41%
QC value within limits for Sn 189.927 Recovery = 108.43%						
Sr 421.552†	626.6	5.0212 ug/L	0.07790	5.0212 ppb	0.07790	1.55%
QC value within limits for Sr 421.552 Recovery = 100.42%						
Ti 334.940†	2923.2	5.0548 ug/L	0.10406	5.0548 ppb	0.10406	2.06%
QC value within limits for Ti 334.940 Recovery = 101.10%						
Tl 190.801†	51.2	19.855 ug/L	2.7075	19.855 ppb	2.7075	13.64%
QC value within limits for Tl 190.801 Recovery = 99.28%						
U 409.014†	1899.0	57.588 ug/L	1.6212	57.588 ppb	1.6212	2.82%
QC value within limits for U 409.014 Recovery = 115.18%						
V 292.402†	597.7	5.0125 ug/L	0.39690	5.0125 ppb	0.39690	7.92%
QC value within limits for V 292.402 Recovery = 100.25%						
Zn 213.857†	1124.9	13.565 ug/L	0.2770	13.565 ppb	0.2770	2.04%
QC value greater than the upper limit for Zn 213.857 Recovery = 135.65%						
SiO2†	2728.7	222.41 ug/L	3.427	222.41 ppb	3.427	1.54%
QC value within limits for SiO2 Recovery = 104.42%						

QC Failed. Continue with analysis.

Sequence No.: 10
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/19/2010 10:32:10
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4467.1	4467.1	102 %		10:34:02
1	Y RADIAL	4880.5	4880.5	102.5 %		10:34:02
1	Al 396.153Radial†	-80.8	-1.4	-1.4230 ug/L	-1.4230 ppb	10:34:22
1	Ca 317.933Radial†	21.9	5.8	11.020 ug/L	11.020 ppb	10:34:22
1	Fe 238.204 Radial†	9.9	1.3	14.506 ug/L	14.506 ppb	10:34:22
1	K 766.490 Radial†	2657.3	15.7	2.9980 ug/L	2.9980 ppb	10:34:02
1	Mg 279.077 IEC†	0.7	-0.8	-34.124 ug/L	-34.124 ppb	10:34:22
1	Na 589.592 Radial†	-924.0	-34.0	-11.981 ug/L	-11.981 ppb	10:34:02
1	Sr 421.552†	21.1	-0.1	-0.0006 ug/L	-0.0006 ppb	10:34:02
1	Sc 361.383	815849.0	815849.0	99.637 %		10:35:19
1	Y 371.029	689649.4	689649.4	99.711 %		10:35:19
1	Ag 328.068†	248.9	64.7	0.3382 ug/L	0.3382 ppb	10:35:19
1	As 188.979†	-18.2	8.5	4.6577 ug/L	4.6577 ppb	10:35:39
1	B 249.677†	-318.6	217.6	6.1019 ug/L	6.1019 ppb	10:35:39
1	Ba 233.527†	7.9	8.6	0.0808 ug/L	0.0808 ppb	10:35:39
1	Be 313.107†	-3623.2	94.6	0.0402 ug/L	0.0402 ppb	10:35:19
1	Cd 226.502†	-173.7	-3.7	-0.0547 ug/L	-0.0547 ppb	10:35:39
1	Co 228.616†	-45.6	0.5	0.0135 ug/L	0.0135 ppb	10:35:39
1	Cr 267.716†	76.1	4.9	0.0662 ug/L	0.0662 ppb	10:35:39
1	Cu 324.752†	5630.0	98.6	0.3251 ug/L	0.3251 ppb	10:35:19
1	Mn 257.610†	436.1	48.7	0.0668 ug/L	0.0668 ppb	10:35:39
1	Mo 202.031†	13.8	5.3	0.4709 ug/L	0.4709 ppb	10:35:39
1	Ni 231.604†	78.0	-5.8	-0.1828 ug/L	-0.1828 ppb	10:35:39
1	P 214.914†	190.4	3.8	2.7615 ug/L	2.7615 ppb	10:35:39
1	Pb 220.353†	-44.4	13.7	2.1042 ug/L	2.1042 ppb	10:35:39
1	S 181.975 Axial†	28.0	-2.1	-3.6725 ug/L	-3.6725 ppb	10:35:39
1	Sb 206.836†	44.0	20.5	8.5973 ug/L	8.5973 ppb	10:35:39
1	Se 196.026†	-15.0	1.9	1.6296 ug/L	1.6296 ppb	10:35:39
1	Si 251.611†	543.0	56.8	2.1517 ug/L	2.1517 ppb	10:35:39
1	Sn 189.927†	11.5	4.4	0.9946 ug/L	0.9946 ppb	10:35:39
1	Ti 334.940†	-1142.7	-25.7	-0.0413 ug/L	-0.0413 ppb	10:35:19
1	Tl 190.801†	-30.9	-1.9	-0.7441 ug/L	-0.7441 ppb	10:35:39
1	U 409.014†	-2131.9	64.5	1.9553 ug/L	1.9553 ppb	10:35:19
1	V 292.402†	-1328.1	-15.5	-0.1162 ug/L	-0.1162 ppb	10:35:19
1	Zn 213.857†	714.3	146.8	1.7773 ug/L	1.7773 ppb	10:35:39
1	SiO2†	550.1	52.8	4.2972 ug/L	4.2972 ppb	10:36:35
2	Sc Radial	4480.4	4480.4	102 %		10:34:27
2	Y RADIAL	4876.8	4876.8	102.4 %		10:34:27
2	Al 396.153Radial†	-82.1	-2.5	-2.4574 ug/L	-2.4574 ppb	10:34:47
2	Ca 317.933Radial†	28.0	11.8	22.307 ug/L	22.307 ppb	10:34:47
2	Fe 238.204 Radial†	8.1	-0.5	-5.7454 ug/L	-5.7454 ppb	10:34:47
2	K 766.490 Radial†	2699.4	49.2	9.3714 ug/L	9.3714 ppb	10:34:27
2	Mg 279.077 IEC†	0.5	-1.0	-40.966 ug/L	-40.966 ppb	10:34:47
2	Na 589.592 Radial†	-910.7	-18.3	-6.4367 ug/L	-6.4367 ppb	10:34:27
2	Sr 421.552†	-14.0	-34.6	-0.2774 ug/L	-0.2774 ppb	10:34:27
2	Sc 361.383	818594.5	818594.5	99.972 %		10:35:44
2	Y 371.029	691573.4	691573.4	99.989 %		10:35:44
2	Ag 328.068†	183.2	-1.9	-0.0151 ug/L	-0.0151 ppb	10:35:44
2	As 188.979†	-18.7	8.1	4.4279 ug/L	4.4279 ppb	10:36:04
2	B 249.677†	-356.2	181.1	5.0804 ug/L	5.0804 ppb	10:36:04
2	Ba 233.527†	12.6	13.3	0.1235 ug/L	0.1235 ppb	10:36:04
2	Be 313.107†	-3656.6	73.3	0.0312 ug/L	0.0312 ppb	10:35:44
2	Cd 226.502†	-161.3	9.3	0.1357 ug/L	0.1357 ppb	10:36:04
2	Co 228.616†	-43.0	3.2	0.0842 ug/L	0.0842 ppb	10:36:04
2	Cr 267.716†	47.3	-24.2	-0.3265 ug/L	-0.3265 ppb	10:36:04
2	Cu 324.752†	5641.1	90.7	0.2980 ug/L	0.2980 ppb	10:35:44
2	Mn 257.610†	423.6	34.6	0.0466 ug/L	0.0466 ppb	10:36:04
2	Mo 202.031†	11.0	2.5	0.2183 ug/L	0.2183 ppb	10:36:04
2	Ni 231.604†	94.5	10.4	0.3309 ug/L	0.3309 ppb	10:36:04

2	P 214.914†	171.8	-15.5	-11.576 ug/L	-11.576 ppb	10:36:04
2	Pb 220.353†	-62.1	-3.8	-0.5818 ug/L	-0.5818 ppb	10:36:04
2	S 181.975 Axial†	28.6	-1.6	-2.8708 ug/L	-2.8708 ppb	10:36:04
2	Sb 206.836†	32.1	8.4	3.5319 ug/L	3.5319 ppb	10:36:04
2	Se 196.026†	-19.4	-2.4	-2.0415 ug/L	-2.0415 ppb	10:36:04
2	Si 251.611†	545.7	57.7	2.1873 ug/L	2.1873 ppb	10:36:04
2	Sn 189.927†	7.4	0.3	0.0664 ug/L	0.0664 ppb	10:36:04
2	Ti 334.940†	-1137.7	-16.8	-0.0238 ug/L	-0.0238 ppb	10:35:44
2	Tl 190.801†	-27.1	1.9	0.7540 ug/L	0.7540 ppb	10:36:04
2	U 409.014†	-2129.2	74.5	2.2602 ug/L	2.2602 ppb	10:35:44
2	V 292.402†	-1364.3	-47.2	-0.3696 ug/L	-0.3696 ppb	10:35:44
2	Zn 213.857†	727.3	157.4	1.9055 ug/L	1.9055 ppb	10:36:04
2	SiO2†	549.9	50.7	4.1340 ug/L	4.1340 ppb	10:36:40
3	Sc Radial	4415.9	4415.9	100 %		10:34:52
3	Y RADIAL	4804.7	4804.7	100.9 %		10:34:52
3	Al 396.153Radial†	-69.6	8.8	8.6302 ug/L	8.6302 ppb	10:35:12
3	Ca 317.933Radial†	26.4	10.6	19.996 ug/L	19.996 ppb	10:35:12
3	Fe 238.204 Radial†	7.2	-1.3	-14.518 ug/L	-14.518 ppb	10:35:12
3	K 766.490 Radial†	2636.1	25.0	4.7603 ug/L	4.7603 ppb	10:34:52
3	Mg 279.077 IEC†	1.4	-0.2	-6.9036 ug/L	-6.9036 ppb	10:35:12
3	Na 589.592 Radial†	-934.4	-54.9	-19.340 ug/L	-19.340 ppb	10:34:52
3	Sr 421.552†	23.2	2.2	0.0179 ug/L	0.0179 ppb	10:34:52
3	Sc 361.383	837815.6	837815.6	102.32 %		10:36:09
3	Y 371.029	707201.2	707201.2	102.25 %		10:36:09
3	Ag 328.068†	256.6	65.6	0.3313 ug/L	0.3313 ppb	10:36:09
3	As 188.979†	-21.0	6.2	3.4192 ug/L	3.4192 ppb	10:36:29
3	B 249.677†	-354.2	191.2	5.3659 ug/L	5.3659 ppb	10:36:29
3	Ba 233.527†	13.5	13.9	0.1289 ug/L	0.1289 ppb	10:36:29
3	Be 313.107†	-3751.0	65.0	0.0280 ug/L	0.0280 ppb	10:36:09
3	Cd 226.502†	-171.4	3.1	0.0472 ug/L	0.0472 ppb	10:36:29
3	Co 228.616†	-49.6	-2.3	-0.0579 ug/L	-0.0579 ppb	10:36:29
3	Cr 267.716†	79.9	6.6	0.0846 ug/L	0.0846 ppb	10:36:29
3	Cu 324.752†	5709.2	27.8	0.0887 ug/L	0.0887 ppb	10:36:09
3	Mn 257.610†	417.8	19.2	0.0241 ug/L	0.0241 ppb	10:36:29
3	Mo 202.031†	15.3	6.4	0.5693 ug/L	0.5693 ppb	10:36:29
3	Ni 231.604†	91.9	5.8	0.1838 ug/L	0.1838 ppb	10:36:29
3	P 214.914†	172.1	-19.0	-14.192 ug/L	-14.192 ppb	10:36:29
3	Pb 220.353†	-53.9	5.6	0.8719 ug/L	0.8719 ppb	10:36:29
3	S 181.975 Axial†	27.2	-3.6	-6.5009 ug/L	-6.5009 ppb	10:36:29
3	Sb 206.836†	31.6	7.2	3.0043 ug/L	3.0043 ppb	10:36:29
3	Se 196.026†	-18.2	-0.8	-0.7030 ug/L	-0.7030 ppb	10:36:29
3	Si 251.611†	521.0	21.0	0.7911 ug/L	0.7911 ppb	10:36:29
3	Sn 189.927†	4.8	-2.5	-0.5546 ug/L	-0.5546 ppb	10:36:29
3	Ti 334.940†	-1064.9	80.4	0.1412 ug/L	0.1412 ppb	10:36:09
3	Tl 190.801†	-27.7	2.1	0.7968 ug/L	0.7968 ppb	10:36:29
3	U 409.014†	-2109.5	142.5	4.3242 ug/L	4.3242 ppb	10:36:09
3	V 292.402†	-1381.1	-32.4	-0.2403 ug/L	-0.2403 ppb	10:36:09
3	Zn 213.857†	738.5	151.7	1.8389 ug/L	1.8389 ppb	10:36:29
3	SiO2†	535.3	23.8	1.9278 ug/L	1.9278 ppb	10:36:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824086.4	100.64 %	1.462			1.45%
Sc Radial	4454.5	101 %	0.8			0.77%
Y 371.029	696141.3	100.65 %	1.392			1.38%
Y RADIAL	4854.0	102.0 %	0.90			0.88%
Ag 328.068†	42.8	0.2181 ug/L	0.20203	0.2181 ppb	0.20203	92.62%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	1.6	1.5833 ug/L	6.12472	1.5833 ppb	6.12472	386.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	7.6	4.1683 ug/L	0.65881	4.1683 ppb	0.65881	15.81%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	196.6	5.5161 ug/L	0.52706	5.5161 ppb	0.52706	9.56%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	11.9	0.1111 ug/L	0.02632	0.1111 ppb	0.02632	23.70%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	77.6	0.0331 ug/L	0.00631	0.0331 ppb	0.00631	19.05%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	9.4	17.774 ug/L	5.9625	17.774 ppb	5.9625	33.55%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	2.9	0.0427 ug/L	0.09529	0.0427 ppb	0.09529 222.93%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.5	0.0133 ug/L	0.07108	0.0133 ppb	0.07108 535.29%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-4.2	-0.0586 ug/L	0.23221	-0.0586 ppb	0.23221 396.54%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	72.4	0.2373 ug/L	0.12938	0.2373 ppb	0.12938 54.53%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.2	-1.9190 ug/L	14.88554	-1.9190 ppb	14.88554 775.71%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	30.0	5.7099 ug/L	3.29108	5.7099 ppb	3.29108 57.64%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	-0.7	-27.331 ug/L	18.0188	-27.331 ppb	18.0188 65.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	34.2	0.0459 ug/L	0.02135	0.0459 ppb	0.02135 46.54%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	4.7	0.4195 ug/L	0.18103	0.4195 ppb	0.18103 43.15%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-35.7	-12.586 ug/L	6.4730	-12.586 ppb	6.4730 51.43%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	3.5	0.1106 ug/L	0.26452	0.1106 ppb	0.26452 239.14%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-10.2	-7.6690 ug/L	9.12731	-7.6690 ppb	9.12731 119.02%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	5.2	0.7981 ug/L	1.34456	0.7981 ppb	1.34456 168.47%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-2.4	-4.3480 ug/L	1.90700	-4.3480 ppb	1.90700 43.86%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	12.0	5.0445 ug/L	3.08810	5.0445 ppb	3.08810 61.22%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-0.4	-0.3716 ug/L	1.85785	-0.3716 ppb	1.85785 499.98%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	45.2	1.7101 ug/L	0.79602	1.7101 ppb	0.79602 46.55%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	0.7	0.1688 ug/L	0.77966	0.1688 ppb	0.77966 461.89%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	-10.8	-0.0867 ug/L	0.16540	-0.0867 ppb	0.16540 190.77%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	12.7	0.0254 ug/L	0.10069	0.0254 ppb	0.10069 396.59%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	0.7	0.2689 ug/L	0.87754	0.2689 ppb	0.87754 326.36%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	93.8	2.8466 ug/L	1.28871	2.8466 ppb	1.28871 45.27%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-31.7	-0.2420 ug/L	0.12674	-0.2420 ppb	0.12674 52.37%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	152.0	1.8406 ug/L	0.06408	1.8406 ppb	0.06408 3.48%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	42.4	3.4530 ug/L	1.32338	3.4530 ppb	1.32338 38.33%
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: 7

Date Collected: 3/19/2010 11:38:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4231.5	4231.5	96.3 %		11:40:31
1	Y RADIAL	4688.3	4688.3	98.48 %		11:40:11
1	Al 396.153Radial†	5078.5	5352.8	5233.5 ug/L	5233.5 ppb	11:40:11
1	Ca 317.933Radial†	2683.8	2771.8	5244.9 ug/L	5244.9 ppb	11:40:31
1	Fe 238.204 Radial†	447.0	455.9	5297.3 ug/L	5297.3 ppb	11:40:31
1	K 766.490 Radial†	29712.9	28262.5	5378.2 ug/L	5378.2 ppb	11:40:11
1	Mg 279.077 IEC†	125.8	129.1	5327.4 ug/L	5327.4 ppb	11:40:31
1	Na 589.592 Radial†	27281.4	29210.9	10297 ug/L	10297 ppb	11:40:11
1	Sr 421.552†	63681.7	66122.0	529.98 ug/L	529.98 ppb	11:40:11
1	Sc 361.383	836694.1	836694.1	102.18 %		11:41:28
1	Y 371.029	695496.4	695496.4	100.56 %		11:41:28
1	Ag 328.068†	99816.9	97499.9	509.39 ug/L	509.39 ppb	11:41:34
1	As 188.979†	930.2	937.1	518.83 ug/L	518.83 ppb	11:41:54
1	B 249.677†	17942.6	18096.7	505.35 ug/L	505.35 ppb	11:41:34
1	Ba 233.527†	55244.6	54065.5	507.67 ug/L	507.67 ppb	11:41:34
1	Be 313.107†	1219044.5	1196740.3	510.71 ug/L	510.71 ppb	11:41:28
1	Cd 226.502†	35788.8	35195.1	510.55 ug/L	510.55 ppb	11:41:34
1	Co 228.616†	20347.1	19958.7	515.95 ug/L	515.95 ppb	11:41:34
1	Cr 267.716†	38697.3	37799.4	507.96 ug/L	507.96 ppb	11:41:34
1	Cu 324.752†	160727.0	151742.3	500.97 ug/L	500.97 ppb	11:41:34
1	Mn 257.610†	387247.8	378588.3	498.08 ug/L	498.08 ppb	11:41:34
1	Mo 202.031†	5787.3	5655.2	503.17 ug/L	503.17 ppb	11:41:54
1	Ni 231.604†	16666.6	16226.6	515.00 ug/L	515.00 ppb	11:41:34
1	P 214.914†	3658.7	3393.2	2429.9 ug/L	2429.9 ppb	11:41:54
1	Pb 220.353†	3286.4	3274.5	504.53 ug/L	504.53 ppb	11:41:54
1	S 181.975 Axial†	609.8	566.5	1013.3 ug/L	1013.3 ppb	11:41:54
1	Sb 206.836†	1273.0	1222.2	529.40 ug/L	529.40 ppb	11:41:54
1	Se 196.026†	607.6	611.6	527.92 ug/L	527.92 ppb	11:41:54
1	Si 251.611†	69000.0	67038.2	2538.8 ug/L	2538.8 ppb	11:41:34
1	Sn 189.927†	2266.5	2210.9	502.34 ug/L	502.34 ppb	11:41:54
1	Ti 334.940†	290738.2	285650.1	496.62 ug/L	496.62 ppb	11:41:34
1	Tl 190.801†	1309.7	1310.8	510.40 ug/L	510.40 ppb	11:41:54
1	U 409.014†	15042.5	16925.4	511.75 ug/L	511.75 ppb	11:41:34
1	V 292.402†	63168.1	63136.4	510.86 ug/L	510.86 ppb	11:41:34
1	Zn 213.857†	43730.0	42225.9	506.89 ug/L	506.89 ppb	11:41:34
1	SiO2†	68926.3	66954.9	5450.6 ug/L	5450.6 ppb	11:43:01
2	Sc Radial	4265.7	4265.7	97.1 %		11:40:56
2	Y RADIAL	4839.5	4839.5	101.7 %		11:40:36
2	Al 396.153Radial†	5150.2	5384.5	5265.0 ug/L	5265.0 ppb	11:40:36
2	Ca 317.933Radial†	2698.8	2764.9	5231.8 ug/L	5231.8 ppb	11:40:56
2	Fe 238.204 Radial†	449.8	455.0	5286.7 ug/L	5286.7 ppb	11:40:56
2	K 766.490 Radial†	29893.9	28201.7	5366.7 ug/L	5366.7 ppb	11:40:36
2	Mg 279.077 IEC†	131.2	133.7	5513.6 ug/L	5513.6 ppb	11:40:56
2	Na 589.592 Radial†	27374.6	29079.9	10251 ug/L	10251 ppb	11:40:36
2	Sr 421.552†	64071.5	65993.7	528.95 ug/L	528.95 ppb	11:40:36
2	Sc 361.383	848819.8	848819.8	103.66 %		11:41:59
2	Y 371.029	706333.9	706333.9	102.12 %		11:41:59
2	Ag 328.068†	99812.0	96099.8	502.10 ug/L	502.10 ppb	11:42:04
2	As 188.979†	913.1	907.6	502.60 ug/L	502.60 ppb	11:42:25
2	B 249.677†	17949.1	17852.2	498.51 ug/L	498.51 ppb	11:42:04
2	Ba 233.527†	55297.9	53344.6	500.90 ug/L	500.90 ppb	11:42:04
2	Be 313.107†	1237185.8	1197198.0	510.89 ug/L	510.89 ppb	11:41:59
2	Cd 226.502†	35790.9	34696.8	503.31 ug/L	503.31 ppb	11:42:04
2	Co 228.616†	20379.5	19705.5	509.40 ug/L	509.40 ppb	11:42:04
2	Cr 267.716†	38754.5	37313.5	501.44 ug/L	501.44 ppb	11:42:04
2	Cu 324.752†	160790.4	149556.5	493.76 ug/L	493.76 ppb	11:42:04
2	Mn 257.610†	386901.3	372840.2	490.51 ug/L	490.51 ppb	11:42:04
2	Mo 202.031†	5780.9	5568.1	495.43 ug/L	495.43 ppb	11:42:25
2	Ni 231.604†	16669.3	15996.2	507.69 ug/L	507.69 ppb	11:42:04

2	P 214.914†	3643.5	3327.5	2382.3 ug/L	2382.3 ppb	11:42:25
2	Pb 220.353†	3274.7	3217.3	495.73 ug/L	495.73 ppb	11:42:25
2	S 181.975 Axial†	602.1	550.6	984.78 ug/L	984.78 ppb	11:42:25
2	Sb 206.836†	1250.5	1182.6	512.53 ug/L	512.53 ppb	11:42:25
2	Se 196.026†	602.0	597.7	516.28 ug/L	516.28 ppb	11:42:25
2	Si 251.611†	69005.4	66078.7	2502.5 ug/L	2502.5 ppb	11:42:04
2	Sn 189.927†	2253.2	2166.4	492.23 ug/L	492.23 ppb	11:42:25
2	Ti 334.940†	291171.1	282003.1	490.27 ug/L	490.27 ppb	11:42:04
2	Tl 190.801†	1306.3	1289.2	502.00 ug/L	502.00 ppb	11:42:25
2	U 409.014†	15074.6	16746.1	506.33 ug/L	506.33 ppb	11:42:04
2	V 292.402†	63254.1	62336.3	504.37 ug/L	504.37 ppb	11:42:04
2	Zn 213.857†	43730.3	41614.9	499.54 ug/L	499.54 ppb	11:42:04
2	SiO2†	68517.6	65597.0	5340.0 ug/L	5340.0 ppb	11:43:06
3	Sc Radial	4269.7	4269.7	97.1 %		11:41:22
3	Y RADIAL	4809.0	4809.0	101.0 %		11:41:01
3	Al 396.153Radial†	5136.6	5365.6	5246.2 ug/L	5246.2 ppb	11:41:01
3	Ca 317.933Radial†	2697.3	2760.8	5224.0 ug/L	5224.0 ppb	11:41:22
3	Fe 238.204 Radial†	445.9	450.6	5236.1 ug/L	5236.1 ppb	11:41:22
3	K 766.490 Radial†	29946.0	28226.7	5371.5 ug/L	5371.5 ppb	11:41:01
3	Mg 279.077 IEC†	122.8	124.9	5152.6 ug/L	5152.6 ppb	11:41:22
3	Na 589.592 Radial†	27228.5	28903.2	10189 ug/L	10189 ppb	11:41:01
3	Sr 421.552†	63894.3	65749.9	527.00 ug/L	527.00 ppb	11:41:01
3	Sc 361.383	838817.3	838817.3	102.44 %		11:42:30
3	Y 371.029	698716.9	698716.9	101.02 %		11:42:30
3	Ag 328.068†	99235.4	96685.1	505.14 ug/L	505.14 ppb	11:42:35
3	As 188.979†	918.9	923.8	511.49 ug/L	511.49 ppb	11:42:55
3	B 249.677†	17901.0	18011.7	502.99 ug/L	502.99 ppb	11:42:35
3	Ba 233.527†	55002.2	53691.9	504.16 ug/L	504.16 ppb	11:42:35
3	Be 313.107†	1222413.8	1197009.5	510.81 ug/L	510.81 ppb	11:42:30
3	Cd 226.502†	35634.8	34956.1	507.08 ug/L	507.08 ppb	11:42:35
3	Co 228.616†	20235.0	19798.9	511.82 ug/L	511.82 ppb	11:42:35
3	Cr 267.716†	38586.2	37595.0	505.22 ug/L	505.22 ppb	11:42:35
3	Cu 324.752†	160008.7	150643.0	497.34 ug/L	497.34 ppb	11:42:35
3	Mn 257.610†	385207.0	375636.8	494.20 ug/L	494.20 ppb	11:42:35
3	Mo 202.031†	5767.3	5621.3	500.15 ug/L	500.15 ppb	11:42:55
3	Ni 231.604†	16538.7	16060.4	509.73 ug/L	509.73 ppb	11:42:35
3	P 214.914†	3658.9	3384.4	2424.1 ug/L	2424.1 ppb	11:42:55
3	Pb 220.353†	3276.9	3257.1	501.86 ug/L	501.86 ppb	11:42:55
3	S 181.975 Axial†	611.1	566.4	1013.0 ug/L	1013.0 ppb	11:42:55
3	Sb 206.836†	1263.9	1210.1	524.31 ug/L	524.31 ppb	11:42:55
3	Se 196.026†	606.1	608.6	525.28 ug/L	525.28 ppb	11:42:55
3	Si 251.611†	68566.9	66444.5	2516.3 ug/L	2516.3 ppb	11:42:35
3	Sn 189.927†	2275.7	2214.3	503.11 ug/L	503.11 ppb	11:42:55
3	Ti 334.940†	289344.8	283569.7	493.02 ug/L	493.02 ppb	11:42:35
3	Tl 190.801†	1294.0	1292.3	503.22 ug/L	503.22 ppb	11:42:55
3	U 409.014†	14750.9	16603.5	502.00 ug/L	502.00 ppb	11:42:35
3	V 292.402†	62942.9	62760.1	507.80 ug/L	507.80 ppb	11:42:35
3	Zn 213.857†	43510.6	41903.4	503.03 ug/L	503.03 ppb	11:42:35
3	SiO2†	67364.1	65259.2	5312.3 ug/L	5312.3 ppb	11:43:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841443.7	102.76 %	0.791			0.77%
Sc Radial	4255.6	96.8 %	0.48			0.49%
Y 371.029	700182.4	101.23 %	0.805			0.79%
Y RADIAL	4778.9	100.4 %	1.68			1.67%
Ag 328.068†	96761.6	505.54 ug/L	3.664	505.54 ppb	3.664	0.72%
QC value within limits for Ag 328.068 Recovery = 101.11%						
Al 396.153Radial†	5367.6	5248.3 ug/L	15.85	5248.3 ppb	15.85	0.30%
QC value within limits for Al 396.153Radial Recovery = 104.97%						
As 188.979†	922.8	510.97 ug/L	8.127	510.97 ppb	8.127	1.59%
QC value within limits for As 188.979 Recovery = 102.19%						
B 249.677†	17986.9	502.29 ug/L	3.474	502.29 ppb	3.474	0.69%
QC value within limits for B 249.677 Recovery = 100.46%						
Ba 233.527†	53700.7	504.25 ug/L	3.384	504.25 ppb	3.384	0.67%
QC value within limits for Ba 233.527 Recovery = 100.85%						
Be 313.107†	1196982.6	510.80 ug/L	0.091	510.80 ppb	0.091	0.02%
QC value within limits for Be 313.107 Recovery = 102.16%						
Ca 317.933Radial†	2765.8	5233.6 ug/L	10.57	5233.6 ppb	10.57	0.20%

QC value within limits for Ca 317.933 Radial Recovery = 104.67%							
Cd 226.502†	34949.3	506.98 ug/L	3.619	506.98 ppb	3.619	0.71%	
QC value within limits for Cd 226.502 Recovery = 101.40%							
Co 228.616†	19821.0	512.39 ug/L	3.312	512.39 ppb	3.312	0.65%	
QC value within limits for Co 228.616 Recovery = 102.48%							
Cr 267.716†	37569.3	504.87 ug/L	3.275	504.87 ppb	3.275	0.65%	
QC value within limits for Cr 267.716 Recovery = 100.97%							
Cu 324.752†	150647.3	497.36 ug/L	3.607	497.36 ppb	3.607	0.73%	
QC value within limits for Cu 324.752 Recovery = 99.47%							
Fe 238.204 Radial†	453.8	5273.4 ug/L	32.71	5273.4 ppb	32.71	0.62%	
QC value within limits for Fe 238.204 Radial Recovery = 105.47%							
K 766.490 Radial†	28230.3	5372.1 ug/L	5.80	5372.1 ppb	5.80	0.11%	
QC value within limits for K 766.490 Radial Recovery = 107.44%							
Mg 279.077 IEC†	129.2	5331.2 ug/L	180.50	5331.2 ppb	180.50	3.39%	
QC value within limits for Mg 279.077 IEC Recovery = 106.62%							
Mn 257.610†	375688.4	494.26 ug/L	3.784	494.26 ppb	3.784	0.77%	
QC value within limits for Mn 257.610 Recovery = 98.85%							
Mo 202.031†	5614.9	499.58 ug/L	3.902	499.58 ppb	3.902	0.78%	
QC value within limits for Mo 202.031 Recovery = 99.92%							
Na 589.592 Radial†	29064.7	10246 ug/L	54.4	10246 ppb	54.4	0.53%	
QC value within limits for Na 589.592 Radial Recovery = 102.46%							
Ni 231.604†	16094.4	510.81 ug/L	3.773	510.81 ppb	3.773	0.74%	
QC value within limits for Ni 231.604 Recovery = 102.16%							
P 214.914†	3368.4	2412.1 ug/L	25.99	2412.1 ppb	25.99	1.08%	
QC value within limits for P 214.914 Recovery = 96.48%							
Pb 220.353†	3249.7	500.70 ug/L	4.513	500.70 ppb	4.513	0.90%	
QC value within limits for Pb 220.353 Recovery = 100.14%							
S 181.975 Axial†	561.2	1003.7 ug/L	16.36	1003.7 ppb	16.36	1.63%	
QC value within limits for S 181.975 Axial Recovery = 100.37%							
Sb 206.836†	1205.0	522.08 ug/L	8.656	522.08 ppb	8.656	1.66%	
QC value within limits for Sb 206.836 Recovery = 104.42%							
Se 196.026†	606.0	523.16 ug/L	6.101	523.16 ppb	6.101	1.17%	
QC value within limits for Se 196.026 Recovery = 104.63%							
Si 251.611†	66520.5	2519.2 ug/L	18.34	2519.2 ppb	18.34	0.73%	
QC value within limits for Si 251.611 Recovery = 100.77%							
Sn 189.927†	2197.2	499.23 ug/L	6.070	499.23 ppb	6.070	1.22%	
QC value within limits for Sn 189.927 Recovery = 99.85%							
Sr 421.552†	65955.2	528.64 ug/L	1.515	528.64 ppb	1.515	0.29%	
QC value within limits for Sr 421.552 Recovery = 105.73%							
Ti 334.940†	283741.0	493.30 ug/L	3.187	493.30 ppb	3.187	0.65%	
QC value within limits for Ti 334.940 Recovery = 98.66%							
Tl 190.801†	1297.4	505.20 ug/L	4.539	505.20 ppb	4.539	0.90%	
QC value within limits for Tl 190.801 Recovery = 101.04%							
U 409.014†	16758.3	506.69 ug/L	4.887	506.69 ppb	4.887	0.96%	
QC value within limits for U 409.014 Recovery = 101.34%							
V 292.402†	62744.3	507.68 ug/L	3.249	507.68 ppb	3.249	0.64%	
QC value within limits for V 292.402 Recovery = 101.54%							
Zn 213.857†	41914.8	503.15 ug/L	3.675	503.15 ppb	3.675	0.73%	
QC value within limits for Zn 213.857 Recovery = 100.63%							
SiO2†	65937.0	5367.6 ug/L	73.18	5367.6 ppb	73.18	1.36%	
QC value within limits for SiO2 Recovery = 100.38%							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 11:45:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4343.7	4343.7	98.8 %		11:47:14
1	Y RADIAL	4752.6	4752.6	99.83 %		11:47:14
1	Al 396.153Radial†	-72.3	4.9	4.8133 ug/L	4.8133 ppb	11:47:34
1	Ca 317.933Radial†	26.1	10.7	20.319 ug/L	20.319 ppb	11:47:34
1	Fe 238.204 Radial†	7.8	-0.6	-6.4728 ug/L	-6.4728 ppb	11:47:34
1	K 766.490 Radial†	2857.2	292.2	55.678 ug/L	55.678 ppb	11:47:14
1	Mg 279.077 IEC†	3.4	1.9	79.741 ug/L	79.741 ppb	11:47:34
1	Na 589.592 Radial†	-927.8	-63.7	-22.449 ug/L	-22.449 ppb	11:47:14
1	Sr 421.552†	28.1	7.6	0.0605 ug/L	0.0605 ppb	11:47:14
1	Sc 361.383	828290.0	828290.0	101.16 %		11:48:31
1	Y 371.029	698408.7	698408.7	100.98 %		11:48:31
1	Ag 328.068†	104.7	-81.6	-0.4271 ug/L	-0.4271 ppb	11:48:31
1	As 188.979†	-31.6	-4.5	-2.4585 ug/L	-2.4585 ppb	11:48:51
1	B 249.677†	-193.4	346.2	9.7120 ug/L	9.7120 ppb	11:48:51
1	Ba 233.527†	14.1	14.7	0.1368 ug/L	0.1368 ppb	11:48:51
1	Be 313.107†	-3650.4	122.4	0.0523 ug/L	0.0523 ppb	11:48:31
1	Cd 226.502†	-158.0	14.5	0.2110 ug/L	0.2110 ppb	11:48:51
1	Co 228.616†	-45.0	1.8	0.0456 ug/L	0.0456 ppb	11:48:51
1	Cr 267.716†	83.6	11.2	0.1488 ug/L	0.1488 ppb	11:48:51
1	Cu 324.752†	5611.4	-4.7	-0.0160 ug/L	-0.0160 ppb	11:48:31
1	Mn 257.610†	476.0	81.5	0.1032 ug/L	0.1032 ppb	11:48:51
1	Mo 202.031†	9.0	0.3	0.0289 ug/L	0.0289 ppb	11:48:51
1	Ni 231.604†	93.0	7.8	0.2484 ug/L	0.2484 ppb	11:48:51
1	P 214.914†	189.1	-0.4	-0.2430 ug/L	-0.2430 ppb	11:48:51
1	Pb 220.353†	-55.8	3.1	0.4814 ug/L	0.4814 ppb	11:48:51
1	S 181.975 Axial†	32.8	2.2	3.9603 ug/L	3.9603 ppb	11:48:51
1	Sb 206.836†	25.8	1.8	0.7907 ug/L	0.7907 ppb	11:48:51
1	Se 196.026†	-13.3	3.9	3.1912 ug/L	3.1912 ppb	11:48:51
1	Si 251.611†	646.0	150.5	5.7129 ug/L	5.7129 ppb	11:48:51
1	Sn 189.927†	15.0	7.7	1.7470 ug/L	1.7470 ppb	11:48:51
1	Ti 334.940†	-1081.0	52.5	0.0874 ug/L	0.0874 ppb	11:48:31
1	Tl 190.801†	-17.1	12.2	4.7325 ug/L	4.7325 ppb	11:48:51
1	U 409.014†	-2223.2	6.4	0.1952 ug/L	0.1952 ppb	11:48:31
1	V 292.402†	-1356.9	-23.9	-0.1879 ug/L	-0.1879 ppb	11:48:31
1	Zn 213.857†	920.4	339.8	4.1165 ug/L	4.1165 ppb	11:48:51
1	SiO2†	681.4	174.2	14.218 ug/L	14.218 ppb	11:50:02
2	Sc Radial	4441.9	4441.9	101 %		11:47:39
2	Y RADIAL	4833.4	4833.4	101.5 %		11:47:39
2	Al 396.153Radial†	-89.0	-10.0	-9.8127 ug/L	-9.8127 ppb	11:47:59
2	Ca 317.933Radial†	25.8	9.9	18.681 ug/L	18.681 ppb	11:47:59
2	Fe 238.204 Radial†	8.3	-0.3	-3.2666 ug/L	-3.2666 ppb	11:47:59
2	K 766.490 Radial†	2698.1	70.9	13.499 ug/L	13.499 ppb	11:47:39
2	Mg 279.077 IEC†	4.0	2.4	99.388 ug/L	99.388 ppb	11:47:59
2	Na 589.592 Radial†	-871.7	12.7	4.4605 ug/L	4.4605 ppb	11:47:39
2	Sr 421.552†	31.8	10.7	0.0855 ug/L	0.0855 ppb	11:47:39
2	Sc 361.383	822220.7	822220.7	100.41 %		11:48:56
2	Y 371.029	694053.4	694053.4	100.35 %		11:48:56
2	Ag 328.068†	97.9	-87.6	-0.4532 ug/L	-0.4532 ppb	11:48:56
2	As 188.979†	-18.2	8.7	4.7808 ug/L	4.7808 ppb	11:49:16
2	B 249.677†	-207.3	330.9	9.2829 ug/L	9.2829 ppb	11:49:16
2	Ba 233.527†	8.6	9.2	0.0863 ug/L	0.0863 ppb	11:49:16
2	Be 313.107†	-3738.2	8.3	0.0032 ug/L	0.0032 ppb	11:48:56
2	Cd 226.502†	-172.2	-0.9	-0.0129 ug/L	-0.0129 ppb	11:49:16
2	Co 228.616†	-48.8	-2.4	-0.0611 ug/L	-0.0611 ppb	11:49:16
2	Cr 267.716†	62.0	-9.8	-0.1300 ug/L	-0.1300 ppb	11:49:16
2	Cu 324.752†	5614.1	38.9	0.1304 ug/L	0.1304 ppb	11:48:56
2	Mn 257.610†	501.3	110.2	0.1405 ug/L	0.1405 ppb	11:49:16
2	Mo 202.031†	10.8	2.2	0.1973 ug/L	0.1973 ppb	11:49:16
2	Ni 231.604†	90.3	5.9	0.1874 ug/L	0.1874 ppb	11:49:16

2	P 214.914†	180.7	-7.3	-5.4650 ug/L	-5.4650 ppb	11:49:16
2	Pb 220.353†	-39.7	18.7	2.8759 ug/L	2.8759 ppb	11:49:16
2	S 181.975 Axial†	29.8	-0.5	-0.8807 ug/L	-0.8807 ppb	11:49:16
2	Sb 206.836†	23.8	0.1	0.0562 ug/L	0.0562 ppb	11:49:16
2	Se 196.026†	-17.5	-0.5	-0.3920 ug/L	-0.3920 ppb	11:49:16
2	Si 251.611†	640.6	149.7	5.6822 ug/L	5.6822 ppb	11:49:16
2	Sn 189.927†	13.4	6.2	1.4045 ug/L	1.4045 ppb	11:49:16
2	Ti 334.940†	-1200.9	-74.7	-0.1338 ug/L	-0.1338 ppb	11:48:56
2	Tl 190.801†	-29.2	0.0	0.0028 ug/L	0.0028 ppb	11:49:16
2	U 409.014†	-2336.4	-122.6	-3.7174 ug/L	-3.7174 ppb	11:48:56
2	V 292.402†	-1326.4	-3.5	-0.0295 ug/L	-0.0295 ppb	11:48:56
2	Zn 213.857†	929.9	356.0	4.3122 ug/L	4.3122 ppb	11:49:16
2	SiO2†	659.8	157.7	12.866 ug/L	12.866 ppb	11:50:22
3	Sc Radial	4304.4	4304.4	97.9 %		11:48:04
3	Y RADIAL	4703.3	4703.3	98.80 %		11:48:04
3	Al 396.153Radial†	-76.9	-0.5	-0.4680 ug/L	-0.4680 ppb	11:48:24
3	Ca 317.933Radial†	24.4	9.2	17.441 ug/L	17.441 ppb	11:48:24
3	Fe 238.204 Radial†	8.1	-0.2	-2.3264 ug/L	-2.3264 ppb	11:48:24
3	K 766.490 Radial†	2757.5	216.8	41.316 ug/L	41.316 ppb	11:48:04
3	Mg 279.077 IEC†	-1.8	-3.4	-138.98 ug/L	-138.98 ppb	11:48:24
3	Na 589.592 Radial†	-956.3	-101.3	-35.712 ug/L	-35.712 ppb	11:48:04
3	Sr 421.552†	17.2	-3.2	-0.0261 ug/L	-0.0261 ppb	11:48:04
3	Sc 361.383	833215.2	833215.2	101.76 %		11:49:21
3	Y 371.029	704277.1	704277.1	101.83 %		11:49:21
3	Ag 328.068†	241.3	52.0	0.2686 ug/L	0.2686 ppb	11:49:21
3	As 188.979†	-21.5	5.7	3.1078 ug/L	3.1078 ppb	11:49:41
3	B 249.677†	-197.2	343.6	9.6384 ug/L	9.6384 ppb	11:49:41
3	Ba 233.527†	18.2	18.6	0.1741 ug/L	0.1741 ppb	11:49:41
3	Be 313.107†	-3699.6	95.4	0.0407 ug/L	0.0407 ppb	11:49:21
3	Cd 226.502†	-179.9	-6.1	-0.0885 ug/L	-0.0885 ppb	11:49:41
3	Co 228.616†	-44.9	2.1	0.0532 ug/L	0.0532 ppb	11:49:41
3	Cr 267.716†	100.4	27.1	0.3634 ug/L	0.3634 ppb	11:49:41
3	Cu 324.752†	5718.7	67.9	0.2234 ug/L	0.2234 ppb	11:49:21
3	Mn 257.610†	479.2	81.9	0.1131 ug/L	0.1131 ppb	11:49:41
3	Mo 202.031†	10.6	1.9	0.1659 ug/L	0.1659 ppb	11:49:41
3	Ni 231.604†	99.0	13.2	0.4195 ug/L	0.4195 ppb	11:49:41
3	P 214.914†	193.1	2.5	1.8356 ug/L	1.8356 ppb	11:49:41
3	Pb 220.353†	-58.2	1.1	0.1647 ug/L	0.1647 ppb	11:49:41
3	S 181.975 Axial†	28.0	-2.6	-4.7374 ug/L	-4.7374 ppb	11:49:41
3	Sb 206.836†	29.2	5.0	2.1114 ug/L	2.1114 ppb	11:49:41
3	Se 196.026†	-18.5	-1.2	-1.0177 ug/L	-1.0177 ppb	11:49:41
3	Si 251.611†	635.3	136.2	5.1683 ug/L	5.1683 ppb	11:49:41
3	Sn 189.927†	11.5	4.1	0.9329 ug/L	0.9329 ppb	11:49:41
3	Ti 334.940†	-1105.7	34.6	0.0732 ug/L	0.0732 ppb	11:49:21
3	Tl 190.801†	-32.3	-2.6	-1.0229 ug/L	-1.0229 ppb	11:49:41
3	U 409.014†	-2206.7	35.6	1.0801 ug/L	1.0801 ppb	11:49:21
3	V 292.402†	-1323.5	16.7	0.1356 ug/L	0.1356 ppb	11:49:21
3	Zn 213.857†	913.1	327.3	3.9630 ug/L	3.9630 ppb	11:49:41
3	SiO2†	667.1	156.3	12.748 ug/L	12.748 ppb	11:50:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827908.6	101.11 %		0.673			0.67%
Sc Radial	4363.4	99.3 %		1.61			1.62%
Y 371.029	698913.0	101.05 %		0.742			0.73%
Y RADIAL	4763.1	100.1 %		1.38			1.38%
Ag 328.068†	-39.1	-0.2039 ug/L		0.40937	-0.2039 ppb	0.40937	200.79%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-1.8	-1.8225 ug/L		7.40648	-1.8225 ppb	7.40648	406.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.3	1.8100 ug/L		3.79014	1.8100 ppb	3.79014	209.40%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	340.2	9.5444 ug/L		0.22946	9.5444 ppb	0.22946	2.40%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	14.2	0.1324 ug/L		0.04406	0.1324 ppb	0.04406	33.28%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	75.3	0.0321 ug/L		0.02566	0.0321 ppb	0.02566	79.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	9.9	18.814 ug/L		1.4439	18.814 ppb	1.4439	7.67%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	2.5	0.0365 ug/L	0.15575	0.0365 ppb	0.15575 426.34%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	0.5	0.0126 ug/L	0.06393	0.0126 ppb	0.06393 508.85%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	9.5	0.1274 ug/L	0.24741	0.1274 ppb	0.24741 194.22%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	34.0	0.1126 ug/L	0.12073	0.1126 ppb	0.12073 107.22%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.3	-4.0220 ug/L	2.17392	-4.0220 ppb	2.17392 54.05%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	193.3	36.831 ug/L	21.4438	36.831 ppb	21.4438 58.22%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.3	13.382 ug/L	132.3172	13.382 ppb	132.3172 988.75%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	91.2	0.1189 ug/L	0.01931	0.1189 ppb	0.01931 16.23%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	1.5	0.1307 ug/L	0.08959	0.1307 ppb	0.08959 68.54%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-50.8	-17.900 ug/L	20.4690	-17.900 ppb	20.4690 114.35%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	9.0	0.2851 ug/L	0.12032	0.2851 ppb	0.12032 42.20%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-1.7	-1.2908 ug/L	3.76140	-1.2908 ppb	3.76140 291.40%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	7.6	1.1740 ug/L	1.48236	1.1740 ppb	1.48236 126.27%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-0.3	-0.5526 ug/L	4.35816	-0.5526 ppb	4.35816 788.67%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	2.3	0.9861 ug/L	1.04143	0.9861 ppb	1.04143 105.61%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	0.7	0.5938 ug/L	2.27102	0.5938 ppb	2.27102 382.45%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	145.5	5.5211 ug/L	0.30596	5.5211 ppb	0.30596 5.54%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	6.0	1.3615 ug/L	0.40877	1.3615 ppb	0.40877 30.02%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	5.0	0.0400 ug/L	0.05856	0.0400 ppb	0.05856 146.55%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	4.1	0.0089 ug/L	0.12382	0.0089 ppb	0.12382 >999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	3.2	1.2375 ug/L	3.06995	1.2375 ppb	3.06995 248.08%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	-26.8	-0.8140 ug/L	2.55300	-0.8140 ppb	2.55300 313.63%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-3.5	-0.0273 ug/L	0.16176	-0.0273 ppb	0.16176 593.25%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	341.0	4.1306 ug/L	0.17503	4.1306 ppb	0.17503 4.24%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	162.7	13.278 ug/L	0.8169	13.278 ppb	0.8169 6.15%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 12:49:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4261.9	4261.9	97.0 %		12:51:52
1	Y RADIAL	4786.4	4786.4	100.5 %		12:51:32
1	Al 396.153Radial†	5093.9	5331.2	5212.3 ug/L	5212.3 ppb	12:51:32
1	Ca 317.933Radial†	2683.5	2751.7	5206.8 ug/L	5206.8 ppb	12:51:52
1	Fe 238.204 Radial†	446.8	452.3	5256.6 ug/L	5256.6 ppb	12:51:52
1	K 766.490 Radial†	29720.1	28050.1	5337.7 ug/L	5337.7 ppb	12:51:32
1	Mg 279.077 IEC†	127.0	129.4	5338.2 ug/L	5338.2 ppb	12:51:52
1	Na 589.592 Radial†	28222.6	29979.7	10568 ug/L	10568 ppb	12:51:32
1	Sr 421.552†	64501.3	66496.3	532.98 ug/L	532.98 ppb	12:51:32
1	Sc 361.383	828749.8	828749.8	101.21 %		12:52:49
1	Y 371.029	689872.4	689872.4	99.743 %		12:52:49
1	Ag 328.068†	99303.8	97929.4	511.61 ug/L	511.61 ppb	12:52:54
1	As 188.979†	907.6	923.5	511.35 ug/L	511.35 ppb	12:53:14
1	B 249.677†	17583.9	17910.7	500.15 ug/L	500.15 ppb	12:52:54
1	Ba 233.527†	54830.6	54174.7	508.70 ug/L	508.70 ppb	12:52:54
1	Be 313.107†	1202781.6	1192108.2	508.74 ug/L	508.74 ppb	12:52:49
1	Cd 226.502†	35321.1	35068.8	508.72 ug/L	508.72 ppb	12:52:54
1	Co 228.616†	20083.2	19888.9	514.15 ug/L	514.15 ppb	12:52:54
1	Cr 267.716†	38399.6	37868.2	508.88 ug/L	508.88 ppb	12:52:54
1	Cu 324.752†	159658.3	152194.2	502.46 ug/L	502.46 ppb	12:52:54
1	Mn 257.610†	384664.4	379668.6	499.50 ug/L	499.50 ppb	12:52:54
1	Mo 202.031†	5739.0	5661.7	503.75 ug/L	503.75 ppb	12:53:14
1	Ni 231.604†	16468.1	16186.9	513.74 ug/L	513.74 ppb	12:52:54
1	P 214.914†	3605.0	3374.5	2415.7 ug/L	2415.7 ppb	12:53:14
1	Pb 220.353†	3261.4	3280.6	505.46 ug/L	505.46 ppb	12:53:14
1	S 181.975 Axial†	600.7	563.3	1007.5 ug/L	1007.5 ppb	12:53:14
1	Sb 206.836†	1234.1	1195.7	518.37 ug/L	518.37 ppb	12:53:14
1	Se 196.026†	590.6	600.5	518.57 ug/L	518.57 ppb	12:53:14
1	Si 251.611†	68245.0	66939.6	2535.0 ug/L	2535.0 ppb	12:52:54
1	Sn 189.927†	2253.1	2219.0	504.17 ug/L	504.17 ppb	12:53:14
1	Ti 334.940†	288608.1	286273.0	497.70 ug/L	497.70 ppb	12:52:54
1	Tl 190.801†	1286.6	1300.3	506.37 ug/L	506.37 ppb	12:53:14
1	U 409.014†	14990.3	17015.0	514.47 ug/L	514.47 ppb	12:52:54
1	V 292.402†	62830.4	63395.4	512.95 ug/L	512.95 ppb	12:52:54
1	Zn 213.857†	43245.4	42157.4	506.07 ug/L	506.07 ppb	12:52:54
1	SiO2†	68507.2	67187.4	5469.6 ug/L	5469.6 ppb	12:54:21
2	Sc Radial	4304.5	4304.5	97.9 %		12:52:17
2	Y RADIAL	4714.5	4714.5	99.03 %		12:51:57
2	Al 396.153Radial†	4972.9	5155.6	5039.8 ug/L	5039.8 ppb	12:51:57
2	Ca 317.933Radial†	2695.0	2736.0	5177.2 ug/L	5177.2 ppb	12:52:17
2	Fe 238.204 Radial†	451.1	452.1	5254.2 ug/L	5254.2 ppb	12:52:17
2	K 766.490 Radial†	29193.9	27209.2	5177.6 ug/L	5177.6 ppb	12:51:57
2	Mg 279.077 IEC†	128.3	129.4	5339.6 ug/L	5339.6 ppb	12:52:17
2	Na 589.592 Radial†	27372.0	28822.9	10161 ug/L	10161 ppb	12:51:57
2	Sr 421.552†	62671.0	63968.4	512.72 ug/L	512.72 ppb	12:51:57
2	Sc 361.383	832371.4	832371.4	101.65 %		12:53:20
2	Y 371.029	695164.8	695164.8	100.51 %		12:53:20
2	Ag 328.068†	99890.0	98079.2	512.40 ug/L	512.40 ppb	12:53:25
2	As 188.979†	910.5	922.5	510.80 ug/L	510.80 ppb	12:53:45
2	B 249.677†	17865.0	18111.6	505.77 ug/L	505.77 ppb	12:53:25
2	Ba 233.527†	55189.0	54291.6	509.80 ug/L	509.80 ppb	12:53:25
2	Be 313.107†	1218747.3	1202643.5	513.23 ug/L	513.23 ppb	12:53:20
2	Cd 226.502†	35688.8	35278.6	511.76 ug/L	511.76 ppb	12:53:25
2	Co 228.616†	20324.8	20040.3	518.06 ug/L	518.06 ppb	12:53:25
2	Cr 267.716†	38700.7	37999.3	510.64 ug/L	510.64 ppb	12:53:25
2	Cu 324.752†	160866.7	152696.7	504.12 ug/L	504.12 ppb	12:53:25
2	Mn 257.610†	387332.0	380639.2	500.77 ug/L	500.77 ppb	12:53:25
2	Mo 202.031†	5751.8	5649.6	502.67 ug/L	502.67 ppb	12:53:45
2	Ni 231.604†	16569.9	16216.2	514.67 ug/L	514.67 ppb	12:53:25

2	P 214.914†	3628.3	3381.9	2420.9 ug/L	2420.9 ppb	12:53:45
2	Pb 220.353†	3281.8	3286.7	506.36 ug/L	506.36 ppb	12:53:45
2	S 181.975 Axial†	602.5	562.5	1006.1 ug/L	1006.1 ppb	12:53:45
2	Sb 206.836†	1262.4	1218.2	527.79 ug/L	527.79 ppb	12:53:45
2	Se 196.026†	608.2	615.3	530.79 ug/L	530.79 ppb	12:53:45
2	Si 251.611†	68655.1	67049.6	2539.2 ug/L	2539.2 ppb	12:53:25
2	Sn 189.927†	2273.0	2228.8	506.39 ug/L	506.39 ppb	12:53:45
2	Ti 334.940†	290598.2	286990.0	498.94 ug/L	498.94 ppb	12:53:25
2	Tl 190.801†	1294.9	1302.9	507.38 ug/L	507.38 ppb	12:53:45
2	U 409.014†	15118.1	17076.2	516.32 ug/L	516.32 ppb	12:53:25
2	V 292.402†	63417.0	63702.4	515.38 ug/L	515.38 ppb	12:53:25
2	Zn 213.857†	43539.1	42260.5	507.31 ug/L	507.31 ppb	12:53:25
2	SiO2†	68156.5	66548.0	5417.4 ug/L	5417.4 ppb	12:54:27
3	Sc Radial	4246.7	4246.7	96.6 %		12:52:42
3	Y RADIAL	4814.1	4814.1	101.1 %		12:52:22
3	Al 396.153Radial†	5061.9	5316.9	5198.5 ug/L	5198.5 ppb	12:52:22
3	Ca 317.933Radial†	2688.3	2766.6	5234.9 ug/L	5234.9 ppb	12:52:42
3	Fe 238.204 Radial†	454.8	462.2	5370.5 ug/L	5370.5 ppb	12:52:42
3	K 766.490 Radial†	29670.6	28108.9	5348.9 ug/L	5348.9 ppb	12:52:22
3	Mg 279.077 IEC†	125.5	128.4	5294.8 ug/L	5294.8 ppb	12:52:42
3	Na 589.592 Radial†	28072.0	29928.3	10550 ug/L	10550 ppb	12:52:22
3	Sr 421.552†	64332.8	66560.5	533.49 ug/L	533.49 ppb	12:52:22
3	Sc 361.383	837178.6	837178.6	102.24 %		12:53:51
3	Y 371.029	698029.1	698029.1	100.92 %		12:53:51
3	Ag 328.068†	98356.8	96015.3	501.68 ug/L	501.68 ppb	12:53:56
3	As 188.979†	909.8	916.6	507.54 ug/L	507.54 ppb	12:54:16
3	B 249.677†	17499.0	17652.8	492.92 ug/L	492.92 ppb	12:53:56
3	Ba 233.527†	54300.7	53110.9	498.72 ug/L	498.72 ppb	12:53:56
3	Be 313.107†	1209735.4	1186944.8	506.52 ug/L	506.52 ppb	12:53:51
3	Cd 226.502†	35124.3	34524.9	500.81 ug/L	500.81 ppb	12:53:56
3	Co 228.616†	19951.5	19560.3	505.66 ug/L	505.66 ppb	12:53:56
3	Cr 267.716†	38093.5	37186.8	499.75 ug/L	499.75 ppb	12:53:56
3	Cu 324.752†	157873.2	148860.1	491.46 ug/L	491.46 ppb	12:53:56
3	Mn 257.610†	381533.0	372779.4	490.45 ug/L	490.45 ppb	12:53:56
3	Mo 202.031†	5739.4	5605.0	498.72 ug/L	498.72 ppb	12:54:16
3	Ni 231.604†	16305.4	15863.9	503.49 ug/L	503.49 ppb	12:53:56
3	P 214.914†	3597.0	3330.9	2385.2 ug/L	2385.2 ppb	12:54:16
3	Pb 220.353†	3275.3	3261.8	502.55 ug/L	502.55 ppb	12:54:16
3	S 181.975 Axial†	599.8	556.4	995.14 ug/L	995.14 ppb	12:54:16
3	Sb 206.836†	1256.7	1205.4	522.26 ug/L	522.26 ppb	12:54:16
3	Se 196.026†	602.6	606.3	523.72 ug/L	523.72 ppb	12:54:16
3	Si 251.611†	67639.5	65668.4	2486.8 ug/L	2486.8 ppb	12:53:56
3	Sn 189.927†	2253.0	2196.4	499.04 ug/L	499.04 ppb	12:54:16
3	Ti 334.940†	285965.2	280817.1	488.22 ug/L	488.22 ppb	12:53:56
3	Tl 190.801†	1292.6	1293.3	503.60 ug/L	503.60 ppb	12:54:16
3	U 409.014†	14765.8	16646.3	503.29 ug/L	503.29 ppb	12:53:56
3	V 292.402†	62348.1	62298.6	504.09 ug/L	504.09 ppb	12:53:56
3	Zn 213.857†	42944.7	41433.1	497.36 ug/L	497.36 ppb	12:53:56
3	SiO2†	68149.5	66156.1	5385.5 ug/L	5385.5 ppb	12:54:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832766.6	101.70 %	0.516			0.51%
Sc Radial	4271.0	97.2 %	0.68			0.70%
Y 371.029	694355.4	100.39 %	0.598			0.60%
Y RADIAL	4771.7	100.2 %	1.08			1.08%
Ag 328.068†	97341.3	508.57 ug/L	5.972	508.57 ppb	5.972	1.17%
QC value within limits for Ag 328.068 Recovery = 101.71%						
Al 396.153Radial†	5267.9	5150.2 ug/L	95.84	5150.2 ppb	95.84	1.86%
QC value within limits for Al 396.153Radial Recovery = 103.00%						
As 188.979†	920.9	509.90 ug/L	2.058	509.90 ppb	2.058	0.40%
QC value within limits for As 188.979 Recovery = 101.98%						
B 249.677†	17891.7	499.61 ug/L	6.445	499.61 ppb	6.445	1.29%
QC value within limits for B 249.677 Recovery = 99.92%						
Ba 233.527†	53859.0	505.74 ug/L	6.104	505.74 ppb	6.104	1.21%
QC value within limits for Ba 233.527 Recovery = 101.15%						
Be 313.107†	1193898.8	509.49 ug/L	3.418	509.49 ppb	3.418	0.67%
QC value within limits for Be 313.107 Recovery = 101.90%						
Ca 317.933Radial†	2751.4	5206.3 ug/L	28.88	5206.3 ppb	28.88	0.55%

QC value within limits for Ca 317.933 Radial Recovery = 104.13%

Cd	226.502†	34957.4	507.10 ug/L	5.656	507.10 ppb	5.656	1.12%
QC value within limits for Cd 226.502 Recovery = 101.42%							
Co	228.616†	19829.8	512.62 ug/L	6.337	512.62 ppb	6.337	1.24%
QC value within limits for Co 228.616 Recovery = 102.52%							
Cr	267.716†	37684.8	506.43 ug/L	5.848	506.43 ppb	5.848	1.15%
QC value within limits for Cr 267.716 Recovery = 101.29%							
Cu	324.752†	151250.3	499.35 ug/L	6.877	499.35 ppb	6.877	1.38%
QC value within limits for Cu 324.752 Recovery = 99.87%							
Fe	238.204 Radial†	455.6	5293.8 ug/L	66.47	5293.8 ppb	66.47	1.26%
QC value within limits for Fe 238.204 Radial Recovery = 105.88%							
K	766.490 Radial†	27789.4	5288.1 ug/L	95.80	5288.1 ppb	95.80	1.81%
QC value within limits for K 766.490 Radial Recovery = 105.76%							
Mg	279.077 IEC†	129.1	5324.2 ug/L	25.49	5324.2 ppb	25.49	0.48%
QC value within limits for Mg 279.077 IEC Recovery = 106.48%							
Mn	257.610†	377695.8	496.91 ug/L	5.627	496.91 ppb	5.627	1.13%
QC value within limits for Mn 257.610 Recovery = 99.38%							
Mo	202.031†	5638.8	501.71 ug/L	2.649	501.71 ppb	2.649	0.53%
QC value within limits for Mo 202.031 Recovery = 100.34%							
Na	589.592 Radial†	29576.9	10427 ug/L	230.4	10427 ppb	230.4	2.21%
QC value within limits for Na 589.592 Radial Recovery = 104.27%							
Ni	231.604†	16089.0	510.63 ug/L	6.204	510.63 ppb	6.204	1.21%
QC value within limits for Ni 231.604 Recovery = 102.13%							
P	214.914†	3362.4	2407.3 ug/L	19.27	2407.3 ppb	19.27	0.80%
QC value within limits for P 214.914 Recovery = 96.29%							
Pb	220.353†	3276.4	504.79 ug/L	1.993	504.79 ppb	1.993	0.39%
QC value within limits for Pb 220.353 Recovery = 100.96%							
S	181.975 Axial†	560.8	1002.9 ug/L	6.76	1002.9 ppb	6.76	0.67%
QC value within limits for S 181.975 Axial Recovery = 100.29%							
Sb	206.836†	1206.4	522.80 ug/L	4.735	522.80 ppb	4.735	0.91%
QC value within limits for Sb 206.836 Recovery = 104.56%							
Se	196.026†	607.4	524.36 ug/L	6.133	524.36 ppb	6.133	1.17%
QC value within limits for Se 196.026 Recovery = 104.87%							
Si	251.611†	66552.5	2520.4 ug/L	29.11	2520.4 ppb	29.11	1.15%
QC value within limits for Si 251.611 Recovery = 100.81%							
Sn	189.927†	2214.7	503.20 ug/L	3.770	503.20 ppb	3.770	0.75%
QC value within limits for Sn 189.927 Recovery = 100.64%							
Sr	421.552†	65675.1	526.40 ug/L	11.850	526.40 ppb	11.850	2.25%
QC value within limits for Sr 421.552 Recovery = 105.28%							
Ti	334.940†	284693.4	494.95 ug/L	5.860	494.95 ppb	5.860	1.18%
QC value within limits for Ti 334.940 Recovery = 98.99%							
Tl	190.801†	1298.9	505.78 ug/L	1.953	505.78 ppb	1.953	0.39%
QC value within limits for Tl 190.801 Recovery = 101.16%							
U	409.014†	16912.5	511.36 ug/L	7.050	511.36 ppb	7.050	1.38%
QC value within limits for U 409.014 Recovery = 102.27%							
V	292.402†	63132.1	510.81 ug/L	5.942	510.81 ppb	5.942	1.16%
QC value within limits for V 292.402 Recovery = 102.16%							
Zn	213.857†	41950.3	503.58 ug/L	5.424	503.58 ppb	5.424	1.08%
QC value within limits for Zn 213.857 Recovery = 100.72%							
SiO2†		66630.5	5424.2 ug/L	42.42	5424.2 ppb	42.42	0.78%
QC value within limits for SiO2 Recovery = 101.43%							

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 12:56:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4122.8	4122.8	93.8 %		12:58:54
1	Y RADIAL	4237.6	4237.6	89.01 %		12:58:34
1	Al 396.153Radial†	-72.2	1.1	1.0140 ug/L	1.0140 ppb	12:58:54
1	Ca 317.933Radial†	19.5	5.1	9.5949 ug/L	9.5949 ppb	12:58:54
1	Fe 238.204 Radial†	6.3	-1.8	-20.749 ug/L	-20.749 ppb	12:58:54
1	K 766.490 Radial†	2742.0	324.3	61.784 ug/L	61.784 ppb	12:58:34
1	Mg 279.077 IEC†	1.8	0.4	16.217 ug/L	16.217 ppb	12:58:54
1	Na 589.592 Radial†	-841.8	-22.3	-7.8636 ug/L	-7.8636 ppb	12:58:34
1	Sr 421.552†	22.9	3.5	0.0283 ug/L	0.0283 ppb	12:58:34
1	Sc 361.383	820286.5	820286.5	100.18 %		12:59:51
1	Y 371.029	693929.7	693929.7	100.33 %		12:59:51
1	Ag 328.068†	165.9	-19.6	-0.1098 ug/L	-0.1098 ppb	12:59:51
1	As 188.979†	-22.3	4.5	2.4690 ug/L	2.4690 ppb	13:00:11
1	B 249.677†	-310.7	227.2	6.3770 ug/L	6.3770 ppb	13:00:11
1	Ba 233.527†	3.2	3.9	0.0347 ug/L	0.0347 ppb	13:00:11
1	Be 313.107†	-3607.0	130.5	0.0559 ug/L	0.0559 ppb	12:59:51
1	Cd 226.502†	-163.0	7.9	0.1166 ug/L	0.1166 ppb	13:00:11
1	Co 228.616†	-31.6	14.7	0.3824 ug/L	0.3824 ppb	13:00:11
1	Cr 267.716†	71.5	-0.2	-0.0048 ug/L	-0.0048 ppb	13:00:11
1	Cu 324.752†	5624.1	62.1	0.2040 ug/L	0.2040 ppb	12:59:51
1	Mn 257.610†	486.4	96.5	0.1241 ug/L	0.1241 ppb	13:00:11
1	Mo 202.031†	19.0	10.5	0.9285 ug/L	0.9285 ppb	13:00:11
1	Ni 231.604†	92.7	8.4	0.2679 ug/L	0.2679 ppb	13:00:11
1	P 214.914†	184.0	-3.6	-2.7086 ug/L	-2.7086 ppb	13:00:11
1	Pb 220.353†	-51.3	7.1	1.0952 ug/L	1.0952 ppb	13:00:11
1	S 181.975 Axial†	27.2	-3.0	-5.4258 ug/L	-5.4258 ppb	13:00:11
1	Sb 206.836†	23.9	0.2	0.0873 ug/L	0.0873 ppb	13:00:11
1	Se 196.026†	-13.7	3.3	2.6542 ug/L	2.6542 ppb	13:00:11
1	Si 251.611†	636.7	147.4	5.5832 ug/L	5.5832 ppb	13:00:11
1	Sn 189.927†	6.6	-0.6	-0.1354 ug/L	-0.1354 ppb	13:00:11
1	Ti 334.940†	-1033.3	89.8	0.1561 ug/L	0.1561 ppb	12:59:51
1	Tl 190.801†	-27.9	1.2	0.4639 ug/L	0.4639 ppb	13:00:11
1	U 409.014†	-2215.6	-7.5	-0.2238 ug/L	-0.2238 ppb	12:59:51
1	V 292.402†	-1375.0	-55.2	-0.4246 ug/L	-0.4246 ppb	12:59:51
1	Zn 213.857†	851.6	280.0	3.3939 ug/L	3.3939 ppb	13:00:11
1	SiO2†	638.6	138.1	11.247 ug/L	11.247 ppb	13:01:22
2	Sc Radial	4186.6	4186.6	95.3 %		12:59:19
2	Y RADIAL	4679.1	4679.1	98.29 %		12:58:59
2	Al 396.153Radial†	-87.4	-13.7	-13.461 ug/L	-13.461 ppb	12:59:19
2	Ca 317.933Radial†	22.7	8.1	15.366 ug/L	15.366 ppb	12:59:19
2	Fe 238.204 Radial†	7.5	-0.6	-6.4238 ug/L	-6.4238 ppb	12:59:19
2	K 766.490 Radial†	2754.6	293.0	55.823 ug/L	55.823 ppb	12:58:59
2	Mg 279.077 IEC†	0.8	-0.7	-27.119 ug/L	-27.119 ppb	12:59:19
2	Na 589.592 Radial†	-886.4	-55.5	-19.549 ug/L	-19.549 ppb	12:58:59
2	Sr 421.552†	21.0	1.2	0.0097 ug/L	0.0097 ppb	12:58:59
2	Sc 361.383	820591.8	820591.8	100.22 %		13:00:16
2	Y 371.029	693619.7	693619.7	100.29 %		13:00:16
2	Ag 328.068†	137.4	-48.0	-0.2526 ug/L	-0.2526 ppb	13:00:16
2	As 188.979†	-25.6	1.3	0.6986 ug/L	0.6986 ppb	13:00:36
2	B 249.677†	-293.6	244.4	6.8564 ug/L	6.8564 ppb	13:00:36
2	Ba 233.527†	9.0	9.7	0.0893 ug/L	0.0893 ppb	13:00:36
2	Be 313.107†	-3652.3	86.6	0.0372 ug/L	0.0372 ppb	13:00:16
2	Cd 226.502†	-166.4	4.6	0.0669 ug/L	0.0669 ppb	13:00:36
2	Co 228.616†	-41.3	5.0	0.1287 ug/L	0.1287 ppb	13:00:36
2	Cr 267.716†	79.9	8.2	0.1090 ug/L	0.1090 ppb	13:00:36
2	Cu 324.752†	5675.4	111.2	0.3674 ug/L	0.3674 ppb	13:00:16
2	Mn 257.610†	483.2	93.1	0.1229 ug/L	0.1229 ppb	13:00:36
2	Mo 202.031†	10.6	2.1	0.1845 ug/L	0.1845 ppb	13:00:36
2	Ni 231.604†	97.8	13.5	0.4294 ug/L	0.4294 ppb	13:00:36

2	P 214.914†	186.5	-1.2	-0.9377 ug/L	-0.9377 ppb	13:00:36
2	Pb 220.353†	-61.1	-2.6	-0.4083 ug/L	-0.4083 ppb	13:00:36
2	S 181.975 Axial†	29.3	-0.9	-1.6210 ug/L	-1.6210 ppb	13:00:36
2	Sb 206.836†	26.0	2.3	0.9839 ug/L	0.9839 ppb	13:00:36
2	Se 196.026†	-13.8	3.2	2.6731 ug/L	2.6731 ppb	13:00:36
2	Si 251.611†	652.9	163.3	6.1968 ug/L	6.1968 ppb	13:00:36
2	Sn 189.927†	12.5	5.3	1.2124 ug/L	1.2124 ppb	13:00:36
2	Ti 334.940†	-1036.2	87.3	0.1565 ug/L	0.1565 ppb	13:00:16
2	Tl 190.801†	-29.8	-0.7	-0.2529 ug/L	-0.2529 ppb	13:00:36
2	U 409.014†	-2247.7	-38.6	-1.1711 ug/L	-1.1711 ppb	13:00:16
2	V 292.402†	-1381.9	-61.5	-0.4908 ug/L	-0.4908 ppb	13:00:16
2	Zn 213.857†	850.6	278.7	3.3742 ug/L	3.3742 ppb	13:00:36
2	SiO2†	638.7	138.0	11.256 ug/L	11.256 ppb	13:01:42
3	Sc Radial	4228.2	4228.2	96.2 %		12:59:44
3	Y RADIAL	4655.5	4655.5	97.79 %		12:59:24
3	Al 396.153Radial†	-73.3	1.9	1.8952 ug/L	1.8952 ppb	12:59:44
3	Ca 317.933Radial†	27.0	12.4	23.461 ug/L	23.461 ppb	12:59:44
3	Fe 238.204 Radial†	6.2	-2.0	-23.574 ug/L	-23.574 ppb	12:59:44
3	K 766.490 Radial†	2678.8	185.7	35.373 ug/L	35.373 ppb	12:59:24
3	Mg 279.077 IEC†	3.6	2.2	90.892 ug/L	90.892 ppb	12:59:44
3	Na 589.592 Radial†	-859.2	-18.0	-6.3412 ug/L	-6.3412 ppb	12:59:24
3	Sr 421.552†	27.4	7.6	0.0609 ug/L	0.0609 ppb	12:59:24
3	Sc 361.383	819441.0	819441.0	100.08 %		13:00:41
3	Y 371.029	693279.0	693279.0	100.24 %		13:00:41
3	Ag 328.068†	227.2	41.9	0.2062 ug/L	0.2062 ppb	13:00:41
3	As 188.979†	-19.4	7.4	4.0824 ug/L	4.0824 ppb	13:01:01
3	B 249.677†	-335.2	202.4	5.6818 ug/L	5.6818 ppb	13:01:01
3	Ba 233.527†	13.3	14.0	0.1308 ug/L	0.1308 ppb	13:01:01
3	Be 313.107†	-3646.0	87.7	0.0377 ug/L	0.0377 ppb	13:00:41
3	Cd 226.502†	-169.5	1.3	0.0222 ug/L	0.0222 ppb	13:01:01
3	Co 228.616†	-41.7	4.6	0.1177 ug/L	0.1177 ppb	13:01:01
3	Cr 267.716†	71.9	0.3	0.0001 ug/L	0.0001 ppb	13:01:01
3	Cu 324.752†	5660.5	104.2	0.3398 ug/L	0.3398 ppb	13:00:41
3	Mn 257.610†	483.4	94.0	0.1175 ug/L	0.1175 ppb	13:01:01
3	Mo 202.031†	5.8	-2.7	-0.2418 ug/L	-0.2418 ppb	13:01:01
3	Ni 231.604†	81.9	-2.2	-0.0710 ug/L	-0.0710 ppb	13:01:01
3	P 214.914†	187.3	-0.1	-0.1132 ug/L	-0.1132 ppb	13:01:01
3	Pb 220.353†	-50.0	8.3	1.2784 ug/L	1.2784 ppb	13:01:01
3	S 181.975 Axial†	34.3	4.0	7.2446 ug/L	7.2446 ppb	13:01:01
3	Sb 206.836†	28.6	4.9	2.0605 ug/L	2.0605 ppb	13:01:01
3	Se 196.026†	-21.1	-4.1	-3.4948 ug/L	-3.4948 ppb	13:01:01
3	Si 251.611†	646.5	157.9	5.9962 ug/L	5.9962 ppb	13:01:01
3	Sn 189.927†	12.3	5.1	1.1633 ug/L	1.1633 ppb	13:01:01
3	Ti 334.940†	-1046.5	75.5	0.1245 ug/L	0.1245 ppb	13:00:41
3	Tl 190.801†	-30.8	-1.7	-0.6569 ug/L	-0.6569 ppb	13:01:01
3	U 409.014†	-2022.8	183.0	5.5531 ug/L	5.5531 ppb	13:00:41
3	V 292.402†	-1297.7	20.7	0.1779 ug/L	0.1779 ppb	13:00:41
3	Zn 213.857†	843.6	272.9	3.3102 ug/L	3.3102 ppb	13:01:01
3	SiO2†	641.2	141.4	11.549 ug/L	11.549 ppb	13:02:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820106.4	100.16 %	0.073			0.07%
Sc Radial	4179.2	95.1 %	1.21			1.27%
Y 371.029	693609.5	100.28 %	0.047			0.05%
Y RADIAL	4524.1	95.03 %	5.217			5.49%
Ag 328.068†	-8.6	-0.0521 ug/L	0.23480	-0.0521 ppb	0.23480	450.92%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-3.6	-3.5172 ug/L	8.62256	-3.5172 ppb	8.62256	245.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.4	2.4167 ug/L	1.69248	2.4167 ppb	1.69248	70.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	224.7	6.3051 ug/L	0.59056	6.3051 ppb	0.59056	9.37%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	9.2	0.0849 ug/L	0.04816	0.0849 ppb	0.04816	56.71%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	101.6	0.0436 ug/L	0.01067	0.0436 ppb	0.01067	24.49%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	8.5	16.141 ug/L	6.9654	16.141 ppb	6.9654	43.15%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	4.6	0.0686 ug/L	0.04722	0.0686 ppb	0.04722	68.89%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	8.1	0.2096 ug/L	0.14974	0.2096 ppb	0.14974	71.44%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	2.8	0.0347 ug/L	0.06433	0.0347 ppb	0.06433	185.23%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	92.5	0.3037 ug/L	0.08749	0.3037 ppb	0.08749	28.81%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	-1.5	-16.916 ug/L	9.1955	-16.916 ppb	9.1955	54.36%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	267.6	50.993 ug/L	13.8523	50.993 ppb	13.8523	27.17%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	0.6	26.663 ug/L	59.6950	26.663 ppb	59.6950	223.88%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	94.5	0.1215 ug/L	0.00352	0.1215 ppb	0.00352	2.90%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.3	0.2904 ug/L	0.59228	0.2904 ppb	0.59228	203.93%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-31.9	-11.251 ug/L	7.2261	-11.251 ppb	7.2261	64.23%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	6.6	0.2088 ug/L	0.25541	0.2088 ppb	0.25541	122.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-1.6	-1.2532 ug/L	1.32612	-1.2532 ppb	1.32612	105.82%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	4.2	0.6551 ug/L	0.92549	0.6551 ppb	0.92549	141.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	0.0	0.0660 ug/L	6.50146	0.0660 ppb	6.50146	>999.9%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.5	1.0439 ug/L	0.98794	1.0439 ppb	0.98794	94.64%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.8	0.6108 ug/L	3.55557	0.6108 ppb	3.55557	582.11%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	156.2	5.9254 ug/L	0.31285	5.9254 ppb	0.31285	5.28%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	3.3	0.7467 ug/L	0.76437	0.7467 ppb	0.76437	102.36%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	4.1	0.0330 ug/L	0.02594	0.0330 ppb	0.02594	78.72%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	84.2	0.1457 ug/L	0.01835	0.1457 ppb	0.01835	12.59%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.4	-0.1486 ug/L	0.56763	-0.1486 ppb	0.56763	381.86%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	45.6	1.3860 ug/L	3.63969	1.3860 ppb	3.63969	262.60%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-32.0	-0.2458 ug/L	0.36848	-0.2458 ppb	0.36848	149.89%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	277.2	3.3594 ug/L	0.04376	3.3594 ppb	0.04376	1.30%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	139.2	11.351 ug/L	0.1715	11.351 ppb	0.1715	1.51%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/19/2010 13:15:22

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb
=====

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/19/2010 13:15:23

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
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Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4422.0	4422.0	101 %		13:17:15
1	Y RADIAL	4780.1	4780.1	100.4 %		13:17:15
1	Al 396.153Radial†	4976.3	5024.0	4910.8 ug/L	4910.8 ppb	13:17:15
1	Ca 317.933Radial†	2700.5	2668.4	5049.1 ug/L	5049.1 ppb	13:17:35
1	Fe 238.204 Radial†	452.2	441.0	5124.8 ug/L	5124.8 ppb	13:17:35
1	K 766.490 Radial†	28954.1	26178.8	4981.5 ug/L	4981.5 ppb	13:17:15
1	Mg 279.077 IEC†	127.2	124.9	5152.1 ug/L	5152.1 ppb	13:17:35
1	Na 589.592 Radial†	27030.2	27740.5	9779.1 ug/L	9779.1 ppb	13:17:15
1	Sr 421.552†	62430.7	62029.2	497.17 ug/L	497.17 ppb	13:17:15
1	Sc 361.383	836041.4	836041.4	102.10 %		13:18:32
1	Y 371.029	695666.9	695666.9	100.58 %		13:18:32
1	Ag 328.068†	99741.5	97502.4	509.35 ug/L	509.35 ppb	13:18:37
1	As 188.979†	902.8	911.0	504.45 ug/L	504.45 ppb	13:18:57
1	B 249.677†	17798.3	17969.1	501.80 ug/L	501.80 ppb	13:18:37
1	Ba 233.527†	55289.1	54151.2	508.47 ug/L	508.47 ppb	13:18:37
1	Be 313.107†	1212462.2	1191224.9	508.36 ug/L	508.36 ppb	13:18:32
1	Cd 226.502†	35617.7	35054.9	508.53 ug/L	508.53 ppb	13:18:37
1	Co 228.616†	20302.2	19930.3	515.21 ug/L	515.21 ppb	13:18:37
1	Cr 267.716†	38592.6	37726.3	506.96 ug/L	506.96 ppb	13:18:37
1	Cu 324.752†	160977.9	152110.9	502.18 ug/L	502.18 ppb	13:18:37
1	Mn 257.610†	392889.1	384409.3	505.72 ug/L	505.72 ppb	13:18:32
1	Mo 202.031†	5733.6	5606.9	498.87 ug/L	498.87 ppb	13:18:57
1	Ni 231.604†	16562.6	16137.5	512.17 ug/L	512.17 ppb	13:18:37
1	P 214.914†	3592.6	3331.3	2383.6 ug/L	2383.6 ppb	13:18:57
1	Pb 220.353†	3245.5	3237.0	498.70 ug/L	498.70 ppb	13:18:57
1	S 181.975 Axial†	595.4	552.9	988.90 ug/L	988.90 ppb	13:18:57
1	Sb 206.836†	1246.1	1196.8	518.64 ug/L	518.64 ppb	13:18:57
1	Se 196.026†	605.1	609.6	525.69 ug/L	525.69 ppb	13:18:57
1	Si 251.611†	68974.5	67066.0	2539.9 ug/L	2539.9 ppb	13:18:37
1	Sn 189.927†	2249.7	2196.2	498.98 ug/L	498.98 ppb	13:18:57
1	Ti 334.940†	291047.8	286175.5	497.52 ug/L	497.52 ppb	13:18:37
1	Tl 190.801†	1279.6	1282.3	499.44 ug/L	499.44 ppb	13:18:57
1	U 409.014†	15153.6	17045.7	515.42 ug/L	515.42 ppb	13:18:37
1	V 292.402†	63088.1	63106.3	510.59 ug/L	510.59 ppb	13:18:37
1	Zn 213.857†	43547.5	42080.7	505.17 ug/L	505.17 ppb	13:18:37
1	SiO2†	69192.6	67268.3	5476.3 ug/L	5476.3 ppb	13:20:05
2	Sc Radial	4371.3	4371.3	99.5 %		13:17:40
2	Y RADIAL	4764.2	4764.2	100.1 %		13:17:40
2	Al 396.153Radial†	5013.3	5118.7	5001.8 ug/L	5001.8 ppb	13:17:40
2	Ca 317.933Radial†	2726.3	2725.5	5157.2 ug/L	5157.2 ppb	13:18:00
2	Fe 238.204 Radial†	455.1	449.1	5219.7 ug/L	5219.7 ppb	13:18:00
2	K 766.490 Radial†	29490.7	27052.7	5147.8 ug/L	5147.8 ppb	13:17:40
2	Mg 279.077 IEC†	130.5	129.7	5350.0 ug/L	5350.0 ppb	13:18:00
2	Na 589.592 Radial†	27159.9	28183.1	9935.1 ug/L	9935.1 ppb	13:17:40
2	Sr 421.552†	63189.5	63513.1	509.07 ug/L	509.07 ppb	13:17:40
2	Sc 361.383	780265.1	780265.1	95.291 %		13:19:03
2	Y 371.029	650259.2	650259.2	94.016 %		13:19:03

2	Ag 328.068†	98573.2	103259.4	539.38 ug/L	539.38 ppb	13:19:08
2	As 188.979†	919.2	991.5	548.84 ug/L	548.84 ppb	13:19:28
2	B 249.677†	17450.0	18849.7	526.40 ug/L	526.40 ppb	13:19:08
2	Ba 233.527†	54777.2	57485.0	539.77 ug/L	539.77 ppb	13:19:08
2	Be 313.107†	1214795.0	1278559.6	545.62 ug/L	545.62 ppb	13:19:03
2	Cd 226.502†	35129.2	37035.9	537.29 ug/L	537.29 ppb	13:19:08
2	Co 228.616†	20097.6	21137.0	546.43 ug/L	546.43 ppb	13:19:08
2	Cr 267.716†	38463.9	40293.3	541.43 ug/L	541.43 ppb	13:19:08
2	Cu 324.752†	159071.0	161380.1	532.77 ug/L	532.77 ppb	13:19:08
2	Mn 257.610†	393681.2	412747.3	542.98 ug/L	542.98 ppb	13:19:03
2	Mo 202.031†	5788.9	6066.5	539.72 ug/L	539.72 ppb	13:19:28
2	Ni 231.604†	16444.8	17173.4	545.05 ug/L	545.05 ppb	13:19:08
2	P 214.914†	3636.2	3628.6	2599.3 ug/L	2599.3 ppb	13:19:28
2	Pb 220.353†	3292.1	3513.1	541.22 ug/L	541.22 ppb	13:19:28
2	S 181.975 Axial†	596.4	595.7	1065.5 ug/L	1065.5 ppb	13:19:28
2	Sb 206.836†	1259.5	1298.0	562.53 ug/L	562.53 ppb	13:19:28
2	Se 196.026†	593.8	640.1	551.52 ug/L	551.52 ppb	13:19:28
2	Si 251.611†	67834.1	70698.2	2677.3 ug/L	2677.3 ppb	13:19:08
2	Sn 189.927†	2279.1	2384.6	541.74 ug/L	541.74 ppb	13:19:28
2	Ti 334.940†	288492.3	303870.4	528.27 ug/L	528.27 ppb	13:19:08
2	Tl 190.801†	1298.1	1391.4	541.85 ug/L	541.85 ppb	13:19:28
2	U 409.014†	15019.8	17966.3	543.26 ug/L	543.26 ppb	13:19:08
2	V 292.402†	62992.3	67422.8	545.63 ug/L	545.63 ppb	13:19:08
2	Zn 213.857†	42669.0	44207.5	530.68 ug/L	530.68 ppb	13:19:08
2	SiO2†	67938.2	70796.3	5763.1 ug/L	5763.1 ppb	13:20:10
3	Sc Radial	4235.6	4235.6	96.4 %		13:18:05
3	Y RADIAL	4578.7	4578.7	96.18 %		13:18:05
3	Al 396.153Radial†	5061.7	5330.3	5211.5 ug/L	5211.5 ppb	13:18:05
3	Ca 317.933Radial†	2685.3	2770.7	5242.7 ug/L	5242.7 ppb	13:18:25
3	Fe 238.204 Radial†	451.0	459.5	5339.8 ug/L	5339.8 ppb	13:18:25
3	K 766.490 Radial†	29654.4	28171.8	5360.9 ug/L	5360.9 ppb	13:18:05
3	Mg 279.077 IEC†	126.6	129.9	5356.3 ug/L	5356.3 ppb	13:18:25
3	Na 589.592 Radial†	27458.7	29367.4	10353 ug/L	10353 ppb	13:18:05
3	Sr 421.552†	63431.8	65798.5	527.38 ug/L	527.38 ppb	13:18:05
3	Sc 361.383	836309.7	836309.7	102.14 %		13:19:34
3	Y 371.029	697379.0	697379.0	100.83 %		13:19:34
3	Ag 328.068†	98803.2	96552.4	504.47 ug/L	504.47 ppb	13:19:39
3	As 188.979†	902.8	910.7	504.29 ug/L	504.29 ppb	13:19:59
3	B 249.677†	17576.7	17746.6	495.54 ug/L	495.54 ppb	13:19:39
3	Ba 233.527†	54612.1	53471.0	502.09 ug/L	502.09 ppb	13:19:39
3	Be 313.107†	1217346.2	1195625.9	510.22 ug/L	510.22 ppb	13:19:34
3	Cd 226.502†	35283.2	34716.1	503.59 ug/L	503.59 ppb	13:19:39
3	Co 228.616†	20062.5	19689.2	508.99 ug/L	508.99 ppb	13:19:39
3	Cr 267.716†	38307.3	37434.9	503.08 ug/L	503.08 ppb	13:19:39
3	Cu 324.752†	158684.0	149814.3	494.61 ug/L	494.61 ppb	13:19:39
3	Mn 257.610†	392833.1	384231.0	505.50 ug/L	505.50 ppb	13:19:34
3	Mo 202.031†	5772.3	5643.1	502.10 ug/L	502.10 ppb	13:19:59
3	Ni 231.604†	16433.1	16005.4	507.98 ug/L	507.98 ppb	13:19:39
3	P 214.914†	3637.4	3374.1	2416.9 ug/L	2416.9 ppb	13:19:59
3	Pb 220.353†	3275.8	3265.6	503.14 ug/L	503.14 ppb	13:19:59
3	S 181.975 Axial†	595.7	553.1	989.20 ug/L	989.20 ppb	13:19:59
3	Sb 206.836†	1259.7	1209.7	524.15 ug/L	524.15 ppb	13:19:59
3	Se 196.026†	604.4	608.7	525.65 ug/L	525.65 ppb	13:19:59
3	Si 251.611†	67839.7	65933.2	2496.8 ug/L	2496.8 ppb	13:19:39
3	Sn 189.927†	2259.5	2205.1	501.02 ug/L	501.02 ppb	13:19:59
3	Ti 334.940†	287629.2	282736.9	491.56 ug/L	491.56 ppb	13:19:39
3	Tl 190.801†	1293.5	1295.6	504.55 ug/L	504.55 ppb	13:19:59
3	U 409.014†	14827.1	16721.4	505.57 ug/L	505.57 ppb	13:19:39
3	V 292.402†	62590.7	62599.5	506.55 ug/L	506.55 ppb	13:19:39
3	Zn 213.857†	43091.5	41620.4	499.60 ug/L	499.60 ppb	13:19:39
3	SiO2†	68658.1	66723.3	5431.7 ug/L	5431.7 ppb	13:20:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817538.8	99.843 %	3.9423			3.95%
Sc Radial	4343.0	98.8 %	2.19			2.22%
Y 371.029	681101.7	98.475 %	3.8638			3.92%
Y RADIAL	4707.7	98.89 %	2.352			2.38%
Ag 328.068†	99104.7	517.73 ug/L	18.906	517.73 ppb	18.906	3.65%

QC value within limits for Ag 328.068 Recovery = 103.55%						
Al 396.153Radial†	5157.7	5041.4 ug/L	154.20	5041.4 ppb	154.20	3.06%
QC value within limits for Al 396.153Radial Recovery = 100.83%						
As 188.979†	937.7	519.19 ug/L	25.673	519.19 ppb	25.673	4.94%
QC value within limits for As 188.979 Recovery = 103.84%						
B 249.677†	18188.5	507.92 ug/L	16.313	507.92 ppb	16.313	3.21%
QC value within limits for B 249.677 Recovery = 101.58%						
Ba 233.527†	55035.7	516.78 ug/L	20.167	516.78 ppb	20.167	3.90%
QC value within limits for Ba 233.527 Recovery = 103.36%						
Be 313.107†	1221803.4	521.40 ug/L	20.994	521.40 ppb	20.994	4.03%
QC value within limits for Be 313.107 Recovery = 104.28%						
Ca 317.933Radial†	2721.5	5149.7 ug/L	97.02	5149.7 ppb	97.02	1.88%
QC value within limits for Ca 317.933Radial Recovery = 102.99%						
Cd 226.502†	35602.3	516.47 ug/L	18.200	516.47 ppb	18.200	3.52%
QC value within limits for Cd 226.502 Recovery = 103.29%						
Co 228.616†	20252.2	523.54 ug/L	20.061	523.54 ppb	20.061	3.83%
QC value within limits for Co 228.616 Recovery = 104.71%						
Cr 267.716†	38484.8	517.16 ug/L	21.113	517.16 ppb	21.113	4.08%
QC value within limits for Cr 267.716 Recovery = 103.43%						
Cu 324.752†	154435.1	509.85 ug/L	20.203	509.85 ppb	20.203	3.96%
QC value within limits for Cu 324.752 Recovery = 101.97%						
Fe 238.204 Radial†	449.9	5228.1 ug/L	107.73	5228.1 ppb	107.73	2.06%
QC value within limits for Fe 238.204 Radial Recovery = 104.56%						
K 766.490 Radial†	27134.5	5163.4 ug/L	190.20	5163.4 ppb	190.20	3.68%
QC value within limits for K 766.490 Radial Recovery = 103.27%						
Mg 279.077 IEC†	128.1	5286.1 ug/L	116.14	5286.1 ppb	116.14	2.20%
QC value within limits for Mg 279.077 IEC Recovery = 105.72%						
Mn 257.610†	393795.9	518.07 ug/L	21.577	518.07 ppb	21.577	4.16%
QC value within limits for Mn 257.610 Recovery = 103.61%						
Mo 202.031†	5772.2	513.56 ug/L	22.713	513.56 ppb	22.713	4.42%
QC value within limits for Mo 202.031 Recovery = 102.71%						
Na 589.592 Radial†	28430.3	10022 ug/L	296.5	10022 ppb	296.5	2.96%
QC value within limits for Na 589.592 Radial Recovery = 100.22%						
Ni 231.604†	16438.8	521.74 ug/L	20.300	521.74 ppb	20.300	3.89%
QC value within limits for Ni 231.604 Recovery = 104.35%						
P 214.914†	3444.7	2466.6 ug/L	116.16	2466.6 ppb	116.16	4.71%
QC value within limits for P 214.914 Recovery = 98.66%						
Pb 220.353†	3338.6	514.35 ug/L	23.371	514.35 ppb	23.371	4.54%
QC value within limits for Pb 220.353 Recovery = 102.87%						
S 181.975 Axial†	567.2	1014.5 ug/L	44.16	1014.5 ppb	44.16	4.35%
QC value within limits for S 181.975 Axial Recovery = 101.45%						
Sb 206.836†	1234.8	535.11 ug/L	23.909	535.11 ppb	23.909	4.47%
QC value within limits for Sb 206.836 Recovery = 107.02%						
Se 196.026†	619.5	534.29 ug/L	14.922	534.29 ppb	14.922	2.79%
QC value within limits for Se 196.026 Recovery = 106.86%						
Si 251.611†	67899.1	2571.3 ug/L	94.24	2571.3 ppb	94.24	3.66%
QC value within limits for Si 251.611 Recovery = 102.85%						
Sn 189.927†	2262.0	513.91 ug/L	24.123	513.91 ppb	24.123	4.69%
QC value within limits for Sn 189.927 Recovery = 102.78%						
Sr 421.552†	63780.3	511.21 ug/L	15.220	511.21 ppb	15.220	2.98%
QC value within limits for Sr 421.552 Recovery = 102.24%						
Ti 334.940†	290927.6	505.78 ug/L	19.700	505.78 ppb	19.700	3.90%
QC value within limits for Ti 334.940 Recovery = 101.16%						
Tl 190.801†	1323.1	515.28 ug/L	23.152	515.28 ppb	23.152	4.49%
QC value within limits for Tl 190.801 Recovery = 103.06%						
U 409.014†	17244.4	521.42 ug/L	19.550	521.42 ppb	19.550	3.75%
QC value within limits for U 409.014 Recovery = 104.28%						
V 292.402†	64376.2	520.92 ug/L	21.493	520.92 ppb	21.493	4.13%
QC value within limits for V 292.402 Recovery = 104.18%						
Zn 213.857†	42636.2	511.81 ug/L	16.570	511.81 ppb	16.570	3.24%
QC value within limits for Zn 213.857 Recovery = 102.36%						
SiO2†	68262.6	5557.1 ug/L	179.84	5557.1 ppb	179.84	3.24%
QC value within limits for SiO2 Recovery = 103.92%						
All analyte(s) passed QC.						

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 13:22:26

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4214.0	4214.0	95.9 %		13:24:38
1	Y RADIAL	4617.8	4617.8	97.00 %		13:24:18
1	Al 396.153Radial†	-78.0	-3.3	-3.2278 ug/L	-3.2278 ppb	13:24:38
1	Ca 317.933Radial†	25.8	11.2	21.266 ug/L	21.266 ppb	13:24:38
1	Fe 238.204 Radial†	6.9	-1.3	-14.901 ug/L	-14.901 ppb	13:24:38
1	K 766.490 Radial†	2560.2	71.4	13.599 ug/L	13.599 ppb	13:24:18
1	Mg 279.077 IEC†	2.3	0.9	37.080 ug/L	37.080 ppb	13:24:38
1	Na 589.592 Radial†	-866.0	-28.1	-9.9122 ug/L	-9.9122 ppb	13:24:18
1	Sr 421.552†	25.6	5.9	0.0470 ug/L	0.0470 ppb	13:24:18
1	Sc 361.383	828827.6	828827.6	101.22 %		13:25:35
1	Y 371.029	700055.9	700055.9	101.22 %		13:25:35
1	Ag 328.068†	206.7	19.1	0.0888 ug/L	0.0888 ppb	13:25:35
1	As 188.979†	-29.4	-2.3	-1.2633 ug/L	-1.2633 ppb	13:25:55
1	B 249.677†	-290.5	250.3	7.0258 ug/L	7.0258 ppb	13:25:55
1	Ba 233.527†	1.9	2.6	0.0237 ug/L	0.0237 ppb	13:25:55
1	Be 313.107†	-3640.9	134.1	0.0571 ug/L	0.0571 ppb	13:25:35
1	Cd 226.502†	-168.1	4.6	0.0690 ug/L	0.0690 ppb	13:25:55
1	Co 228.616†	-49.5	-2.7	-0.0682 ug/L	-0.0682 ppb	13:25:55
1	Cr 267.716†	72.4	0.0	-0.0036 ug/L	-0.0036 ppb	13:25:55
1	Cu 324.752†	5691.7	71.0	0.2304 ug/L	0.2304 ppb	13:25:35
1	Mn 257.610†	475.1	80.3	0.1026 ug/L	0.1026 ppb	13:25:55
1	Mo 202.031†	16.0	7.2	0.6416 ug/L	0.6416 ppb	13:25:55
1	Ni 231.604†	93.4	8.3	0.2620 ug/L	0.2620 ppb	13:25:55
1	P 214.914†	183.1	-6.4	-4.8145 ug/L	-4.8145 ppb	13:25:55
1	Pb 220.353†	-56.0	3.0	0.4595 ug/L	0.4595 ppb	13:25:55
1	S 181.975 Axial†	32.6	2.0	3.5771 ug/L	3.5771 ppb	13:25:55
1	Sb 206.836†	30.2	6.2	2.6171 ug/L	2.6171 ppb	13:25:55
1	Se 196.026†	-6.0	11.1	9.1807 ug/L	9.1807 ppb	13:25:55
1	Si 251.611†	640.7	144.8	5.4888 ug/L	5.4888 ppb	13:25:55
1	Sn 189.927†	10.5	3.2	0.7280 ug/L	0.7280 ppb	13:25:55
1	Ti 334.940†	-1118.9	15.8	0.0248 ug/L	0.0248 ppb	13:25:35
1	Tl 190.801†	-30.5	-1.0	-0.3917 ug/L	-0.3917 ppb	13:25:55
1	U 409.014†	-2040.5	188.3	5.7146 ug/L	5.7146 ppb	13:25:35
1	V 292.402†	-1357.2	-23.4	-0.1643 ug/L	-0.1643 ppb	13:25:35
1	Zn 213.857†	824.2	244.1	2.9585 ug/L	2.9585 ppb	13:25:55
1	SiO2†	614.0	107.2	8.7346 ug/L	8.7346 ppb	13:26:51
2	Sc Radial	4287.6	4287.6	97.6 %		13:25:03
2	Y RADIAL	4853.5	4853.5	102.0 %		13:24:43
2	Al 396.153Radial†	-79.3	-3.2	-3.2285 ug/L	-3.2285 ppb	13:25:03
2	Ca 317.933Radial†	28.5	13.5	25.522 ug/L	25.522 ppb	13:25:03
2	Fe 238.204 Radial†	7.8	-0.5	-5.6203 ug/L	-5.6203 ppb	13:25:03
2	K 766.490 Radial†	2708.7	177.8	33.882 ug/L	33.882 ppb	13:24:43
2	Mg 279.077 IEC†	1.9	0.4	15.487 ug/L	15.487 ppb	13:25:03
2	Na 589.592 Radial†	-956.7	-105.6	-37.211 ug/L	-37.211 ppb	13:24:43
2	Sr 421.552†	37.2	17.3	0.1382 ug/L	0.1382 ppb	13:24:43
2	Sc 361.383	836907.6	836907.6	102.21 %		13:26:00
2	Y 371.029	707095.7	707095.7	102.23 %		13:26:00
2	Ag 328.068†	124.8	-63.0	-0.3304 ug/L	-0.3304 ppb	13:26:00
2	As 188.979†	-22.0	5.3	2.8864 ug/L	2.8864 ppb	13:26:20
2	B 249.677†	-270.3	272.9	7.6575 ug/L	7.6575 ppb	13:26:20
2	Ba 233.527†	16.9	17.3	0.1616 ug/L	0.1616 ppb	13:26:20
2	Be 313.107†	-3628.8	180.7	0.0773 ug/L	0.0773 ppb	13:26:00
2	Cd 226.502†	-169.9	4.4	0.0656 ug/L	0.0656 ppb	13:26:20
2	Co 228.616†	-50.5	-3.2	-0.0794 ug/L	-0.0794 ppb	13:26:20
2	Cr 267.716†	64.1	-8.8	-0.1196 ug/L	-0.1196 ppb	13:26:20
2	Cu 324.752†	5653.3	-20.8	-0.0701 ug/L	-0.0701 ppb	13:26:00
2	Mn 257.610†	476.1	76.8	0.0998 ug/L	0.0998 ppb	13:26:20
2	Mo 202.031†	21.7	12.7	1.1268 ug/L	1.1268 ppb	13:26:20
2	Ni 231.604†	91.6	5.5	0.1758 ug/L	0.1758 ppb	13:26:20

2	P 214.914†	183.5	-7.7	-5.7343 ug/L	-5.7343 ppb	13:26:20
2	Pb 220.353†	-52.7	6.8	1.0466 ug/L	1.0466 ppb	13:26:20
2	S 181.975 Axial†	36.4	5.4	9.6328 ug/L	9.6328 ppb	13:26:20
2	Sb 206.836†	20.4	-3.7	-1.5352 ug/L	-1.5352 ppb	13:26:20
2	Se 196.026†	-17.9	-0.6	-0.4926 ug/L	-0.4926 ppb	13:26:20
2	Si 251.611†	636.7	134.8	5.1028 ug/L	5.1028 ppb	13:26:20
2	Sn 189.927†	9.4	2.0	0.4691 ug/L	0.4691 ppb	13:26:20
2	Ti 334.940†	-1040.5	103.2	0.1808 ug/L	0.1808 ppb	13:26:00
2	Tl 190.801†	-17.0	12.4	4.8149 ug/L	4.8149 ppb	13:26:20
2	U 409.014†	-2187.0	64.5	1.9568 ug/L	1.9568 ppb	13:26:00
2	V 292.402†	-1336.3	10.0	0.1004 ug/L	0.1004 ppb	13:26:00
2	Zn 213.857†	847.0	258.7	3.1339 ug/L	3.1339 ppb	13:26:20
2	SiO2†	672.8	159.0	12.943 ug/L	12.943 ppb	13:26:56
3	Sc Radial	4223.8	4223.8	96.1 %		13:25:29
3	Y RADIAL	4787.5	4787.5	100.6 %		13:25:08
3	Al 396.153Radial†	-68.0	7.3	7.1801 ug/L	7.1801 ppb	13:25:29
3	Ca 317.933Radial†	26.0	11.4	21.587 ug/L	21.587 ppb	13:25:29
3	Fe 238.204 Radial†	10.4	2.3	27.019 ug/L	27.019 ppb	13:25:29
3	K 766.490 Radial†	2761.7	274.9	52.379 ug/L	52.379 ppb	13:25:08
3	Mg 279.077 IEC†	3.9	2.5	103.77 ug/L	103.77 ppb	13:25:29
3	Na 589.592 Radial†	-913.7	-75.6	-26.662 ug/L	-26.662 ppb	13:25:08
3	Sr 421.552†	26.1	6.3	0.0504 ug/L	0.0504 ppb	13:25:08
3	Sc 361.383	826019.3	826019.3	100.88 %		13:26:26
3	Y 371.029	699154.6	699154.6	101.09 %		13:26:26
3	Ag 328.068†	254.0	66.6	0.3502 ug/L	0.3502 ppb	13:26:26
3	As 188.979†	-18.3	8.7	4.7742 ug/L	4.7742 ppb	13:26:46
3	B 249.677†	-276.0	263.7	7.3939 ug/L	7.3939 ppb	13:26:46
3	Ba 233.527†	2.5	3.1	0.0295 ug/L	0.0295 ppb	13:26:46
3	Be 313.107†	-3722.1	41.4	0.0180 ug/L	0.0180 ppb	13:26:26
3	Cd 226.502†	-167.3	4.8	0.0667 ug/L	0.0667 ppb	13:26:46
3	Co 228.616†	-48.2	-1.5	-0.0409 ug/L	-0.0409 ppb	13:26:46
3	Cr 267.716†	91.7	19.4	0.2616 ug/L	0.2616 ppb	13:26:46
3	Cu 324.752†	5709.6	107.9	0.3559 ug/L	0.3559 ppb	13:26:26
3	Mn 257.610†	484.6	91.3	0.1185 ug/L	0.1185 ppb	13:26:46
3	Mo 202.031†	5.8	-2.7	-0.2411 ug/L	-0.2411 ppb	13:26:46
3	Ni 231.604†	81.5	-3.3	-0.1050 ug/L	-0.1050 ppb	13:26:46
3	P 214.914†	185.3	-3.6	-2.7581 ug/L	-2.7581 ppb	13:26:46
3	Pb 220.353†	-51.2	7.5	1.1535 ug/L	1.1535 ppb	13:26:46
3	S 181.975 Axial†	29.6	-0.8	-1.4364 ug/L	-1.4364 ppb	13:26:46
3	Sb 206.836†	21.4	-2.5	-0.9971 ug/L	-0.9971 ppb	13:26:46
3	Se 196.026†	-25.5	-8.3	-6.8747 ug/L	-6.8747 ppb	13:26:46
3	Si 251.611†	640.1	146.4	5.5592 ug/L	5.5592 ppb	13:26:46
3	Sn 189.927†	19.1	11.8	2.6769 ug/L	2.6769 ppb	13:26:46
3	Ti 334.940†	-1044.7	85.7	0.1419 ug/L	0.1419 ppb	13:26:26
3	Tl 190.801†	-23.1	6.2	2.3838 ug/L	2.3838 ppb	13:26:46
3	U 409.014†	-2122.7	99.9	3.0285 ug/L	3.0285 ppb	13:26:26
3	V 292.402†	-1369.3	-39.9	-0.3187 ug/L	-0.3187 ppb	13:26:26
3	Zn 213.857†	853.0	275.4	3.3336 ug/L	3.3336 ppb	13:26:46
3	SiO2†	645.5	140.5	11.476 ug/L	11.476 ppb	13:27:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830584.8	101.44 %	0.690			0.68%
Sc Radial	4241.8	96.5 %	0.91			0.94%
Y 371.029	702102.1	101.51 %	0.629			0.62%
Y RADIAL	4753.0	99.84 %	2.554			2.56%
Ag 328.068†	7.6	0.0362 ug/L	0.34331	0.0362 ppb	0.34331	948.38%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.3	0.2413 ug/L	6.00919	0.2413 ppb	6.00919	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.9	2.1324 ug/L	3.08859	2.1324 ppb	3.08859	144.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	262.3	7.3591 ug/L	0.31728	7.3591 ppb	0.31728	4.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.7	0.0716 ug/L	0.07804	0.0716 ppb	0.07804	108.99%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	118.7	0.0508 ug/L	0.03019	0.0508 ppb	0.03019	59.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	12.0	22.792 ug/L	2.3703	22.792 ppb	2.3703	10.40%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	4.6	0.0671 ug/L	0.00174	0.0671 ppb	0.00174	2.59%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	-2.5	-0.0628 ug/L	0.01978	-0.0628 ppb	0.01978	31.48%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.5	0.0461 ug/L	0.19542	0.0461 ppb	0.19542	423.60%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.7	0.1720 ug/L	0.21892	0.1720 ppb	0.21892	127.26%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.2	2.1660 ug/L	22.01818	2.1660 ppb	22.01818	>999.9%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	174.7	33.287 ug/L	19.3971	33.287 ppb	19.3971	58.27%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	1.3	52.114 ug/L	46.0235	52.114 ppb	46.0235	88.31%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	82.8	0.1069 ug/L	0.01008	0.1069 ppb	0.01008	9.43%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.7	0.5091 ug/L	0.69348	0.5091 ppb	0.69348	136.22%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	-69.8	-24.595 ug/L	13.7661	-24.595 ppb	13.7661	55.97%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	3.5	0.1110 ug/L	0.19193	0.1110 ppb	0.19193	172.99%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-5.9	-4.4357 ug/L	1.52384	-4.4357 ppb	1.52384	34.35%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	5.8	0.8865 ug/L	0.37365	0.8865 ppb	0.37365	42.15%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	2.2	3.9245 ug/L	5.54276	3.9245 ppb	5.54276	141.24%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	-0.0	0.0283 ug/L	2.25812	0.0283 ppb	2.25812	>999.9%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.6045 ug/L	8.08370	0.6045 ppb	8.08370	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	142.0	5.3836 ug/L	0.24572	5.3836 ppb	0.24572	4.56%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	5.7	1.2913 ug/L	1.20690	1.2913 ppb	1.20690	93.46%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	9.8	0.0785 ug/L	0.05168	0.0785 ppb	0.05168	65.82%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	68.2	0.1159 ug/L	0.08122	0.1159 ppb	0.08122	70.10%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	5.9	2.2690 ug/L	2.60522	2.2690 ppb	2.60522	114.82%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	117.6	3.5666 ug/L	1.93587	3.5666 ppb	1.93587	54.28%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-17.8	-0.1275 ug/L	0.21193	-0.1275 ppb	0.21193	166.18%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	259.4	3.1420 ug/L	0.18772	3.1420 ppb	0.18772	5.97%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	135.6	11.051 ug/L	2.1364	11.051 ppb	2.1364	19.33%	
QC value within limits for SiO2 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 14:17:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4286.6	4286.6	97.5 %		14:19:21
1	Y RADIAL	4712.3	4712.3	98.99 %		14:19:01
1	Al 396.153Radial†	4948.0	5151.3	5035.7 ug/L	5035.7 ppb	14:19:01
1	Ca 317.933Radial†	2681.9	2734.1	5173.4 ug/L	5173.4 ppb	14:19:21
1	Fe 238.204 Radial†	445.8	448.7	5213.7 ug/L	5213.7 ppb	14:19:21
1	K 766.490 Radial†	29143.9	27282.4	5191.6 ug/L	5191.6 ppb	14:19:01
1	Mg 279.077 IEC†	128.4	130.2	5369.0 ug/L	5369.0 ppb	14:19:21
1	Na 589.592 Radial†	27278.3	28843.5	10168 ug/L	10168 ppb	14:19:01
1	Sr 421.552†	62479.4	64039.2	513.28 ug/L	513.28 ppb	14:19:01
1	Sc 361.383	831477.9	831477.9	101.55 %		14:20:18
1	Y 371.029	692747.3	692747.3	100.16 %		14:20:18
1	Ag 328.068†	98324.6	96643.2	504.90 ug/L	504.90 ppb	14:20:24
1	As 188.979†	905.4	918.4	508.54 ug/L	508.54 ppb	14:20:44
1	B 249.677†	17422.4	17694.6	494.10 ug/L	494.10 ppb	14:20:24
1	Ba 233.527†	54391.7	53564.7	502.96 ug/L	502.96 ppb	14:20:24
1	Be 313.107†	1194858.5	1180406.6	503.74 ug/L	503.74 ppb	14:20:18
1	Cd 226.502†	35200.5	34835.4	505.33 ug/L	505.33 ppb	14:20:24
1	Co 228.616†	20048.9	19790.0	511.60 ug/L	511.60 ppb	14:20:24
1	Cr 267.716†	37955.7	37306.6	501.34 ug/L	501.34 ppb	14:20:24
1	Cu 324.752†	157713.0	149761.0	494.43 ug/L	494.43 ppb	14:20:24
1	Mn 257.610†	381470.8	375276.7	493.72 ug/L	493.72 ppb	14:20:24
1	Mo 202.031†	5726.4	5630.7	500.99 ug/L	500.99 ppb	14:20:44
1	Ni 231.604†	16346.0	16013.1	508.23 ug/L	508.23 ppb	14:20:24
1	P 214.914†	3603.1	3360.9	2407.2 ug/L	2407.2 ppb	14:20:44
1	Pb 220.353†	3243.2	3252.2	501.06 ug/L	501.06 ppb	14:20:44
1	S 181.975 Axial†	604.1	564.7	1010.0 ug/L	1010.0 ppb	14:20:44
1	Sb 206.836†	1248.8	1206.2	522.61 ug/L	522.61 ppb	14:20:44
1	Se 196.026†	598.5	606.4	523.26 ug/L	523.26 ppb	14:20:44
1	Si 251.611†	68567.2	67035.6	2538.7 ug/L	2538.7 ppb	14:20:24
1	Sn 189.927†	2241.0	2199.7	499.80 ug/L	499.80 ppb	14:20:44
1	Ti 334.940†	287050.0	283803.0	493.40 ug/L	493.40 ppb	14:20:24
1	Tl 190.801†	1277.2	1286.9	501.13 ug/L	501.13 ppb	14:20:44
1	U 409.014†	14715.7	16695.9	504.81 ug/L	504.81 ppb	14:20:24
1	V 292.402†	61985.5	62359.7	504.63 ug/L	504.63 ppb	14:20:24
1	Zn 213.857†	42736.7	41516.3	498.35 ug/L	498.35 ppb	14:20:24
1	SiO2†	68779.3	67233.3	5473.4 ug/L	5473.4 ppb	14:21:51
2	Sc Radial	4298.9	4298.9	97.8 %		14:19:46
2	Y RADIAL	4801.9	4801.9	100.9 %		14:19:26
2	Al 396.153Radial†	5052.3	5243.4	5126.5 ug/L	5126.5 ppb	14:19:26
2	Ca 317.933Radial†	2690.8	2735.3	5175.8 ug/L	5175.8 ppb	14:19:46
2	Fe 238.204 Radial†	448.2	449.8	5226.7 ug/L	5226.7 ppb	14:19:46
2	K 766.490 Radial†	29575.8	27638.4	5259.4 ug/L	5259.4 ppb	14:19:26
2	Mg 279.077 IEC†	124.6	125.8	5189.8 ug/L	5189.8 ppb	14:19:46
2	Na 589.592 Radial†	27711.8	29206.6	10296 ug/L	10296 ppb	14:19:26
2	Sr 421.552†	63721.4	65125.5	521.99 ug/L	521.99 ppb	14:19:26
2	Sc 361.383	838934.0	838934.0	102.46 %		14:20:49
2	Y 371.029	696901.9	696901.9	100.76 %		14:20:49
2	Ag 328.068†	98089.8	95553.4	499.22 ug/L	499.22 ppb	14:20:54
2	As 188.979†	897.0	902.3	499.63 ug/L	499.63 ppb	14:21:15
2	B 249.677†	17432.6	17552.1	490.12 ug/L	490.12 ppb	14:20:54
2	Ba 233.527†	54141.6	52844.5	496.20 ug/L	496.20 ppb	14:20:54
2	Be 313.107†	1207828.3	1182607.7	504.67 ug/L	504.67 ppb	14:20:49
2	Cd 226.502†	34973.2	34305.6	497.64 ug/L	497.64 ppb	14:20:54
2	Co 228.616†	19965.7	19533.3	504.96 ug/L	504.96 ppb	14:20:54
2	Cr 267.716†	37713.6	36738.1	493.71 ug/L	493.71 ppb	14:20:54
2	Cu 324.752†	157185.6	147865.8	488.18 ug/L	488.18 ppb	14:20:54
2	Mn 257.610†	379619.5	370131.0	486.96 ug/L	486.96 ppb	14:20:54
2	Mo 202.031†	5693.9	5548.9	493.72 ug/L	493.72 ppb	14:21:15
2	Ni 231.604†	16251.4	15777.8	500.76 ug/L	500.76 ppb	14:20:54

2	P 214.914†	3594.4	3321.0	2378.6 ug/L	2378.6 ppb	14:21:15
2	Pb 220.353†	3259.7	3239.8	499.16 ug/L	499.16 ppb	14:21:15
2	S 181.975 Axial†	605.2	560.5	1002.5 ug/L	1002.5 ppb	14:21:15
2	Sb 206.836†	1248.3	1194.7	517.64 ug/L	517.64 ppb	14:21:15
2	Se 196.026†	589.8	592.6	511.83 ug/L	511.83 ppb	14:21:15
2	Si 251.611†	68173.9	66051.6	2501.4 ug/L	2501.4 ppb	14:20:54
2	Sn 189.927†	2257.8	2196.6	499.08 ug/L	499.08 ppb	14:21:15
2	Ti 334.940†	285541.1	279817.9	486.49 ug/L	486.49 ppb	14:20:54
2	Tl 190.801†	1275.8	1274.3	496.22 ug/L	496.22 ppb	14:21:15
2	U 409.014†	14699.2	16551.0	500.43 ug/L	500.43 ppb	14:20:54
2	V 292.402†	61693.6	61532.2	497.92 ug/L	497.92 ppb	14:20:54
2	Zn 213.857†	42687.0	41093.7	493.29 ug/L	493.29 ppb	14:20:54
2	SiO2†	69054.8	66900.2	5446.4 ug/L	5446.4 ppb	14:21:56
3	Sc Radial	4285.5	4285.5	97.5 %		14:20:11
3	Y RADIAL	4880.2	4880.2	102.5 %		14:19:51
3	Al 396.153Radial†	5069.9	5277.6	5159.6 ug/L	5159.6 ppb	14:19:51
3	Ca 317.933Radial†	2697.6	2750.8	5205.1 ug/L	5205.1 ppb	14:20:11
3	Fe 238.204 Radial†	454.8	458.0	5322.0 ug/L	5322.0 ppb	14:20:11
3	K 766.490 Radial†	29958.4	28125.4	5352.1 ug/L	5352.1 ppb	14:19:51
3	Mg 279.077 IEC†	131.4	133.2	5495.5 ug/L	5495.5 ppb	14:20:11
3	Na 589.592 Radial†	27959.3	29549.0	10417 ug/L	10417 ppb	14:19:51
3	Sr 421.552†	64362.6	65986.8	528.89 ug/L	528.89 ppb	14:19:51
3	Sc 361.383	825187.1	825187.1	100.78 %		14:21:20
3	Y 371.029	686685.7	686685.7	99.283 %		14:21:20
3	Ag 328.068†	97337.1	96401.4	503.67 ug/L	503.67 ppb	14:21:25
3	As 188.979†	913.9	933.6	516.86 ug/L	516.86 ppb	14:21:45
3	B 249.677†	17209.9	17614.5	491.84 ug/L	491.84 ppb	14:21:25
3	Ba 233.527†	53489.1	53077.4	498.40 ug/L	498.40 ppb	14:21:25
3	Be 313.107†	1185936.7	1180523.9	503.79 ug/L	503.79 ppb	14:21:20
3	Cd 226.502†	34609.4	34513.2	500.64 ug/L	500.64 ppb	14:21:25
3	Co 228.616†	19749.9	19643.9	507.83 ug/L	507.83 ppb	14:21:25
3	Cr 267.716†	37555.4	37194.3	499.84 ug/L	499.84 ppb	14:21:25
3	Cu 324.752†	155986.3	149231.7	492.69 ug/L	492.69 ppb	14:21:25
3	Mn 257.610†	376330.0	373039.4	490.78 ug/L	490.78 ppb	14:21:25
3	Mo 202.031†	5723.8	5671.2	504.59 ug/L	504.59 ppb	14:21:45
3	Ni 231.604†	16186.7	15977.8	507.11 ug/L	507.11 ppb	14:21:25
3	P 214.914†	3581.7	3366.8	2411.9 ug/L	2411.9 ppb	14:21:45
3	Pb 220.353†	3250.7	3283.9	505.96 ug/L	505.96 ppb	14:21:45
3	S 181.975 Axial†	603.6	568.8	1017.3 ug/L	1017.3 ppb	14:21:45
3	Sb 206.836†	1251.1	1217.8	527.67 ug/L	527.67 ppb	14:21:45
3	Se 196.026†	597.0	609.3	526.11 ug/L	526.11 ppb	14:21:45
3	Si 251.611†	67487.4	66478.9	2517.5 ug/L	2517.5 ppb	14:21:25
3	Sn 189.927†	2258.7	2234.1	507.59 ug/L	507.59 ppb	14:21:45
3	Ti 334.940†	283433.1	282369.0	490.90 ug/L	490.90 ppb	14:21:25
3	Tl 190.801†	1286.7	1305.8	508.45 ug/L	508.45 ppb	14:21:45
3	U 409.014†	14522.6	16614.8	502.34 ug/L	502.34 ppb	14:21:25
3	V 292.402†	61245.5	62090.7	502.52 ug/L	502.52 ppb	14:21:25
3	Zn 213.857†	42292.7	41396.5	496.90 ug/L	496.90 ppb	14:21:25
3	SiO2†	68089.2	67064.8	5459.5 ug/L	5459.5 ppb	14:22:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831866.4	101.59 %	0.840			0.83%
Sc Radial	4290.4	97.6 %	0.17			0.17%
Y 371.029	692111.7	100.07 %	0.743			0.74%
Y RADIAL	4798.1	100.8 %	1.76			1.75%
Ag 328.068†	96199.3	502.60 ug/L	2.987	502.60 ppb	2.987	0.59%
QC value within limits for Ag 328.068 Recovery = 100.52%						
Al 396.153Radial†	5224.1	5107.2 ug/L	64.17	5107.2 ppb	64.17	1.26%
QC value within limits for Al 396.153Radial Recovery = 102.14%						
As 188.979†	918.1	508.34 ug/L	8.615	508.34 ppb	8.615	1.69%
QC value within limits for As 188.979 Recovery = 101.67%						
B 249.677†	17620.4	492.02 ug/L	1.996	492.02 ppb	1.996	0.41%
QC value within limits for B 249.677 Recovery = 98.40%						
Ba 233.527†	53162.2	499.19 ug/L	3.449	499.19 ppb	3.449	0.69%
QC value within limits for Ba 233.527 Recovery = 99.84%						
Be 313.107†	1181179.4	504.07 ug/L	0.520	504.07 ppb	0.520	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2740.1	5184.8 ug/L	17.64	5184.8 ppb	17.64	0.34%

QC value within limits for Ca 317.933 Radial Recovery = 103.70%

Cd 226.502†	34551.4	501.20 ug/L	3.878	501.20 ppb	3.878	0.77%
QC value within limits for Cd 226.502 Recovery = 100.24%						
Co 228.616†	19655.7	508.13 ug/L	3.329	508.13 ppb	3.329	0.66%
QC value within limits for Co 228.616 Recovery = 101.63%						
Cr 267.716†	37079.7	498.30 ug/L	4.043	498.30 ppb	4.043	0.81%
QC value within limits for Cr 267.716 Recovery = 99.66%						
Cu 324.752†	148952.8	491.77 ug/L	3.228	491.77 ppb	3.228	0.66%
QC value within limits for Cu 324.752 Recovery = 98.35%						
Fe 238.204 Radial†	452.2	5254.2 ug/L	59.13	5254.2 ppb	59.13	1.13%
QC value within limits for Fe 238.204 Radial Recovery = 105.08%						
K 766.490 Radial†	27682.1	5267.7 ug/L	80.57	5267.7 ppb	80.57	1.53%
QC value within limits for K 766.490 Radial Recovery = 105.35%						
Mg 279.077 IEC†	129.7	5351.4 ug/L	153.62	5351.4 ppb	153.62	2.87%
QC value within limits for Mg 279.077 IEC Recovery = 107.03%						
Mn 257.610†	372815.7	490.48 ug/L	3.388	490.48 ppb	3.388	0.69%
QC value within limits for Mn 257.610 Recovery = 98.10%						
Mo 202.031†	5616.9	499.77 ug/L	5.539	499.77 ppb	5.539	1.11%
QC value within limits for Mo 202.031 Recovery = 99.95%						
Na 589.592 Radial†	29199.7	10294 ug/L	124.4	10294 ppb	124.4	1.21%
QC value within limits for Na 589.592 Radial Recovery = 102.94%						
Ni 231.604†	15922.9	505.36 ug/L	4.029	505.36 ppb	4.029	0.80%
QC value within limits for Ni 231.604 Recovery = 101.07%						
P 214.914†	3349.6	2399.2 ug/L	17.98	2399.2 ppb	17.98	0.75%
QC value within limits for P 214.914 Recovery = 95.97%						
Pb 220.353†	3258.6	502.06 ug/L	3.508	502.06 ppb	3.508	0.70%
QC value within limits for Pb 220.353 Recovery = 100.41%						
S 181.975 Axial†	564.7	1009.9 ug/L	7.41	1009.9 ppb	7.41	0.73%
QC value within limits for S 181.975 Axial Recovery = 100.99%						
Sb 206.836†	1206.2	522.64 ug/L	5.013	522.64 ppb	5.013	0.96%
QC value within limits for Sb 206.836 Recovery = 104.53%						
Se 196.026†	602.8	520.40 ug/L	7.558	520.40 ppb	7.558	1.45%
QC value within limits for Se 196.026 Recovery = 104.08%						
Si 251.611†	66522.0	2519.2 ug/L	18.69	2519.2 ppb	18.69	0.74%
QC value within limits for Si 251.611 Recovery = 100.77%						
Sn 189.927†	2210.1	502.15 ug/L	4.722	502.15 ppb	4.722	0.94%
QC value within limits for Sn 189.927 Recovery = 100.43%						
Sr 421.552†	65050.5	521.39 ug/L	7.823	521.39 ppb	7.823	1.50%
QC value within limits for Sr 421.552 Recovery = 104.28%						
Ti 334.940†	281996.6	490.26 ug/L	3.499	490.26 ppb	3.499	0.71%
QC value within limits for Ti 334.940 Recovery = 98.05%						
Tl 190.801†	1289.0	501.94 ug/L	6.156	501.94 ppb	6.156	1.23%
QC value within limits for Tl 190.801 Recovery = 100.39%						
U 409.014†	16620.6	502.53 ug/L	2.197	502.53 ppb	2.197	0.44%
QC value within limits for U 409.014 Recovery = 100.51%						
V 292.402†	61994.2	501.69 ug/L	3.433	501.69 ppb	3.433	0.68%
QC value within limits for V 292.402 Recovery = 100.34%						
Zn 213.857†	41335.5	496.18 ug/L	2.608	496.18 ppb	2.608	0.53%
QC value within limits for Zn 213.857 Recovery = 99.24%						
SiO2†	67066.1	5459.8 ug/L	13.50	5459.8 ppb	13.50	0.25%
QC value within limits for SiO2 Recovery = 102.10%						

All analyte(s) passed QC.

Sequence No.: 11

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 14:24:11

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4205.6	4205.6	95.7 %		14:26:24
1	Y RADIAL	4674.8	4674.8	98.20 %		14:26:04
1	Al 396.153Radial†	-79.0	-4.5	-4.4237 ug/L	-4.4237 ppb	14:26:24
1	Ca 317.933Radial†	19.5	4.7	8.8716 ug/L	8.8716 ppb	14:26:24
1	Fe 238.204 Radial†	6.8	-1.3	-15.152 ug/L	-15.152 ppb	14:26:24
1	K 766.490 Radial†	2657.1	178.0	33.925 ug/L	33.925 ppb	14:26:04
1	Mg 279.077 IEC†	2.1	0.7	28.443 ug/L	28.443 ppb	14:26:24
1	Na 589.592 Radial†	-889.3	-54.3	-19.138 ug/L	-19.138 ppb	14:26:04
1	Sr 421.552†	24.1	4.3	0.0345 ug/L	0.0345 ppb	14:26:04
1	Sc 361.383	823769.2	823769.2	100.60 %		14:27:21
1	Y 371.029	695270.5	695270.5	100.52 %		14:27:21
1	Ag 328.068†	239.9	53.4	0.2721 ug/L	0.2721 ppb	14:27:21
1	As 188.979†	-22.7	4.3	2.3396 ug/L	2.3396 ppb	14:27:41
1	B 249.677†	-326.0	213.3	5.9855 ug/L	5.9855 ppb	14:27:41
1	Ba 233.527†	2.4	3.1	0.0279 ug/L	0.0279 ppb	14:27:41
1	Be 313.107†	-3704.2	49.1	0.0210 ug/L	0.0210 ppb	14:27:21
1	Cd 226.502†	-181.7	-10.0	-0.1442 ug/L	-0.1442 ppb	14:27:41
1	Co 228.616†	-39.1	7.3	0.1900 ug/L	0.1900 ppb	14:27:41
1	Cr 267.716†	76.1	4.1	0.0536 ug/L	0.0536 ppb	14:27:41
1	Cu 324.752†	5545.9	-39.4	-0.1306 ug/L	-0.1306 ppb	14:27:21
1	Mn 257.610†	381.1	-10.3	-0.0162 ug/L	-0.0162 ppb	14:27:41
1	Mo 202.031†	14.0	5.4	0.4818 ug/L	0.4818 ppb	14:27:41
1	Ni 231.604†	72.9	-11.6	-0.3696 ug/L	-0.3696 ppb	14:27:41
1	P 214.914†	183.4	-5.0	-3.6798 ug/L	-3.6798 ppb	14:27:41
1	Pb 220.353†	-46.8	11.8	1.8119 ug/L	1.8119 ppb	14:27:41
1	S 181.975 Axial†	32.0	1.6	2.8912 ug/L	2.8912 ppb	14:27:41
1	Sb 206.836†	43.9	20.0	8.3742 ug/L	8.3742 ppb	14:27:41
1	Se 196.026†	-22.6	-5.5	-4.6659 ug/L	-4.6659 ppb	14:27:41
1	Si 251.611†	500.4	9.2	0.3440 ug/L	0.3440 ppb	14:27:41
1	Sn 189.927†	7.2	0.0	0.0045 ug/L	0.0045 ppb	14:27:41
1	Ti 334.940†	-1115.0	12.9	0.0215 ug/L	0.0215 ppb	14:27:21
1	Tl 190.801†	-27.7	1.5	0.5959 ug/L	0.5959 ppb	14:27:41
1	U 409.014†	-2231.3	-13.8	-0.4157 ug/L	-0.4157 ppb	14:27:21
1	V 292.402†	-1342.4	-17.0	-0.1266 ug/L	-0.1266 ppb	14:27:21
1	Zn 213.857†	544.5	-28.8	-0.3443 ug/L	-0.3443 ppb	14:27:41
1	SiO2†	528.6	26.1	2.1191 ug/L	2.1191 ppb	14:28:52
2	Sc Radial	4264.1	4264.1	97.0 %		14:26:49
2	Y RADIAL	4759.1	4759.1	99.97 %		14:26:29
2	Al 396.153Radial†	-70.3	5.6	5.5009 ug/L	5.5009 ppb	14:26:49
2	Ca 317.933Radial†	18.4	3.2	6.0968 ug/L	6.0968 ppb	14:26:49
2	Fe 238.204 Radial†	5.2	-3.1	-35.431 ug/L	-35.431 ppb	14:26:49
2	K 766.490 Radial†	2765.0	251.1	47.845 ug/L	47.845 ppb	14:26:29
2	Mg 279.077 IEC†	0.2	-1.3	-52.606 ug/L	-52.606 ppb	14:26:49
2	Na 589.592 Radial†	-846.1	3.0	1.0656 ug/L	1.0656 ppb	14:26:29
2	Sr 421.552†	8.3	-12.3	-0.0986 ug/L	-0.0986 ppb	14:26:29
2	Sc 361.383	820046.7	820046.7	100.15 %		14:27:46
2	Y 371.029	692570.4	692570.4	100.13 %		14:27:46
2	Ag 328.068†	155.7	-29.7	-0.1663 ug/L	-0.1663 ppb	14:27:46
2	As 188.979†	-21.4	5.4	2.9797 ug/L	2.9797 ppb	14:28:06
2	B 249.677†	-341.2	196.7	5.5226 ug/L	5.5226 ppb	14:28:06
2	Ba 233.527†	10.9	11.6	0.1074 ug/L	0.1074 ppb	14:28:06
2	Be 313.107†	-3692.5	44.0	0.0186 ug/L	0.0186 ppb	14:27:46
2	Cd 226.502†	-177.9	-7.0	-0.0978 ug/L	-0.0978 ppb	14:28:06
2	Co 228.616†	-34.2	12.0	0.3131 ug/L	0.3131 ppb	14:28:06
2	Cr 267.716†	63.7	-7.9	-0.1096 ug/L	-0.1096 ppb	14:28:06
2	Cu 324.752†	5570.5	10.2	0.0316 ug/L	0.0316 ppb	14:27:46
2	Mn 257.610†	410.2	20.5	0.0256 ug/L	0.0256 ppb	14:28:06
2	Mo 202.031†	16.5	7.9	0.7010 ug/L	0.7010 ppb	14:28:06
2	Ni 231.604†	72.9	-11.2	-0.3570 ug/L	-0.3570 ppb	14:28:06

2	P 214.914†	186.8	-0.8	-0.5492 ug/L	-0.5492 ppb	14:28:06
2	Pb 220.353†	-58.2	0.2	0.0395 ug/L	0.0395 ppb	14:28:06
2	S 181.975 Axial†	27.1	-3.1	-5.5952 ug/L	-5.5952 ppb	14:28:06
2	Sb 206.836†	28.8	5.1	2.1640 ug/L	2.1640 ppb	14:28:06
2	Se 196.026†	-18.2	-1.2	-1.1286 ug/L	-1.1286 ppb	14:28:06
2	Si 251.611†	504.7	15.7	0.5887 ug/L	0.5887 ppb	14:28:06
2	Sn 189.927†	9.4	2.2	0.4997 ug/L	0.4997 ppb	14:28:06
2	Ti 334.940†	-1163.2	-40.2	-0.0649 ug/L	-0.0649 ppb	14:27:46
2	Tl 190.801†	-24.2	5.0	1.9222 ug/L	1.9222 ppb	14:28:06
2	U 409.014†	-2198.7	8.8	0.2707 ug/L	0.2707 ppb	14:27:46
2	V 292.402†	-1351.3	-31.9	-0.2400 ug/L	-0.2400 ppb	14:27:46
2	Zn 213.857†	568.5	-2.4	-0.0213 ug/L	-0.0213 ppb	14:28:06
2	SiO2†	525.9	25.8	2.0856 ug/L	2.0856 ppb	14:29:12
3	Sc Radial	4260.5	4260.5	96.9 %		14:27:14
3	Y RADIAL	4745.0	4745.0	99.67 %		14:26:54
3	Al 396.153Radial†	-75.0	0.8	0.7173 ug/L	0.7173 ppb	14:27:14
3	Ca 317.933Radial†	17.2	2.0	3.8392 ug/L	3.8392 ppb	14:27:14
3	Fe 238.204 Radial†	9.8	1.6	18.570 ug/L	18.570 ppb	14:27:14
3	K 766.490 Radial†	2583.2	66.1	12.593 ug/L	12.593 ppb	14:26:54
3	Mg 279.077 IEC†	4.2	2.8	116.12 ug/L	116.12 ppb	14:27:14
3	Na 589.592 Radial†	-905.2	-58.7	-20.689 ug/L	-20.689 ppb	14:26:54
3	Sr 421.552†	51.1	31.9	0.2554 ug/L	0.2554 ppb	14:26:54
3	Sc 361.383	830623.4	830623.4	101.44 %		14:28:11
3	Y 371.029	700309.7	700309.7	101.25 %		14:28:11
3	Ag 328.068†	154.3	-33.0	-0.1667 ug/L	-0.1667 ppb	14:28:11
3	As 188.979†	-19.3	7.8	4.2894 ug/L	4.2894 ppb	14:28:31
3	B 249.677†	-338.5	203.7	5.7097 ug/L	5.7097 ppb	14:28:31
3	Ba 233.527†	3.3	4.0	0.0384 ug/L	0.0384 ppb	14:28:31
3	Be 313.107†	-3793.1	-8.2	-0.0031 ug/L	-0.0031 ppb	14:28:11
3	Cd 226.502†	-163.4	9.5	0.1367 ug/L	0.1367 ppb	14:28:31
3	Co 228.616†	-38.1	8.6	0.2236 ug/L	0.2236 ppb	14:28:31
3	Cr 267.716†	71.6	-1.0	-0.0114 ug/L	-0.0114 ppb	14:28:31
3	Cu 324.752†	5605.6	-26.0	-0.0864 ug/L	-0.0864 ppb	14:28:11
3	Mn 257.610†	397.9	3.2	0.0012 ug/L	0.0012 ppb	14:28:31
3	Mo 202.031†	14.3	5.6	0.4998 ug/L	0.4998 ppb	14:28:31
3	Ni 231.604†	66.4	-18.6	-0.5896 ug/L	-0.5896 ppb	14:28:31
3	P 214.914†	183.4	-6.5	-4.8409 ug/L	-4.8409 ppb	14:28:31
3	Pb 220.353†	-56.2	2.9	0.4381 ug/L	0.4381 ppb	14:28:31
3	S 181.975 Axial†	30.1	-0.5	-0.8845 ug/L	-0.8845 ppb	14:28:31
3	Sb 206.836†	25.6	1.6	0.6614 ug/L	0.6614 ppb	14:28:31
3	Se 196.026†	-20.1	-2.8	-2.3008 ug/L	-2.3008 ppb	14:28:31
3	Si 251.611†	507.2	11.8	0.4437 ug/L	0.4437 ppb	14:28:31
3	Sn 189.927†	3.8	-3.4	-0.7653 ug/L	-0.7653 ppb	14:28:31
3	Ti 334.940†	-1039.1	96.9	0.1583 ug/L	0.1583 ppb	14:28:11
3	Tl 190.801†	-26.5	2.9	1.1346 ug/L	1.1346 ppb	14:28:31
3	U 409.014†	-2141.1	93.5	2.8347 ug/L	2.8347 ppb	14:28:11
3	V 292.402†	-1290.2	45.6	0.3759 ug/L	0.3759 ppb	14:28:11
3	Zn 213.857†	545.0	-32.8	-0.3965 ug/L	-0.3965 ppb	14:28:31
3	SiO2†	528.5	21.6	1.7513 ug/L	1.7513 ppb	14:29:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824813.1	100.73 %	0.655			0.65%
Sc Radial	4243.4	96.5 %	0.75			0.77%
Y 371.029	696050.2	100.64 %	0.568			0.56%
Y RADIAL	4726.3	99.28 %	0.949			0.96%
Ag 328.068†	-3.1	-0.0203 ug/L	0.25322	-0.0203 ppb	0.25322	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.6	0.5982 ug/L	4.96338	0.5982 ppb	4.96338	829.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	5.8	3.2029 ug/L	0.99385	3.2029 ppb	0.99385	31.03%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	204.5	5.7393 ug/L	0.23288	5.7393 ppb	0.23288	4.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.2	0.0579 ug/L	0.04318	0.0579 ppb	0.04318	74.57%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	28.3	0.0121 ug/L	0.01325	0.0121 ppb	0.01325	109.09%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	3.3	6.2692 ug/L	2.52066	6.2692 ppb	2.52066	40.21%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-2.5	-0.0351 ug/L	0.15058	-0.0351 ppb	0.15058	429.43%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	9.3	0.2423 ug/L	0.06365	0.2423 ppb	0.06365	26.27%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1.6	-0.0225 ug/L	0.08221	-0.0225 ppb	0.08221	365.69%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-18.4	-0.0618 ug/L	0.08382	-0.0618 ppb	0.08382	135.61%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.9	-10.671 ug/L	27.2781	-10.671 ppb	27.2781	255.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	165.1	31.454 ug/L	17.7553	31.454 ppb	17.7553	56.45%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	30.653 ug/L	84.3857	30.653 ppb	84.3857	275.29%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	4.5	0.0036 ug/L	0.02100	0.0036 ppb	0.02100	589.65%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.3	0.5609 ug/L	0.12168	0.5609 ppb	0.12168	21.69%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-36.7	-12.921 ug/L	12.1373	-12.921 ppb	12.1373	93.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-13.8	-0.4387 ug/L	0.13079	-0.4387 ppb	0.13079	29.81%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-4.1	-3.0233 ug/L	2.21992	-3.0233 ppb	2.21992	73.43%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	4.9	0.7632 ug/L	0.92984	0.7632 ppb	0.92984	121.84%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-0.7	-1.1962 ug/L	4.25178	-1.1962 ppb	4.25178	355.45%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	8.9	3.7332 ug/L	4.08887	3.7332 ppb	4.08887	109.53%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-3.2	-2.6985 ug/L	1.80185	-2.6985 ppb	1.80185	66.77%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	12.3	0.4588 ug/L	0.12302	0.4588 ppb	0.12302	26.81%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.4	-0.0870 ug/L	0.63746	-0.0870 ppb	0.63746	732.63%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	8.0	0.0638 ug/L	0.17881	0.0638 ppb	0.17881	280.39%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	23.2	0.0383 ug/L	0.11258	0.0383 ppb	0.11258	294.02%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	3.1	1.2176 ug/L	0.66700	1.2176 ppb	0.66700	54.78%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	29.5	0.8966 ug/L	1.71320	0.8966 ppb	1.71320	191.08%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-1.1	0.0031 ug/L	0.32780	0.0031 ppb	0.32780	>999.9%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	-21.3	-0.2541 ug/L	0.20321	-0.2541 ppb	0.20321	79.99%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	24.5	1.9853 ug/L	0.20340	1.9853 ppb	0.20340	10.25%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 15:12:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4404.0	4404.0	100 %		15:14:37
1	Y RADIAL	4730.6	4730.6	99.37 %		15:14:37
1	Al 396.153Radial†	5002.3	5070.3	4955.5 ug/L	4955.5 ppb	15:14:37
1	Ca 317.933Radial†	2665.0	2643.9	5002.8 ug/L	5002.8 ppb	15:14:57
1	Fe 238.204 Radial†	445.1	435.7	5064.4 ug/L	5064.4 ppb	15:14:57
1	K 766.490 Radial†	29328.0	26670.1	5075.1 ug/L	5075.1 ppb	15:14:37
1	Mg 279.077 IEC†	128.1	126.4	5212.2 ug/L	5212.2 ppb	15:14:57
1	Na 589.592 Radial†	26896.2	27717.1	9770.9 ug/L	9770.9 ppb	15:14:37
1	Sr 421.552†	62531.5	62384.5	500.02 ug/L	500.02 ppb	15:14:37
1	Sc 361.383	815981.5	815981.5	99.653 %		15:15:54
1	Y 371.029	678972.4	678972.4	98.168 %		15:15:54
1	Ag 328.068†	99323.4	99484.4	519.65 ug/L	519.65 ppb	15:15:59
1	As 188.979†	916.3	946.3	523.88 ug/L	523.88 ppb	15:16:19
1	B 249.677†	17665.7	18264.6	510.08 ug/L	510.08 ppb	15:15:59
1	Ba 233.527†	54677.6	54868.8	515.21 ug/L	515.21 ppb	15:15:59
1	Be 313.107†	1198712.4	1206620.3	514.94 ug/L	514.94 ppb	15:15:54
1	Cd 226.502†	35251.0	35544.4	515.65 ug/L	515.65 ppb	15:15:59
1	Co 228.616†	20174.1	20290.6	524.53 ug/L	524.53 ppb	15:15:59
1	Cr 267.716†	38269.8	38331.7	515.08 ug/L	515.08 ppb	15:15:59
1	Cu 324.752†	159857.8	154862.8	511.26 ug/L	511.26 ppb	15:15:59
1	Mn 257.610†	387826.8	388789.1	511.47 ug/L	511.47 ppb	15:15:54
1	Mo 202.031†	5749.0	5760.5	512.51 ug/L	512.51 ppb	15:16:19
1	Ni 231.604†	16400.6	16373.6	519.67 ug/L	519.67 ppb	15:15:59
1	P 214.914†	3631.4	3456.8	2475.4 ug/L	2475.4 ppb	15:16:19
1	Pb 220.353†	3246.5	3316.2	510.91 ug/L	510.91 ppb	15:16:19
1	S 181.975 Axial†	607.6	579.5	1036.6 ug/L	1036.6 ppb	15:16:19
1	Sb 206.836†	1250.0	1230.7	533.32 ug/L	533.32 ppb	15:16:19
1	Se 196.026†	594.8	613.8	529.04 ug/L	529.04 ppb	15:16:19
1	Si 251.611†	69143.7	68896.5	2609.2 ug/L	2609.2 ppb	15:15:59
1	Sn 189.927†	2261.0	2261.7	513.83 ug/L	513.83 ppb	15:16:19
1	Ti 334.940†	289769.3	291900.3	507.46 ug/L	507.46 ppb	15:15:59
1	Tl 190.801†	1279.6	1313.1	511.41 ug/L	511.41 ppb	15:16:19
1	U 409.014†	14956.9	17213.2	520.49 ug/L	520.49 ppb	15:15:59
1	V 292.402†	62622.7	64158.3	519.19 ug/L	519.19 ppb	15:15:59
1	Zn 213.857†	43109.4	42689.5	512.50 ug/L	512.50 ppb	15:15:59
1	SiO2†	68460.8	68200.0	5552.0 ug/L	5552.0 ppb	15:17:27
2	Sc Radial	4392.0	4392.0	99.9 %		15:15:02
2	Y RADIAL	4731.1	4731.1	99.38 %		15:15:02
2	Al 396.153Radial†	4974.3	5055.8	4942.1 ug/L	4942.1 ppb	15:15:02
2	Ca 317.933Radial†	2657.5	2643.6	5002.3 ug/L	5002.3 ppb	15:15:22
2	Fe 238.204 Radial†	442.7	434.5	5050.3 ug/L	5050.3 ppb	15:15:22
2	K 766.490 Radial†	29402.7	26824.3	5104.5 ug/L	5104.5 ppb	15:15:02
2	Mg 279.077 IEC†	126.8	125.3	5170.3 ug/L	5170.3 ppb	15:15:22
2	Na 589.592 Radial†	26914.6	27808.3	9803.0 ug/L	9803.0 ppb	15:15:02
2	Sr 421.552†	62368.6	62390.9	500.07 ug/L	500.07 ppb	15:15:02
2	Sc 361.383	834394.9	834394.9	101.90 %		15:16:25
2	Y 371.029	694397.6	694397.6	100.40 %		15:16:25
2	Ag 328.068†	99525.8	97483.5	509.22 ug/L	509.22 ppb	15:16:30
2	As 188.979†	888.4	898.6	497.66 ug/L	497.66 ppb	15:16:50
2	B 249.677†	17654.2	17862.1	498.82 ug/L	498.82 ppb	15:16:30
2	Ba 233.527†	54672.4	53652.9	503.79 ug/L	503.79 ppb	15:16:30
2	Be 313.107†	1208362.9	1189545.5	507.64 ug/L	507.64 ppb	15:16:25
2	Cd 226.502†	35289.2	34801.3	504.86 ug/L	504.86 ppb	15:16:30
2	Co 228.616†	20123.5	19794.2	511.69 ug/L	511.69 ppb	15:16:30
2	Cr 267.716†	38179.5	37395.5	502.52 ug/L	502.52 ppb	15:16:30
2	Cu 324.752†	159882.0	151346.5	499.65 ug/L	499.65 ppb	15:16:30
2	Mn 257.610†	391166.3	383477.9	504.49 ug/L	504.49 ppb	15:16:25
2	Mo 202.031†	5685.1	5570.5	495.62 ug/L	495.62 ppb	15:16:50
2	Ni 231.604†	16441.2	16050.3	509.41 ug/L	509.41 ppb	15:16:30

2	P 214.914†	3569.9	3316.0	2372.7 ug/L	2372.7 ppb	15:16:50
2	Pb 220.353†	3236.1	3234.0	498.25 ug/L	498.25 ppb	15:16:50
2	S 181.975 Axial†	595.9	554.6	991.99 ug/L	991.99 ppb	15:16:50
2	Sb 206.836†	1237.5	1190.8	516.03 ug/L	516.03 ppb	15:16:50
2	Se 196.026†	584.8	590.9	509.84 ug/L	509.84 ppb	15:16:50
2	Si 251.611†	69211.5	67431.8	2553.8 ug/L	2553.8 ppb	15:16:30
2	Sn 189.927†	2235.2	2186.3	496.74 ug/L	496.74 ppb	15:16:50
2	Ti 334.940†	289447.9	285167.9	495.76 ug/L	495.76 ppb	15:16:30
2	Tl 190.801†	1270.6	1276.0	496.99 ug/L	496.99 ppb	15:16:50
2	U 409.014†	15111.0	17033.2	515.06 ug/L	515.06 ppb	15:16:30
2	V 292.402†	62576.2	62725.9	507.52 ug/L	507.52 ppb	15:16:30
2	Zn 213.857†	43153.1	41777.8	501.53 ug/L	501.53 ppb	15:16:30
2	SiO2†	68493.7	66716.3	5431.3 ug/L	5431.3 ppb	15:17:32
3	Sc Radial	4459.3	4459.3	101 %		15:15:27
3	Y RADIAL	4814.6	4814.6	101.1 %		15:15:27
3	Al 396.153Radial†	4993.1	4999.3	4886.3 ug/L	4886.3 ppb	15:15:27
3	Ca 317.933Radial†	2664.6	2610.6	4939.8 ug/L	4939.8 ppb	15:15:47
3	Fe 238.204 Radial†	446.8	431.9	5019.7 ug/L	5019.7 ppb	15:15:47
3	K 766.490 Radial†	29415.5	26393.2	5022.4 ug/L	5022.4 ppb	15:15:27
3	Mg 279.077 IEC†	128.2	124.8	5148.6 ug/L	5148.6 ppb	15:15:47
3	Na 589.592 Radial†	27038.4	27524.2	9702.9 ug/L	9702.9 ppb	15:15:27
3	Sr 421.552†	62826.9	61901.4	496.15 ug/L	496.15 ppb	15:15:27
3	Sc 361.383	833630.7	833630.7	101.81 %		15:16:56
3	Y 371.029	692553.2	692553.2	100.13 %		15:16:56
3	Ag 328.068†	97710.7	95790.2	500.40 ug/L	500.40 ppb	15:17:01
3	As 188.979†	899.6	910.4	504.02 ug/L	504.02 ppb	15:17:21
3	B 249.677†	17246.9	17477.9	488.07 ug/L	488.07 ppb	15:17:01
3	Ba 233.527†	53738.1	52784.4	495.64 ug/L	495.64 ppb	15:17:01
3	Be 313.107†	1192189.2	1174746.1	501.32 ug/L	501.32 ppb	15:16:56
3	Cd 226.502†	34796.6	34349.3	498.29 ug/L	498.29 ppb	15:17:01
3	Co 228.616†	19805.2	19499.7	504.11 ug/L	504.11 ppb	15:17:01
3	Cr 267.716†	37606.7	36867.3	495.42 ug/L	495.42 ppb	15:17:01
3	Cu 324.752†	156722.8	148387.3	489.89 ug/L	489.89 ppb	15:17:01
3	Mn 257.610†	387453.6	380183.1	500.16 ug/L	500.16 ppb	15:16:56
3	Mo 202.031†	5766.5	5655.5	503.17 ug/L	503.17 ppb	15:17:21
3	Ni 231.604†	16153.9	15783.0	500.92 ug/L	500.92 ppb	15:17:01
3	P 214.914†	3634.3	3382.5	2424.3 ug/L	2424.3 ppb	15:17:21
3	Pb 220.353†	3285.2	3285.1	506.12 ug/L	506.12 ppb	15:17:21
3	S 181.975 Axial†	600.0	559.2	1000.1 ug/L	1000.1 ppb	15:17:21
3	Sb 206.836†	1263.4	1217.3	527.40 ug/L	527.40 ppb	15:17:21
3	Se 196.026†	606.3	612.5	527.75 ug/L	527.75 ppb	15:17:21
3	Si 251.611†	67911.9	66217.5	2507.6 ug/L	2507.6 ppb	15:17:01
3	Sn 189.927†	2271.2	2223.7	505.20 ug/L	505.20 ppb	15:17:21
3	Ti 334.940†	284631.4	280697.4	487.99 ug/L	487.99 ppb	15:17:01
3	Tl 190.801†	1292.7	1298.8	505.78 ug/L	505.78 ppb	15:17:21
3	U 409.014†	14495.0	16441.7	497.14 ug/L	497.14 ppb	15:17:01
3	V 292.402†	61439.3	61665.5	499.14 ug/L	499.14 ppb	15:17:01
3	Zn 213.857†	42394.5	41071.4	493.05 ug/L	493.05 ppb	15:17:01
3	SiO2†	69769.2	68030.7	5538.4 ug/L	5538.4 ppb	15:17:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828002.3	101.12 %	1.272			1.26%
Sc Radial	4418.4	101 %	0.8			0.81%
Y 371.029	688641.1	99.565 %	1.2179			1.22%
Y RADIAL	4758.8	99.96 %	1.015			1.02%
Ag 328.068†	97586.0	509.75 ug/L	9.638	509.75 ppb	9.638	1.89%
QC value within limits for Ag 328.068 Recovery = 101.95%						
Al 396.153Radial†	5041.8	4928.0 ug/L	36.71	4928.0 ppb	36.71	0.74%
QC value within limits for Al 396.153Radial Recovery = 98.56%						
As 188.979†	918.4	508.52 ug/L	13.678	508.52 ppb	13.678	2.69%
QC value within limits for As 188.979 Recovery = 101.70%						
B 249.677†	17868.2	498.99 ug/L	11.003	498.99 ppb	11.003	2.21%
QC value within limits for B 249.677 Recovery = 99.80%						
Ba 233.527†	53768.7	504.88 ug/L	9.830	504.88 ppb	9.830	1.95%
QC value within limits for Ba 233.527 Recovery = 100.98%						
Be 313.107†	1190304.0	507.97 ug/L	6.814	507.97 ppb	6.814	1.34%
QC value within limits for Be 313.107 Recovery = 101.59%						
Ca 317.933Radial†	2632.7	4981.6 ug/L	36.27	4981.6 ppb	36.27	0.73%

QC value within limits for Ca 317.933 Radial Recovery = 99.63%

Cd 226.502†	34898.3	506.26 ug/L	8.762	506.26 ppb	8.762	1.73%
QC value within limits for Cd 226.502 Recovery = 101.25%						
Co 228.616†	19861.5	513.44 ug/L	10.324	513.44 ppb	10.324	2.01%
QC value within limits for Co 228.616 Recovery = 102.69%						
Cr 267.716†	37531.5	504.34 ug/L	9.957	504.34 ppb	9.957	1.97%
QC value within limits for Cr 267.716 Recovery = 100.87%						
Cu 324.752†	151532.2	500.27 ug/L	10.697	500.27 ppb	10.697	2.14%
QC value within limits for Cu 324.752 Recovery = 100.05%						
Fe 238.204 Radial†	434.1	5044.8 ug/L	22.84	5044.8 ppb	22.84	0.45%
QC value within limits for Fe 238.204 Radial Recovery = 100.90%						
K 766.490 Radial†	26629.2	5067.3 ug/L	41.59	5067.3 ppb	41.59	0.82%
QC value within limits for K 766.490 Radial Recovery = 101.35%						
Mg 279.077 IEC†	125.5	5177.0 ug/L	32.36	5177.0 ppb	32.36	0.63%
QC value within limits for Mg 279.077 IEC Recovery = 103.54%						
Mn 257.610†	384150.0	505.37 ug/L	5.710	505.37 ppb	5.710	1.13%
QC value within limits for Mn 257.610 Recovery = 101.07%						
Mo 202.031†	5662.2	503.77 ug/L	8.461	503.77 ppb	8.461	1.68%
QC value within limits for Mo 202.031 Recovery = 100.75%						
Na 589.592 Radial†	27683.2	9758.9 ug/L	51.14	9758.9 ppb	51.14	0.52%
QC value within limits for Na 589.592 Radial Recovery = 97.59%						
Ni 231.604†	16069.0	510.00 ug/L	9.387	510.00 ppb	9.387	1.84%
QC value within limits for Ni 231.604 Recovery = 102.00%						
P 214.914†	3385.1	2424.1 ug/L	51.37	2424.1 ppb	51.37	2.12%
QC value within limits for P 214.914 Recovery = 96.96%						
Pb 220.353†	3278.4	505.09 ug/L	6.393	505.09 ppb	6.393	1.27%
QC value within limits for Pb 220.353 Recovery = 101.02%						
S 181.975 Axial†	564.4	1009.6 ug/L	23.75	1009.6 ppb	23.75	2.35%
QC value within limits for S 181.975 Axial Recovery = 100.96%						
Sb 206.836†	1212.9	525.58 ug/L	8.789	525.58 ppb	8.789	1.67%
QC value within limits for Sb 206.836 Recovery = 105.12%						
Se 196.026†	605.7	522.21 ug/L	10.735	522.21 ppb	10.735	2.06%
QC value within limits for Se 196.026 Recovery = 104.44%						
Si 251.611†	67515.3	2556.9 ug/L	50.86	2556.9 ppb	50.86	1.99%
QC value within limits for Si 251.611 Recovery = 102.28%						
Sn 189.927†	2223.9	505.26 ug/L	8.547	505.26 ppb	8.547	1.69%
QC value within limits for Sn 189.927 Recovery = 101.05%						
Sr 421.552†	62225.6	498.75 ug/L	2.251	498.75 ppb	2.251	0.45%
QC value within limits for Sr 421.552 Recovery = 99.75%						
Ti 334.940†	285921.8	497.07 ug/L	9.800	497.07 ppb	9.800	1.97%
QC value within limits for Ti 334.940 Recovery = 99.41%						
Tl 190.801†	1296.0	504.73 ug/L	7.266	504.73 ppb	7.266	1.44%
QC value within limits for Tl 190.801 Recovery = 100.95%						
U 409.014†	16896.0	510.90 ug/L	12.223	510.90 ppb	12.223	2.39%
QC value within limits for U 409.014 Recovery = 102.18%						
V 292.402†	62849.9	508.61 ug/L	10.069	508.61 ppb	10.069	1.98%
QC value within limits for V 292.402 Recovery = 101.72%						
Zn 213.857†	41846.3	502.36 ug/L	9.752	502.36 ppb	9.752	1.94%
QC value within limits for Zn 213.857 Recovery = 100.47%						
SiO2†	67649.0	5507.2 ug/L	66.08	5507.2 ppb	66.08	1.20%
QC value within limits for SiO2 Recovery = 102.99%						

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 15:19:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4561.2	4561.2	104 %		15:21:39
1	Y RADIAL	4943.3	4943.3	103.8 %		15:21:39
1	Al 396.153Radial†	-82.3	-1.3	-1.2627 ug/L	-1.2627 ppb	15:21:59
1	Ca 317.933Radial†	20.9	4.4	8.3378 ug/L	8.3378 ppb	15:21:59
1	Fe 238.204 Radial†	7.8	-0.9	-10.521 ug/L	-10.521 ppb	15:21:59
1	K 766.490 Radial†	2758.8	59.5	11.332 ug/L	11.332 ppb	15:21:39
1	Mg 279.077 IEC†	2.6	1.0	39.950 ug/L	39.950 ppb	15:21:59
1	Na 589.592 Radial†	-843.2	62.6	22.070 ug/L	22.070 ppb	15:21:39
1	Sr 421.552†	26.0	4.2	0.0335 ug/L	0.0335 ppb	15:21:39
1	Sc 361.383	812531.2	812531.2	99.231 %		15:22:56
1	Y 371.029	687107.4	687107.4	99.344 %		15:22:56
1	Ag 328.068†	225.0	41.6	0.2104 ug/L	0.2104 ppb	15:22:56
1	As 188.979†	-22.2	4.5	2.4473 ug/L	2.4473 ppb	15:23:16
1	B 249.677†	-303.9	231.1	6.4852 ug/L	6.4852 ppb	15:23:16
1	Ba 233.527†	3.7	4.4	0.0400 ug/L	0.0400 ppb	15:23:16
1	Be 313.107†	-3705.1	-2.7	-0.0013 ug/L	-0.0013 ppb	15:22:56
1	Cd 226.502†	-168.8	0.5	0.0088 ug/L	0.0088 ppb	15:23:16
1	Co 228.616†	-45.5	0.4	0.0116 ug/L	0.0116 ppb	15:23:16
1	Cr 267.716†	74.3	3.4	0.0438 ug/L	0.0438 ppb	15:23:16
1	Cu 324.752†	5446.3	-63.5	-0.2108 ug/L	-0.2108 ppb	15:22:56
1	Mn 257.610†	438.5	52.9	0.0668 ug/L	0.0668 ppb	15:23:16
1	Mo 202.031†	15.7	7.3	0.6438 ug/L	0.6438 ppb	15:23:16
1	Ni 231.604†	66.2	-17.3	-0.5503 ug/L	-0.5503 ppb	15:23:16
1	P 214.914†	186.1	0.3	0.2556 ug/L	0.2556 ppb	15:23:16
1	Pb 220.353†	-59.8	-2.0	-0.3012 ug/L	-0.3012 ppb	15:23:16
1	S 181.975 Axial†	32.2	2.2	4.0167 ug/L	4.0167 ppb	15:23:16
1	Sb 206.836†	42.0	18.7	7.7890 ug/L	7.7890 ppb	15:23:16
1	Se 196.026†	-9.1	7.8	6.4898 ug/L	6.4898 ppb	15:23:16
1	Si 251.611†	517.9	33.8	1.2738 ug/L	1.2738 ppb	15:23:16
1	Sn 189.927†	-0.6	-7.7	-1.7537 ug/L	-1.7537 ppb	15:23:16
1	Ti 334.940†	-1144.0	-31.6	-0.0576 ug/L	-0.0576 ppb	15:22:56
1	Tl 190.801†	-20.8	8.1	3.1394 ug/L	3.1394 ppb	15:23:16
1	U 409.014†	-2158.3	29.2	0.8862 ug/L	0.8862 ppb	15:22:56
1	V 292.402†	-1354.7	-47.7	-0.3679 ug/L	-0.3679 ppb	15:22:56
1	Zn 213.857†	584.1	18.5	0.2295 ug/L	0.2295 ppb	15:23:16
1	SiO2†	515.7	20.4	1.6444 ug/L	1.6444 ppb	15:24:27
2	Sc Radial	4315.7	4315.7	98.2 %		15:22:05
2	Y RADIAL	4683.2	4683.2	98.37 %		15:22:05
2	Al 396.153Radial†	-77.4	-0.7	-0.6792 ug/L	-0.6792 ppb	15:22:25
2	Ca 317.933Radial†	16.9	1.6	2.9400 ug/L	2.9400 ppb	15:22:25
2	Fe 238.204 Radial†	12.0	3.8	43.926 ug/L	43.926 ppb	15:22:25
2	K 766.490 Radial†	2745.9	197.6	37.644 ug/L	37.644 ppb	15:22:05
2	Mg 279.077 IEC†	0.9	-0.6	-24.744 ug/L	-24.744 ppb	15:22:25
2	Na 589.592 Radial†	-812.0	48.1	16.974 ug/L	16.974 ppb	15:22:05
2	Sr 421.552†	39.4	19.4	0.1551 ug/L	0.1551 ppb	15:22:05
2	Sc 361.383	830170.6	830170.6	101.39 %		15:23:22
2	Y 371.029	701100.0	701100.0	101.37 %		15:23:22
2	Ag 328.068†	161.1	-26.3	-0.1273 ug/L	-0.1273 ppb	15:23:22
2	As 188.979†	-26.5	0.7	0.3885 ug/L	0.3885 ppb	15:23:42
2	B 249.677†	-305.1	236.5	6.6262 ug/L	6.6262 ppb	15:23:42
2	Ba 233.527†	0.3	1.0	0.0108 ug/L	0.0108 ppb	15:23:42
2	Be 313.107†	-3685.3	96.1	0.0413 ug/L	0.0413 ppb	15:23:22
2	Cd 226.502†	-165.1	7.8	0.1093 ug/L	0.1093 ppb	15:23:42
2	Co 228.616†	-36.9	9.8	0.2516 ug/L	0.2516 ppb	15:23:42
2	Cr 267.716†	87.9	15.2	0.2059 ug/L	0.2059 ppb	15:23:42
2	Cu 324.752†	5508.2	-119.1	-0.3942 ug/L	-0.3942 ppb	15:23:22
2	Mn 257.610†	409.3	14.6	0.0246 ug/L	0.0246 ppb	15:23:42
2	Mo 202.031†	7.6	-1.1	-0.0920 ug/L	-0.0920 ppb	15:23:42
2	Ni 231.604†	72.4	-12.6	-0.4018 ug/L	-0.4018 ppb	15:23:42

2	P 214.914†	194.2	4.3	3.2216 ug/L	3.2216 ppb	15:23:42
2	Pb 220.353†	-59.1	0.0	-0.0005 ug/L	-0.0005 ppb	15:23:42
2	S 181.975 Axial†	32.1	1.4	2.5716 ug/L	2.5716 ppb	15:23:42
2	Sb 206.836†	28.8	4.7	1.9615 ug/L	1.9615 ppb	15:23:42
2	Se 196.026†	-20.5	-3.3	-2.6269 ug/L	-2.6269 ppb	15:23:42
2	Si 251.611†	502.8	7.7	0.2951 ug/L	0.2951 ppb	15:23:42
2	Sn 189.927†	3.6	-3.6	-0.8238 ug/L	-0.8238 ppb	15:23:42
2	Ti 334.940†	-1041.5	93.9	0.1629 ug/L	0.1629 ppb	15:23:22
2	Tl 190.801†	-31.4	-1.9	-0.7308 ug/L	-0.7308 ppb	15:23:42
2	U 409.014†	-2028.3	203.6	6.1723 ug/L	6.1723 ppb	15:23:22
2	V 292.402†	-1316.9	18.5	0.1514 ug/L	0.1514 ppb	15:23:22
2	Zn 213.857†	587.0	8.9	0.1045 ug/L	0.1045 ppb	15:23:42
2	SiO2†	533.5	26.8	2.1935 ug/L	2.1935 ppb	15:24:47
3	Sc Radial	4508.6	4508.6	103 %		15:22:30
3	Y RADIAL	4909.7	4909.7	103.1 %		15:22:30
3	Al 396.153Radial†	-70.5	9.3	9.1260 ug/L	9.1260 ppb	15:22:50
3	Ca 317.933Radial†	15.7	-0.3	-0.6519 ug/L	-0.6519 ppb	15:22:50
3	Fe 238.204 Radial†	8.7	0.1	0.5782 ug/L	0.5782 ppb	15:22:50
3	K 766.490 Radial†	2587.6	-76.3	-14.548 ug/L	-14.548 ppb	15:22:30
3	Mg 279.077 IEC†	1.4	-0.2	-7.9990 ug/L	-7.9990 ppb	15:22:50
3	Na 589.592 Radial†	-873.2	23.9	8.4342 ug/L	8.4342 ppb	15:22:30
3	Sr 421.552†	25.7	4.2	0.0337 ug/L	0.0337 ppb	15:22:30
3	Sc 361.383	814827.9	814827.9	99.512 %		15:23:47
3	Y 371.029	686828.7	686828.7	99.303 %		15:23:47
3	Ag 328.068†	97.6	-87.1	-0.4563 ug/L	-0.4563 ppb	15:23:47
3	As 188.979†	-25.2	1.5	0.8026 ug/L	0.8026 ppb	15:24:07
3	B 249.677†	-327.7	208.0	5.8359 ug/L	5.8359 ppb	15:24:07
3	Ba 233.527†	-5.0	-4.3	-0.0411 ug/L	-0.0411 ppb	15:24:07
3	Be 313.107†	-3699.6	13.2	0.0055 ug/L	0.0055 ppb	15:23:47
3	Cd 226.502†	-177.6	-7.8	-0.1132 ug/L	-0.1132 ppb	15:24:07
3	Co 228.616†	-50.0	-4.0	-0.1022 ug/L	-0.1022 ppb	15:24:07
3	Cr 267.716†	68.5	-2.6	-0.0370 ug/L	-0.0370 ppb	15:24:07
3	Cu 324.752†	5513.3	-11.7	-0.0402 ug/L	-0.0402 ppb	15:23:47
3	Mn 257.610†	419.8	32.8	0.0435 ug/L	0.0435 ppb	15:24:07
3	Mo 202.031†	17.2	8.8	0.7797 ug/L	0.7797 ppb	15:24:07
3	Ni 231.604†	63.2	-20.6	-0.6526 ug/L	-0.6526 ppb	15:24:07
3	P 214.914†	191.3	4.9	3.6842 ug/L	3.6842 ppb	15:24:07
3	Pb 220.353†	-45.4	12.7	1.9561 ug/L	1.9561 ppb	15:24:07
3	S 181.975 Axial†	30.9	0.9	1.5220 ug/L	1.5220 ppb	15:24:07
3	Sb 206.836†	21.1	-2.5	-1.0139 ug/L	-1.0139 ppb	15:24:07
3	Se 196.026†	-17.9	-1.0	-0.8526 ug/L	-0.8526 ppb	15:24:07
3	Si 251.611†	522.0	36.3	1.3701 ug/L	1.3701 ppb	15:24:07
3	Sn 189.927†	9.5	2.4	0.5431 ug/L	0.5431 ppb	15:24:07
3	Ti 334.940†	-1157.4	-41.8	-0.0736 ug/L	-0.0736 ppb	15:23:47
3	Tl 190.801†	-26.3	2.6	1.0117 ug/L	1.0117 ppb	15:24:07
3	U 409.014†	-2090.9	103.0	3.1251 ug/L	3.1251 ppb	15:23:47
3	V 292.402†	-1369.2	-58.5	-0.4501 ug/L	-0.4501 ppb	15:23:47
3	Zn 213.857†	584.1	16.9	0.2084 ug/L	0.2084 ppb	15:24:07
3	SiO2†	531.2	34.5	2.7955 ug/L	2.7955 ppb	15:25:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819176.6	100.04 %	1.171			1.17%
Sc Radial	4461.8	102 %	2.9			2.90%
Y 371.029	691678.7	100.00 %	1.180			1.18%
Y RADIAL	4845.4	101.8 %	2.97			2.92%
Ag 328.068†	-23.9	-0.1244 ug/L	0.33336	-0.1244 ppb	0.33336	267.92%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	2.5	2.3947 ug/L	5.83674	2.3947 ppb	5.83674	243.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	2.2	1.2128 ug/L	1.08894	1.2128 ppb	1.08894	89.79%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	225.2	6.3158 ug/L	0.42150	6.3158 ppb	0.42150	6.67%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	0.4	0.0032 ug/L	0.04111	0.0032 ppb	0.04111	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	35.5	0.0152 ug/L	0.02288	0.0152 ppb	0.02288	150.99%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.9	3.5420 ug/L	4.52499	3.5420 ppb	4.52499	127.75%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.2	0.0016 ug/L	0.11138	0.0016 ppb	0.11138	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.0	0.0537 ug/L	0.18063	0.0537 ppb	0.18063	336.65%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.3	0.0709 ug/L	0.12370	0.0709 ppb	0.12370	174.51%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-64.8	-0.2151 ug/L	0.17704	-0.2151 ppb	0.17704	82.32%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.0	11.328 ug/L	28.7716	11.328 ppb	28.7716	253.99%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	60.3	11.476 ug/L	26.0963	11.476 ppb	26.0963	227.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.1	2.4023 ug/L	33.57814	2.4023 ppb	33.57814	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	33.4	0.0450 ug/L	0.02116	0.0450 ppb	0.02116	47.05%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.0	0.4438 ug/L	0.46896	0.4438 ppb	0.46896	105.66%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	44.9	15.826 ug/L	6.8900	15.826 ppb	6.8900	43.54%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-16.8	-0.5349 ug/L	0.12613	-0.5349 ppb	0.12613	23.58%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.2	2.3871 ug/L	1.86043	2.3871 ppb	1.86043	77.94%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	3.6	0.5514 ug/L	1.22574	0.5514 ppb	1.22574	222.28%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.5	2.7034 ug/L	1.25258	2.7034 ppb	1.25258	46.33%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	7.0	2.9122 ug/L	4.47781	2.9122 ppb	4.47781	153.76%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.2	1.0034 ug/L	4.83345	1.0034 ppb	4.83345	481.70%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	25.9	0.9797 ug/L	0.59481	0.9797 ppb	0.59481	60.72%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-3.0	-0.6781 ug/L	1.15533	-0.6781 ppb	1.15533	170.37%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	9.2	0.0741 ug/L	0.07015	0.0741 ppb	0.07015	94.68%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.8	0.0106 ug/L	0.13217	0.0106 ppb	0.13217	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.9	1.1401 ug/L	1.93830	1.1401 ppb	1.93830	170.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	111.9	3.3945 ug/L	2.65336	3.3945 ppb	2.65336	78.17%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-29.2	-0.2222 ug/L	0.32618	-0.2222 ppb	0.32618	146.79%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	14.8	0.1808 ug/L	0.06693	0.1808 ppb	0.06693	37.01%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	27.2	2.2111 ug/L	0.57579	2.2111 ppb	0.57579	26.04%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 27

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 16:16:05

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4402.2	4402.2	100 %		16:17:58
1	Y RADIAL	4731.1	4731.1	99.38 %		16:17:58
1	Al 396.153Radial†	5010.2	5080.2	4965.9 ug/L	4965.9 ppb	16:17:58
1	Ca 317.933Radial†	2670.1	2650.1	5014.5 ug/L	5014.5 ppb	16:18:18
1	Fe 238.204 Radial†	441.4	432.2	5023.5 ug/L	5023.5 ppb	16:18:18
1	K 766.490 Radial†	29509.5	26863.0	5111.9 ug/L	5111.9 ppb	16:17:58
1	Mg 279.077 IEC†	125.0	123.3	5085.3 ug/L	5085.3 ppb	16:18:18
1	Na 589.592 Radial†	26730.0	27561.9	9716.2 ug/L	9716.2 ppb	16:17:58
1	Sr 421.552†	62391.5	62269.8	499.10 ug/L	499.10 ppb	16:17:58
1	Sc 361.383	835922.3	835922.3	102.09 %		16:19:15
1	Y 371.029	696126.9	696126.9	100.65 %		16:19:15
1	Ag 328.068†	99594.6	97372.5	508.64 ug/L	508.64 ppb	16:19:20
1	As 188.979†	903.3	911.6	504.79 ug/L	504.79 ppb	16:19:40
1	B 249.677†	17815.0	17988.0	502.36 ug/L	502.36 ppb	16:19:20
1	Ba 233.527†	54809.1	53688.8	504.13 ug/L	504.13 ppb	16:19:20
1	Be 313.107†	1199453.4	1178651.4	503.00 ug/L	503.00 ppb	16:19:15
1	Cd 226.502†	35326.2	34774.3	504.47 ug/L	504.47 ppb	16:19:20
1	Co 228.616†	20209.3	19842.2	512.94 ug/L	512.94 ppb	16:19:20
1	Cr 267.716†	38328.3	37472.9	503.55 ug/L	503.55 ppb	16:19:20
1	Cu 324.752†	160134.4	151307.1	499.52 ug/L	499.52 ppb	16:19:20
1	Mn 257.610†	388179.2	379850.5	499.72 ug/L	499.72 ppb	16:19:15
1	Mo 202.031†	5733.9	5608.1	498.96 ug/L	498.96 ppb	16:19:40
1	Ni 231.604†	16489.1	16067.7	509.96 ug/L	509.96 ppb	16:19:20
1	P 214.914†	3617.5	3356.2	2402.7 ug/L	2402.7 ppb	16:19:40
1	Pb 220.353†	3232.9	3225.1	496.89 ug/L	496.89 ppb	16:19:40
1	S 181.975 Axial†	600.5	558.0	998.05 ug/L	998.05 ppb	16:19:40
1	Sb 206.836†	1231.6	1182.8	512.76 ug/L	512.76 ppb	16:19:40
1	Se 196.026†	598.3	603.0	519.86 ug/L	519.86 ppb	16:19:40
1	Si 251.611†	69465.6	67556.6	2558.5 ug/L	2558.5 ppb	16:19:20
1	Sn 189.927†	2243.4	2190.4	497.66 ug/L	497.66 ppb	16:19:40
1	Ti 334.940†	290256.3	285440.8	496.25 ug/L	496.25 ppb	16:19:20
1	Tl 190.801†	1273.2	1276.3	497.06 ug/L	497.06 ppb	16:19:40
1	U 409.014†	15022.1	16919.0	511.60 ug/L	511.60 ppb	16:19:20
1	V 292.402†	62771.7	62805.3	508.19 ug/L	508.19 ppb	16:19:20
1	Zn 213.857†	43186.0	41732.7	500.99 ug/L	500.99 ppb	16:19:20
1	SiO2†	70045.9	68113.8	5545.3 ug/L	5545.3 ppb	16:20:48
2	Sc Radial	4400.2	4400.2	100 %		16:18:23
2	Y RADIAL	4740.2	4740.2	99.57 %		16:18:23
2	Al 396.153Radial†	4966.4	5038.7	4924.8 ug/L	4924.8 ppb	16:18:23
2	Ca 317.933Radial†	2661.4	2642.6	5000.3 ug/L	5000.3 ppb	16:18:43
2	Fe 238.204 Radial†	440.0	431.1	5010.2 ug/L	5010.2 ppb	16:18:43
2	K 766.490 Radial†	29249.7	26616.9	5065.1 ug/L	5065.1 ppb	16:18:23
2	Mg 279.077 IEC†	125.0	123.3	5087.1 ug/L	5087.1 ppb	16:18:43
2	Na 589.592 Radial†	26393.4	27237.8	9601.9 ug/L	9601.9 ppb	16:18:23
2	Sr 421.552†	61692.4	61599.8	493.73 ug/L	493.73 ppb	16:18:23
2	Sc 361.383	826781.9	826781.9	100.97 %		16:19:46
2	Y 371.029	688677.6	688677.6	99.571 %		16:19:46
2	Ag 328.068†	99730.1	98585.2	514.95 ug/L	514.95 ppb	16:19:51
2	As 188.979†	904.5	922.6	510.83 ug/L	510.83 ppb	16:20:11
2	B 249.677†	17837.7	18203.4	508.39 ug/L	508.39 ppb	16:19:51
2	Ba 233.527†	54922.3	54394.5	510.75 ug/L	510.75 ppb	16:19:51
2	Be 313.107†	1187758.3	1180058.2	503.62 ug/L	503.62 ppb	16:19:46
2	Cd 226.502†	35516.9	35345.8	512.76 ug/L	512.76 ppb	16:19:51
2	Co 228.616†	20183.2	20035.2	517.93 ug/L	517.93 ppb	16:19:51
2	Cr 267.716†	38401.5	37960.4	510.10 ug/L	510.10 ppb	16:19:51
2	Cu 324.752†	159894.7	152803.8	504.46 ug/L	504.46 ppb	16:19:51
2	Mn 257.610†	384237.7	380150.7	500.12 ug/L	500.12 ppb	16:19:46
2	Mo 202.031†	5749.5	5685.7	505.86 ug/L	505.86 ppb	16:20:11
2	Ni 231.604†	16483.3	16240.6	515.44 ug/L	515.44 ppb	16:19:51

2	P 214.914†	3591.6	3369.8	2411.9 ug/L	2411.9 ppb	16:20:11
2	Pb 220.353†	3259.5	3286.4	506.33 ug/L	506.33 ppb	16:20:11
2	S 181.975 Axial†	608.7	572.6	1024.2 ug/L	1024.2 ppb	16:20:11
2	Sb 206.836†	1231.1	1195.6	518.40 ug/L	518.40 ppb	16:20:11
2	Se 196.026†	609.9	621.0	534.85 ug/L	534.85 ppb	16:20:11
2	Si 251.611†	69567.4	68409.8	2590.8 ug/L	2590.8 ppb	16:19:51
2	Sn 189.927†	2257.0	2228.1	506.23 ug/L	506.23 ppb	16:20:11
2	Ti 334.940†	290413.7	288740.0	501.98 ug/L	501.98 ppb	16:19:51
2	Tl 190.801†	1301.1	1317.7	513.10 ug/L	513.10 ppb	16:20:11
2	U 409.014†	14982.4	17042.5	515.33 ug/L	515.33 ppb	16:19:51
2	V 292.402†	62794.7	63507.7	513.90 ug/L	513.90 ppb	16:19:51
2	Zn 213.857†	43252.2	42265.9	507.41 ug/L	507.41 ppb	16:19:51
2	SiO2†	69267.5	68101.6	5544.1 ug/L	5544.1 ppb	16:20:53
3	Sc Radial	4425.7	4425.7	101 %		16:18:48
3	Y RADIAL	4782.7	4782.7	100.5 %		16:18:48
3	Al 396.153Radial†	5033.1	5076.3	4962.1 ug/L	4962.1 ppb	16:18:48
3	Ca 317.933Radial†	2658.8	2624.7	4966.4 ug/L	4966.4 ppb	16:19:08
3	Fe 238.204 Radial†	439.0	427.5	4968.7 ug/L	4968.7 ppb	16:19:08
3	K 766.490 Radial†	29541.6	26738.3	5088.2 ug/L	5088.2 ppb	16:18:48
3	Mg 279.077 IEC†	123.3	120.9	4986.7 ug/L	4986.7 ppb	16:19:08
3	Na 589.592 Radial†	26560.3	27251.5	9606.8 ug/L	9606.8 ppb	16:18:48
3	Sr 421.552†	62301.6	61849.4	495.73 ug/L	495.73 ppb	16:18:48
3	Sc 361.383	831615.2	831615.2	101.56 %		16:20:17
3	Y 371.029	693496.3	693496.3	100.27 %		16:20:17
3	Ag 328.068†	98591.3	96889.8	506.10 ug/L	506.10 ppb	16:20:22
3	As 188.979†	899.5	912.5	505.20 ug/L	505.20 ppb	16:20:42
3	B 249.677†	17618.1	17884.5	499.47 ug/L	499.47 ppb	16:20:22
3	Ba 233.527†	54141.2	53309.2	500.56 ug/L	500.56 ppb	16:20:22
3	Be 313.107†	1195119.8	1180469.7	503.77 ug/L	503.77 ppb	16:20:17
3	Cd 226.502†	34953.8	34586.8	501.75 ug/L	501.75 ppb	16:20:22
3	Co 228.616†	19939.1	19678.7	508.72 ug/L	508.72 ppb	16:20:22
3	Cr 267.716†	37938.4	37283.4	501.00 ug/L	501.00 ppb	16:20:22
3	Cu 324.752†	158213.3	150228.0	495.96 ug/L	495.96 ppb	16:20:22
3	Mn 257.610†	386066.1	379739.2	499.57 ug/L	499.57 ppb	16:20:17
3	Mo 202.031†	5709.6	5613.3	499.41 ug/L	499.41 ppb	16:20:42
3	Ni 231.604†	16250.7	15916.7	505.16 ug/L	505.16 ppb	16:20:22
3	P 214.914†	3588.3	3345.9	2395.8 ug/L	2395.8 ppb	16:20:42
3	Pb 220.353†	3252.5	3260.8	502.39 ug/L	502.39 ppb	16:20:42
3	S 181.975 Axial†	595.0	555.7	993.81 ug/L	993.81 ppb	16:20:42
3	Sb 206.836†	1235.1	1192.4	516.82 ug/L	516.82 ppb	16:20:42
3	Se 196.026†	601.3	609.0	524.74 ug/L	524.74 ppb	16:20:42
3	Si 251.611†	68558.9	67016.2	2538.0 ug/L	2538.0 ppb	16:20:22
3	Sn 189.927†	2236.2	2194.6	498.62 ug/L	498.62 ppb	16:20:42
3	Ti 334.940†	287124.5	283829.7	493.45 ug/L	493.45 ppb	16:20:22
3	Tl 190.801†	1275.0	1284.5	500.25 ug/L	500.25 ppb	16:20:42
3	U 409.014†	14819.1	16795.4	507.86 ug/L	507.86 ppb	16:20:22
3	V 292.402†	62008.3	62372.1	504.74 ug/L	504.74 ppb	16:20:22
3	Zn 213.857†	42612.5	41387.0	496.84 ug/L	496.84 ppb	16:20:22
3	SiO2†	68765.6	67208.7	5471.4 ug/L	5471.4 ppb	16:20:58

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831439.8	101.54 %	0.558			0.55%
Sc Radial	4409.4	100 %	0.3			0.32%
Y 371.029	692766.9	100.16 %	0.546			0.55%
Y RADIAL	4751.3	99.81 %	0.578			0.58%
Ag 328.068†	97615.8	509.90 ug/L	4.555	509.90 ppb	4.555	0.89%
QC value within limits for Ag 328.068 Recovery = 101.98%						
Al 396.153Radial†	5065.1	4951.0 ug/L	22.71	4951.0 ppb	22.71	0.46%
QC value within limits for Al 396.153Radial Recovery = 99.02%						
As 188.979†	915.6	506.94 ug/L	3.380	506.94 ppb	3.380	0.67%
QC value within limits for As 188.979 Recovery = 101.39%						
B 249.677†	18025.3	503.41 ug/L	4.549	503.41 ppb	4.549	0.90%
QC value within limits for B 249.677 Recovery = 100.68%						
Ba 233.527†	53797.5	505.15 ug/L	5.169	505.15 ppb	5.169	1.02%
QC value within limits for Ba 233.527 Recovery = 101.03%						
Be 313.107†	1179726.4	503.46 ug/L	0.406	503.46 ppb	0.406	0.08%
QC value within limits for Be 313.107 Recovery = 100.69%						
Ca 317.933Radial†	2639.1	4993.7 ug/L	24.71	4993.7 ppb	24.71	0.49%

QC value within limits for Ca 317.933 Radial Recovery = 99.87%

Cd 226.502†	34902.3	506.33 ug/L	5.738	506.33 ppb	5.738	1.13%
QC value within limits for Cd 226.502 Recovery = 101.27%						
Co 228.616†	19852.0	513.19 ug/L	4.611	513.19 ppb	4.611	0.90%
QC value within limits for Co 228.616 Recovery = 102.64%						
Cr 267.716†	37572.2	504.88 ug/L	4.690	504.88 ppb	4.690	0.93%
QC value within limits for Cr 267.716 Recovery = 100.98%						
Cu 324.752†	151446.3	499.98 ug/L	4.270	499.98 ppb	4.270	0.85%
QC value within limits for Cu 324.752 Recovery = 100.00%						
Fe 238.204 Radial†	430.3	5000.8 ug/L	28.54	5000.8 ppb	28.54	0.57%
QC value within limits for Fe 238.204 Radial Recovery = 100.02%						
K 766.490 Radial†	26739.4	5088.4 ug/L	23.43	5088.4 ppb	23.43	0.46%
QC value within limits for K 766.490 Radial Recovery = 101.77%						
Mg 279.077 IEC†	122.5	5053.1 ug/L	57.45	5053.1 ppb	57.45	1.14%
QC value within limits for Mg 279.077 IEC Recovery = 101.06%						
Mn 257.610†	379913.5	499.80 ug/L	0.280	499.80 ppb	0.280	0.06%
QC value within limits for Mn 257.610 Recovery = 99.96%						
Mo 202.031†	5635.7	501.41 ug/L	3.857	501.41 ppb	3.857	0.77%
QC value within limits for Mo 202.031 Recovery = 100.28%						
Na 589.592 Radial†	27350.4	9641.6 ug/L	64.60	9641.6 ppb	64.60	0.67%
QC value within limits for Na 589.592 Radial Recovery = 96.42%						
Ni 231.604†	16075.0	510.19 ug/L	5.144	510.19 ppb	5.144	1.01%
QC value within limits for Ni 231.604 Recovery = 102.04%						
P 214.914†	3357.3	2403.5 ug/L	8.11	2403.5 ppb	8.11	0.34%
QC value within limits for P 214.914 Recovery = 96.14%						
Pb 220.353†	3257.4	501.87 ug/L	4.738	501.87 ppb	4.738	0.94%
QC value within limits for Pb 220.353 Recovery = 100.37%						
S 181.975 Axial†	562.1	1005.4 ug/L	16.46	1005.4 ppb	16.46	1.64%
QC value within limits for S 181.975 Axial Recovery = 100.54%						
Sb 206.836†	1190.3	515.99 ug/L	2.908	515.99 ppb	2.908	0.56%
QC value within limits for Sb 206.836 Recovery = 103.20%						
Se 196.026†	611.0	526.48 ug/L	7.645	526.48 ppb	7.645	1.45%
QC value within limits for Se 196.026 Recovery = 105.30%						
Si 251.611†	67660.9	2562.4 ug/L	26.63	2562.4 ppb	26.63	1.04%
QC value within limits for Si 251.611 Recovery = 102.50%						
Sn 189.927†	2204.4	500.83 ug/L	4.695	500.83 ppb	4.695	0.94%
QC value within limits for Sn 189.927 Recovery = 100.17%						
Sr 421.552†	61906.3	496.19 ug/L	2.714	496.19 ppb	2.714	0.55%
QC value within limits for Sr 421.552 Recovery = 99.24%						
Ti 334.940†	286003.5	497.22 ug/L	4.348	497.22 ppb	4.348	0.87%
QC value within limits for Ti 334.940 Recovery = 99.44%						
Tl 190.801†	1292.8	503.47 ug/L	8.490	503.47 ppb	8.490	1.69%
QC value within limits for Tl 190.801 Recovery = 100.69%						
U 409.014†	16919.0	511.60 ug/L	3.735	511.60 ppb	3.735	0.73%
QC value within limits for U 409.014 Recovery = 102.32%						
V 292.402†	62895.0	508.95 ug/L	4.625	508.95 ppb	4.625	0.91%
QC value within limits for V 292.402 Recovery = 101.79%						
Zn 213.857†	41795.2	501.74 ug/L	5.323	501.74 ppb	5.323	1.06%
QC value within limits for Zn 213.857 Recovery = 100.35%						
SiO2†	67808.0	5520.3 ug/L	42.32	5520.3 ppb	42.32	0.77%
QC value within limits for SiO2 Recovery = 103.23%						

All analyte(s) passed QC.

Sequence No.: 28

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 16:23:09

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4402.0	4402.0	100 %		16:25:02
1	Y RADIAL	4757.6	4757.6	99.94 %		16:25:02
1	Al 396.153Radial†	-77.9	0.3	0.3043 ug/L	0.3043 ppb	16:25:22
1	Ca 317.933Radial†	14.3	-1.4	-2.6093 ug/L	-2.6093 ppb	16:25:22
1	Fe 238.204 Radial†	7.9	-0.6	-6.4503 ug/L	-6.4503 ppb	16:25:22
1	K 766.490 Radial†	2716.1	113.1	21.549 ug/L	21.549 ppb	16:25:02
1	Mg 279.077 IEC†	0.0	-1.5	-62.540 ug/L	-62.540 ppb	16:25:22
1	Na 589.592 Radial†	-895.3	-18.8	-6.6244 ug/L	-6.6244 ppb	16:25:02
1	Sr 421.552†	32.7	11.8	0.0947 ug/L	0.0947 ppb	16:25:02
1	Sc 361.383	821746.9	821746.9	100.36 %		16:26:19
1	Y 371.029	694626.5	694626.5	100.43 %		16:26:19
1	Ag 328.068†	108.0	-77.5	-0.4023 ug/L	-0.4023 ppb	16:26:19
1	As 188.979†	-22.1	4.8	2.6249 ug/L	2.6249 ppb	16:26:39
1	B 249.677†	-206.5	331.6	9.3033 ug/L	9.3033 ppb	16:26:39
1	Ba 233.527†	4.3	5.0	0.0466 ug/L	0.0466 ppb	16:26:39
1	Be 313.107†	-3672.1	71.9	0.0306 ug/L	0.0306 ppb	16:26:19
1	Cd 226.502†	-188.8	-17.4	-0.2531 ug/L	-0.2531 ppb	16:26:39
1	Co 228.616†	-41.3	5.0	0.1295 ug/L	0.1295 ppb	16:26:39
1	Cr 267.716†	83.9	12.1	0.1627 ug/L	0.1627 ppb	16:26:39
1	Cu 324.752†	5590.5	18.6	0.0614 ug/L	0.0614 ppb	16:26:19
1	Mn 257.610†	421.8	31.3	0.0411 ug/L	0.0411 ppb	16:26:39
1	Mo 202.031†	13.9	5.3	0.4734 ug/L	0.4734 ppb	16:26:39
1	Ni 231.604†	76.1	-8.2	-0.2605 ug/L	-0.2605 ppb	16:26:39
1	P 214.914†	185.6	-2.4	-1.7755 ug/L	-1.7755 ppb	16:26:39
1	Pb 220.353†	-53.2	5.3	0.8103 ug/L	0.8103 ppb	16:26:39
1	S 181.975 Axial†	26.2	-4.0	-7.2355 ug/L	-7.2355 ppb	16:26:39
1	Sb 206.836†	32.7	8.9	3.7302 ug/L	3.7302 ppb	16:26:39
1	Se 196.026†	-18.7	-1.6	-1.3633 ug/L	-1.3633 ppb	16:26:39
1	Si 251.611†	648.1	157.6	5.9844 ug/L	5.9844 ppb	16:26:39
1	Sn 189.927†	3.4	-3.8	-0.8572 ug/L	-0.8572 ppb	16:26:39
1	Ti 334.940†	-1130.0	-4.8	-0.0084 ug/L	-0.0084 ppb	16:26:19
1	Tl 190.801†	-22.7	6.5	2.5070 ug/L	2.5070 ppb	16:26:39
1	U 409.014†	-2156.6	55.2	1.6755 ug/L	1.6755 ppb	16:26:19
1	V 292.402†	-1339.7	-17.5	-0.1400 ug/L	-0.1400 ppb	16:26:19
1	Zn 213.857†	570.6	-1.5	-0.0186 ug/L	-0.0186 ppb	16:26:39
1	SiO2†	681.3	179.5	14.649 ug/L	14.649 ppb	16:27:50
2	Sc Radial	4432.0	4432.0	101 %		16:25:27
2	Y RADIAL	4821.0	4821.0	101.3 %		16:25:27
2	Al 396.153Radial†	-72.5	6.2	6.0880 ug/L	6.0880 ppb	16:25:47
2	Ca 317.933Radial†	15.4	-0.4	-0.8179 ug/L	-0.8179 ppb	16:25:47
2	Fe 238.204 Radial†	7.2	-1.4	-15.743 ug/L	-15.743 ppb	16:25:47
2	K 766.490 Radial†	2711.7	90.3	17.205 ug/L	17.205 ppb	16:25:27
2	Mg 279.077 IEC†	1.1	-0.5	-19.869 ug/L	-19.869 ppb	16:25:47
2	Na 589.592 Radial†	-904.2	-21.5	-7.5925 ug/L	-7.5925 ppb	16:25:27
2	Sr 421.552†	13.6	-7.3	-0.0586 ug/L	-0.0586 ppb	16:25:27
2	Sc 361.383	822185.5	822185.5	100.41 %		16:26:44
2	Y 371.029	693807.7	693807.7	100.31 %		16:26:44
2	Ag 328.068†	147.6	-38.2	-0.1982 ug/L	-0.1982 ppb	16:26:44
2	As 188.979†	-12.6	14.3	7.8372 ug/L	7.8372 ppb	16:27:04
2	B 249.677†	-195.2	342.9	9.6208 ug/L	9.6208 ppb	16:27:04
2	Ba 233.527†	10.5	11.2	0.1047 ug/L	0.1047 ppb	16:27:04
2	Be 313.107†	-3724.4	21.8	0.0093 ug/L	0.0093 ppb	16:26:44
2	Cd 226.502†	-167.3	4.0	0.0581 ug/L	0.0581 ppb	16:27:04
2	Co 228.616†	-30.2	16.1	0.4160 ug/L	0.4160 ppb	16:27:04
2	Cr 267.716†	68.5	-3.3	-0.0441 ug/L	-0.0441 ppb	16:27:04
2	Cu 324.752†	5462.6	-111.7	-0.3688 ug/L	-0.3688 ppb	16:26:44
2	Mn 257.610†	444.6	53.7	0.0706 ug/L	0.0706 ppb	16:27:04
2	Mo 202.031†	16.6	8.0	0.7089 ug/L	0.7089 ppb	16:27:04
2	Ni 231.604†	69.5	-14.9	-0.4717 ug/L	-0.4717 ppb	16:27:04

2	P 214.914†	186.4	-1.6	-1.2135 ug/L	-1.2135 ppb	16:27:04
2	Pb 220.353†	-53.2	5.3	0.8163 ug/L	0.8163 ppb	16:27:04
2	S 181.975 Axial†	33.2	2.8	5.0836 ug/L	5.0836 ppb	16:27:04
2	Sb 206.836†	27.9	4.1	1.7026 ug/L	1.7026 ppb	16:27:04
2	Se 196.026†	-12.2	4.8	4.0243 ug/L	4.0243 ppb	16:27:04
2	Si 251.611†	658.6	167.7	6.3669 ug/L	6.3669 ppb	16:27:04
2	Sn 189.927†	10.4	3.2	0.7291 ug/L	0.7291 ppb	16:27:04
2	Ti 334.940†	-1124.6	1.2	0.0021 ug/L	0.0021 ppb	16:26:44
2	Tl 190.801†	-32.7	-3.5	-1.3397 ug/L	-1.3397 ppb	16:27:04
2	U 409.014†	-2098.0	114.8	3.4824 ug/L	3.4824 ppb	16:26:44
2	V 292.402†	-1355.0	-32.0	-0.2557 ug/L	-0.2557 ppb	16:26:44
2	Zn 213.857†	580.1	7.6	0.0924 ug/L	0.0924 ppb	16:27:04
2	SiO2†	668.5	166.4	13.583 ug/L	13.583 ppb	16:28:10
3	Sc Radial	4423.7	4423.7	101 %		16:25:52
3	Y RADIAL	4803.4	4803.4	100.9 %		16:25:52
3	Al 396.153Radial†	-83.2	-4.6	-4.5035 ug/L	-4.5035 ppb	16:26:12
3	Ca 317.933Radial†	15.6	-0.2	-0.3575 ug/L	-0.3575 ppb	16:26:12
3	Fe 238.204 Radial†	7.7	-0.8	-8.9431 ug/L	-8.9431 ppb	16:26:12
3	K 766.490 Radial†	2752.6	136.0	25.911 ug/L	25.911 ppb	16:25:52
3	Mg 279.077 IEC†	1.4	-0.2	-6.6434 ug/L	-6.6434 ppb	16:26:12
3	Na 589.592 Radial†	-868.6	12.1	4.2660 ug/L	4.2660 ppb	16:25:52
3	Sr 421.552†	4.3	-16.5	-0.1326 ug/L	-0.1326 ppb	16:25:52
3	Sc 361.383	832106.3	832106.3	101.62 %		16:27:09
3	Y 371.029	702928.2	702928.2	101.63 %		16:27:09
3	Ag 328.068†	198.6	10.3	0.0537 ug/L	0.0537 ppb	16:27:09
3	As 188.979†	-19.5	7.6	4.1733 ug/L	4.1733 ppb	16:27:30
3	B 249.677†	-240.1	301.1	8.4460 ug/L	8.4460 ppb	16:27:30
3	Ba 233.527†	2.5	3.1	0.0294 ug/L	0.0294 ppb	16:27:30
3	Be 313.107†	-3735.5	55.1	0.0235 ug/L	0.0235 ppb	16:27:09
3	Cd 226.502†	-164.7	8.6	0.1248 ug/L	0.1248 ppb	16:27:30
3	Co 228.616†	-43.2	3.7	0.0957 ug/L	0.0957 ppb	16:27:30
3	Cr 267.716†	75.6	2.9	0.0384 ug/L	0.0384 ppb	16:27:30
3	Cu 324.752†	5608.0	-33.5	-0.1108 ug/L	-0.1108 ppb	16:27:09
3	Mn 257.610†	409.7	14.1	0.0186 ug/L	0.0186 ppb	16:27:30
3	Mo 202.031†	7.5	-1.2	-0.1033 ug/L	-0.1033 ppb	16:27:30
3	Ni 231.604†	82.8	-2.6	-0.0827 ug/L	-0.0827 ppb	16:27:30
3	P 214.914†	198.1	7.7	5.7109 ug/L	5.7109 ppb	16:27:30
3	Pb 220.353†	-40.8	18.2	2.7924 ug/L	2.7924 ppb	16:27:30
3	S 181.975 Axial†	33.5	2.8	5.0300 ug/L	5.0300 ppb	16:27:30
3	Sb 206.836†	21.6	-2.4	-1.0212 ug/L	-1.0212 ppb	16:27:30
3	Se 196.026†	-25.7	-8.4	-6.9686 ug/L	-6.9686 ppb	16:27:30
3	Si 251.611†	663.2	164.4	6.2424 ug/L	6.2424 ppb	16:27:30
3	Sn 189.927†	13.4	6.0	1.3681 ug/L	1.3681 ppb	16:27:30
3	Ti 334.940†	-1129.3	9.9	0.0172 ug/L	0.0172 ppb	16:27:09
3	Tl 190.801†	-15.3	14.0	5.4354 ug/L	5.4354 ppb	16:27:30
3	U 409.014†	-2077.7	159.7	4.8441 ug/L	4.8441 ppb	16:27:09
3	V 292.402†	-1357.4	-18.3	-0.1459 ug/L	-0.1459 ppb	16:27:09
3	Zn 213.857†	578.2	-1.1	-0.0131 ug/L	-0.0131 ppb	16:27:30
3	SiO2†	635.6	126.1	10.293 ug/L	10.293 ppb	16:28:30

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825346.3	100.80 %		0.715			0.71%
Sc Radial	4419.2	101 %		0.4			0.35%
Y 371.029	697120.8	100.79 %		0.730			0.72%
Y RADIAL	4794.0	100.7 %		0.69			0.68%
Ag 328.068†	-35.1	-0.1823 ug/L		0.22842	-0.1823 ppb	0.22842	125.31%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.6296 ug/L		5.30325	0.6296 ppb	5.30325	842.29%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	8.9	4.8785 ug/L		2.67674	4.8785 ppb	2.67674	54.87%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	325.2	9.1234 ug/L		0.60771	9.1234 ppb	0.60771	6.66%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.4	0.0602 ug/L		0.03944	0.0602 ppb	0.03944	65.50%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	49.6	0.0211 ug/L		0.01086	0.0211 ppb	0.01086	51.39%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	-0.7	-1.2616 ug/L		1.18962	-1.2616 ppb	1.18962	94.30%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	-1.6 -0.0234 ug/L	0.20174 -0.0234 ppb	0.20174 862.88%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	8.3 0.2137 ug/L	0.17599 0.2137 ppb	0.17599 82.34%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	3.9 0.0523 ug/L	0.10407 0.0523 ppb	0.10407 198.81%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-42.2 -0.1394 ug/L	0.21654 -0.1394 ppb	0.21654 155.34%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.9 -10.379 ug/L	4.8096 -10.379 ppb	4.8096 46.34%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	113.1 21.555 ug/L	4.3531 21.555 ppb	4.3531 20.20%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	-0.7 -29.684 ug/L	29.2124 -29.684 ppb	29.2124 98.41%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	33.0 0.0434 ug/L	0.02609 0.0434 ppb	0.02609 60.09%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	4.0 0.3597 ug/L	0.41791 0.3597 ppb	0.41791 116.19%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-9.4 -3.3170 ug/L	6.58490 -3.3170 ppb	6.58490 198.52%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-8.6 -0.2717 ug/L	0.19475 -0.2717 ppb	0.19475 71.69%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	1.2 0.9073 ug/L	4.16952 0.9073 ppb	4.16952 459.54%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	9.6 1.4730 ug/L	1.14262 1.4730 ppb	1.14262 77.57%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	0.5 0.9594 ug/L	7.09704 0.9594 ppb	7.09704 739.76%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	3.5 1.4705 ug/L	2.38418 1.4705 ppb	2.38418 162.13%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-1.7 -1.4359 ug/L	5.49684 -1.4359 ppb	5.49684 382.82%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	163.3 6.1979 ug/L	0.19510 6.1979 ppb	0.19510 3.15%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	1.8 0.4133 ug/L	1.14577 0.4133 ppb	1.14577 277.20%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-4.0 -0.0322 ug/L	0.11597 -0.0322 ppb	0.11597 360.52%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	2.1 0.0037 ug/L	0.01287 0.0037 ppb	0.01287 351.41%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	5.7 2.2009 ug/L	3.39793 2.2009 ppb	3.39793 154.39%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	109.9 3.3340 ug/L	1.58950 3.3340 ppb	1.58950 47.68%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-22.6 -0.1805 ug/L	0.06515 -0.1805 ppb	0.06515 36.09%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	1.7 0.0202 ug/L	0.06256 0.0202 ppb	0.06256 309.04%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	157.4 12.842 ug/L	2.2707 12.842 ppb	2.2707 17.68%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 35

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/19/2010 17:13:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4409.1	4409.1	100 %		17:15:26
1	Y RADIAL	4770.5	4770.5	100.2 %		17:15:26
1	Al 396.153Radial†	5041.8	5103.8	4989.2 ug/L	4989.2 ppb	17:15:26
1	Ca 317.933Radial†	2707.7	2683.4	5077.5 ug/L	5077.5 ppb	17:15:46
1	Fe 238.204 Radial†	457.3	447.4	5199.1 ug/L	5199.1 ppb	17:15:46
1	K 766.490 Radial†	29717.2	27023.8	5142.3 ug/L	5142.3 ppb	17:15:26
1	Mg 279.077 IEC†	130.1	128.2	5288.4 ug/L	5288.4 ppb	17:15:46
1	Na 589.592 Radial†	28142.3	28927.8	10198 ug/L	10198 ppb	17:15:26
1	Sr 421.552†	63922.3	63697.9	510.55 ug/L	510.55 ppb	17:15:26
1	Sc 361.383	843711.2	843711.2	103.04 %		17:16:44
1	Y 371.029	702661.7	702661.7	101.59 %		17:16:44
1	Ag 328.068†	99412.1	96294.7	503.08 ug/L	503.08 ppb	17:16:49
1	As 188.979†	911.4	911.3	504.62 ug/L	504.62 ppb	17:17:09
1	B 249.677†	17621.4	17639.0	492.55 ug/L	492.55 ppb	17:16:49
1	Ba 233.527†	54798.5	53182.9	499.38 ug/L	499.38 ppb	17:16:49
1	Be 313.107†	1217454.2	1185274.8	505.81 ug/L	505.81 ppb	17:16:44
1	Cd 226.502†	35499.2	34622.7	502.25 ug/L	502.25 ppb	17:16:49
1	Co 228.616†	20188.5	19639.2	507.69 ug/L	507.69 ppb	17:16:49
1	Cr 267.716†	38370.0	37166.7	499.46 ug/L	499.46 ppb	17:16:49
1	Cu 234.752†	159562.0	149303.5	492.92 ug/L	492.92 ppb	17:16:49
1	Mn 257.610†	392941.7	380962.3	501.19 ug/L	501.19 ppb	17:16:44
1	Mo 202.031†	5766.5	5587.9	497.18 ug/L	497.18 ppb	17:17:09
1	Ni 231.604†	16495.4	15924.7	505.42 ug/L	505.42 ppb	17:16:49
1	P 214.914†	3634.7	3340.2	2392.0 ug/L	2392.0 ppb	17:17:09
1	Pb 220.353†	3290.1	3251.4	500.92 ug/L	500.92 ppb	17:17:09
1	S 181.975 Axial†	608.2	560.1	1001.7 ug/L	1001.7 ppb	17:17:09
1	Sb 206.836†	1259.8	1198.9	519.53 ug/L	519.53 ppb	17:17:09
1	Se 196.026†	613.1	611.9	527.84 ug/L	527.84 ppb	17:17:09
1	Si 251.611†	69303.3	66770.9	2528.7 ug/L	2528.7 ppb	17:16:49
1	Sn 189.927†	2276.0	2201.7	500.23 ug/L	500.23 ppb	17:17:09
1	Ti 334.940†	289593.2	282172.4	490.56 ug/L	490.56 ppb	17:16:49
1	Tl 190.801†	1307.5	1298.0	505.48 ug/L	505.48 ppb	17:17:09
1	U 409.014†	14904.2	16668.8	503.99 ug/L	503.99 ppb	17:16:49
1	V 292.402†	62763.7	62229.8	503.54 ug/L	503.54 ppb	17:16:49
1	Zn 213.857†	43263.2	41417.0	497.17 ug/L	497.17 ppb	17:16:49
1	SiO2†	69849.8	67290.1	5478.1 ug/L	5478.1 ppb	17:18:16
2	Sc Radial	4326.0	4326.0	98.4 %		17:15:51
2	Y RADIAL	4647.1	4647.1	97.62 %		17:15:51
2	Al 396.153Radial†	4947.8	5104.9	4989.9 ug/L	4989.9 ppb	17:15:51
2	Ca 317.933Radial†	2694.3	2721.6	5149.9 ug/L	5149.9 ppb	17:16:11
2	Fe 238.204 Radial†	451.1	449.8	5227.6 ug/L	5227.6 ppb	17:16:11
2	K 766.490 Radial†	29435.1	27306.3	5196.1 ug/L	5196.1 ppb	17:15:51
2	Mg 279.077 IEC†	128.3	128.8	5312.3 ug/L	5312.3 ppb	17:16:11
2	Na 589.592 Radial†	27557.4	28872.5	10178 ug/L	10178 ppb	17:15:51
2	Sr 421.552†	62842.9	63825.4	511.57 ug/L	511.57 ppb	17:15:51
2	Sc 361.383	835050.7	835050.7	101.98 %		17:17:15
2	Y 371.029	694943.8	694943.8	100.48 %		17:17:15
2	Ag 328.068†	99343.8	97228.3	507.94 ug/L	507.94 ppb	17:17:20
2	As 188.979†	910.9	920.0	509.39 ug/L	509.39 ppb	17:17:40
2	B 249.677†	17614.7	17809.8	497.33 ug/L	497.33 ppb	17:17:20
2	Ba 233.527†	54530.3	53471.4	502.09 ug/L	502.09 ppb	17:17:20
2	Be 313.107†	1202715.9	1183076.9	504.88 ug/L	504.88 ppb	17:17:15
2	Cd 226.502†	35302.9	34787.6	504.64 ug/L	504.64 ppb	17:17:20
2	Co 228.616†	20128.7	19783.8	511.44 ug/L	511.44 ppb	17:17:20
2	Cr 267.716†	38090.7	37279.0	500.97 ug/L	500.97 ppb	17:17:20
2	Cu 324.752†	159454.9	150804.5	497.87 ug/L	497.87 ppb	17:17:20
2	Mn 257.610†	389286.4	381333.1	501.68 ug/L	501.68 ppb	17:17:15
2	Mo 202.031†	5781.4	5660.5	503.64 ug/L	503.64 ppb	17:17:40
2	Ni 231.604†	16386.2	15983.7	507.29 ug/L	507.29 ppb	17:17:20

2	P 214.914†	3646.8	3388.6	2427.1 ug/L	2427.1 ppb	17:17:40
2	Pb 220.353†	3297.7	3292.0	507.16 ug/L	507.16 ppb	17:17:40
2	S 181.975 Axial†	610.2	568.2	1016.3 ug/L	1016.3 ppb	17:17:40
2	Sb 206.836†	1264.6	1216.3	527.01 ug/L	527.01 ppb	17:17:40
2	Se 196.026†	616.6	621.6	535.96 ug/L	535.96 ppb	17:17:40
2	Si 251.611†	69107.6	67276.6	2547.8 ug/L	2547.8 ppb	17:17:20
2	Sn 189.927†	2277.8	2226.4	505.85 ug/L	505.85 ppb	17:17:40
2	Ti 334.940†	289022.4	284527.6	494.66 ug/L	494.66 ppb	17:17:20
2	Tl 190.801†	1301.7	1305.5	508.39 ug/L	508.39 ppb	17:17:40
2	U 409.014†	15028.9	16941.1	512.25 ug/L	512.25 ppb	17:17:20
2	V 292.402†	62467.0	62570.6	506.36 ug/L	506.36 ppb	17:17:20
2	Zn 213.857†	43096.7	41689.2	500.45 ug/L	500.45 ppb	17:17:20
2	SiO2†	69859.7	68002.9	5536.1 ug/L	5536.1 ppb	17:18:21
3	Sc Radial	4448.9	4448.9	101 %		17:16:16
3	Y RADIAL	4790.1	4790.1	100.6 %		17:16:16
3	Al 396.153Radial†	5049.0	5066.0	4952.1 ug/L	4952.1 ppb	17:16:16
3	Ca 317.933Radial†	2695.2	2646.8	5008.4 ug/L	5008.4 ppb	17:16:36
3	Fe 238.204 Radial†	450.3	436.3	5070.9 ug/L	5070.9 ppb	17:16:36
3	K 766.490 Radial†	29831.9	26872.0	5113.5 ug/L	5113.5 ppb	17:16:16
3	Mg 279.077 IEC†	128.2	125.2	5163.2 ug/L	5163.2 ppb	17:16:36
3	Na 589.592 Radial†	27913.0	28450.2	10029 ug/L	10029 ppb	17:16:16
3	Sr 421.552†	63987.5	63192.0	506.49 ug/L	506.49 ppb	17:16:16
3	Sc 361.383	843734.6	843734.6	103.04 %		17:17:46
3	Y 371.029	702967.9	702967.9	101.64 %		17:17:46
3	Ag 328.068†	99387.3	96267.9	502.90 ug/L	502.90 ppb	17:17:51
3	As 188.979†	907.7	907.7	502.57 ug/L	502.57 ppb	17:18:11
3	B 249.677†	17673.9	17689.5	493.99 ug/L	493.99 ppb	17:17:51
3	Ba 233.527†	54834.3	53216.1	499.69 ug/L	499.69 ppb	17:17:51
3	Be 313.107†	1221640.0	1189304.2	507.52 ug/L	507.52 ppb	17:17:46
3	Cd 226.502†	35570.5	34690.9	503.25 ug/L	503.25 ppb	17:17:51
3	Co 228.616†	20136.2	19587.9	506.37 ug/L	506.37 ppb	17:17:51
3	Cr 267.716†	38361.0	37157.0	499.32 ug/L	499.32 ppb	17:17:51
3	Cu 324.752†	158721.7	148483.7	490.21 ug/L	490.21 ppb	17:17:51
3	Mn 257.610†	393553.5	381545.5	501.95 ug/L	501.95 ppb	17:17:46
3	Mo 202.031†	5766.4	5587.6	497.15 ug/L	497.15 ppb	17:18:11
3	Ni 231.604†	16529.5	15957.4	506.46 ug/L	506.46 ppb	17:17:51
3	P 214.914†	3640.4	3345.6	2396.6 ug/L	2396.6 ppb	17:18:11
3	Pb 220.353†	3286.8	3248.1	500.42 ug/L	500.42 ppb	17:18:11
3	S 181.975 Axial†	608.2	560.0	1001.6 ug/L	1001.6 ppb	17:18:11
3	Sb 206.836†	1264.6	1203.5	521.40 ug/L	521.40 ppb	17:18:11
3	Se 196.026†	605.8	604.9	521.59 ug/L	521.59 ppb	17:18:11
3	Si 251.611†	69096.7	66568.6	2521.0 ug/L	2521.0 ppb	17:17:51
3	Sn 189.927†	2259.5	2185.6	496.58 ug/L	496.58 ppb	17:18:11
3	Ti 334.940†	288901.4	281493.3	489.38 ug/L	489.38 ppb	17:17:51
3	Tl 190.801†	1289.8	1280.8	498.82 ug/L	498.82 ppb	17:18:11
3	U 409.014†	14852.7	16618.4	502.48 ug/L	502.48 ppb	17:17:51
3	V 292.402†	62683.4	62150.3	502.92 ug/L	502.92 ppb	17:17:51
3	Zn 213.857†	43190.9	41345.6	496.32 ug/L	496.32 ppb	17:17:51
3	SiO2†	69346.6	66800.0	5438.1 ug/L	5438.1 ppb	17:18:26

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	840832.2	102.69 %	0.611			0.60%
Sc Radial	4394.7	100.0 %	1.43			1.43%
Y 371.029	700191.2	101.24 %	0.657			0.65%
Y RADIAL	4735.9	99.48 %	1.629			1.64%
Ag 328.068†	96597.0	504.64 ug/L	2.859	504.64 ppb	2.859	0.57%
QC value within limits for Ag 328.068 Recovery = 100.93%						
Al 396.153Radial†	5091.6	4977.1 ug/L	21.66	4977.1 ppb	21.66	0.44%
QC value within limits for Al 396.153Radial Recovery = 99.54%						
As 188.979†	913.0	505.53 ug/L	3.503	505.53 ppb	3.503	0.69%
QC value within limits for As 188.979 Recovery = 101.11%						
B 249.677†	17712.8	494.62 ug/L	2.450	494.62 ppb	2.450	0.50%
QC value within limits for B 249.677 Recovery = 98.92%						
Ba 233.527†	53290.1	500.39 ug/L	1.484	500.39 ppb	1.484	0.30%
QC value within limits for Ba 233.527 Recovery = 100.08%						
Be 313.107†	1185885.3	506.07 ug/L	1.339	506.07 ppb	1.339	0.26%
QC value within limits for Be 313.107 Recovery = 101.21%						
Ca 317.933Radial†	2683.9	5078.6 ug/L	70.78	5078.6 ppb	70.78	1.39%

QC value within limits for Ca 317.933 Radial Recovery = 101.57%

Cd 226.502†	34700.4	503.38 ug/L	1.201	503.38 ppb	1.201	0.24%
QC value within limits for Cd 226.502 Recovery = 100.68%						
Co 228.616†	19670.3	508.50 ug/L	2.628	508.50 ppb	2.628	0.52%
QC value within limits for Co 228.616 Recovery = 101.70%						
Cr 267.716†	37200.9	499.92 ug/L	0.916	499.92 ppb	0.916	0.18%
QC value within limits for Cr 267.716 Recovery = 99.98%						
Cu 324.752†	149530.6	493.67 ug/L	3.887	493.67 ppb	3.887	0.79%
QC value within limits for Cu 324.752 Recovery = 98.73%						
Fe 238.204 Radial†	444.5	5165.9 ug/L	83.47	5165.9 ppb	83.47	1.62%
QC value within limits for Fe 238.204 Radial Recovery = 103.32%						
K 766.490 Radial†	27067.4	5150.6 ug/L	41.94	5150.6 ppb	41.94	0.81%
QC value within limits for K 766.490 Radial Recovery = 103.01%						
Mg 279.077 IEC†	127.4	5254.6 ug/L	80.07	5254.6 ppb	80.07	1.52%
QC value within limits for Mg 279.077 IEC Recovery = 105.09%						
Mn 257.610†	381280.3	501.61 ug/L	0.385	501.61 ppb	0.385	0.08%
QC value within limits for Mn 257.610 Recovery = 100.32%						
Mo 202.031†	5612.0	499.32 ug/L	3.738	499.32 ppb	3.738	0.75%
QC value within limits for Mo 202.031 Recovery = 99.86%						
Na 589.592 Radial†	28750.2	10135 ug/L	92.1	10135 ppb	92.1	0.91%
QC value within limits for Na 589.592 Radial Recovery = 101.35%						
Ni 231.604†	15955.3	506.39 ug/L	0.937	506.39 ppb	0.937	0.18%
QC value within limits for Ni 231.604 Recovery = 101.28%						
P 214.914†	3358.1	2405.2 ug/L	19.09	2405.2 ppb	19.09	0.79%
QC value within limits for P 214.914 Recovery = 96.21%						
Pb 220.353†	3263.8	502.83 ug/L	3.756	502.83 ppb	3.756	0.75%
QC value within limits for Pb 220.353 Recovery = 100.57%						
S 181.975 Axial†	562.8	1006.5 ug/L	8.42	1006.5 ppb	8.42	0.84%
QC value within limits for S 181.975 Axial Recovery = 100.65%						
Sb 206.836†	1206.3	522.65 ug/L	3.892	522.65 ppb	3.892	0.74%
QC value within limits for Sb 206.836 Recovery = 104.53%						
Se 196.026†	612.8	528.47 ug/L	7.204	528.47 ppb	7.204	1.36%
QC value within limits for Se 196.026 Recovery = 105.69%						
Si 251.611†	66872.1	2532.5 ug/L	13.80	2532.5 ppb	13.80	0.54%
QC value within limits for Si 251.611 Recovery = 101.30%						
Sn 189.927†	2204.6	500.89 ug/L	4.668	500.89 ppb	4.668	0.93%
QC value within limits for Sn 189.927 Recovery = 100.18%						
Sr 421.552†	63571.8	509.54 ug/L	2.685	509.54 ppb	2.685	0.53%
QC value within limits for Sr 421.552 Recovery = 101.91%						
Ti 334.940†	282731.1	491.53 ug/L	2.771	491.53 ppb	2.771	0.56%
QC value within limits for Ti 334.940 Recovery = 98.31%						
Tl 190.801†	1294.8	504.23 ug/L	4.907	504.23 ppb	4.907	0.97%
QC value within limits for Tl 190.801 Recovery = 100.85%						
U 409.014†	16742.7	506.24 ug/L	5.258	506.24 ppb	5.258	1.04%
QC value within limits for U 409.014 Recovery = 101.25%						
V 292.402†	62316.9	504.28 ug/L	1.834	504.28 ppb	1.834	0.36%
QC value within limits for V 292.402 Recovery = 100.86%						
Zn 213.857†	41483.9	497.98 ug/L	2.178	497.98 ppb	2.178	0.44%
QC value within limits for Zn 213.857 Recovery = 99.60%						
SiO2†	67364.3	5484.1 ug/L	49.27	5484.1 ppb	49.27	0.90%
QC value within limits for SiO2 Recovery = 102.56%						

All analyte(s) passed QC.

Sequence No.: 36

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/19/2010 17:20:36

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4503.5	4503.5	102 %			17:22:28
1	Y RADIAL	4860.9	4860.9	102.1 %			17:22:28
1	Al 396.153Radial†	-77.0	2.9	2.8653 ug/L		2.8653 ppb	17:22:48
1	Ca 317.933Radial†	16.1	-0.0	-0.0436 ug/L		-0.0436 ppb	17:22:48
1	Fe 238.204 Radial†	7.7	-0.9	-10.748 ug/L		-10.748 ppb	17:22:48
1	K 766.490 Radial†	2619.4	-42.5	-8.0961 ug/L		-8.0961 ppb	17:22:28
1	Mg 279.077 IEC†	1.6	0.0	0.5237 ug/L		0.5237 ppb	17:22:48
1	Na 589.592 Radial†	-840.9	54.5	19.207 ug/L		19.207 ppb	17:22:28
1	Sr 421.552†	33.6	11.9	0.0957 ug/L		0.0957 ppb	17:22:28
1	Sc 361.383	833138.7	833138.7	101.75 %			17:23:45
1	Y 371.029	704182.7	704182.7	101.81 %			17:23:45
1	Ag 328.068†	257.2	67.7	0.3464 ug/L		0.3464 ppb	17:23:45
1	As 188.979†	-22.3	4.9	2.6933 ug/L		2.6933 ppb	17:24:05
1	B 249.677†	-336.1	207.0	5.8092 ug/L		5.8092 ppb	17:24:05
1	Ba 233.527†	6.3	6.9	0.0642 ug/L		0.0642 ppb	17:24:05
1	Be 313.107†	-3663.1	130.9	0.0554 ug/L		0.0554 ppb	17:23:45
1	Cd 226.502†	-173.4	0.2	0.0042 ug/L		0.0042 ppb	17:24:05
1	Co 228.616†	-45.9	1.1	0.0290 ug/L		0.0290 ppb	17:24:05
1	Cr 267.716†	85.5	12.5	0.1653 ug/L		0.1653 ppb	17:24:05
1	Cu 324.752†	5577.8	-70.0	-0.2330 ug/L		-0.2330 ppb	17:23:45
1	Mn 257.610†	420.8	24.5	0.0312 ug/L		0.0312 ppb	17:24:05
1	Mo 202.031†	8.2	-0.5	-0.0422 ug/L		-0.0422 ppb	17:24:05
1	Ni 231.604†	61.4	-23.7	-0.7541 ug/L		-0.7541 ppb	17:24:05
1	P 214.914†	201.3	10.6	7.9331 ug/L		7.9331 ppb	17:24:05
1	Pb 220.353†	-74.3	-14.7	-2.2625 ug/L		-2.2625 ppb	17:24:05
1	S 181.975 Axial†	30.0	-0.7	-1.2452 ug/L		-1.2452 ppb	17:24:05
1	Sb 206.836†	30.0	5.9	2.4707 ug/L		2.4707 ppb	17:24:05
1	Se 196.026†	-20.2	-2.9	-2.4540 ug/L		-2.4540 ppb	17:24:05
1	Si 251.611†	552.3	54.6	2.0738 ug/L		2.0738 ppb	17:24:05
1	Sn 189.927†	14.2	6.8	1.5484 ug/L		1.5484 ppb	17:24:05
1	Ti 334.940†	-1220.1	-77.9	-0.1366 ug/L		-0.1366 ppb	17:23:45
1	Tl 190.801†	-24.1	5.4	2.0705 ug/L		2.0705 ppb	17:24:05
1	U 409.014†	-2163.4	78.0	2.3668 ug/L		2.3668 ppb	17:23:45
1	V 292.402†	-1329.7	10.5	0.0897 ug/L		0.0897 ppb	17:23:45
1	Zn 213.857†	590.1	9.9	0.1270 ug/L		0.1270 ppb	17:24:05
1	SiO2†	550.0	41.2	3.3657 ug/L		3.3657 ppb	17:25:01
2	Sc Radial	4482.3	4482.3	102 %			17:22:54
2	Y RADIAL	4855.5	4855.5	102.0 %			17:22:54
2	Al 396.153Radial†	-74.4	5.1	5.0272 ug/L		5.0272 ppb	17:23:14
2	Ca 317.933Radial†	16.1	0.1	0.2028 ug/L		0.2028 ppb	17:23:14
2	Fe 238.204 Radial†	9.3	0.7	8.0057 ug/L		8.0057 ppb	17:23:14
2	K 766.490 Radial†	2773.7	120.9	23.036 ug/L		23.036 ppb	17:22:54
2	Mg 279.077 IEC†	0.9	-0.6	-24.638 ug/L		-24.638 ppb	17:23:14
2	Na 589.592 Radial†	-889.8	2.7	0.9423 ug/L		0.9423 ppb	17:22:54
2	Sr 421.552†	20.7	-0.5	-0.0041 ug/L		-0.0041 ppb	17:22:54
2	Sc 361.383	833212.5	833212.5	101.76 %			17:24:11
2	Y 371.029	702995.6	702995.6	101.64 %			17:24:11
2	Ag 328.068†	186.5	-1.9	-0.0120 ug/L		-0.0120 ppb	17:24:11
2	As 188.979†	-14.0	13.0	7.1584 ug/L		7.1584 ppb	17:24:31
2	B 249.677†	-345.9	197.4	5.5391 ug/L		5.5391 ppb	17:24:31
2	Ba 233.527†	0.2	0.9	0.0084 ug/L		0.0084 ppb	17:24:31
2	Be 313.107†	-3698.2	96.7	0.0416 ug/L		0.0416 ppb	17:24:11
2	Cd 226.502†	-180.9	-7.1	-0.1037 ug/L		-0.1037 ppb	17:24:31
2	Co 228.616†	-65.5	-18.1	-0.4689 ug/L		-0.4689 ppb	17:24:31
2	Cr 267.716†	71.4	-1.3	-0.0191 ug/L		-0.0191 ppb	17:24:31
2	Cu 324.752†	5671.8	21.9	0.0697 ug/L		0.0697 ppb	17:24:11
2	Mn 257.610†	428.6	32.1	0.0440 ug/L		0.0440 ppb	17:24:31
2	Mo 202.031†	9.2	0.5	0.0466 ug/L		0.0466 ppb	17:24:31
2	Ni 231.604†	75.0	-10.3	-0.3279 ug/L		-0.3279 ppb	17:24:31

2	P 214.914†	199.9	9.2	6.7923 ug/L	6.7923 ppb	17:24:31
2	Pb 220.353†	-54.8	4.5	0.6839 ug/L	0.6839 ppb	17:24:31
2	S 181.975 Axial†	29.8	-0.9	-1.5486 ug/L	-1.5486 ppb	17:24:31
2	Sb 206.836†	27.5	3.3	1.3643 ug/L	1.3643 ppb	17:24:31
2	Se 196.026†	-14.4	2.8	2.3984 ug/L	2.3984 ppb	17:24:31
2	Si 251.611†	547.4	49.7	1.8880 ug/L	1.8880 ppb	17:24:31
2	Sn 189.927†	-0.4	-7.6	-1.7168 ug/L	-1.7168 ppb	17:24:31
2	Ti 334.940†	-1014.8	123.9	0.2153 ug/L	0.2153 ppb	17:24:11
2	Tl 190.801†	-26.1	3.4	1.3359 ug/L	1.3359 ppb	17:24:31
2	U 409.014†	-2067.8	172.1	5.2216 ug/L	5.2216 ppb	17:24:11
2	V 292.402†	-1356.2	-15.4	-0.1141 ug/L	-0.1141 ppb	17:24:11
2	Zn 213.857†	595.4	15.1	0.1833 ug/L	0.1833 ppb	17:24:31
2	SiO2†	589.4	79.9	6.5188 ug/L	6.5188 ppb	17:25:06
3	Sc Radial	4421.7	4421.7	101 %		17:23:19
3	Y RADIAL	4838.4	4838.4	101.6 %		17:23:19
3	Al 396.153Radial†	-74.4	4.1	4.0218 ug/L	4.0218 ppb	17:23:39
3	Ca 317.933Radial†	17.7	1.9	3.5393 ug/L	3.5393 ppb	17:23:39
3	Fe 238.204 Radial†	10.2	1.7	19.134 ug/L	19.134 ppb	17:23:39
3	K 766.490 Radial†	2675.4	60.6	11.543 ug/L	11.543 ppb	17:23:19
3	Mg 279.077 IEC†	4.5	3.0	122.85 ug/L	122.85 ppb	17:23:39
3	Na 589.592 Radial†	-882.3	-1.9	-0.6664 ug/L	-0.6664 ppb	17:23:19
3	Sr 421.552†	15.0	-5.9	-0.0470 ug/L	-0.0470 ppb	17:23:19
3	Sc 361.383	833605.8	833605.8	101.81 %		17:24:36
3	Y 371.029	704512.9	704512.9	101.86 %		17:24:36
3	Ag 328.068†	126.0	-61.4	-0.3157 ug/L	-0.3157 ppb	17:24:36
3	As 188.979†	-18.2	8.9	4.8742 ug/L	4.8742 ppb	17:24:56
3	B 249.677†	-337.3	206.0	5.7763 ug/L	5.7763 ppb	17:24:56
3	Ba 233.527†	12.9	13.4	0.1264 ug/L	0.1264 ppb	17:24:56
3	Be 313.107†	-3697.8	98.8	0.0424 ug/L	0.0424 ppb	17:24:36
3	Cd 226.502†	-170.8	2.9	0.0409 ug/L	0.0409 ppb	17:24:56
3	Co 228.616†	-53.8	-6.6	-0.1700 ug/L	-0.1700 ppb	17:24:56
3	Cr 267.716†	67.3	-5.4	-0.0715 ug/L	-0.0715 ppb	17:24:56
3	Cu 324.752†	5634.2	-17.7	-0.0600 ug/L	-0.0600 ppb	17:24:36
3	Mn 257.610†	419.3	22.8	0.0268 ug/L	0.0268 ppb	17:24:56
3	Mo 202.031†	17.9	9.0	0.8031 ug/L	0.8031 ppb	17:24:56
3	Ni 231.604†	87.6	2.0	0.0632 ug/L	0.0632 ppb	17:24:56
3	P 214.914†	187.1	-3.5	-2.5974 ug/L	-2.5974 ppb	17:24:56
3	Pb 220.353†	-45.6	13.5	2.0789 ug/L	2.0789 ppb	17:24:56
3	S 181.975 Axial†	26.1	-4.6	-8.1918 ug/L	-8.1918 ppb	17:24:56
3	Sb 206.836†	33.3	9.0	3.7885 ug/L	3.7885 ppb	17:24:56
3	Se 196.026†	-12.9	4.3	3.6286 ug/L	3.6286 ppb	17:24:56
3	Si 251.611†	553.4	55.4	2.0934 ug/L	2.0934 ppb	17:24:56
3	Sn 189.927†	7.7	0.4	0.0839 ug/L	0.0839 ppb	17:24:56
3	Ti 334.940†	-1054.1	85.8	0.1378 ug/L	0.1378 ppb	17:24:36
3	Tl 190.801†	-24.7	4.8	1.8557 ug/L	1.8557 ppb	17:24:56
3	U 409.014†	-2093.5	147.8	4.4815 ug/L	4.4815 ppb	17:24:36
3	V 292.402†	-1314.7	26.0	0.2271 ug/L	0.2271 ppb	17:24:36
3	Zn 213.857†	593.1	12.5	0.1478 ug/L	0.1478 ppb	17:24:56
3	SiO2†	584.2	74.5	6.0608 ug/L	6.0608 ppb	17:25:11

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833319.0	101.77 %	0.031			0.03%
Sc Radial	4469.2	102 %	1.0			0.95%
Y 371.029	703897.1	101.77 %	0.115			0.11%
Y RADIAL	4851.6	101.9 %	0.25			0.24%
Ag 328.068†	1.5	0.0062 ug/L	0.33143	0.0062 ppb	0.33143	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	4.1	3.9714 ug/L	1.08184	3.9714 ppb	1.08184	27.24%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	8.9	4.9086 ug/L	2.23275	4.9086 ppb	2.23275	45.49%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	203.5	5.7082 ug/L	0.14736	5.7082 ppb	0.14736	2.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.0	0.0663 ug/L	0.05901	0.0663 ppb	0.05901	88.98%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	108.8	0.0465 ug/L	0.00774	0.0465 ppb	0.00774	16.65%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	0.7	1.2328 ug/L	2.00123	1.2328 ppb	2.00123	162.33%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-1.3	-0.0196 ug/L	0.07515	-0.0196 ppb	0.07515 384.30%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	-7.9	-0.2033 ug/L	0.25059	-0.2033 ppb	0.25059 123.26%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	1.9	0.0249 ug/L	0.12441	0.0249 ppb	0.12441 499.39%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-22.0	-0.0744 ug/L	0.15185	-0.0744 ppb	0.15185 204.00%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	0.5	5.4640 ug/L	15.10249	5.4640 ppb	15.10249 276.40%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	46.3	8.8276 ug/L	15.74271	8.8276 ppb	15.74271 178.34%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.8	32.912 ug/L	78.8985	32.912 ppb	78.8985 239.72%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	26.5	0.0340 ug/L	0.00893	0.0340 ppb	0.00893 26.26%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	3.0	0.2692 ug/L	0.46452	0.2692 ppb	0.46452 172.55%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	18.4	6.4943 ug/L	11.03877	6.4943 ppb	11.03877 169.98%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-10.7	-0.3396 ug/L	0.40877	-0.3396 ppb	0.40877 120.38%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	5.4	4.0427 ug/L	5.77866	4.0427 ppb	5.77866 142.94%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	1.1	0.1667 ug/L	2.21641	0.1667 ppb	2.21641 >999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-2.0	-3.6619 ug/L	3.92597	-3.6619 ppb	3.92597 107.21%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	6.1	2.5412 ug/L	1.21364	2.5412 ppb	1.21364 47.76%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	1.4	1.1910 ug/L	3.21606	1.1910 ppb	3.21606 270.03%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	53.3	2.0184 ug/L	0.11336	2.0184 ppb	0.11336 5.62%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.1	-0.0282 ug/L	1.63546	-0.0282 ppb	1.63546 >999.9%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	1.9	0.0149 ug/L	0.07320	0.0149 ppb	0.07320 492.72%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	44.0	0.0721 ug/L	0.18487	0.0721 ppb	0.18487 256.24%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	4.5	1.7540 ug/L	0.37771	1.7540 ppb	0.37771 21.53%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	132.6	4.0233 ug/L	1.48156	4.0233 ppb	1.48156 36.82%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	7.1	0.0676 ug/L	0.17167	0.0676 ppb	0.17167 254.14%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	12.5	0.1527 ug/L	0.02849	0.1527 ppb	0.02849 18.66%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	65.2	5.3151 ug/L	1.70367	5.3151 ppb	1.70367 32.05%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 37
 Sample ID: 1202053041|957488|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 51
 Date Collected: 3/19/2010 17:27:21
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053041|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4304.0	4304.0	97.9 %		17:29:34
1	Y RADIAL	4864.9	4864.9	102.2 %		17:29:14
1	Al 396.153Radial†	-70.0	6.6	6.5203 ug/L	6.5203 ppb	17:29:34
1	Ca 317.933Radial†	24.7	9.5	17.999 ug/L	17.999 ppb	17:29:34
1	Fe 238.204 Radial†	10.9	2.6	30.454 ug/L	30.454 ppb	17:29:34
1	K 766.490 Radial†	2682.8	140.8	26.828 ug/L	26.828 ppb	17:29:14
1	Mg 279.077 IEC†	-1.7	-3.3	-136.50 ug/L	-136.50 ppb	17:29:34
1	Na 589.592 Radial†	-847.8	9.4	3.3026 ug/L	3.3026 ppb	17:29:14
1	Sr 421.552†	46.3	26.5	0.2119 ug/L	0.2119 ppb	17:29:14
1	Sc 361.383	830096.6	830096.6	101.38 %		17:30:31
1	Y 371.029	701002.1	701002.1	101.35 %		17:30:31
1	Ag 328.068†	180.9	-6.7	-0.0278 ug/L	-0.0278 ppb	17:30:31
1	As 188.979†	-15.9	11.1	6.1044 ug/L	6.1044 ppb	17:30:51
1	B 249.677†	-380.0	162.5	4.5541 ug/L	4.5541 ppb	17:30:51
1	Ba 233.527†	-0.8	-0.1	-0.0008 ug/L	-0.0008 ppb	17:30:51
1	Be 313.107†	-3745.9	36.0	0.0169 ug/L	0.0169 ppb	17:30:31
1	Cd 226.502†	-185.7	-12.5	-0.1845 ug/L	-0.1845 ppb	17:30:51
1	Co 228.616†	-51.3	-4.4	-0.1168 ug/L	-0.1168 ppb	17:30:51
1	Cr 267.716†	90.8	18.0	0.2442 ug/L	0.2442 ppb	17:30:51
1	Cu 324.752†	5635.6	7.1	0.0243 ug/L	0.0243 ppb	17:30:31
1	Mn 257.610†	783.3	383.7	0.5130 ug/L	0.5130 ppb	17:30:51
1	Mo 202.031†	6.7	-1.9	-0.1652 ug/L	-0.1652 ppb	17:30:51
1	Ni 231.604†	80.6	-4.6	-0.1460 ug/L	-0.1460 ppb	17:30:51
1	P 214.914†	191.8	2.0	1.4348 ug/L	1.4348 ppb	17:30:51
1	Pb 220.353†	-58.2	0.9	0.1400 ug/L	0.1400 ppb	17:30:51
1	S 181.975 Axial†	21.1	-9.4	-16.745 ug/L	-16.745 ppb	17:30:51
1	Sb 206.836†	44.2	19.9	8.3265 ug/L	8.3265 ppb	17:30:51
1	Se 196.026†	-31.4	-14.0	-11.581 ug/L	-11.581 ppb	17:30:51
1	Si 251.611†	1133.9	630.3	23.931 ug/L	23.931 ppb	17:30:51
1	Sn 189.927†	10.5	3.2	0.7290 ug/L	0.7290 ppb	17:30:51
1	Ti 334.940†	-741.4	389.9	0.6911 ug/L	0.6911 ppb	17:30:31
1	Tl 190.801†	-24.1	5.3	2.0651 ug/L	2.0651 ppb	17:30:51
1	U 409.014†	-2199.5	34.6	1.0449 ug/L	1.0449 ppb	17:30:31
1	V 292.402†	-1372.4	-36.4	-0.2985 ug/L	-0.2985 ppb	17:30:31
1	Zn 213.857†	714.8	135.0	1.6318 ug/L	1.6318 ppb	17:30:51
1	SiO2†	1155.4	640.4	52.267 ug/L	52.267 ppb	17:31:47
2	Sc Radial	4255.9	4255.9	96.8 %		17:29:59
2	Y RADIAL	4796.1	4796.1	100.7 %		17:29:39
2	Al 396.153Radial†	-75.1	0.5	0.4697 ug/L	0.4697 ppb	17:29:59
2	Ca 317.933Radial†	25.8	11.0	20.799 ug/L	20.799 ppb	17:29:59
2	Fe 238.204 Radial†	11.1	3.0	34.535 ug/L	34.535 ppb	17:29:59
2	K 766.490 Radial†	2536.9	21.1	4.0140 ug/L	4.0140 ppb	17:29:39
2	Mg 279.077 IEC†	2.1	0.6	25.101 ug/L	25.101 ppb	17:29:59
2	Na 589.592 Radial†	-816.7	31.7	11.179 ug/L	11.179 ppb	17:29:39
2	Sr 421.552†	19.9	-0.2	-0.0020 ug/L	-0.0020 ppb	17:29:39
2	Sc 361.383	816900.7	816900.7	99.765 %		17:30:56
2	Y 371.029	690009.9	690009.9	99.763 %		17:30:56
2	Ag 328.068†	207.6	23.0	0.1257 ug/L	0.1257 ppb	17:30:56
2	As 188.979†	-16.7	10.1	5.5541 ug/L	5.5541 ppb	17:31:16
2	B 249.677†	-358.4	178.1	4.9901 ug/L	4.9901 ppb	17:31:16
2	Ba 233.527†	14.7	15.5	0.1460 ug/L	0.1460 ppb	17:31:16
2	Be 313.107†	-3665.2	57.2	0.0255 ug/L	0.0255 ppb	17:30:56
2	Cd 226.502†	-168.4	1.9	0.0240 ug/L	0.0240 ppb	17:31:16
2	Co 228.616†	-45.7	0.3	0.0082 ug/L	0.0082 ppb	17:31:16
2	Cr 267.716†	111.5	40.2	0.5413 ug/L	0.5413 ppb	17:31:16
2	Cu 324.752†	5608.9	70.1	0.2306 ug/L	0.2306 ppb	17:30:56
2	Mn 257.610†	750.6	363.3	0.4800 ug/L	0.4800 ppb	17:31:16
2	Mo 202.031†	12.9	4.4	0.3973 ug/L	0.3973 ppb	17:31:16
2	Ni 231.604†	73.8	-10.1	-0.3204 ug/L	-0.3204 ppb	17:31:16

2	P 214.914†	185.0	-1.9	-1.4865 ug/L	-1.4865 ppb	17:31:16
2	Pb 220.353†	-68.2	-10.1	-1.5531 ug/L	-1.5531 ppb	17:31:16
2	S 181.975 Axial†	31.1	1.0	1.7921 ug/L	1.7921 ppb	17:31:16
2	Sb 206.836†	22.7	-0.9	-0.3785 ug/L	-0.3785 ppb	17:31:16
2	Se 196.026†	-17.8	-0.9	-0.6584 ug/L	-0.6584 ppb	17:31:16
2	Si 251.611†	1151.0	665.5	25.261 ug/L	25.261 ppb	17:31:16
2	Sn 189.927†	6.5	-0.7	-0.1528 ug/L	-0.1528 ppb	17:31:16
2	Ti 334.940†	-825.2	294.0	0.5098 ug/L	0.5098 ppb	17:30:56
2	Tl 190.801†	-25.9	3.2	1.2281 ug/L	1.2281 ppb	17:31:16
2	U 409.014†	-2041.0	158.4	4.8016 ug/L	4.8016 ppb	17:30:56
2	V 292.402†	-1315.5	-1.1	0.0004 ug/L	0.0004 ppb	17:30:56
2	Zn 213.857†	717.6	149.2	1.8044 ug/L	1.8044 ppb	17:31:16
2	SiO2†	1186.2	689.7	56.275 ug/L	56.275 ppb	17:31:52
3	Sc Radial	4290.1	4290.1	97.6 %		17:30:24
3	Y RADIAL	4734.7	4734.7	99.46 %		17:30:04
3	Al 396.153Radial†	-68.5	7.9	7.7477 ug/L	7.7477 ppb	17:30:24
3	Ca 317.933Radial†	19.4	4.2	7.9666 ug/L	7.9666 ppb	17:30:24
3	Fe 238.204 Radial†	9.1	0.8	9.6025 ug/L	9.6025 ppb	17:30:24
3	K 766.490 Radial†	2706.8	174.3	33.193 ug/L	33.193 ppb	17:30:04
3	Mg 279.077 IEC†	2.9	1.5	60.476 ug/L	60.476 ppb	17:30:24
3	Na 589.592 Radial†	-807.2	48.1	16.968 ug/L	16.968 ppb	17:30:04
3	Sr 421.552†	36.5	16.6	0.1329 ug/L	0.1329 ppb	17:30:04
3	Sc 361.383	822363.9	822363.9	100.43 %		17:31:21
3	Y 371.029	693592.7	693592.7	100.28 %		17:31:21
3	Ag 328.068†	94.3	-91.2	-0.4718 ug/L	-0.4718 ppb	17:31:21
3	As 188.979†	-11.5	15.3	8.4052 ug/L	8.4052 ppb	17:31:41
3	B 249.677†	-374.5	164.5	4.6135 ug/L	4.6135 ppb	17:31:41
3	Ba 233.527†	23.7	24.3	0.2295 ug/L	0.2295 ppb	17:31:41
3	Be 313.107†	-3662.6	84.2	0.0369 ug/L	0.0369 ppb	17:31:21
3	Cd 226.502†	-176.1	-4.7	-0.0684 ug/L	-0.0684 ppb	17:31:41
3	Co 228.616†	-56.8	-10.3	-0.2669 ug/L	-0.2669 ppb	17:31:41
3	Cr 267.716†	91.2	19.3	0.2596 ug/L	0.2596 ppb	17:31:41
3	Cu 324.752†	5529.3	-46.5	-0.1552 ug/L	-0.1552 ppb	17:31:21
3	Mn 257.610†	766.0	373.7	0.4898 ug/L	0.4898 ppb	17:31:41
3	Mo 202.031†	11.5	2.9	0.2574 ug/L	0.2574 ppb	17:31:41
3	Ni 231.604†	79.5	-4.9	-0.1567 ug/L	-0.1567 ppb	17:31:41
3	P 214.914†	190.7	2.6	1.9860 ug/L	1.9860 ppb	17:31:41
3	Pb 220.353†	-43.9	14.6	2.2490 ug/L	2.2490 ppb	17:31:41
3	S 181.975 Axial†	24.6	-5.7	-10.242 ug/L	-10.242 ppb	17:31:41
3	Sb 206.836†	29.8	6.0	2.5131 ug/L	2.5131 ppb	17:31:41
3	Se 196.026†	-23.6	-6.6	-5.4439 ug/L	-5.4439 ppb	17:31:41
3	Si 251.611†	1144.5	651.4	24.725 ug/L	24.725 ppb	17:31:41
3	Sn 189.927†	10.1	2.9	0.6505 ug/L	0.6505 ppb	17:31:41
3	Ti 334.940†	-850.1	274.8	0.4722 ug/L	0.4722 ppb	17:31:21
3	Tl 190.801†	-31.0	-1.7	-0.6687 ug/L	-0.6687 ppb	17:31:41
3	U 409.014†	-2082.3	130.9	3.9696 ug/L	3.9696 ppb	17:31:21
3	V 292.402†	-1255.5	67.3	0.5481 ug/L	0.5481 ppb	17:31:21
3	Zn 213.857†	706.5	133.3	1.6155 ug/L	1.6155 ppb	17:31:41
3	SiO2†	1193.9	689.5	56.261 ug/L	56.261 ppb	17:31:57

Mean Data: 1202053041|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823120.4	100.52 %	0.810			0.81%
Sc Radial	4283.3	97.5 %	0.56			0.58%
Y 371.029	694868.3	100.47 %	0.811			0.81%
Y RADIAL	4798.6	100.8 %	1.37			1.36%
Ag 328.068†	-25.0	-0.1247 ug/L	0.31028	-0.1247 ppb	0.31028	248.89%
Al 396.153Radial†	5.0	4.9126 ug/L	3.89624	4.9126 ppb	3.89624	79.31%
As 188.979†	12.2	6.6879 ug/L	1.51246	6.6879 ppb	1.51246	22.61%
B 249.677†	168.4	4.7192 ug/L	0.23644	4.7192 ppb	0.23644	5.01%
Ba 233.527†	13.2	0.1249 ug/L	0.11662	0.1249 ppb	0.11662	93.37%
Be 313.107†	59.1	0.0264 ug/L	0.01007	0.0264 ppb	0.01007	38.10%
Ca 317.933Radial†	8.2	15.588 ug/L	6.7473	15.588 ppb	6.7473	43.28%
Cd 226.502†	-5.1	-0.0763 ug/L	0.10448	-0.0763 ppb	0.10448	136.98%
Co 228.616†	-4.8	-0.1252 ug/L	0.13771	-0.1252 ppb	0.13771	110.03%
Cr 267.716†	25.9	0.3484 ug/L	0.16729	0.3484 ppb	0.16729	48.02%
Cu 324.752†	10.2	0.0332 ug/L	0.19304	0.0332 ppb	0.19304	580.82%
Fe 238.204 Radial†	2.1	24.864 ug/L	13.3731	24.864 ppb	13.3731	53.79%
K 766.490 Radial†	112.1	21.345 ug/L	15.3427	21.345 ppb	15.3427	71.88%

Mg 279.077 IEC†	-0.4	-16.974 ug/L	105.0128	-16.974 ppb	105.0128	618.66%
Mn 257.610†	373.5	0.4943 ug/L	0.01694	0.4943 ppb	0.01694	3.43%
Mo 202.031†	1.8	0.1632 ug/L	0.29282	0.1632 ppb	0.29282	179.45%
Na 589.592 Radial†	29.7	10.483 ug/L	6.8594	10.483 ppb	6.8594	65.43%
Ni 231.604†	-6.5	-0.2077 ug/L	0.09777	-0.2077 ppb	0.09777	47.08%
P 214.914†	0.9	0.6448 ug/L	1.86616	0.6448 ppb	1.86616	289.43%
Pb 220.353†	1.8	0.2786 ug/L	1.90485	0.2786 ppb	1.90485	683.65%
S 181.975 Axial†	-4.7	-8.3982 ug/L	9.40490	-8.3982 ppb	9.40490	111.99%
Sb 206.836†	8.3	3.4870 ug/L	4.43347	3.4870 ppb	4.43347	127.14%
Se 196.026†	-7.2	-5.8945 ug/L	5.47528	-5.8945 ppb	5.47528	92.89%
Si 251.611†	649.1	24.639 ug/L	0.6696	24.639 ppb	0.6696	2.72%
Sn 189.927†	1.8	0.4089 ug/L	0.48805	0.4089 ppb	0.48805	119.35%
Sr 421.552†	14.3	0.1143 ug/L	0.10818	0.1143 ppb	0.10818	94.68%
Ti 334.940†	319.6	0.5577 ug/L	0.11706	0.5577 ppb	0.11706	20.99%
Tl 190.801†	2.2	0.8749 ug/L	1.40074	0.8749 ppb	1.40074	160.11%
U 409.014†	108.0	3.2720 ug/L	1.97308	3.2720 ppb	1.97308	60.30%
V 292.402†	9.9	0.0833 ug/L	0.42934	0.0833 ppb	0.42934	515.37%
Zn 213.857†	139.2	1.6839 ug/L	0.10467	1.6839 ppb	0.10467	6.22%
SiO2†	673.2	54.934 ug/L	2.3102	54.934 ppb	2.3102	4.21%

Sequence No.: 38

Sample ID: 1202053046|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 52

Date Collected: 3/19/2010 17:34:07

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053046|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4594.8	4594.8	105 %		17:36:20
1	Y RADIAL	5399.2	5399.2	113.4 %		17:36:20
1	Al 396.153Radial†	102490.8	98114.4	96350 ug/L	96350 ppb	17:36:00
1	Ca 317.933Radial†	53524.0	51182.0	96847 ug/L	96847 ppb	17:36:00
1	Fe 238.204 Radial†	17252.5	16494.2	191140 ug/L	191140 ppb	17:36:00
1	K 766.490 Radial†	246467.4	233156.5	44384 ug/L	44384 ppb	17:36:00
1	Mg 279.077 IEC†	1003.1	958.0	39324 ug/L	39324 ppb	17:36:20
1	Na 589.592 Radial†	29635.3	29222.4	10302 ug/L	10302 ppb	17:36:00
1	Sr 421.552†	304044.6	290809.2	2330.3 ug/L	2330.3 ppb	17:36:00
1	Sc 361.383	819277.4	819277.4	100.06 %		17:37:24
1	Y 371.029	745527.3	745527.3	107.79 %		17:37:24
1	Ag 328.068†	50951.2	50737.9	326.67 ug/L	326.67 ppb	17:37:24
1	As 188.979†	1876.7	1902.5	1143.3 ug/L	1143.3 ppb	17:37:44
1	B 249.677†	56691.6	57197.6	1570.8 ug/L	1570.8 ppb	17:37:24
1	Ba 233.527†	233304.5	233176.3	2192.7 ug/L	2192.7 ppb	17:37:24
1	Be 313.107†	1916257.4	1918929.8	831.57 ug/L	831.57 ppb	17:37:19
1	Cd 226.502†	42303.6	42450.9	597.06 ug/L	597.06 ppb	17:37:44
1	Co 228.616†	37095.1	37120.8	944.48 ug/L	944.48 ppb	17:37:44
1	Cr 267.716†	185902.6	185728.4	2512.8 ug/L	2512.8 ppb	17:37:24
1	Cu 324.752†	575414.5	569544.6	1890.6 ug/L	1890.6 ppb	17:37:24
1	Mn 257.610†	4154486.2	4151802.1	5476.1 ug/L	5476.1 ppb	17:37:19
1	Mo 202.031†	5700.8	5689.1	521.70 ug/L	521.70 ppb	17:37:44
1	Ni 231.604†	44259.8	44151.2	1401.5 ug/L	1401.5 ppb	17:37:24
1	P 214.914†	10907.0	10713.7	7487.7 ug/L	7487.7 ppb	17:37:44
1	Pb 220.353†	5459.7	5515.0	842.95 ug/L	842.95 ppb	17:37:44
1	S 181.975 Axial†	2342.1	2310.6	4118.5 ug/L	4118.5 ppb	17:37:44
1	Sb 206.836†	3320.5	3295.0	1385.0 ug/L	1385.0 ppb	17:37:44
1	Se 196.026†	2977.2	2992.5	3074.8 ug/L	3074.8 ppb	17:37:44
1	Si 251.611†	1178468.7	1177329.5	44689 ug/L	44689 ppb	17:37:19
1	Sn 189.927†	4869.0	4859.1	1108.9 ug/L	1108.9 ppb	17:37:44
1	Ti 334.940†	3667835.0	3666930.0	6385.9 ug/L	6385.9 ppb	17:37:19
1	Tl 190.801†	3017.9	3045.3	1250.5 ug/L	1250.5 ppb	17:37:44
1	U 409.014†	-8103.8	-5895.1	-206.21 ug/L	-206.21 ppb	17:37:24
1	V 292.402†	163218.5	164445.8	1285.2 ug/L	1285.2 ppb	17:37:24
1	Zn 213.857†	504396.4	503547.7	6061.3 ug/L	6061.3 ppb	17:37:24
1	SiO2†	1182123.8	1180971.4	96367 ug/L	96367 ppb	17:38:55
2	Sc Radial	4524.7	4524.7	103 %		17:36:45
2	Y RADIAL	5325.8	5325.8	111.9 %		17:36:45
2	Al 396.153Radial†	102352.4	99497.3	97709 ug/L	97709 ppb	17:36:25
2	Ca 317.933Radial†	53445.3	51898.0	98202 ug/L	98202 ppb	17:36:25
2	Fe 238.204 Radial†	17228.6	16726.4	193830 ug/L	193830 ppb	17:36:25
2	K 766.490 Radial†	246921.1	237246.2	45162 ug/L	45162 ppb	17:36:25
2	Mg 279.077 IEC†	1002.4	972.2	39907 ug/L	39907 ppb	17:36:45
2	Na 589.592 Radial†	29744.9	29767.6	10494 ug/L	10494 ppb	17:36:25
2	Sr 421.552†	304236.3	295496.8	2367.9 ug/L	2367.9 ppb	17:36:25
2	Sc 361.383	826951.0	826951.0	100.99 %		17:37:56
2	Y 371.029	751918.3	751918.3	108.71 %		17:37:56
2	Ag 328.068†	51283.3	50594.2	326.73 ug/L	326.73 ppb	17:37:56
2	As 188.979†	1866.8	1875.3	1128.0 ug/L	1128.0 ppb	17:38:16
2	B 249.677†	57256.4	57231.1	1571.4 ug/L	1571.4 ppb	17:37:56
2	Ba 233.527†	234715.7	232409.9	2185.6 ug/L	2185.6 ppb	17:37:56
2	Be 313.107†	1896788.3	1881880.2	815.54 ug/L	815.54 ppb	17:37:51
2	Cd 226.502†	42135.1	41891.7	588.66 ug/L	588.66 ppb	17:38:16
2	Co 228.616†	37050.0	36732.2	934.62 ug/L	934.62 ppb	17:38:16
2	Cr 267.716†	187222.7	185311.4	2507.5 ug/L	2507.5 ppb	17:37:56
2	Cu 324.752†	580952.5	569691.6	1891.2 ug/L	1891.2 ppb	17:37:56
2	Mn 257.610†	4118964.8	4078099.9	5379.5 ug/L	5379.5 ppb	17:37:51
2	Mo 202.031†	5706.0	5641.4	517.69 ug/L	517.69 ppb	17:38:16
2	Ni 231.604†	44534.0	44012.3	1397.1 ug/L	1397.1 ppb	17:37:56

2	P 214.914†	10868.8	10574.7	7382.1 ug/L	7382.1 ppb	17:38:16
2	Pb 220.353†	5484.2	5488.7	838.83 ug/L	838.83 ppb	17:38:16
2	S 181.975 Axial†	2321.2	2268.2	4042.2 ug/L	4042.2 ppb	17:38:16
2	Sb 206.836†	3326.0	3269.7	1374.4 ug/L	1374.4 ppb	17:38:16
2	Se 196.026†	2940.9	2929.0	3030.0 ug/L	3030.0 ppb	17:38:16
2	Si 251.611†	1169218.0	1157240.3	43926 ug/L	43926 ppb	17:37:51
2	Sn 189.927†	4854.5	4799.6	1095.5 ug/L	1095.5 ppb	17:38:16
2	Ti 334.940†	3637289.4	3602668.1	6274.3 ug/L	6274.3 ppb	17:37:51
2	Tl 190.801†	3034.6	3033.9	1244.7 ug/L	1244.7 ppb	17:38:16
2	U 409.014†	-8243.2	-5958.0	-208.41 ug/L	-208.41 ppb	17:37:56
2	V 292.402†	164550.8	164251.2	1283.3 ug/L	1283.3 ppb	17:37:56
2	Zn 213.857†	508786.4	503216.7	6056.9 ug/L	6056.9 ppb	17:37:56
2	SiO2†	1165959.0	1154002.2	94166 ug/L	94166 ppb	17:39:00
3	Sc Radial	4429.5	4429.5	101 %		17:37:11
3	Y RADIAL	5204.7	5204.7	109.3 %		17:37:11
3	Al 396.153Radial†	101645.2	100934.0	99120 ug/L	99120 ppb	17:36:51
3	Ca 317.933Radial†	52973.2	52546.2	99428 ug/L	99428 ppb	17:36:51
3	Fe 238.204 Radial†	17059.4	16918.5	196060 ug/L	196060 ppb	17:36:51
3	K 766.490 Radial†	243984.8	239491.6	45590 ug/L	45590 ppb	17:36:51
3	Mg 279.077 IEC†	983.2	974.0	39981 ug/L	39981 ppb	17:37:11
3	Na 589.592 Radial†	29148.0	29796.8	10504 ug/L	10504 ppb	17:36:51
3	Sr 421.552†	300883.2	298526.1	2392.2 ug/L	2392.2 ppb	17:36:51
3	Sc 361.383	820940.0	820940.0	100.26 %		17:38:28
3	Y 371.029	746299.0	746299.0	107.90 %		17:38:28
3	Ag 328.068†	50946.7	50630.3	327.59 ug/L	327.59 ppb	17:38:28
3	As 188.979†	1848.8	1870.8	1126.2 ug/L	1126.2 ppb	17:38:48
3	B 249.677†	56970.4	57361.0	1574.6 ug/L	1574.6 ppb	17:38:28
3	Ba 233.527†	232910.4	232311.0	2184.8 ug/L	2184.8 ppb	17:38:28
3	Be 313.107†	1882954.2	1881833.7	815.55 ug/L	815.55 ppb	17:38:23
3	Cd 226.502†	42108.9	42171.0	592.49 ug/L	592.49 ppb	17:38:48
3	Co 228.616†	37021.5	36972.3	940.76 ug/L	940.76 ppb	17:38:48
3	Cr 267.716†	185594.9	185045.2	2504.2 ug/L	2504.2 ppb	17:38:28
3	Cu 324.752†	576885.1	569846.8	1891.8 ug/L	1891.8 ppb	17:38:28
3	Mn 257.610†	4099127.3	4088176.6	5392.9 ug/L	5392.9 ppb	17:38:23
3	Mo 202.031†	5677.9	5654.7	519.06 ug/L	519.06 ppb	17:38:48
3	Ni 231.604†	44145.6	43947.8	1395.1 ug/L	1395.1 ppb	17:38:28
3	P 214.914†	10864.0	10648.7	7435.7 ug/L	7435.7 ppb	17:38:48
3	Pb 220.353†	5446.5	5490.8	839.17 ug/L	839.17 ppb	17:38:48
3	S 181.975 Axial†	2306.3	2270.2	4045.6 ug/L	4045.6 ppb	17:38:48
3	Sb 206.836†	3319.8	3287.6	1381.9 ug/L	1381.9 ppb	17:38:48
3	Se 196.026†	2943.8	2953.2	3057.1 ug/L	3057.1 ppb	17:38:48
3	Si 251.611†	1162158.8	1158676.3	43981 ug/L	43981 ppb	17:38:23
3	Sn 189.927†	4839.4	4819.8	1100.1 ug/L	1100.1 ppb	17:38:48
3	Ti 334.940†	3619273.4	3611069.3	6289.1 ug/L	6289.1 ppb	17:38:23
3	Tl 190.801†	2999.9	3021.2	1240.0 ug/L	1240.0 ppb	17:38:48
3	U 409.014†	-8299.5	-6073.9	-212.17 ug/L	-212.17 ppb	17:38:28
3	V 292.402†	163248.7	164145.6	1282.1 ug/L	1282.1 ppb	17:38:28
3	Zn 213.857†	504297.3	502427.8	6047.0 ug/L	6047.0 ppb	17:38:28
3	SiO2†	1181415.8	1177872.5	96114 ug/L	96114 ppb	17:39:06

Mean Data: 1202053046|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	822389.5	100.44 %	0.493			0.49%
Sc Radial	4516.3	103 %	1.9			1.84%
Y 371.029	747914.9	108.14 %	0.504			0.47%
Y RADIAL	5309.9	111.5 %	2.06			1.85%
Ag 328.068†	50654.1	326.99 ug/L	0.514	326.99 ppb	0.514	0.16%
Al 396.153Radial†	99515.2	97726 ug/L	1385.0	97726 ppb	1385.0	1.42%
As 188.979†	1882.9	1132.5 ug/L	9.37	1132.5 ppb	9.37	0.83%
B 249.677†	57263.2	1572.3 ug/L	2.06	1572.3 ppb	2.06	0.13%
Ba 233.527†	232632.4	2187.7 ug/L	4.37	2187.7 ppb	4.37	0.20%
Be 313.107†	1894214.6	820.89 ug/L	9.251	820.89 ppb	9.251	1.13%
Ca 317.933Radial†	51875.4	98159 ug/L	1291.2	98159 ppb	1291.2	1.32%
Cd 226.502†	42171.2	592.74 ug/L	4.203	592.74 ppb	4.203	0.71%
Co 228.616†	36941.8	939.95 ug/L	4.981	939.95 ppb	4.981	0.53%
Cr 267.716†	185361.7	2508.2 ug/L	4.36	2508.2 ppb	4.36	0.17%
Cu 324.752†	569694.3	1891.2 ug/L	0.63	1891.2 ppb	0.63	0.03%
Fe 238.204 Radial†	16713.1	193680 ug/L	2461.4	193680 ppb	2461.4	1.27%
K 766.490 Radial†	236631.4	45045 ug/L	611.5	45045 ppb	611.5	1.36%

Mg 279.077 IEC†	968.1	39737 ug/L	359.6	39737 ppb	359.6	0.90%
Mn 257.610†	4106026.2	5416.2 ug/L	52.36	5416.2 ppb	52.36	0.97%
Mo 202.031†	5661.8	519.48 ug/L	2.039	519.48 ppb	2.039	0.39%
Na 589.592 Radial†	29595.6	10433 ug/L	114.0	10433 ppb	114.0	1.09%
Ni 231.604†	44037.1	1397.9 ug/L	3.30	1397.9 ppb	3.30	0.24%
P 214.914†	10645.7	7435.2 ug/L	52.78	7435.2 ppb	52.78	0.71%
Pb 220.353†	5498.2	840.32 ug/L	2.289	840.32 ppb	2.289	0.27%
S 181.975 Axial†	2283.0	4068.8 ug/L	43.09	4068.8 ppb	43.09	1.06%
Sb 206.836†	3284.1	1380.5 ug/L	5.45	1380.5 ppb	5.45	0.39%
Se 196.026†	2958.2	3054.0 ug/L	22.56	3054.0 ppb	22.56	0.74%
Si 251.611†	1164415.4	44198 ug/L	425.4	44198 ppb	425.4	0.96%
Sn 189.927†	4826.2	1101.5 ug/L	6.81	1101.5 ppb	6.81	0.62%
Sr 421.552†	294944.1	2363.5 ug/L	31.16	2363.5 ppb	31.16	1.32%
Ti 334.940†	3626889.1	6316.4 ug/L	60.63	6316.4 ppb	60.63	0.96%
Tl 190.801†	3033.5	1245.1 ug/L	5.25	1245.1 ppb	5.25	0.42%
U 409.014†	-5975.7	-208.93 ug/L	3.015	-208.93 ppb	3.015	1.44%
V 292.402†	164280.8	1283.5 ug/L	1.54	1283.5 ppb	1.54	0.12%
Zn 213.857†	503064.1	6055.0 ug/L	7.31	6055.0 ppb	7.31	0.12%
SiO2†	1170948.7	95549 ug/L	1204.4	95549 ppb	1204.4	1.26%

Sequence No.: 39

Sample ID: 247770001|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 53

Date Collected: 3/19/2010 17:41:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770001|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4580.2	4580.2	104 %		17:43:10
1	Y RADIAL	6220.6	6220.6	130.7 %		17:43:10
1	Al 396.153Radial†	9659.1	9346.7	9180.6 ug/L	9180.6 ppb	17:43:10
1	Ca 317.933Radial†	1587.2	1507.4	2852.2 ug/L	2852.2 ppb	17:43:30
1	Fe 238.204 Radial†	6085.5	5831.0	67562 ug/L	67562 ppb	17:43:10
1	K 766.490 Radial†	17224.6	13929.5	2651.5 ug/L	2651.5 ppb	17:43:10
1	Mg 279.077 IEC†	111.0	105.0	4259.9 ug/L	4259.9 ppb	17:43:30
1	Na 589.592 Radial†	3407.3	4144.7	1461.1 ug/L	1461.1 ppb	17:43:10
1	Sr 421.552†	1542.7	1459.5	11.678 ug/L	11.678 ppb	17:43:10
1	Sc 361.383	855175.5	855175.5	104.44 %		17:44:27
1	Y 371.029	902501.5	902501.5	130.49 %		17:44:27
1	Ag 328.068†	-4013.7	-4028.2	0.2547 ug/L	0.2547 ppb	17:44:32
1	As 188.979†	-41.3	-12.7	31.166 ug/L	31.166 ppb	17:44:52
1	B 249.677†	631.9	1142.4	21.049 ug/L	21.049 ppb	17:44:32
1	Ba 233.527†	11817.3	11315.7	108.11 ug/L	108.11 ppb	17:44:32
1	Be 313.107†	250.4	3970.8	7.5487 ug/L	7.5487 ppb	17:44:32
1	Cd 226.502†	424.5	577.1	1.3558 ug/L	1.3558 ppb	17:44:52
1	Co 228.616†	334.6	366.6	3.1596 ug/L	3.1596 ppb	17:44:52
1	Cr 267.716†	430.6	340.8	11.862 ug/L	11.862 ppb	17:44:32
1	Cu 324.752†	9211.5	3268.0	14.489 ug/L	14.489 ppb	17:44:32
1	Mn 257.610†	1937780.8	1855023.0	2445.5 ug/L	2445.5 ppb	17:44:27
1	Mo 202.031†	93.9	81.4	12.512 ug/L	12.512 ppb	17:44:52
1	Ni 231.604†	305.0	208.0	6.5995 ug/L	6.5995 ppb	17:44:52
1	P 214.914†	643.9	429.2	265.46 ug/L	265.46 ppb	17:44:52
1	Pb 220.353†	278.2	324.7	42.357 ug/L	42.357 ppb	17:44:52
1	S 181.975 Axial†	40.4	8.5	13.547 ug/L	13.547 ppb	17:44:52
1	Sb 206.836†	36.2	11.0	-4.6954 ug/L	-4.6954 ppb	17:44:52
1	Se 196.026†	-296.4	-266.8	-25.124 ug/L	-25.124 ppb	17:44:52
1	Si 251.611†	543379.4	519794.0	19733 ug/L	19733 ppb	17:44:27
1	Sn 189.927†	4.7	-2.7	-3.9771 ug/L	-3.9771 ppb	17:44:52
1	Ti 334.940†	1548415.8	1483718.9	2580.4 ug/L	2580.4 ppb	17:44:27
1	Tl 190.801†	-108.8	-75.1	3.9145 ug/L	3.9145 ppb	17:44:52
1	U 409.014†	-9989.0	-7360.2	-231.01 ug/L	-231.01 ppb	17:44:27
1	V 292.402†	2881.0	4075.9	19.730 ug/L	19.730 ppb	17:44:32
1	Zn 213.857†	29334.4	27517.4	323.25 ug/L	323.25 ppb	17:44:32
1	SiO2†	536859.6	513540.1	41911 ug/L	41911 ppb	17:46:00
2	Sc Radial	4403.4	4403.4	100 %		17:43:35
2	Y RADIAL	6033.0	6033.0	126.7 %		17:43:35
2	Al 396.153Radial†	9666.6	9726.3	9553.5 ug/L	9553.5 ppb	17:43:35
2	Ca 317.933Radial†	1575.4	1556.7	2945.6 ug/L	2945.6 ppb	17:43:55
2	Fe 238.204 Radial†	6067.6	6047.6	70072 ug/L	70072 ppb	17:43:35
2	K 766.490 Radial†	16964.9	14334.0	2728.5 ug/L	2728.5 ppb	17:43:35
2	Mg 279.077 IEC†	110.2	108.5	4402.2 ug/L	4402.2 ppb	17:43:55
2	Na 589.592 Radial†	3305.3	4174.1	1471.5 ug/L	1471.5 ppb	17:43:35
2	Sr 421.552†	1533.2	1509.5	12.078 ug/L	12.078 ppb	17:43:35
2	Sc 361.383	863414.1	863414.1	105.45 %		17:44:58
2	Y 371.029	908498.4	908498.4	131.35 %		17:44:58
2	Ag 328.068†	-4031.8	-4008.7	1.1279 ug/L	1.1279 ppb	17:45:03
2	As 188.979†	-39.2	-10.4	33.020 ug/L	33.020 ppb	17:45:23
2	B 249.677†	666.0	1169.0	21.390 ug/L	21.390 ppb	17:45:03
2	Ba 233.527†	11699.0	11095.6	106.13 ug/L	106.13 ppb	17:45:03
2	Be 313.107†	408.1	4118.0	7.6027 ug/L	7.6027 ppb	17:45:03
2	Cd 226.502†	419.7	568.7	0.9747 ug/L	0.9747 ppb	17:45:23
2	Co 228.616†	306.8	337.2	2.3707 ug/L	2.3707 ppb	17:45:23
2	Cr 267.716†	451.9	357.1	12.345 ug/L	12.345 ppb	17:45:03
2	Cu 324.752†	9059.8	3039.9	13.867 ug/L	13.867 ppb	17:45:03
2	Mn 257.610†	1955418.8	1854046.1	2444.5 ug/L	2444.5 ppb	17:44:58
2	Mo 202.031†	96.4	82.9	12.847 ug/L	12.847 ppb	17:45:23
2	Ni 231.604†	300.5	201.0	6.3764 ug/L	6.3764 ppb	17:45:23

2	P 214.914†	637.6	417.4	254.90 ug/L	254.90 ppb	17:45:23
2	Pb 220.353†	270.1	314.5	40.513 ug/L	40.513 ppb	17:45:23
2	S 181.975 Axial†	45.8	13.3	21.958 ug/L	21.958 ppb	17:45:23
2	Sb 206.836†	36.1	10.6	-4.8374 ug/L	-4.8374 ppb	17:45:23
2	Se 196.026†	-298.6	-266.2	-17.239 ug/L	-17.239 ppb	17:45:23
2	Si 251.611†	549239.4	520386.8	19755 ug/L	19755 ppb	17:44:58
2	Sn 189.927†	17.2	9.1	-1.4308 ug/L	-1.4308 ppb	17:45:23
2	Ti 334.940†	1561015.3	1481521.1	2576.6 ug/L	2576.6 ppb	17:44:58
2	Tl 190.801†	-118.4	-83.2	0.7572 ug/L	0.7572 ppb	17:45:23
2	U 409.014†	-9980.9	-7261.3	-228.29 ug/L	-228.29 ppb	17:44:58
2	V 292.402†	2894.6	4062.6	19.272 ug/L	19.272 ppb	17:45:03
2	Zn 213.857†	29042.4	26972.5	316.28 ug/L	316.28 ppb	17:45:03
2	SiO2†	542542.9	514025.0	41950 ug/L	41950 ppb	17:46:06
3	Sc Radial	4503.5	4503.5	102 %		17:44:00
3	Y RADIAL	6122.8	6122.8	128.6 %		17:44:00
3	Al 396.153Radial†	9875.1	9715.5	9542.9 ug/L	9542.9 ppb	17:44:00
3	Ca 317.933Radial†	1569.4	1515.9	2868.4 ug/L	2868.4 ppb	17:44:20
3	Fe 238.204 Radial†	6143.2	5986.9	69369 ug/L	69369 ppb	17:44:00
3	K 766.490 Radial†	17177.7	14165.4	2696.4 ug/L	2696.4 ppb	17:44:00
3	Mg 279.077 IEC†	108.2	104.1	4222.1 ug/L	4222.1 ppb	17:44:20
3	Na 589.592 Radial†	3336.8	4131.6	1456.5 ug/L	1456.5 ppb	17:44:00
3	Sr 421.552†	1570.0	1511.4	12.093 ug/L	12.093 ppb	17:44:00
3	Sc 361.383	842964.6	842964.6	102.95 %		17:45:29
3	Y 371.029	888377.8	888377.8	128.44 %		17:45:29
3	Ag 328.068†	-3935.4	-4007.8	0.9211 ug/L	0.9211 ppb	17:45:34
3	As 188.979†	-39.1	-11.2	32.353 ug/L	32.353 ppb	17:45:54
3	B 249.677†	692.6	1210.1	22.657 ug/L	22.657 ppb	17:45:34
3	Ba 233.527†	11683.6	11349.7	108.49 ug/L	108.49 ppb	17:45:34
3	Be 313.107†	224.4	3949.0	7.5149 ug/L	7.5149 ppb	17:45:34
3	Cd 226.502†	422.6	581.2	1.2283 ug/L	1.2283 ppb	17:45:54
3	Co 228.616†	325.9	362.7	3.0580 ug/L	3.0580 ppb	17:45:54
3	Cr 267.716†	455.1	370.6	12.454 ug/L	12.454 ppb	17:45:34
3	Cu 324.752†	9058.4	3247.0	14.516 ug/L	14.516 ppb	17:45:34
3	Mn 257.610†	1907034.7	1852034.3	2441.8 ug/L	2441.8 ppb	17:45:29
3	Mo 202.031†	98.6	87.3	13.177 ug/L	13.177 ppb	17:45:54
3	Ni 231.604†	325.0	231.7	7.3514 ug/L	7.3514 ppb	17:45:54
3	P 214.914†	637.6	432.1	266.28 ug/L	266.28 ppb	17:45:54
3	Pb 220.353†	287.1	337.1	44.091 ug/L	44.091 ppb	17:45:54
3	S 181.975 Axial†	37.0	5.8	8.5747 ug/L	8.5747 ppb	17:45:54
3	Sb 206.836†	40.3	15.4	-2.7579 ug/L	-2.7579 ppb	17:45:54
3	Se 196.026†	-289.5	-264.3	-17.663 ug/L	-17.663 ppb	17:45:54
3	Si 251.611†	533566.3	517798.5	19657 ug/L	19657 ppb	17:45:29
3	Sn 189.927†	20.9	13.1	-0.4974 ug/L	-0.4974 ppb	17:45:54
3	Ti 334.940†	1519904.4	1477500.4	2569.6 ug/L	2569.6 ppb	17:45:29
3	Tl 190.801†	-112.3	-80.0	1.9239 ug/L	1.9239 ppb	17:45:54
3	U 409.014†	-9875.2	-7388.2	-232.06 ug/L	-232.06 ppb	17:45:29
3	V 292.402†	2888.7	4123.4	19.862 ug/L	19.862 ppb	17:45:34
3	Zn 213.857†	29015.4	27614.4	324.15 ug/L	324.15 ppb	17:45:34
3	SiO2†	540086.7	524121.0	42774 ug/L	42774 ppb	17:46:11

Mean Data: 247770001|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	853851.4	104.28 %	1.257			1.20%
Sc Radial	4495.7	102 %	2.0			1.97%
Y 371.029	899792.6	130.09 %	1.494			1.15%
Y RADIAL	6125.5	128.7 %	1.97			1.53%
Ag 328.068†	-4014.9	0.7679 ug/L	0.45628	0.7679 ppb	0.45628	59.42%
Al 396.153Radial†	9596.2	9425.7 ug/L	212.27	9425.7 ppb	212.27	2.25%
As 188.979†	-11.4	32.180 ug/L	0.9394	32.180 ppb	0.9394	2.92%
B 249.677†	1173.8	21.699 ug/L	0.8474	21.699 ppb	0.8474	3.91%
Ba 233.527†	11253.7	107.58 ug/L	1.268	107.58 ppb	1.268	1.18%
Be 313.107†	4012.6	7.5554 ug/L	0.04430	7.5554 ppb	0.04430	0.59%
Ca 317.933Radial†	1526.6	2888.7 ug/L	49.89	2888.7 ppb	49.89	1.73%
Cd 226.502†	575.7	1.1863 ug/L	0.19401	1.1863 ppb	0.19401	16.35%
Co 228.616†	355.5	2.8628 ug/L	0.42918	2.8628 ppb	0.42918	14.99%
Cr 267.716†	356.1	12.220 ug/L	0.3150	12.220 ppb	0.3150	2.58%
Cu 324.752†	3184.9	14.291 ug/L	0.3669	14.291 ppb	0.3669	2.57%
Fe 238.204 Radial†	5955.2	69001 ug/L	1294.8	69001 ppb	1294.8	1.88%
K 766.490 Radial†	14143.0	2692.1 ug/L	38.69	2692.1 ppb	38.69	1.44%

Mg 279.077 IEC†	105.9	4294.7 ug/L	94.97	4294.7 ppb	94.97	2.21%
Mn 257.610†	1853701.1	2443.9 ug/L	1.94	2443.9 ppb	1.94	0.08%
Mo 202.031†	83.9	12.845 ug/L	0.3329	12.845 ppb	0.3329	2.59%
Na 589.592 Radial†	4150.2	1463.0 ug/L	7.68	1463.0 ppb	7.68	0.52%
Ni 231.604†	213.5	6.7758 ug/L	0.51086	6.7758 ppb	0.51086	7.54%
P 214.914†	426.2	262.21 ug/L	6.346	262.21 ppb	6.346	2.42%
Pb 220.353†	325.4	42.320 ug/L	1.7892	42.320 ppb	1.7892	4.23%
S 181.975 Axial†	9.2	14.693 ug/L	6.7649	14.693 ppb	6.7649	46.04%
Sb 206.836†	12.3	-4.0969 ug/L	1.16176	-4.0969 ppb	1.16176	28.36%
Se 196.026†	-265.8	-20.009 ug/L	4.4350	-20.009 ppb	4.4350	22.17%
Si 251.611†	519326.5	19715 ug/L	51.5	19715 ppb	51.5	0.26%
Sn 189.927†	6.5	-1.9685 ug/L	1.80109	-1.9685 ppb	1.80109	91.50%
Sr 421.552†	1493.4	11.950 ug/L	0.2357	11.950 ppb	0.2357	1.97%
Ti 334.940†	1480913.5	2575.5 ug/L	5.48	2575.5 ppb	5.48	0.21%
Tl 190.801†	-79.4	2.1985 ug/L	1.59645	2.1985 ppb	1.59645	72.61%
U 409.014†	-7336.5	-230.45 ug/L	1.945	-230.45 ppb	1.945	0.84%
V 292.402†	4087.3	19.622 ug/L	0.3096	19.622 ppb	0.3096	1.58%
Zn 213.857†	27368.1	321.23 ug/L	4.311	321.23 ppb	4.311	1.34%
SiO2†	517228.7	42212 ug/L	487.5	42212 ppb	487.5	1.15%

Sequence No.: 40

Sample ID: 1202053042|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 54

Date Collected: 3/19/2010 17:48:23

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053042|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4358.2	4358.2	99.2 %		17:50:35
1	Y RADIAL	6123.6	6123.6	128.6 %		17:50:15
1	Al 396.153Radial†	10212.4	10376.8	10193 ug/L	10193 ppb	17:50:15
1	Ca 317.933Radial†	1603.3	1601.2	3029.7 ug/L	3029.7 ppb	17:50:35
1	Fe 238.204 Radial†	6397.0	6442.6	74650 ug/L	74650 ppb	17:50:15
1	K 766.490 Radial†	18160.5	15715.3	2991.5 ug/L	2991.5 ppb	17:50:15
1	Mg 279.077 IEC†	119.1	118.6	4814.6 ug/L	4814.6 ppb	17:50:35
1	Na 589.592 Radial†	3741.4	4648.2	1638.6 ug/L	1638.6 ppb	17:50:15
1	Sr 421.552†	1584.2	1576.8	12.616 ug/L	12.616 ppb	17:50:15
1	Sc 361.383	876042.3	876042.3	106.99 %		17:51:33
1	Y 371.029	919519.0	919519.0	132.95 %		17:51:33
1	Ag 328.068†	-4083.4	-4001.8	2.5799 ug/L	2.5799 ppb	17:51:38
1	As 188.979†	-33.9	-4.9	36.764 ug/L	36.764 ppb	17:51:58
1	B 249.677†	538.0	1040.2	17.033 ug/L	17.033 ppb	17:51:38
1	Ba 233.527†	12845.1	12006.9	114.80 ug/L	114.80 ppb	17:51:38
1	Be 313.107†	531.0	4227.3	7.5569 ug/L	7.5569 ppb	17:51:38
1	Cd 226.502†	427.9	570.5	0.5290 ug/L	0.5290 ppb	17:51:58
1	Co 228.616†	344.9	368.6	3.2035 ug/L	3.2035 ppb	17:51:58
1	Cr 267.716†	518.4	413.0	13.581 ug/L	13.581 ppb	17:51:38
1	Cu 324.752†	9231.4	3076.4	14.230 ug/L	14.230 ppb	17:51:38
1	Mn 257.610†	2048387.8	1914211.2	2524.0 ug/L	2524.0 ppb	17:51:33
1	Mo 202.031†	91.3	76.8	12.657 ug/L	12.657 ppb	17:51:58
1	Ni 231.604†	323.7	218.5	6.9329 ug/L	6.9329 ppb	17:51:58
1	P 214.914†	669.3	438.3	266.87 ug/L	266.87 ppb	17:51:58
1	Pb 220.353†	287.5	327.1	41.936 ug/L	41.936 ppb	17:51:58
1	S 181.975 Axial†	40.5	7.7	11.806 ug/L	11.806 ppb	17:51:58
1	Sb 206.836†	38.0	11.8	-4.2953 ug/L	-4.2953 ppb	17:51:58
1	Se 196.026†	-309.6	-272.4	-9.0456 ug/L	-9.0456 ppb	17:51:58
1	Si 251.611†	563998.2	526673.3	19994 ug/L	19994 ppb	17:51:33
1	Sn 189.927†	10.9	3.1	-3.0503 ug/L	-3.0503 ppb	17:51:58
1	Ti 334.940†	1558821.7	1458130.7	2535.9 ug/L	2535.9 ppb	17:51:33
1	Tl 190.801†	-118.3	-81.4	1.4580 ug/L	1.4580 ppb	17:51:58
1	U 409.014†	-10143.7	-7277.0	-229.29 ug/L	-229.29 ppb	17:51:33
1	V 292.402†	2986.0	4108.4	19.014 ug/L	19.014 ppb	17:51:38
1	Zn 213.857†	30093.7	27558.1	322.68 ug/L	322.68 ppb	17:51:38
1	SiO2†	570936.3	533147.1	43511 ug/L	43511 ppb	17:53:06
2	Sc Radial	4284.5	4284.5	97.5 %		17:51:01
2	Y RADIAL	6209.5	6209.5	130.4 %		17:50:40
2	Al 396.153Radial†	10277.2	10620.5	10432 ug/L	10432 ppb	17:50:40
2	Ca 317.933Radial†	1586.2	1611.4	3049.1 ug/L	3049.1 ppb	17:51:01
2	Fe 238.204 Radial†	6454.0	6612.2	76614 ug/L	76614 ppb	17:50:40
2	K 766.490 Radial†	18409.1	16285.6	3100.1 ug/L	3100.1 ppb	17:50:40
2	Mg 279.077 IEC†	114.8	116.3	4716.7 ug/L	4716.7 ppb	17:51:01
2	Na 589.592 Radial†	3733.3	4704.7	1658.5 ug/L	1658.5 ppb	17:50:40
2	Sr 421.552†	1606.2	1626.8	13.018 ug/L	13.018 ppb	17:50:40
2	Sc 361.383	854072.3	854072.3	104.30 %		17:52:04
2	Y 371.029	903072.8	903072.8	130.57 %		17:52:04
2	Ag 328.068†	-4086.0	-4102.5	2.6769 ug/L	2.6769 ppb	17:52:09
2	As 188.979†	-37.4	-9.0	35.919 ug/L	35.919 ppb	17:52:29
2	B 249.677†	512.5	1028.7	16.391 ug/L	16.391 ppb	17:52:09
2	Ba 233.527†	12920.1	12387.6	118.43 ug/L	118.43 ppb	17:52:09
2	Be 313.107†	591.1	4297.7	7.8426 ug/L	7.8426 ppb	17:52:09
2	Cd 226.502†	431.2	584.1	0.5207 ug/L	0.5207 ppb	17:52:29
2	Co 228.616†	332.0	364.5	2.8389 ug/L	2.8389 ppb	17:52:29
2	Cr 267.716†	522.5	429.4	14.015 ug/L	14.015 ppb	17:52:09
2	Cu 324.752†	9359.6	3421.3	15.479 ug/L	15.479 ppb	17:52:09
2	Mn 257.610†	2085812.3	1999341.9	2636.1 ug/L	2636.1 ppb	17:52:04
2	Mo 202.031†	100.6	87.9	13.799 ug/L	13.799 ppb	17:52:29
2	Ni 231.604†	337.4	239.4	7.5982 ug/L	7.5982 ppb	17:52:29

2	P 214.914†	659.9	445.4	270.44 ug/L	270.44 ppb	17:52:29
2	Pb 220.353†	282.4	329.1	42.016 ug/L	42.016 ppb	17:52:29
2	S 181.975 Axial†	39.2	7.4	11.255 ug/L	11.255 ppb	17:52:29
2	Sb 206.836†	49.4	23.7	0.3067 ug/L	0.3067 ppb	17:52:29
2	Se 196.026†	-299.1	-269.8	-1.1750 ug/L	-1.1750 ppb	17:52:29
2	Si 251.611†	573935.2	549760.7	20870 ug/L	20870 ppb	17:52:04
2	Sn 189.927†	8.3	0.8	-3.6667 ug/L	-3.6667 ppb	17:52:29
2	Ti 334.940†	1587295.7	1522909.3	2648.5 ug/L	2648.5 ppb	17:52:04
2	Tl 190.801†	-117.4	-83.5	2.1419 ug/L	2.1419 ppb	17:52:29
2	U 409.014†	-10255.4	-7627.9	-240.17 ug/L	-240.17 ppb	17:52:04
2	V 292.402†	3038.4	4230.5	19.575 ug/L	19.575 ppb	17:52:09
2	Zn 213.857†	30221.8	28404.5	332.64 ug/L	332.64 ppb	17:52:09
2	SiO2†	574859.3	550635.5	44938 ug/L	44938 ppb	17:53:11
3	Sc Radial	4431.0	4431.0	101 %		17:51:26
3	Y RADIAL	6099.7	6099.7	128.1 %		17:51:06
3	Al 396.153Radial†	10163.4	10159.0	9978.6 ug/L	9978.6 ppb	17:51:06
3	Ca 317.933Radial†	1609.0	1580.2	2990.1 ug/L	2990.1 ppb	17:51:26
3	Fe 238.204 Radial†	6303.6	6244.0	72348 ug/L	72348 ppb	17:51:06
3	K 766.490 Radial†	18173.4	15427.2	2936.7 ug/L	2936.7 ppb	17:51:06
3	Mg 279.077 IEC†	121.5	119.0	4832.0 ug/L	4832.0 ppb	17:51:26
3	Na 589.592 Radial†	3657.9	4503.4	1587.5 ug/L	1587.5 ppb	17:51:06
3	Sc 421.552†	1566.6	1533.1	12.266 ug/L	12.266 ppb	17:51:06
3	Sc 361.383	856701.4	856701.4	104.63 %		17:52:35
3	Y 371.029	905376.7	905376.7	130.90 %		17:52:35
3	Ag 328.068†	-4062.0	-4067.6	1.5373 ug/L	1.5373 ppb	17:52:40
3	As 188.979†	-36.3	-8.0	35.521 ug/L	35.521 ppb	17:53:00
3	B 249.677†	452.2	969.5	15.421 ug/L	15.421 ppb	17:52:40
3	Ba 233.527†	12867.1	12298.9	117.47 ug/L	117.47 ppb	17:52:40
3	Be 313.107†	506.7	4215.3	7.8112 ug/L	7.8112 ppb	17:52:40
3	Cd 226.502†	415.2	567.5	0.7209 ug/L	0.7209 ppb	17:53:00
3	Co 228.616†	356.0	386.4	3.4622 ug/L	3.4622 ppb	17:53:00
3	Cr 267.716†	505.6	411.7	13.325 ug/L	13.325 ppb	17:52:40
3	Cu 324.752†	9225.0	3265.1	14.736 ug/L	14.736 ppb	17:52:40
3	Mn 257.610†	2088846.5	1996105.2	2631.5 ug/L	2631.5 ppb	17:52:35
3	Mo 202.031†	96.6	83.8	13.102 ug/L	13.102 ppb	17:53:00
3	Ni 231.604†	331.5	232.8	7.3860 ug/L	7.3860 ppb	17:53:00
3	P 214.914†	652.4	436.3	267.09 ug/L	267.09 ppb	17:53:00
3	Pb 220.353†	301.2	346.2	45.152 ug/L	45.152 ppb	17:53:00
3	S 181.975 Axial†	39.9	7.9	12.348 ug/L	12.348 ppb	17:53:00
3	Sb 206.836†	42.9	17.4	-2.2827 ug/L	-2.2827 ppb	17:53:00
3	Se 196.026†	-303.0	-272.6	-15.944 ug/L	-15.944 ppb	17:53:00
3	Si 251.611†	576119.6	550160.0	20886 ug/L	20886 ppb	17:52:35
3	Sn 189.927†	15.5	7.7	-1.8800 ug/L	-1.8800 ppb	17:53:00
3	Ti 334.940†	1593147.0	1523831.8	2650.1 ug/L	2650.1 ppb	17:52:35
3	Tl 190.801†	-118.9	-84.6	1.6964 ug/L	1.6964 ppb	17:53:00
3	U 409.014†	-10176.7	-7522.6	-236.48 ug/L	-236.48 ppb	17:52:35
3	V 292.402†	3049.3	4232.0	20.210 ug/L	20.210 ppb	17:52:40
3	Zn 213.857†	30144.2	28241.4	331.30 ug/L	331.30 ppb	17:52:40
3	SiO2†	572144.1	546349.1	44588 ug/L	44588 ppb	17:53:17

Mean Data: 1202053042|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	862272.0	105.31 %	1.465			1.39%
Sc Radial	4357.9	99.2 %	1.67			1.68%
Y 371.029	909322.8	131.47 %	1.288			0.98%
Y RADIAL	6144.3	129.1 %	1.21			0.94%
Ag 328.068†	-4057.3	2.2647 ug/L	0.63179	2.2647 ppb	0.63179	27.90%
Al 396.153Radial†	10385.5	10201 ug/L	226.8	10201 ppb	226.8	2.22%
As 188.979†	-7.3	36.068 ug/L	0.6347	36.068 ppb	0.6347	1.76%
B 249.677†	1012.8	16.282 ug/L	0.8113	16.282 ppb	0.8113	4.98%
Ba 233.527†	12231.1	116.90 ug/L	1.880	116.90 ppb	1.880	1.61%
Be 313.107†	4246.8	7.7369 ug/L	0.15667	7.7369 ppb	0.15667	2.03%
Ca 317.933Radial†	1597.6	3023.0 ug/L	30.05	3023.0 ppb	30.05	0.99%
Cd 226.502†	574.0	0.5902 ug/L	0.11326	0.5902 ppb	0.11326	19.19%
Co 228.616†	373.2	3.1682 ug/L	0.31316	3.1682 ppb	0.31316	9.88%
Cr 267.716†	418.0	13.640 ug/L	0.3489	13.640 ppb	0.3489	2.56%
Cu 324.752†	3254.3	14.815 ug/L	0.6280	14.815 ppb	0.6280	4.24%
Fe 238.204 Radial†	6432.9	74537 ug/L	2135.1	74537 ppb	2135.1	2.86%
K 766.490 Radial†	15809.3	3009.4 ug/L	83.20	3009.4 ppb	83.20	2.76%

Mg 279.077 IEC†	117.9	4787.8 ug/L	62.14	4787.8 ppb	62.14	1.30%
Mn 257.610†	1969886.1	2597.2 ug/L	63.43	2597.2 ppb	63.43	2.44%
Mo 202.031†	82.8	13.186 ug/L	0.5759	13.186 ppb	0.5759	4.37%
Na 589.592 Radial†	4618.8	1628.2 ug/L	36.61	1628.2 ppb	36.61	2.25%
Ni 231.604†	230.2	7.3057 ug/L	0.33986	7.3057 ppb	0.33986	4.65%
P 214.914†	440.0	268.13 ug/L	2.004	268.13 ppb	2.004	0.75%
Pb 220.353†	334.1	43.035 ug/L	1.8343	43.035 ppb	1.8343	4.26%
S 181.975 Axial†	7.7	11.803 ug/L	0.5467	11.803 ppb	0.5467	4.63%
Sb 206.836†	17.6	-2.0904 ug/L	2.30701	-2.0904 ppb	2.30701	110.36%
Se 196.026†	-271.6	-8.7214 ug/L	7.38962	-8.7214 ppb	7.38962	84.73%
Si 251.611†	542198.0	20583 ug/L	510.5	20583 ppb	510.5	2.48%
Sn 189.927†	3.9	-2.8657 ug/L	0.90756	-2.8657 ppb	0.90756	31.67%
Sr 421.552†	1578.9	12.633 ug/L	0.3759	12.633 ppb	0.3759	2.98%
Ti 334.940†	1501623.9	2611.5 ug/L	65.51	2611.5 ppb	65.51	2.51%
Tl 190.801†	-83.2	1.7654 ug/L	0.34715	1.7654 ppb	0.34715	19.66%
U 409.014†	-7475.8	-235.31 ug/L	5.529	-235.31 ppb	5.529	2.35%
V 292.402†	4190.3	19.599 ug/L	0.5982	19.599 ppb	0.5982	3.05%
Zn 213.857†	28068.0	328.88 ug/L	5.404	328.88 ppb	5.404	1.64%
SiO2†	543377.2	44346 ug/L	743.9	44346 ppb	743.9	1.68%

Sequence No.: 41

Sample ID: 1202053044|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 55

Date Collected: 3/19/2010 17:55:27

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053044|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4431.3	4431.3	101 %		17:57:20
1	Y RADIAL	6715.7	6715.7	141.1 %		17:57:20
1	Al 396.153Radial†	23370.8	23258.0	22822 ug/L	22822 ppb	17:57:20
1	Ca 317.933Radial†	4885.7	4830.1	9139.6 ug/L	9139.6 ppb	17:57:20
1	Fe 238.204 Radial†	7452.1	7382.8	85557 ug/L	85557 ppb	17:57:20
1	K 766.490 Radial†	60518.9	57425.8	10932 ug/L	10932 ppb	17:57:20
1	Mg 279.077 IEC†	272.7	269.0	11011 ug/L	11011 ppb	17:57:40
1	Na 589.592 Radial†	26095.6	26757.5	9432.6 ug/L	9432.6 ppb	17:57:20
1	Sr 421.552†	66345.0	65782.2	527.22 ug/L	527.22 ppb	17:57:20
1	Sc 361.383	844198.0	844198.0	103.10 %		17:58:39
1	Y 371.029	985836.6	985836.6	142.53 %		17:58:39
1	Ag 328.068†	94195.5	91179.2	501.68 ug/L	501.68 ppb	17:58:39
1	As 188.979†	891.3	891.3	538.87 ug/L	538.87 ppb	17:58:59
1	B 249.677†	18909.7	18878.7	514.30 ug/L	514.30 ppb	17:58:39
1	Ba 233.527†	72947.3	70755.5	666.49 ug/L	666.49 ppb	17:58:39
1	Be 313.107†	1247549.3	1213784.0	524.88 ug/L	524.88 ppb	17:58:39
1	Cd 226.502†	35250.6	34361.7	490.10 ug/L	490.10 ppb	17:58:59
1	Co 228.616†	19872.0	19320.9	491.98 ug/L	491.98 ppb	17:58:59
1	Cr 267.716†	38612.3	37380.3	511.00 ug/L	511.00 ppb	17:58:39
1	Cu 324.752†	174171.2	163384.3	543.82 ug/L	543.82 ppb	17:58:39
1	Mn 257.610†	2938697.2	2849982.9	3755.2 ug/L	3755.2 ppb	17:58:39
1	Mo 202.031†	5718.7	5538.2	499.05 ug/L	499.05 ppb	17:58:59
1	Ni 231.604†	16493.1	15913.4	505.06 ug/L	505.06 ppb	17:58:59
1	P 214.914†	1537.4	1303.9	805.53 ug/L	805.53 ppb	17:58:59
1	Pb 220.353†	3774.6	3719.5	565.36 ug/L	565.36 ppb	17:58:59
1	S 181.975 Axial†	2960.7	2841.5	5082.7 ug/L	5082.7 ppb	17:58:59
1	Sb 206.836†	1256.3	1194.8	506.22 ug/L	506.22 ppb	17:58:59
1	Se 196.026†	302.8	310.6	513.51 ug/L	513.51 ppb	17:58:59
1	Si 251.611†	995538.1	965128.1	36633 ug/L	36633 ppb	17:58:39
1	Sn 189.927†	2235.1	2160.8	487.05 ug/L	487.05 ppb	17:58:59
1	Ti 334.940†	2098037.1	2036099.9	3540.9 ug/L	3540.9 ppb	17:58:39
1	Tl 190.801†	1169.1	1163.1	494.06 ug/L	494.06 ppb	17:58:59
1	U 409.014†	5195.2	7243.2	208.87 ug/L	208.87 ppb	17:58:39
1	V 292.402†	66947.5	66252.7	520.23 ug/L	520.23 ppb	17:58:39
1	Zn 213.857†	76957.1	74074.0	880.78 ug/L	880.78 ppb	17:58:39
1	SiO2†	992469.8	962140.8	78509 ug/L	78509 ppb	18:00:00
2	Sc Radial	4454.4	4454.4	101 %		17:57:45
2	Y RADIAL	6747.8	6747.8	141.7 %		17:57:45
2	Al 396.153Radial†	23448.1	23213.7	22778 ug/L	22778 ppb	17:57:45
2	Ca 317.933Radial†	4863.5	4783.0	9050.4 ug/L	9050.4 ppb	17:57:45
2	Fe 238.204 Radial†	7461.5	7353.6	85219 ug/L	85219 ppb	17:57:45
2	K 766.490 Radial†	60928.1	57517.4	10950 ug/L	10950 ppb	17:57:45
2	Mg 279.077 IEC†	274.3	269.2	11019 ug/L	11019 ppb	17:58:05
2	Na 589.592 Radial†	26028.3	26556.5	9361.8 ug/L	9361.8 ppb	17:57:45
2	Sr 421.552†	66651.8	65742.7	526.91 ug/L	526.91 ppb	17:57:45
2	Sc 361.383	841985.1	841985.1	102.83 %		17:59:06
2	Y 371.029	982259.5	982259.5	142.02 %		17:59:06
2	Ag 328.068†	93933.5	91164.5	501.50 ug/L	501.50 ppb	17:59:06
2	As 188.979†	893.0	895.2	540.99 ug/L	540.99 ppb	17:59:26
2	B 249.677†	18927.3	18944.0	516.19 ug/L	516.19 ppb	17:59:06
2	Ba 233.527†	72893.3	70888.9	667.73 ug/L	667.73 ppb	17:59:06
2	Be 313.107†	1244314.6	1213818.5	524.90 ug/L	524.90 ppb	17:59:06
2	Cd 226.502†	35209.6	34411.7	490.86 ug/L	490.86 ppb	17:59:26
2	Co 228.616†	19825.0	19325.9	492.10 ug/L	492.10 ppb	17:59:26
2	Cr 267.716†	38568.1	37435.7	511.71 ug/L	511.71 ppb	17:59:06
2	Cu 324.752†	173620.7	163293.0	543.50 ug/L	543.50 ppb	17:59:06
2	Mn 257.610†	2938768.7	2857543.6	3765.1 ug/L	3765.1 ppb	17:59:06
2	Mo 202.031†	5701.7	5536.4	498.86 ug/L	498.86 ppb	17:59:26
2	Ni 231.604†	16499.5	15961.6	506.60 ug/L	506.60 ppb	17:59:26

2	P 214.914†	1547.0	1317.2	815.72 ug/L	815.72 ppb	17:59:26
2	Pb 220.353†	3785.3	3739.5	568.48 ug/L	568.48 ppb	17:59:26
2	S 181.975 Axial†	2969.6	2857.7	5111.7 ug/L	5111.7 ppb	17:59:26
2	Sb 206.836†	1262.9	1204.5	510.19 ug/L	510.19 ppb	17:59:26
2	Se 196.026†	300.5	309.2	511.33 ug/L	511.33 ppb	17:59:26
2	Si 251.611†	993648.8	965828.6	36660 ug/L	36660 ppb	17:59:06
2	Sn 189.927†	2213.9	2145.8	483.65 ug/L	483.65 ppb	17:59:26
2	Ti 334.940†	2096378.1	2039834.7	3547.4 ug/L	3547.4 ppb	17:59:06
2	Tl 190.801†	1154.7	1152.0	489.90 ug/L	489.90 ppb	17:59:26
2	U 409.014†	5068.7	7133.5	205.58 ug/L	205.58 ppb	17:59:06
2	V 292.402†	66777.8	66258.4	520.31 ug/L	520.31 ppb	17:59:06
2	Zn 213.857†	76824.4	74141.1	881.64 ug/L	881.64 ppb	17:59:06
2	SiO2†	994496.7	966642.0	78876 ug/L	78876 ppb	18:00:06
3	Sc Radial	4445.1	4445.1	101 %		17:58:10
3	Y RADIAL	6737.9	6737.9	141.5 %		17:58:10
3	Al 396.153Radial†	23538.1	23351.3	22913 ug/L	22913 ppb	17:58:10
3	Ca 317.933Radial†	4897.3	4826.5	9132.7 ug/L	9132.7 ppb	17:58:10
3	Fe 238.204 Radial†	7464.4	7372.0	85432 ug/L	85432 ppb	17:58:10
3	K 766.490 Radial†	60934.4	57650.0	10975 ug/L	10975 ppb	17:58:10
3	Mg 279.077 IEC†	270.9	266.3	10902 ug/L	10902 ppb	17:58:30
3	Na 589.592 Radial†	25983.4	26566.2	9365.2 ug/L	9365.2 ppb	17:58:10
3	Sr 421.552†	66621.1	65850.7	527.77 ug/L	527.77 ppb	17:58:10
3	Sc 361.383	841080.4	841080.4	102.72 %		17:59:33
3	Y 371.029	981706.2	981706.2	141.94 %		17:59:33
3	Ag 328.068†	93489.7	90830.8	499.83 ug/L	499.83 ppb	17:59:33
3	As 188.979†	882.9	886.3	536.04 ug/L	536.04 ppb	17:59:53
3	B 249.677†	18829.2	18868.3	514.03 ug/L	514.03 ppb	17:59:33
3	Ba 233.527†	72673.6	70751.3	666.45 ug/L	666.45 ppb	17:59:33
3	Be 313.107†	1239449.2	1210383.4	523.41 ug/L	523.41 ppb	17:59:33
3	Cd 226.502†	35128.5	34369.6	490.23 ug/L	490.23 ppb	17:59:53
3	Co 228.616†	19784.4	19307.1	491.64 ug/L	491.64 ppb	17:59:53
3	Cr 267.716†	38358.9	37272.4	509.54 ug/L	509.54 ppb	17:59:33
3	Cu 324.752†	172761.3	162637.9	541.35 ug/L	541.35 ppb	17:59:33
3	Mn 257.610†	2924751.4	2846971.3	3751.2 ug/L	3751.2 ppb	17:59:33
3	Mo 202.031†	5698.2	5538.9	499.10 ug/L	499.10 ppb	17:59:53
3	Ni 231.604†	16434.2	15915.3	505.13 ug/L	505.13 ppb	17:59:53
3	P 214.914†	1530.6	1302.8	805.30 ug/L	805.30 ppb	17:59:53
3	Pb 220.353†	3770.7	3729.2	566.90 ug/L	566.90 ppb	17:59:53
3	S 181.975 Axial†	2947.9	2839.7	5079.4 ug/L	5079.4 ppb	17:59:53
3	Sb 206.836†	1243.9	1187.3	503.06 ug/L	503.06 ppb	17:59:53
3	Se 196.026†	294.3	303.5	507.25 ug/L	507.25 ppb	17:59:53
3	Si 251.611†	988224.5	961587.1	36499 ug/L	36499 ppb	17:59:33
3	Sn 189.927†	2222.6	2156.6	486.10 ug/L	486.10 ppb	17:59:53
3	Ti 334.940†	2086600.5	2032508.7	3534.7 ug/L	3534.7 ppb	17:59:33
3	Tl 190.801†	1164.6	1162.8	493.91 ug/L	493.91 ppb	17:59:53
3	U 409.014†	4929.7	7003.5	201.62 ug/L	201.62 ppb	17:59:33
3	V 292.402†	66478.7	66037.1	518.52 ug/L	518.52 ppb	17:59:33
3	Zn 213.857†	76401.8	73810.1	877.61 ug/L	877.61 ppb	17:59:33
3	SiO2†	998823.1	971894.2	79305 ug/L	79305 ppb	18:00:12

Mean Data: 1202053044|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	842421.2	102.88 %	0.196			0.19%
Sc Radial	4443.6	101 %	0.3			0.26%
Y 371.029	983267.5	142.16 %	0.324			0.23%
Y RADIAL	6733.8	141.4 %	0.35			0.24%
Ag 328.068†	91058.2	501.01 ug/L	1.020	501.01 ppb	1.020	0.20%
Al 396.153Radial†	23274.4	22838 ug/L	69.0	22838 ppb	69.0	0.30%
As 188.979†	890.9	538.63 ug/L	2.487	538.63 ppb	2.487	0.46%
B 249.677†	18897.0	514.84 ug/L	1.175	514.84 ppb	1.175	0.23%
Ba 233.527†	70798.6	666.89 ug/L	0.730	666.89 ppb	0.730	0.11%
Be 313.107†	1212662.0	524.40 ug/L	0.853	524.40 ppb	0.853	0.16%
Ca 317.933Radial†	4813.2	9107.6 ug/L	49.64	9107.6 ppb	49.64	0.54%
Cd 226.502†	34381.0	490.40 ug/L	0.408	490.40 ppb	0.408	0.08%
Co 228.616†	19318.0	491.91 ug/L	0.240	491.91 ppb	0.240	0.05%
Cr 267.716†	37362.8	510.75 ug/L	1.106	510.75 ppb	1.106	0.22%
Cu 324.752†	163105.1	542.89 ug/L	1.342	542.89 ppb	1.342	0.25%
Fe 238.204 Radial†	7369.4	85403 ug/L	171.2	85403 ppb	171.2	0.20%
K 766.490 Radial†	57531.1	10953 ug/L	21.5	10953 ppb	21.5	0.20%

Mg 279.077 IEC†	268.2	10977 ug/L	65.1	10977 ppb	65.1	0.59%
Mn 257.610†	2851499.2	3757.2 ug/L	7.15	3757.2 ppb	7.15	0.19%
Mo 202.031†	5537.8	499.00 ug/L	0.130	499.00 ppb	0.130	0.03%
Na 589.592 Radial†	26626.7	9386.5 ug/L	39.96	9386.5 ppb	39.96	0.43%
Ni 231.604†	15930.1	505.60 ug/L	0.868	505.60 ppb	0.868	0.17%
P 214.914†	1307.9	808.85 ug/L	5.951	808.85 ppb	5.951	0.74%
Pb 220.353†	3729.4	566.91 ug/L	1.558	566.91 ppb	1.558	0.27%
S 181.975 Axial†	2846.3	5091.3 ug/L	17.76	5091.3 ppb	17.76	0.35%
Sb 206.836†	1195.6	506.49 ug/L	3.575	506.49 ppb	3.575	0.71%
Se 196.026†	307.8	510.70 ug/L	3.177	510.70 ppb	3.177	0.62%
Si 251.611†	964181.3	36597 ug/L	86.3	36597 ppb	86.3	0.24%
Sn 189.927†	2154.4	485.60 ug/L	1.752	485.60 ppb	1.752	0.36%
Sr 421.552†	65791.9	527.30 ug/L	0.438	527.30 ppb	0.438	0.08%
Ti 334.940†	2036147.8	3541.0 ug/L	6.36	3541.0 ppb	6.36	0.18%
Tl 190.801†	1159.3	492.62 ug/L	2.359	492.62 ppb	2.359	0.48%
U 409.014†	7126.7	205.36 ug/L	3.633	205.36 ppb	3.633	1.77%
V 292.402†	66182.7	519.69 ug/L	1.012	519.69 ppb	1.012	0.19%
Zn 213.857†	74008.4	880.01 ug/L	2.124	880.01 ppb	2.124	0.24%
SiO2†	966892.3	78896 ug/L	398.4	78896 ppb	398.4	0.50%

Sequence No.: 42

Sample ID: 1202053045|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 56

Date Collected: 3/19/2010 18:02:22

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053045|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4570.7	4570.7	104 %		18:04:15
1	Y RADIAL	6769.4	6769.4	142.2 %		18:04:15
1	Al 396.153Radial†	22072.5	21302.6	20901 ug/L	20901 ppb	18:04:15
1	Ca 317.933Radial†	4734.2	4536.7	8584.3 ug/L	8584.3 ppb	18:04:15
1	Fe 238.204 Radial†	6992.6	6715.5	77826 ug/L	77826 ppb	18:04:15
1	K 766.490 Radial†	59727.2	54833.8	10439 ug/L	10439 ppb	18:04:15
1	Mg 279.077 IEC†	253.4	242.1	9910.5 ug/L	9910.5 ppb	18:04:35
1	Na 589.592 Radial†	25127.0	25036.7	8826.0 ug/L	8826.0 ppb	18:04:15
1	Sr 421.552†	65158.4	62634.2	502.00 ug/L	502.00 ppb	18:04:15
1	Sc 361.383	835719.5	835719.5	102.06 %		18:05:34
1	Y 371.029	958227.0	958227.0	138.54 %		18:05:34
1	Ag 328.068†	93320.6	91248.9	499.62 ug/L	499.62 ppb	18:05:34
1	As 188.979†	891.0	899.8	540.80 ug/L	540.80 ppb	18:05:54
1	B 249.677†	18704.1	18863.3	515.12 ug/L	515.12 ppb	18:05:34
1	Ba 233.527†	70387.8	68965.6	649.48 ug/L	649.48 ppb	18:05:34
1	Be 313.107†	1229357.4	1208236.0	522.27 ug/L	522.27 ppb	18:05:34
1	Cd 226.502†	35114.5	34575.2	494.00 ug/L	494.00 ppb	18:05:54
1	Co 228.616†	19855.3	19500.2	496.95 ug/L	496.95 ppb	18:05:54
1	Cr 267.716†	38049.8	37209.1	507.87 ug/L	507.87 ppb	18:05:34
1	Cu 324.752†	171276.4	162261.9	539.69 ug/L	539.69 ppb	18:05:34
1	Mn 257.610†	2568861.8	2516541.3	3316.1 ug/L	3316.1 ppb	18:05:34
1	Mo 202.031†	5685.7	5562.2	500.58 ug/L	500.58 ppb	18:05:54
1	Ni 231.604†	16432.0	16015.8	508.31 ug/L	508.31 ppb	18:05:54
1	P 214.914†	1686.6	1465.2	932.23 ug/L	932.23 ppb	18:05:54
1	Pb 220.353†	3706.2	3689.6	561.45 ug/L	561.45 ppb	18:05:54
1	S 181.975 Axial†	2969.8	2879.6	5151.2 ug/L	5151.2 ppb	18:05:54
1	Sb 206.836†	1254.4	1205.3	511.18 ug/L	511.18 ppb	18:05:54
1	Se 196.026†	319.5	330.0	506.83 ug/L	506.83 ppb	18:05:54
1	Si 251.611†	967229.4	947188.0	35952 ug/L	35952 ppb	18:05:34
1	Sn 189.927†	2227.7	2175.5	490.73 ug/L	490.73 ppb	18:05:54
1	Ti 334.940†	2014533.3	1974929.3	3434.6 ug/L	3434.6 ppb	18:05:34
1	Tl 190.801†	1177.9	1183.2	498.86 ug/L	498.86 ppb	18:05:54
1	U 409.014†	5766.9	7854.6	228.31 ug/L	228.31 ppb	18:05:34
1	V 292.402†	65534.1	65526.8	515.72 ug/L	515.72 ppb	18:05:34
1	Zn 213.857†	73726.0	71665.5	852.74 ug/L	852.74 ppb	18:05:34
1	SiO2†	975771.9	955546.7	77970 ug/L	77970 ppb	18:06:55
2	Sc Radial	4472.6	4472.6	102 %		18:04:40
2	Y RADIAL	6694.3	6694.3	140.6 %		18:04:40
2	Al 396.153Radial†	22222.8	21915.8	21504 ug/L	21504 ppb	18:04:40
2	Ca 317.933Radial†	4752.4	4654.4	8807.0 ug/L	8807.0 ppb	18:04:40
2	Fe 238.204 Radial†	7016.5	6886.5	79807 ug/L	79807 ppb	18:04:40
2	K 766.490 Radial†	59981.3	56343.2	10727 ug/L	10727 ppb	18:04:40
2	Mg 279.077 IEC†	253.9	248.0	10150 ug/L	10150 ppb	18:05:00
2	Na 589.592 Radial†	25081.6	25522.1	8997.1 ug/L	8997.1 ppb	18:04:40
2	Sr 421.552†	65518.8	64362.6	515.85 ug/L	515.85 ppb	18:04:40
2	Sc 361.383	846720.3	846720.3	103.41 %		18:06:01
2	Y 371.029	968703.4	968703.4	140.06 %		18:06:01
2	Ag 328.068†	93910.9	90631.9	497.02 ug/L	497.02 ppb	18:06:01
2	As 188.979†	896.4	893.7	537.71 ug/L	537.71 ppb	18:06:21
2	B 249.677†	18891.3	18806.3	513.21 ug/L	513.21 ppb	18:06:01
2	Ba 233.527†	70694.6	68366.2	643.92 ug/L	643.92 ppb	18:06:01
2	Be 313.107†	1236152.8	1199158.3	518.35 ug/L	518.35 ppb	18:06:01
2	Cd 226.502†	35212.9	34223.4	488.69 ug/L	488.69 ppb	18:06:21
2	Co 228.616†	19870.7	19262.3	490.81 ug/L	490.81 ppb	18:06:21
2	Cr 267.716†	38250.4	36918.7	504.18 ug/L	504.18 ppb	18:06:01
2	Cu 324.752†	172527.5	161291.5	536.60 ug/L	536.60 ppb	18:06:01
2	Mn 257.610†	2581703.2	2496259.1	3289.6 ug/L	3289.6 ppb	18:06:01
2	Mo 202.031†	5707.3	5510.7	496.15 ug/L	496.15 ppb	18:06:21
2	Ni 231.604†	16461.3	15834.9	502.57 ug/L	502.57 ppb	18:06:21

2	P 214.914†	1684.5	1441.7	913.81 ug/L	913.81 ppb	18:06:21
2	Pb 220.353†	3717.7	3653.5	555.75 ug/L	555.75 ppb	18:06:21
2	S 181.975 Axial†	2967.4	2839.4	5079.2 ug/L	5079.2 ppb	18:06:21
2	Sb 206.836†	1262.5	1197.2	507.62 ug/L	507.62 ppb	18:06:21
2	Se 196.026†	321.2	327.6	510.70 ug/L	510.70 ppb	18:06:21
2	Si 251.611†	972199.4	939681.8	35667 ug/L	35667 ppb	18:06:01
2	Sn 189.927†	2225.3	2144.8	483.70 ug/L	483.70 ppb	18:06:21
2	Ti 334.940†	2026419.2	1960779.3	3410.0 ug/L	3410.0 ppb	18:06:01
2	Tl 190.801†	1182.8	1172.9	494.59 ug/L	494.59 ppb	18:06:21
2	U 409.014†	5659.3	7677.1	222.70 ug/L	222.70 ppb	18:06:01
2	V 292.402†	66004.6	65147.5	512.36 ug/L	512.36 ppb	18:06:01
2	Zn 213.857†	74004.2	70996.0	844.37 ug/L	844.37 ppb	18:06:01
2	SiO2†	977001.7	944314.7	77054 ug/L	77054 ppb	18:07:01
3	Sc Radial	4375.7	4375.7	99.6 %		18:05:05
3	Y RADIAL	6550.4	6550.4	137.6 %		18:05:05
3	Al 396.153Radial†	21942.8	22117.9	21702 ug/L	21702 ppb	18:05:05
3	Ca 317.933Radial†	4735.5	4740.7	8970.5 ug/L	8970.5 ppb	18:05:05
3	Fe 238.204 Radial†	6899.9	6922.0	80218 ug/L	80218 ppb	18:05:05
3	K 766.490 Radial†	59207.4	56870.4	10827 ug/L	10827 ppb	18:05:05
3	Mg 279.077 IEC†	254.8	254.4	10414 ug/L	10414 ppb	18:05:25
3	Na 589.592 Radial†	24683.4	25667.7	9048.4 ug/L	9048.4 ppb	18:05:05
3	Sr 421.552†	64566.9	64831.6	519.61 ug/L	519.61 ppb	18:05:05
3	Sc 361.383	851189.4	851189.4	103.95 %		18:06:29
3	Y 371.029	973316.2	973316.2	140.72 %		18:06:29
3	Ag 328.068†	94543.2	90763.2	497.83 ug/L	497.83 ppb	18:06:29
3	As 188.979†	897.2	889.8	535.79 ug/L	535.79 ppb	18:06:49
3	B 249.677†	18996.3	18811.4	513.30 ug/L	513.30 ppb	18:06:29
3	Ba 233.527†	71228.2	68520.6	645.38 ug/L	645.38 ppb	18:06:29
3	Be 313.107†	1246561.9	1202895.1	519.97 ug/L	519.97 ppb	18:06:29
3	Cd 226.502†	35168.1	34001.6	485.43 ug/L	485.43 ppb	18:06:49
3	Co 228.616†	19800.4	19093.8	486.42 ug/L	486.42 ppb	18:06:49
3	Cr 267.716†	38564.9	37027.1	505.68 ug/L	505.68 ppb	18:06:29
3	Cu 324.752†	174019.3	161850.6	538.47 ug/L	538.47 ppb	18:06:29
3	Mn 257.610†	2603869.6	2504473.9	3300.4 ug/L	3300.4 ppb	18:06:29
3	Mo 202.031†	5707.7	5482.2	493.65 ug/L	493.65 ppb	18:06:49
3	Ni 231.604†	16382.1	15675.2	497.50 ug/L	497.50 ppb	18:06:49
3	P 214.914†	1668.4	1417.7	895.27 ug/L	895.27 ppb	18:06:49
3	Pb 220.353†	3733.2	3649.6	555.13 ug/L	555.13 ppb	18:06:49
3	S 181.975 Axial†	2963.0	2820.1	5044.6 ug/L	5044.6 ppb	18:06:49
3	Sb 206.836†	1258.8	1187.2	503.30 ug/L	503.30 ppb	18:06:49
3	Se 196.026†	300.7	306.3	494.15 ug/L	494.15 ppb	18:06:49
3	Si 251.611†	980993.5	943205.1	35801 ug/L	35801 ppb	18:06:29
3	Sn 189.927†	2227.8	2135.9	481.68 ug/L	481.68 ppb	18:06:49
3	Ti 334.940†	2043639.7	1967055.9	3420.9 ug/L	3420.9 ppb	18:06:29
3	Tl 190.801†	1170.0	1154.6	487.66 ug/L	487.66 ppb	18:06:49
3	U 409.014†	5696.6	7684.2	222.87 ug/L	222.87 ppb	18:06:29
3	V 292.402†	66349.6	65144.3	512.23 ug/L	512.23 ppb	18:06:29
3	Zn 213.857†	74582.6	71176.7	846.53 ug/L	846.53 ppb	18:06:29
3	SiO2†	971946.6	934491.1	76252 ug/L	76252 ppb	18:07:07

Mean Data: 1202053045|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	844543.1	103.14 %	0.972			0.94%
Sc Radial	4473.0	102 %	2.2			2.18%
Y 371.029	966748.9	139.77 %	1.118			0.80%
Y RADIAL	6671.3	140.1 %	2.34			1.67%
Ag 328.068†	90881.3	498.15 ug/L	1.332	498.15 ppb	1.332	0.27%
Al 396.153Radial†	21778.8	21369 ug/L	417.2	21369 ppb	417.2	1.95%
As 188.979†	894.4	538.10 ug/L	2.529	538.10 ppb	2.529	0.47%
B 249.677†	18827.0	513.87 ug/L	1.075	513.87 ppb	1.075	0.21%
Ba 233.527†	68617.5	646.26 ug/L	2.883	646.26 ppb	2.883	0.45%
Be 313.107†	1203429.8	520.20 ug/L	1.971	520.20 ppb	1.971	0.38%
Ca 317.933Radial†	4643.9	8787.3 ug/L	193.84	8787.3 ppb	193.84	2.21%
Cd 226.502†	34266.7	489.37 ug/L	4.330	489.37 ppb	4.330	0.88%
Co 228.616†	19285.4	491.39 ug/L	5.288	491.39 ppb	5.288	1.08%
Cr 267.716†	37051.6	505.91 ug/L	1.854	505.91 ppb	1.854	0.37%
Cu 324.752†	161801.3	538.25 ug/L	1.559	538.25 ppb	1.559	0.29%
Fe 238.204 Radial†	6841.3	79283 ug/L	1278.8	79283 ppb	1278.8	1.61%
K 766.490 Radial†	56015.8	10664 ug/L	201.3	10664 ppb	201.3	1.89%

Mg 279.077 IEC†	248.1	10158 ug/L	251.7	10158 ppb	251.7	2.48%
Mn 257.610†	2505758.1	3302.0 ug/L	13.31	3302.0 ppb	13.31	0.40%
Mo 202.031†	5518.4	496.79 ug/L	3.506	496.79 ppb	3.506	0.71%
Na 589.592 Radial†	25408.8	8957.2 ug/L	116.46	8957.2 ppb	116.46	1.30%
Ni 231.604†	15842.0	502.80 ug/L	5.409	502.80 ppb	5.409	1.08%
P 214.914†	1441.5	913.77 ug/L	18.480	913.77 ppb	18.480	2.02%
Pb 220.353†	3664.2	557.44 ug/L	3.484	557.44 ppb	3.484	0.63%
S 181.975 Axial†	2846.4	5091.6 ug/L	54.37	5091.6 ppb	54.37	1.07%
Sb 206.836†	1196.6	507.37 ug/L	3.945	507.37 ppb	3.945	0.78%
Se 196.026†	321.3	503.89 ug/L	8.660	503.89 ppb	8.660	1.72%
Si 251.611†	943358.3	35807 ug/L	142.5	35807 ppb	142.5	0.40%
Sn 189.927†	2152.1	485.37 ug/L	4.751	485.37 ppb	4.751	0.98%
Sr 421.552†	63942.8	512.48 ug/L	9.275	512.48 ppb	9.275	1.81%
Ti 334.940†	1967588.2	3421.8 ug/L	12.32	3421.8 ppb	12.32	0.36%
Tl 190.801†	1170.2	493.70 ug/L	5.651	493.70 ppb	5.651	1.14%
U 409.014†	7738.6	224.63 ug/L	3.187	224.63 ppb	3.187	1.42%
V 292.402†	65272.8	513.44 ug/L	1.978	513.44 ppb	1.978	0.39%
Zn 213.857†	71279.4	847.88 ug/L	4.344	847.88 ppb	4.344	0.51%
SiO2†	944784.2	77092 ug/L	859.7	77092 ppb	859.7	1.12%

Sequence No.: 43
 Sample ID: 1202053043|957488|5
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 57
 Date Collected: 3/19/2010 18:09:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053043|957488|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4345.0	4345.0	98.9 %		18:11:31
1	Y RADIAL	5130.9	5130.9	107.8 %		18:11:11
1	Al 396.153Radial†	1936.6	2037.0	2000.8 ug/L	2000.8 ppb	18:11:11
1	Ca 317.933Radial†	334.9	323.1	611.39 ug/L	611.39 ppb	18:11:31
1	Fe 238.204 Radial†	1273.0	1279.2	14822 ug/L	14822 ppb	18:11:31
1	K 766.490 Radial†	5558.9	3024.2	575.66 ug/L	575.66 ppb	18:11:11
1	Mg 279.077 IEC†	23.5	22.3	903.69 ug/L	903.69 ppb	18:11:31
1	Na 589.592 Radial†	-35.6	839.1	295.79 ug/L	295.79 ppb	18:11:11
1	Sr 421.552†	379.3	362.8	2.9036 ug/L	2.9036 ppb	18:11:11
1	Sc 361.383	837934.9	837934.9	102.33 %		18:12:28
1	Y 371.029	739881.8	739881.8	106.97 %		18:12:28
1	Ag 328.068†	-582.3	-754.1	0.7246 ug/L	0.7246 ppb	18:12:28
1	As 188.979†	-19.0	8.3	12.585 ug/L	12.585 ppb	18:12:48
1	B 249.677†	-120.6	419.5	9.3558 ug/L	9.3558 ppb	18:12:28
1	Ba 233.527†	2304.0	2252.2	21.561 ug/L	21.561 ppb	18:12:48
1	Be 313.107†	-3130.9	671.5	1.4880 ug/L	1.4880 ppb	18:12:28
1	Cd 226.502†	-40.9	130.7	0.3573 ug/L	0.3573 ppb	18:12:48
1	Co 228.616†	33.5	78.9	0.7301 ug/L	0.7301 ppb	18:12:48
1	Cr 267.716†	147.4	72.5	2.5706 ug/L	2.5706 ppb	18:12:48
1	Cu 324.752†	6264.9	570.1	2.6918 ug/L	2.6918 ppb	18:12:28
1	Mn 257.610†	397743.7	388283.6	511.95 ug/L	511.95 ppb	18:12:28
1	Mo 202.031†	29.4	20.2	2.9559 ug/L	2.9559 ppb	18:12:48
1	Ni 231.604†	125.9	39.0	1.2364 ug/L	1.2364 ppb	18:12:48
1	P 214.914†	283.2	89.5	54.832 ug/L	54.832 ppb	18:12:48
1	Pb 220.353†	11.8	69.9	9.0805 ug/L	9.0805 ppb	18:12:48
1	S 181.975 Axial†	38.8	7.7	13.485 ug/L	13.485 ppb	18:12:48
1	Sb 206.836†	21.6	-2.5	-2.9786 ug/L	-2.9786 ppb	18:12:48
1	Se 196.026†	-70.9	-52.3	-0.2946 ug/L	-0.2946 ppb	18:12:48
1	Si 251.611†	108734.9	105766.9	4015.2 ug/L	4015.2 ppb	18:12:28
1	Sn 189.927†	3.9	-3.4	-1.5085 ug/L	-1.5085 ppb	18:12:48
1	Ti 334.940†	310434.3	304475.8	529.53 ug/L	529.53 ppb	18:12:28
1	Tl 190.801†	-37.3	-7.3	3.9726 ug/L	3.9726 ppb	18:12:48
1	U 409.014†	-3789.0	-1498.4	-47.149 ug/L	-47.149 ppb	18:12:28
1	V 292.402†	-476.5	851.8	4.0382 ug/L	4.0382 ppb	18:12:28
1	Zn 213.857†	6270.5	5557.4	65.109 ug/L	65.109 ppb	18:12:28
1	SiO2†	107867.6	104908.2	8561.7 ug/L	8561.7 ppb	18:13:45
2	Sc Radial	4316.1	4316.1	98.2 %		18:11:56
2	Y RADIAL	5199.5	5199.5	109.2 %		18:11:36
2	Al 396.153Radial†	1875.4	1987.8	1952.5 ug/L	1952.5 ppb	18:11:36
2	Ca 317.933Radial†	326.5	316.8	599.45 ug/L	599.45 ppb	18:11:56
2	Fe 238.204 Radial†	1238.7	1252.9	14517 ug/L	14517 ppb	18:11:56
2	K 766.490 Radial†	5449.6	2950.5	561.63 ug/L	561.63 ppb	18:11:36
2	Mg 279.077 IEC†	20.4	19.3	779.69 ug/L	779.69 ppb	18:11:56
2	Na 589.592 Radial†	-68.1	805.7	284.04 ug/L	284.04 ppb	18:11:36
2	Sr 421.552†	340.5	325.9	2.6081 ug/L	2.6081 ppb	18:11:36
2	Sc 361.383	835116.1	835116.1	101.99 %		18:12:54
2	Y 371.029	737423.1	737423.1	106.62 %		18:12:54
2	Ag 328.068†	-603.9	-777.2	0.5025 ug/L	0.5025 ppb	18:12:54
2	As 188.979†	-21.5	5.7	11.116 ug/L	11.116 ppb	18:13:14
2	B 249.677†	-58.4	480.1	11.106 ug/L	11.106 ppb	18:12:54
2	Ba 233.527†	2324.3	2279.7	21.810 ug/L	21.810 ppb	18:13:14
2	Be 313.107†	-3146.6	645.8	1.4775 ug/L	1.4775 ppb	18:12:54
2	Cd 226.502†	-47.9	123.6	0.2884 ug/L	0.2884 ppb	18:13:14
2	Co 228.616†	20.1	65.9	0.3979 ug/L	0.3979 ppb	18:13:14
2	Cr 267.716†	172.2	97.4	2.8672 ug/L	2.8672 ppb	18:13:14
2	Cu 324.752†	6306.5	631.5	2.8718 ug/L	2.8718 ppb	18:12:54
2	Mn 257.610†	396476.8	388353.3	512.02 ug/L	512.02 ppb	18:12:54
2	Mo 202.031†	32.8	23.7	3.2365 ug/L	3.2365 ppb	18:13:14
2	Ni 231.604†	116.1	29.8	0.9445 ug/L	0.9445 ppb	18:13:14

2	P 214.914†	266.9	74.5	43.855 ug/L	43.855 ppb	18:13:14
2	Pb 220.353†	6.1	64.2	8.2489 ug/L	8.2489 ppb	18:13:14
2	S 181.975 Axial†	30.0	-0.8	-1.8320 ug/L	-1.8320 ppb	18:13:14
2	Sb 206.836†	27.9	3.7	-0.3426 ug/L	-0.3426 ppb	18:13:14
2	Se 196.026†	-80.5	-62.0	-9.2720 ug/L	-9.2720 ppb	18:13:14
2	Si 251.611†	108491.8	105887.2	4019.8 ug/L	4019.8 ppb	18:12:54
2	Sn 189.927†	13.2	5.7	0.5774 ug/L	0.5774 ppb	18:13:14
2	Ti 334.940†	309506.0	304589.5	529.73 ug/L	529.73 ppb	18:12:54
2	Tl 190.801†	-47.3	-17.3	0.1324 ug/L	0.1324 ppb	18:13:14
2	U 409.014†	-3384.5	-1114.3	-35.462 ug/L	-35.462 ppb	18:12:54
2	V 292.402†	-422.9	902.8	4.5132 ug/L	4.5132 ppb	18:12:54
2	Zn 213.857†	6275.9	5583.4	65.471 ug/L	65.471 ppb	18:12:54
2	SiO2†	107682.9	105082.9	8575.9 ug/L	8575.9 ppb	18:13:50
3	Sc Radial	4312.1	4312.1	98.1 %		18:12:22
3	Y RADIAL	5044.2	5044.2	106.0 %		18:12:01
3	Al 396.153Radial†	1884.9	1999.2	1963.7 ug/L	1963.7 ppb	18:12:01
3	Ca 317.933Radial†	335.5	326.2	617.33 ug/L	617.33 ppb	18:12:22
3	Fe 238.204 Radial†	1261.8	1277.7	14804 ug/L	14804 ppb	18:12:22
3	K 766.490 Radial†	5637.3	3147.1	599.09 ug/L	599.09 ppb	18:12:01
3	Mg 279.077 IEC†	21.9	20.8	841.71 ug/L	841.71 ppb	18:12:22
3	Na 589.592 Radial†	-61.8	812.1	286.29 ug/L	286.29 ppb	18:12:01
3	Sr 421.552†	324.1	309.5	2.4764 ug/L	2.4764 ppb	18:12:01
3	Sc 361.383	834526.6	834526.6	101.92 %		18:13:19
3	Y 371.029	736795.0	736795.0	106.53 %		18:13:19
3	Ag 328.068†	-603.7	-777.5	0.5930 ug/L	0.5930 ppb	18:13:19
3	As 188.979†	-26.8	0.5	8.3225 ug/L	8.3225 ppb	18:13:39
3	B 249.677†	-95.6	443.6	10.034 ug/L	10.034 ppb	18:13:19
3	Ba 233.527†	2306.8	2264.1	21.672 ug/L	21.672 ppb	18:13:39
3	Be 313.107†	-3121.6	668.2	1.4835 ug/L	1.4835 ppb	18:13:19
3	Cd 226.502†	-68.6	103.4	-0.0361 ug/L	-0.0361 ppb	18:13:39
3	Co 228.616†	36.9	82.4	0.8238 ug/L	0.8238 ppb	18:13:39
3	Cr 267.716†	173.6	98.8	2.9189 ug/L	2.9189 ppb	18:13:39
3	Cu 324.752†	6351.8	680.3	3.0508 ug/L	3.0508 ppb	18:13:19
3	Mn 257.610†	395274.6	387448.3	510.85 ug/L	510.85 ppb	18:13:19
3	Mo 202.031†	31.5	22.4	3.1475 ug/L	3.1475 ppb	18:13:39
3	Ni 231.604†	130.9	44.4	1.4082 ug/L	1.4082 ppb	18:13:39
3	P 214.914†	273.3	80.9	48.394 ug/L	48.394 ppb	18:13:39
3	Pb 220.353†	0.7	58.9	7.3972 ug/L	7.3972 ppb	18:13:39
3	S 181.975 Axial†	31.6	0.9	1.1830 ug/L	1.1830 ppb	18:13:39
3	Sb 206.836†	40.0	15.6	4.6132 ug/L	4.6132 ppb	18:13:39
3	Se 196.026†	-66.5	-48.3	2.9531 ug/L	2.9531 ppb	18:13:39
3	Si 251.611†	107775.4	105259.4	3995.9 ug/L	3995.9 ppb	18:13:19
3	Sn 189.927†	6.4	-0.9	-0.9376 ug/L	-0.9376 ppb	18:13:39
3	Ti 334.940†	308381.9	303700.8	528.18 ug/L	528.18 ppb	18:13:19
3	Tl 190.801†	-39.6	-9.8	3.0155 ug/L	3.0155 ppb	18:13:39
3	U 409.014†	-3543.0	-1272.1	-40.284 ug/L	-40.284 ppb	18:13:19
3	V 292.402†	-449.8	876.1	4.2505 ug/L	4.2505 ppb	18:13:19
3	Zn 213.857†	6198.3	5511.6	64.555 ug/L	64.555 ppb	18:13:19
3	SiO2†	107109.2	104594.6	8536.1 ug/L	8536.1 ppb	18:13:55

Mean Data: 1202053043|957488|5

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835859.2	102.08 %		0.222			0.22%
Sc Radial	4324.4	98.4 %		0.41			0.42%
Y 371.029	738033.3	106.71 %		0.236			0.22%
Y RADIAL	5124.9	107.7 %		1.63			1.52%
Ag 328.068†	-769.6	0.6067 ug/L		0.11166	0.6067 ppb	0.11166	18.40%
Al 396.153Radial†	2008.0	1972.3 ug/L		25.28	1972.3 ppb	25.28	1.28%
As 188.979†	4.8	10.675 ug/L		2.1655	10.675 ppb	2.1655	20.29%
B 249.677†	447.7	10.165 ug/L		0.8827	10.165 ppb	0.8827	8.68%
Ba 233.527†	2265.3	21.681 ug/L		0.1248	21.681 ppb	0.1248	0.58%
Be 313.107†	661.8	1.4830 ug/L		0.00527	1.4830 ppb	0.00527	0.36%
Ca 317.933Radial†	322.1	609.39 ug/L		9.109	609.39 ppb	9.109	1.49%
Cd 226.502†	119.2	0.2032 ug/L		0.21013	0.2032 ppb	0.21013	103.41%
Co 228.616†	75.7	0.6506 ug/L		0.22382	0.6506 ppb	0.22382	34.40%
Cr 267.716†	89.6	2.7856 ug/L		0.18793	2.7856 ppb	0.18793	6.75%
Cu 324.752†	627.3	2.8715 ug/L		0.17952	2.8715 ppb	0.17952	6.25%
Fe 238.204 Radial†	1269.9	14714 ug/L		171.5	14714 ppb	171.5	1.17%
K 766.490 Radial†	3040.6	578.80 ug/L		18.924	578.80 ppb	18.924	3.27%

Mg 279.077 IEC†	20.8	841.69 ug/L	61.997	841.69 ppb	61.997	7.37%
Mn 257.610†	388028.4	511.61 ug/L	0.654	511.61 ppb	0.654	0.13%
Mo 202.031†	22.1	3.1133 ug/L	0.14342	3.1133 ppb	0.14342	4.61%
Na 589.592 Radial†	819.0	288.71 ug/L	6.238	288.71 ppb	6.238	2.16%
Ni 231.604†	37.7	1.1964 ug/L	0.23443	1.1964 ppb	0.23443	19.60%
P 214.914†	81.6	49.027 ug/L	5.5155	49.027 ppb	5.5155	11.25%
Pb 220.353†	64.4	8.2422 ug/L	0.84169	8.2422 ppb	0.84169	10.21%
S 181.975 Axial†	2.6	4.2786 ug/L	8.11400	4.2786 ppb	8.11400	189.64%
Sb 206.836†	5.6	0.4307 ug/L	3.85452	0.4307 ppb	3.85452	894.98%
Se 196.026†	-54.2	-2.2045 ug/L	6.33237	-2.2045 ppb	6.33237	287.25%
Si 251.611†	105637.8	4010.3 ug/L	12.65	4010.3 ppb	12.65	0.32%
Sn 189.927†	0.5	-0.6229 ug/L	1.07797	-0.6229 ppb	1.07797	173.05%
Sr 421.552†	332.8	2.6627 ug/L	0.21881	2.6627 ppb	0.21881	8.22%
Ti 334.940†	304255.3	529.14 ug/L	0.841	529.14 ppb	0.841	0.16%
Tl 190.801†	-11.5	2.3735 ug/L	1.99897	2.3735 ppb	1.99897	84.22%
U 409.014†	-1294.9	-40.965 ug/L	5.8733	-40.965 ppb	5.8733	14.34%
V 292.402†	876.9	4.2673 ug/L	0.23793	4.2673 ppb	0.23793	5.58%
Zn 213.857†	5550.8	65.045 ug/L	0.4614	65.045 ppb	0.4614	0.71%
SiO2†	104861.9	8557.9 ug/L	20.19	8557.9 ppb	20.19	0.24%

Sequence No.: 44

Sample ID: 247770002|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 58

Date Collected: 3/19/2010 18:16:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770002|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3998.1	3998.1	91.0 %		18:18:19
1	Y RADIAL	7118.1	7118.1	149.5 %		18:17:59
1	Al 396.153Radial†	13753.9	15197.4	14927 ug/L	14927 ppb	18:17:59
1	Ca 317.933Radial†	3919.4	4292.8	8122.9 ug/L	8122.9 ppb	18:18:19
1	Fe 238.204 Radial†	5607.3	6155.5	71323 ug/L	71323 ppb	18:17:59
1	K 766.490 Radial†	47722.2	49861.2	9493.1 ug/L	9493.1 ppb	18:17:59
1	Mg 279.077 IEC†	37.9	40.1	1581.0 ug/L	1581.0 ppb	18:18:19
1	Na 589.592 Radial†	16330.2	18826.5	6636.8 ug/L	6636.8 ppb	18:17:59
1	Sr 421.552†	2596.9	2833.9	22.655 ug/L	22.655 ppb	18:17:59
1	Sc 361.383	834399.4	834399.4	101.90 %		18:19:17
1	Y 371.029	1017692.2	1017692.2	147.14 %		18:19:17
1	Ag 328.068†	-3658.3	-3775.2	2.7522 ug/L	2.7522 ppb	18:19:22
1	As 188.979†	-45.0	-17.4	32.496 ug/L	32.496 ppb	18:19:42
1	B 249.677†	275.8	808.0	11.045 ug/L	11.045 ppb	18:19:22
1	Ba 233.527†	12330.4	12101.0	115.60 ug/L	115.60 ppb	18:19:22
1	Be 313.107†	-12122.1	-8164.8	3.1778 ug/L	3.1778 ppb	18:19:22
1	Cd 226.502†	327.6	492.2	-0.2742 ug/L	-0.2742 ppb	18:19:42
1	Co 228.616†	490.6	527.7	6.5156 ug/L	6.5156 ppb	18:19:42
1	Cr 267.716†	8737.6	8503.0	121.76 ug/L	121.76 ppb	18:19:22
1	Cu 324.752†	8646.7	2933.3	13.621 ug/L	13.621 ppb	18:19:22
1	Mn 257.610†	3091067.8	3032981.9	3994.8 ug/L	3994.8 ppb	18:19:17
1	Mo 202.031†	225.0	212.2	24.498 ug/L	24.498 ppb	18:19:42
1	Ni 231.604†	513.4	419.8	13.323 ug/L	13.323 ppb	18:19:42
1	P 214.914†	823.1	620.4	406.44 ug/L	406.44 ppb	18:19:42
1	Pb 220.353†	301.7	354.4	47.753 ug/L	47.753 ppb	18:19:42
1	S 181.975 Axial†	32.7	1.9	0.6165 ug/L	0.6165 ppb	18:19:42
1	Sb 206.836†	54.4	29.7	1.9308 ug/L	1.9308 ppb	18:19:42
1	Se 196.026†	-278.2	-256.1	-3.4583 ug/L	-3.4583 ppb	18:19:42
1	Si 251.611†	866142.0	849486.7	32249 ug/L	32249 ppb	18:19:17
1	Sn 189.927†	-28.7	-35.3	-10.665 ug/L	-10.665 ppb	18:19:42
1	Ti 334.940†	1716388.0	1685471.7	2932.2 ug/L	2932.2 ppb	18:19:17
1	Tl 190.801†	-141.8	-110.1	0.6517 ug/L	0.6517 ppb	18:19:42
1	U 409.014†	-12030.4	-9601.6	-299.68 ug/L	-299.68 ppb	18:19:17
1	V 292.402†	3979.5	5222.6	27.910 ug/L	27.910 ppb	18:19:22
1	Zn 213.857†	38550.9	37261.3	440.71 ug/L	440.71 ppb	18:19:22
1	SiO2†	878785.6	861883.1	70339 ug/L	70339 ppb	18:20:50
2	Sc Radial	4025.2	4025.2	91.6 %		18:18:44
2	Y RADIAL	7055.4	7055.4	148.2 %		18:18:24
2	Al 396.153Radial†	13899.6	15254.9	14983 ug/L	14983 ppb	18:18:24
2	Ca 317.933Radial†	3886.8	4228.3	8000.8 ug/L	8000.8 ppb	18:18:44
2	Fe 238.204 Radial†	5607.4	6114.2	70844 ug/L	70844 ppb	18:18:24
2	K 766.490 Radial†	48033.9	49848.9	9490.7 ug/L	9490.7 ppb	18:18:24
2	Mg 279.077 IEC†	40.1	42.2	1668.5 ug/L	1668.5 ppb	18:18:44
2	Na 589.592 Radial†	16607.7	19008.8	6701.0 ug/L	6701.0 ppb	18:18:24
2	Sr 421.552†	2636.2	2857.6	22.846 ug/L	22.846 ppb	18:18:24
2	Sc 361.383	832734.6	832734.6	101.70 %		18:19:48
2	Y 371.029	1015740.9	1015740.9	146.86 %		18:19:48
2	Ag 328.068†	-3479.7	-3606.7	3.4855 ug/L	3.4855 ppb	18:19:53
2	As 188.979†	-45.8	-18.2	32.025 ug/L	32.025 ppb	18:20:13
2	B 249.677†	214.1	747.9	9.4369 ug/L	9.4369 ppb	18:19:53
2	Ba 233.527†	12164.2	11961.8	114.29 ug/L	114.29 ppb	18:19:53
2	Be 313.107†	-11735.5	-7808.4	3.3511 ug/L	3.3511 ppb	18:19:53
2	Cd 226.502†	328.0	493.1	-0.2121 ug/L	-0.2121 ppb	18:20:13
2	Co 228.616†	501.8	539.6	6.8177 ug/L	6.8177 ppb	18:20:13
2	Cr 267.716†	8645.4	8429.4	120.72 ug/L	120.72 ppb	18:19:53
2	Cu 324.752†	8546.8	2852.0	13.330 ug/L	13.330 ppb	18:19:53
2	Mn 257.610†	3097415.5	3045288.1	4010.9 ug/L	4010.9 ppb	18:19:48
2	Mo 202.031†	256.8	244.0	27.284 ug/L	27.284 ppb	18:20:13
2	Ni 231.604†	511.4	418.8	13.293 ug/L	13.293 ppb	18:20:13

2	P 214.914†	826.0	624.9	410.23 ug/L	410.23 ppb	18:20:13
2	Pb 220.353†	293.2	346.6	46.647 ug/L	46.647 ppb	18:20:13
2	S 181.975 Axial†	34.9	4.2	4.6444 ug/L	4.6444 ppb	18:20:13
2	Sb 206.836†	46.3	21.9	-1.3385 ug/L	-1.3385 ppb	18:20:13
2	Se 196.026†	-277.4	-255.8	-4.5926 ug/L	-4.5926 ppb	18:20:13
2	Si 251.611†	868312.7	853320.4	32394 ug/L	32394 ppb	18:19:48
2	Sn 189.927†	-34.2	-40.8	-11.893 ug/L	-11.893 ppb	18:20:13
2	Ti 334.940†	1718511.5	1690927.2	2941.6 ug/L	2941.6 ppb	18:19:48
2	Tl 190.801†	-147.9	-116.3	-1.6039 ug/L	-1.6039 ppb	18:20:13
2	U 409.014†	-12220.1	-9811.8	-306.00 ug/L	-306.00 ppb	18:19:48
2	V 292.402†	3962.7	5214.0	27.930 ug/L	27.930 ppb	18:19:53
2	Zn 213.857†	38084.0	36877.8	436.14 ug/L	436.14 ppb	18:19:53
2	SiO2†	874314.9	859211.3	70121 ug/L	70121 ppb	18:20:56
3	Sc Radial	4029.2	4029.2	91.7 %		18:19:09
3	Y RADIAL	7080.5	7080.5	148.7 %		18:18:49
3	Al 396.153Radial†	13836.7	15171.1	14901 ug/L	14901 ppb	18:18:49
3	Ca 317.933Radial†	3897.1	4235.2	8013.9 ug/L	8013.9 ppb	18:19:09
3	Fe 238.204 Radial†	5567.7	6064.7	70271 ug/L	70271 ppb	18:18:49
3	K 766.490 Radial†	47748.4	49485.1	9421.4 ug/L	9421.4 ppb	18:18:49
3	Mg 279.077 IEC†	36.7	38.5	1514.0 ug/L	1514.0 ppb	18:19:09
3	Na 589.592 Radial†	16320.2	18677.2	6584.1 ug/L	6584.1 ppb	18:18:49
3	Sr 421.552†	2596.3	2811.2	22.474 ug/L	22.474 ppb	18:18:49
3	Sc 361.383	833479.8	833479.8	101.79 %		18:20:19
3	Y 371.029	1017003.0	1017003.0	147.04 %		18:20:19
3	Ag 328.068†	-3576.7	-3699.0	2.8327 ug/L	2.8327 ppb	18:20:24
3	As 188.979†	-46.9	-19.3	31.207 ug/L	31.207 ppb	18:20:44
3	B 249.677†	344.3	875.6	13.113 ug/L	13.113 ppb	18:20:24
3	Ba 233.527†	12315.2	12099.3	115.56 ug/L	115.56 ppb	18:20:24
3	Be 313.107†	-11980.0	-8038.3	3.2326 ug/L	3.2326 ppb	18:20:24
3	Cd 226.502†	335.4	500.1	-0.0513 ug/L	-0.0513 ppb	18:20:44
3	Co 228.616†	498.8	536.3	6.7556 ug/L	6.7556 ppb	18:20:44
3	Cr 267.716†	8772.3	8546.5	122.23 ug/L	122.23 ppb	18:20:24
3	Cu 324.752†	8714.7	3009.5	13.822 ug/L	13.822 ppb	18:20:24
3	Mn 257.610†	3087561.0	3032883.7	3994.6 ug/L	3994.6 ppb	18:20:19
3	Mo 202.031†	241.0	228.2	25.837 ug/L	25.837 ppb	18:20:44
3	Ni 231.604†	545.7	452.1	14.348 ug/L	14.348 ppb	18:20:44
3	P 214.914†	824.6	622.8	408.97 ug/L	408.97 ppb	18:20:44
3	Pb 220.353†	301.5	354.5	47.922 ug/L	47.922 ppb	18:20:44
3	S 181.975 Axial†	34.6	3.8	4.0207 ug/L	4.0207 ppb	18:20:44
3	Sb 206.836†	45.8	21.3	-1.5287 ug/L	-1.5287 ppb	18:20:44
3	Se 196.026†	-277.6	-255.7	-6.2074 ug/L	-6.2074 ppb	18:20:44
3	Si 251.611†	864801.8	849107.9	32234 ug/L	32234 ppb	18:20:19
3	Sn 189.927†	-31.3	-37.9	-11.215 ug/L	-11.215 ppb	18:20:44
3	Ti 334.940†	1714749.1	1685720.0	2932.6 ug/L	2932.6 ppb	18:20:19
3	Tl 190.801†	-160.2	-128.3	-6.3791 ug/L	-6.3791 ppb	18:20:44
3	U 409.014†	-12336.7	-9915.6	-309.09 ug/L	-309.09 ppb	18:20:19
3	V 292.402†	4007.4	5254.3	28.316 ug/L	28.316 ppb	18:20:24
3	Zn 213.857†	38500.9	37253.8	440.77 ug/L	440.77 ppb	18:20:24
3	SiO2†	863847.9	848159.6	69219 ug/L	69219 ppb	18:21:02

Mean Data: 247770002|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833537.9	101.80 %	0.102			0.10%
Sc Radial	4017.5	91.4 %	0.38			0.42%
Y 371.029	1016812.0	147.01 %	0.143			0.10%
Y RADIAL	7084.7	148.8 %	0.66			0.45%
Ag 328.068†	-3693.6	3.0235 ug/L	0.40215	3.0235 ppb	0.40215	13.30%
Al 396.153Radial†	15207.8	14937 ug/L	42.0	14937 ppb	42.0	0.28%
As 188.979†	-18.3	31.910 ug/L	0.6522	31.910 ppb	0.6522	2.04%
B 249.677†	810.5	11.199 ug/L	1.8429	11.199 ppb	1.8429	16.46%
Ba 233.527†	12054.0	115.15 ug/L	0.748	115.15 ppb	0.748	0.65%
Be 313.107†	-8003.9	3.2539 ug/L	0.08857	3.2539 ppb	0.08857	2.72%
Ca 317.933Radial†	4252.1	8045.9 ug/L	67.01	8045.9 ppb	67.01	0.83%
Cd 226.502†	495.1	-0.1792 ug/L	0.11500	-0.1792 ppb	0.11500	64.18%
Co 228.616†	534.5	6.6963 ug/L	0.15955	6.6963 ppb	0.15955	2.38%
Cr 267.716†	8493.0	121.57 ug/L	0.773	121.57 ppb	0.773	0.64%
Cu 324.752†	2931.6	13.591 ug/L	0.2470	13.591 ppb	0.2470	1.82%
Fe 238.204 Radial†	6111.5	70812 ug/L	526.7	70812 ppb	526.7	0.74%
K 766.490 Radial†	49731.7	9468.4 ug/L	40.68	9468.4 ppb	40.68	0.43%

Mg 279.077 IEC†	40.3	1587.8 ug/L	77.47	1587.8 ppb	77.47	4.88%
Mn 257.610†	3037051.2	4000.1 ug/L	9.38	4000.1 ppb	9.38	0.23%
Mo 202.031†	228.1	25.873 ug/L	1.3936	25.873 ppb	1.3936	5.39%
Na 589.592 Radial†	18837.5	6640.6 ug/L	58.55	6640.6 ppb	58.55	0.88%
Ni 231.604†	430.2	13.655 ug/L	0.6006	13.655 ppb	0.6006	4.40%
P 214.914†	622.7	408.55 ug/L	1.930	408.55 ppb	1.930	0.47%
Pb 220.353†	351.8	47.441 ug/L	0.6925	47.441 ppb	0.6925	1.46%
S 181.975 Axial†	3.3	3.0938 ug/L	2.16802	3.0938 ppb	2.16802	70.08%
Sb 206.836†	24.3	-0.3121 ug/L	1.94476	-0.3121 ppb	1.94476	623.10%
Se 196.026†	-255.9	-4.7528 ug/L	1.38156	-4.7528 ppb	1.38156	29.07%
Si 251.611†	850638.3	32292 ug/L	88.5	32292 ppb	88.5	0.27%
Sn 189.927†	-38.0	-11.258 ug/L	0.6149	-11.258 ppb	0.6149	5.46%
Sr 421.552†	2834.2	22.658 ug/L	0.1860	22.658 ppb	0.1860	0.82%
Ti 334.940†	1687373.0	2935.5 ug/L	5.35	2935.5 ppb	5.35	0.18%
Tl 190.801†	-118.2	-2.4438 ug/L	3.58983	-2.4438 ppb	3.58983	146.90%
U 409.014†	-9776.3	-304.92 ug/L	4.795	-304.92 ppb	4.795	1.57%
V 292.402†	5230.3	28.052 ug/L	0.2290	28.052 ppb	0.2290	0.82%
Zn 213.857†	37131.0	439.21 ug/L	2.659	439.21 ppb	2.659	0.61%
SiO2†	856418.0	69893 ug/L	593.8	69893 ppb	593.8	0.85%

Sequence No.: 45

Sample ID: 247770003|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 59

Date Collected: 3/19/2010 18:23:13

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770003|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4285.8	4285.8	97.5 %		18:25:27
1	Y RADIAL	5823.2	5823.2	122.3 %		18:25:06
1	Al 396.153Radial†	8578.2	8875.1	8717.5 ug/L	8717.5 ppb	18:25:06
1	Ca 317.933Radial†	3087.3	3150.3	5961.1 ug/L	5961.1 ppb	18:25:27
1	Fe 238.204 Radial†	5912.8	6055.1	70159 ug/L	70159 ppb	18:25:06
1	K 766.490 Radial†	28303.3	26426.4	5030.8 ug/L	5030.8 ppb	18:25:06
1	Mg 279.077 IEC†	46.2	45.9	1819.2 ug/L	1819.2 ppb	18:25:27
1	Na 589.592 Radial†	8887.5	9989.2	3521.4 ug/L	3521.4 ppb	18:25:06
1	Sr 421.552†	1650.3	1671.5	13.354 ug/L	13.354 ppb	18:25:06
1	Sc 361.383	846525.3	846525.3	103.38 %		18:26:24
1	Y 371.029	863909.4	863909.4	124.91 %		18:26:24
1	Ag 328.068†	-3747.4	-3809.9	2.1703 ug/L	2.1703 ppb	18:26:29
1	As 188.979†	-58.1	-29.4	29.333 ug/L	29.333 ppb	18:26:49
1	B 249.677†	117.4	650.9	6.8362 ug/L	6.8362 ppb	18:26:29
1	Ba 233.527†	7542.3	7296.2	70.543 ug/L	70.543 ppb	18:26:29
1	Be 313.107†	-20593.4	-16188.5	0.7204 ug/L	0.7204 ppb	18:26:29
1	Cd 226.502†	344.5	503.9	0.0191 ug/L	0.0191 ppb	18:26:49
1	Co 228.616†	372.4	406.4	2.5036 ug/L	2.5036 ppb	18:26:49
1	Cr 267.716†	1189.9	1079.5	22.055 ug/L	22.055 ppb	18:26:29
1	Cu 324.752†	7962.0	2149.5	10.951 ug/L	10.951 ppb	18:26:29
1	Mn 257.610†	1489268.3	1440146.6	1900.4 ug/L	1900.4 ppb	18:26:24
1	Mo 202.031†	65.5	54.8	10.388 ug/L	10.388 ppb	18:26:49
1	Ni 231.604†	315.1	220.7	7.0022 ug/L	7.0022 ppb	18:26:49
1	P 214.914†	980.8	761.4	511.36 ug/L	511.36 ppb	18:26:49
1	Pb 220.353†	201.6	253.3	30.956 ug/L	30.956 ppb	18:26:49
1	S 181.975 Axial†	37.3	5.9	9.0029 ug/L	9.0029 ppb	18:26:49
1	Sb 206.836†	43.6	18.5	-4.2612 ug/L	-4.2612 ppb	18:26:49
1	Se 196.026†	-289.9	-263.4	-14.978 ug/L	-14.978 ppb	18:26:49
1	Si 251.611†	695488.4	672242.0	25520 ug/L	25520 ppb	18:26:24
1	Sn 189.927†	-17.5	-24.1	-8.4301 ug/L	-8.4301 ppb	18:26:49
1	Ti 334.940†	1992476.2	1928398.5	3354.3 ug/L	3354.3 ppb	18:26:24
1	Tl 190.801†	-121.5	-88.4	2.5642 ug/L	2.5642 ppb	18:26:49
1	U 409.014†	-10978.5	-8415.1	-263.33 ug/L	-263.33 ppb	18:26:24
1	V 292.402†	2701.0	3930.1	17.223 ug/L	17.223 ppb	18:26:29
1	Zn 213.857†	37436.9	35641.8	421.31 ug/L	421.31 ppb	18:26:29
1	SiO2†	692652.5	669487.8	54638 ug/L	54638 ppb	18:27:57
2	Sc Radial	4341.0	4341.0	98.8 %		18:25:52
2	Y RADIAL	5893.8	5893.8	123.8 %		18:25:32
2	Al 396.153Radial†	8680.1	8866.3	8708.9 ug/L	8708.9 ppb	18:25:32
2	Ca 317.933Radial†	3122.4	3145.6	5952.1 ug/L	5952.1 ppb	18:25:52
2	Fe 238.204 Radial†	5936.9	6002.4	69549 ug/L	69549 ppb	18:25:32
2	K 766.490 Radial†	28518.2	26274.7	5002.0 ug/L	5002.0 ppb	18:25:32
2	Mg 279.077 IEC†	46.7	45.8	1815.5 ug/L	1815.5 ppb	18:25:52
2	Na 589.592 Radial†	8892.0	9877.9	3482.2 ug/L	3482.2 ppb	18:25:32
2	Sr 421.552†	1635.7	1635.2	13.063 ug/L	13.063 ppb	18:25:32
2	Sc 361.383	841145.8	841145.8	102.73 %		18:26:55
2	Y 371.029	857722.1	857722.1	124.01 %		18:26:55
2	Ag 328.068†	-3698.6	-3785.6	2.1062 ug/L	2.1062 ppb	18:27:00
2	As 188.979†	-58.8	-30.4	28.682 ug/L	28.682 ppb	18:27:20
2	B 249.677†	186.5	718.9	8.8433 ug/L	8.8433 ppb	18:27:00
2	Ba 233.527†	7564.2	7364.2	71.161 ug/L	71.161 ppb	18:27:00
2	Be 313.107†	-20618.9	-16340.7	0.6706 ug/L	0.6706 ppb	18:27:00
2	Cd 226.502†	376.2	536.8	0.5597 ug/L	0.5597 ppb	18:27:20
2	Co 228.616†	381.8	417.9	2.7967 ug/L	2.7967 ppb	18:27:20
2	Cr 267.716†	1136.3	1034.6	21.387 ug/L	21.387 ppb	18:27:00
2	Cu 324.752†	8107.9	2340.8	11.550 ug/L	11.550 ppb	18:27:00
2	Mn 257.610†	1483240.8	1443491.8	1904.7 ug/L	1904.7 ppb	18:26:55
2	Mo 202.031†	67.6	57.3	10.562 ug/L	10.562 ppb	18:27:20
2	Ni 231.604†	300.7	208.7	6.6208 ug/L	6.6208 ppb	18:27:20

2	P 214.914†	973.9	760.7	511.26 ug/L	511.26 ppb	18:27:20
2	Pb 220.353†	189.6	242.9	29.442 ug/L	29.442 ppb	18:27:20
2	S 181.975 Axial†	37.5	6.4	9.7375 ug/L	9.7375 ppb	18:27:20
2	Sb 206.836†	42.9	18.0	-4.4477 ug/L	-4.4477 ppb	18:27:20
2	Se 196.026†	-275.2	-251.0	-6.3434 ug/L	-6.3434 ppb	18:27:20
2	Si 251.611†	692299.1	673439.8	25566 ug/L	25566 ppb	18:26:55
2	Sn 189.927†	-16.9	-23.6	-8.2972 ug/L	-8.2972 ppb	18:27:20
2	Ti 334.940†	1983726.8	1932206.9	3361.0 ug/L	3361.0 ppb	18:26:55
2	Tl 190.801†	-127.5	-95.1	0.0686 ug/L	0.0686 ppb	18:27:20
2	U 409.014†	-10885.3	-8392.2	-262.56 ug/L	-262.56 ppb	18:26:55
2	V 292.402†	2650.9	3898.0	17.053 ug/L	17.053 ppb	18:27:00
2	Zn 213.857†	37500.0	35934.8	424.95 ug/L	424.95 ppb	18:27:00
2	SiO2†	695681.7	676721.4	55228 ug/L	55228 ppb	18:28:02
3	Sc Radial	4297.3	4297.3	97.8 %		18:26:17
3	Y RADIAL	6019.0	6019.0	126.4 %		18:25:57
3	Al 396.153Radial†	8876.2	9156.2	8993.7 ug/L	8993.7 ppb	18:25:57
3	Ca 317.933Radial†	3082.4	3136.8	5935.5 ug/L	5935.5 ppb	18:26:17
3	Fe 238.204 Radial†	6052.4	6181.6	71625 ug/L	71625 ppb	18:25:57
3	K 766.490 Radial†	29039.7	27101.5	5159.5 ug/L	5159.5 ppb	18:25:57
3	Mg 279.077 IEC†	47.7	47.2	1872.9 ug/L	1872.9 ppb	18:26:17
3	Na 589.592 Radial†	8991.4	10071.1	3550.3 ug/L	3550.3 ppb	18:25:57
3	Sr 421.552†	1697.2	1715.0	13.703 ug/L	13.703 ppb	18:25:57
3	Sc 361.383	838264.2	838264.2	102.37 %		18:27:26
3	Y 371.029	856437.7	856437.7	123.83 %		18:27:26
3	Ag 328.068†	-3663.9	-3764.0	2.8558 ug/L	2.8558 ppb	18:27:31
3	As 188.979†	-64.7	-36.4	25.809 ug/L	25.809 ppb	18:27:51
3	B 249.677†	47.0	583.3	4.7001 ug/L	4.7001 ppb	18:27:31
3	Ba 233.527†	7547.1	7372.8	71.303 ug/L	71.303 ppb	18:27:31
3	Be 313.107†	-20957.0	-16740.0	0.4845 ug/L	0.4845 ppb	18:27:31
3	Cd 226.502†	371.7	533.7	0.3003 ug/L	0.3003 ppb	18:27:51
3	Co 228.616†	387.8	425.0	2.9642 ug/L	2.9642 ppb	18:27:51
3	Cr 267.716†	1186.3	1087.3	22.312 ug/L	22.312 ppb	18:27:31
3	Cu 324.752†	8063.9	2324.9	11.606 ug/L	11.606 ppb	18:27:31
3	Mn 257.610†	1474540.9	1439957.2	1900.3 ug/L	1900.3 ppb	18:27:26
3	Mo 202.031†	63.1	53.1	10.349 ug/L	10.349 ppb	18:27:51
3	Ni 231.604†	303.4	212.3	6.7345 ug/L	6.7345 ppb	18:27:51
3	P 214.914†	973.7	763.9	512.02 ug/L	512.02 ppb	18:27:51
3	Pb 220.353†	190.6	244.4	29.444 ug/L	29.444 ppb	18:27:51
3	S 181.975 Axial†	42.6	11.4	18.688 ug/L	18.688 ppb	18:27:51
3	Sb 206.836†	44.8	20.1	-3.5477 ug/L	-3.5477 ppb	18:27:51
3	Se 196.026†	-287.7	-264.0	-11.164 ug/L	-11.164 ppb	18:27:51
3	Si 251.611†	688074.1	671629.5	25497 ug/L	25497 ppb	18:27:26
3	Sn 189.927†	0.5	-6.7	-4.5676 ug/L	-4.5676 ppb	18:27:51
3	Ti 334.940†	1972762.7	1928135.5	3353.9 ug/L	3353.9 ppb	18:27:26
3	Tl 190.801†	-128.4	-96.3	-0.5010 ug/L	-0.5010 ppb	18:27:51
3	U 409.014†	-10756.9	-8303.2	-260.10 ug/L	-260.10 ppb	18:27:26
3	V 292.402†	2565.2	3823.1	16.161 ug/L	16.161 ppb	18:27:31
3	Zn 213.857†	37544.8	36104.1	426.69 ug/L	426.69 ppb	18:27:31
3	SiO2†	699105.1	682393.5	55691 ug/L	55691 ppb	18:28:08

Mean Data: 247770003|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841978.4	102.83 %	0.512			0.50%
Sc Radial	4308.0	98.0 %	0.66			0.68%
Y 371.029	859356.4	124.25 %	0.578			0.46%
Y RADIAL	5912.0	124.2 %	2.08			1.68%
Ag 328.068†	-3786.5	2.3774 ug/L	0.41553	2.3774 ppb	0.41553	17.48%
Al 396.153Radial†	8965.9	8806.7 ug/L	162.00	8806.7 ppb	162.00	1.84%
As 188.979†	-32.1	27.941 ug/L	1.8752	27.941 ppb	1.8752	6.71%
B 249.677†	651.0	6.7932 ug/L	2.07196	6.7932 ppb	2.07196	30.50%
Ba 233.527†	7344.4	71.002 ug/L	0.4040	71.002 ppb	0.4040	0.57%
Be 313.107†	-16423.1	0.6252 ug/L	0.12432	0.6252 ppb	0.12432	19.89%
Ca 317.933Radial†	3144.2	5949.6 ug/L	12.97	5949.6 ppb	12.97	0.22%
Cd 226.502†	524.8	0.2930 ug/L	0.27041	0.2930 ppb	0.27041	92.28%
Co 228.616†	416.4	2.7548 ug/L	0.23313	2.7548 ppb	0.23313	8.46%
Cr 267.716†	1067.1	21.918 ug/L	0.4773	21.918 ppb	0.4773	2.18%
Cu 324.752†	2271.7	11.369 ug/L	0.3630	11.369 ppb	0.3630	3.19%
Fe 238.204 Radial†	6079.7	70444 ug/L	1067.1	70444 ppb	1067.1	1.51%
K 766.490 Radial†	26600.9	5064.1 ug/L	83.86	5064.1 ppb	83.86	1.66%

Mg 279.077 IEC†	46.3	1835.9 ug/L	32.11	1835.9 ppb	32.11	1.75%
Mn 257.610†	1441198.5	1901.8 ug/L	2.54	1901.8 ppb	2.54	0.13%
Mo 202.031†	55.1	10.433 ug/L	0.1132	10.433 ppb	0.1132	1.09%
Na 589.592 Radial†	9979.4	3517.9 ug/L	34.18	3517.9 ppb	34.18	0.97%
Ni 231.604†	213.9	6.7858 ug/L	0.19585	6.7858 ppb	0.19585	2.89%
P 214.914†	762.0	511.55 ug/L	0.415	511.55 ppb	0.415	0.08%
Pb 220.353†	246.9	29.947 ug/L	0.8734	29.947 ppb	0.8734	2.92%
S 181.975 Axial†	7.9	12.476 ug/L	5.3923	12.476 ppb	5.3923	43.22%
Sb 206.836†	18.9	-4.0855 ug/L	0.47504	-4.0855 ppb	0.47504	11.63%
Se 196.026†	-259.5	-10.828 ug/L	4.3270	-10.828 ppb	4.3270	39.96%
Si 251.611†	672437.1	25528 ug/L	35.0	25528 ppb	35.0	0.14%
Sn 189.927†	-18.1	-7.0983 ug/L	2.19263	-7.0983 ppb	2.19263	30.89%
Sr 421.552†	1673.9	13.373 ug/L	0.3204	13.373 ppb	0.3204	2.40%
Ti 334.940†	1929580.3	3356.4 ug/L	3.96	3356.4 ppb	3.96	0.12%
Tl 190.801†	-93.3	0.7106 ug/L	1.63032	0.7106 ppb	1.63032	229.44%
U 409.014†	-8370.2	-262.00 ug/L	1.686	-262.00 ppb	1.686	0.64%
V 292.402†	3883.7	16.812 ug/L	0.5703	16.812 ppb	0.5703	3.39%
Zn 213.857†	35893.6	424.32 ug/L	2.747	424.32 ppb	2.747	0.65%
SiO2†	676200.9	55186 ug/L	527.9	55186 ppb	527.9	0.96%

Sequence No.: 46

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 1

Date Collected: 3/19/2010 18:30:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4197.7	4197.7	95.5 %			18:32:31
1	Y RADIAL	4660.4	4660.4	97.90 %			18:32:11
1	Al 396.153Radial†	5010.0	5323.7	5204.6 ug/L		5204.6 ppb	18:32:11
1	Ca 317.933Radial†	2684.2	2794.7	5288.2 ug/L		5288.2 ppb	18:32:31
1	Fe 238.204 Radial†	443.7	456.2	5300.8 ug/L		5300.8 ppb	18:32:31
1	K 766.490 Radial†	29661.0	28457.2	5415.4 ug/L		5415.4 ppb	18:32:11
1	Mg 279.077 IEC†	130.2	134.7	5558.3 ug/L		5558.3 ppb	18:32:31
1	Na 589.592 Radial†	26344.0	28458.1	10032 ug/L		10032 ppb	18:32:11
1	Sr 421.552†	61994.4	64889.3	520.10 ug/L		520.10 ppb	18:32:11
1	Sc 361.383	825334.8	825334.8	100.80 %			18:33:28
1	Y 371.029	687524.4	687524.4	99.404 %			18:33:28
1	Ag 328.068†	99570.1	98599.6	515.10 ug/L		515.10 ppb	18:33:34
1	As 188.979†	895.9	915.6	507.05 ug/L		507.05 ppb	18:33:54
1	B 249.677†	17885.7	18282.0	510.54 ug/L		510.54 ppb	18:33:34
1	Ba 233.527†	54837.4	54405.5	510.86 ug/L		510.86 ppb	18:33:34
1	Be 313.107†	1205455.9	1199678.6	511.97 ug/L		511.97 ppb	18:33:28
1	Cd 226.502†	35364.4	35256.1	511.43 ug/L		511.43 ppb	18:33:34
1	Co 228.616†	20166.9	20054.1	518.42 ug/L		518.42 ppb	18:33:34
1	Cr 267.716†	38304.0	37930.4	509.72 ug/L		509.72 ppb	18:33:34
1	Cu 324.752†	160016.4	153202.3	505.79 ug/L		505.79 ppb	18:33:34
1	Mn 257.610†	384792.8	381368.6	501.73 ug/L		501.73 ppb	18:33:34
1	Mo 202.031†	5786.7	5732.5	510.04 ug/L		510.04 ppb	18:33:54
1	Ni 231.604†	16419.7	16206.1	514.35 ug/L		514.35 ppb	18:33:34
1	P 214.914†	3635.8	3419.8	2448.8 ug/L		2448.8 ppb	18:33:54
1	Pb 220.353†	3271.8	3304.3	509.11 ug/L		509.11 ppb	18:33:54
1	S 181.975 Axial†	601.4	566.4	1013.0 ug/L		1013.0 ppb	18:33:54
1	Sb 206.836†	1250.8	1217.2	527.52 ug/L		527.52 ppb	18:33:54
1	Se 196.026†	607.6	619.8	534.77 ug/L		534.77 ppb	18:33:54
1	Si 251.611†	69419.3	68383.6	2589.8 ug/L		2589.8 ppb	18:33:34
1	Sn 189.927†	2252.5	2227.6	506.14 ug/L		506.14 ppb	18:33:54
1	Ti 334.940†	289937.7	288771.9	502.03 ug/L		502.03 ppb	18:33:34
1	Tl 190.801†	1290.2	1309.1	509.79 ug/L		509.79 ppb	18:33:54
1	U 409.014†	15092.8	17178.0	519.41 ug/L		519.41 ppb	18:33:34
1	V 292.402†	62645.7	63469.0	513.63 ug/L		513.63 ppb	18:33:34
1	Zn 213.857†	43225.8	42314.7	507.96 ug/L		507.96 ppb	18:33:34
1	SiO2†	69540.4	68492.6	5575.9 ug/L		5575.9 ppb	18:35:01
2	Sc Radial	4193.5	4193.5	95.4 %			18:32:56
2	Y RADIAL	4685.5	4685.5	98.42 %			18:32:36
2	Al 396.153Radial†	5043.6	5364.2	5244.6 ug/L		5244.6 ppb	18:32:36
2	Ca 317.933Radial†	2654.2	2766.2	5234.1 ug/L		5234.1 ppb	18:32:56
2	Fe 238.204 Radial†	444.6	457.5	5316.8 ug/L		5316.8 ppb	18:32:56
2	K 766.490 Radial†	29768.2	28600.7	5442.8 ug/L		5442.8 ppb	18:32:36
2	Mg 279.077 IEC†	123.3	127.7	5267.3 ug/L		5267.3 ppb	18:32:56
2	Na 589.592 Radial†	26361.9	28504.5	10048 ug/L		10048 ppb	18:32:36
2	Sr 421.552†	62236.0	65207.5	522.65 ug/L		522.65 ppb	18:32:36
2	Sc 361.383	827416.7	827416.7	101.05 %			18:33:59
2	Y 371.029	688896.7	688896.7	99.602 %			18:33:59
2	Ag 328.068†	98840.5	97629.0	510.06 ug/L		510.06 ppb	18:34:05
2	As 188.979†	909.5	926.8	513.20 ug/L		513.20 ppb	18:34:25
2	B 249.677†	17770.3	18123.2	506.09 ug/L		506.09 ppb	18:34:05
2	Ba 233.527†	54557.4	53991.6	506.98 ug/L		506.98 ppb	18:34:05
2	Be 313.107†	1208478.1	1199660.3	511.95 ug/L		511.95 ppb	18:33:59
2	Cd 226.502†	35257.7	35062.2	508.62 ug/L		508.62 ppb	18:34:05
2	Co 228.616†	20087.0	19924.6	515.08 ug/L		515.08 ppb	18:34:05
2	Cr 267.716†	38117.2	37649.9	505.96 ug/L		505.96 ppb	18:34:05
2	Cu 324.752†	158419.9	151222.9	499.26 ug/L		499.26 ppb	18:34:05
2	Mn 257.610†	382798.8	378434.8	497.88 ug/L		497.88 ppb	18:34:05
2	Mo 202.031†	5752.6	5684.4	505.76 ug/L		505.76 ppb	18:34:25
2	Ni 231.604†	16376.7	16122.6	511.70 ug/L		511.70 ppb	18:34:05

2	P 214.914†	3608.1	3383.4	2422.9 ug/L	2422.9 ppb	18:34:25
2	Pb 220.353†	3257.5	3282.0	505.68 ug/L	505.68 ppb	18:34:25
2	S 181.975 Axial†	601.1	564.7	1009.9 ug/L	1009.9 ppb	18:34:25
2	Sb 206.836†	1248.9	1212.3	525.34 ug/L	525.34 ppb	18:34:25
2	Se 196.026†	602.7	613.4	529.48 ug/L	529.48 ppb	18:34:25
2	Si 251.611†	68918.7	67714.9	2564.4 ug/L	2564.4 ppb	18:34:05
2	Sn 189.927†	2253.8	2223.3	505.14 ug/L	505.14 ppb	18:34:25
2	Ti 334.940†	288072.2	286202.0	497.58 ug/L	497.58 ppb	18:34:05
2	Tl 190.801†	1277.9	1293.7	503.79 ug/L	503.79 ppb	18:34:25
2	U 409.014†	14932.2	16981.3	513.45 ug/L	513.45 ppb	18:34:05
2	V 292.402†	62349.7	63019.7	509.96 ug/L	509.96 ppb	18:34:05
2	Zn 213.857†	43004.3	41987.7	504.02 ug/L	504.02 ppb	18:34:05
2	SiO2†	69873.2	68648.3	5588.7 ug/L	5588.7 ppb	18:35:06
3	Sc Radial	4206.0	4206.0	95.7 %		18:33:22
3	Y RADIAL	4681.5	4681.5	98.34 %		18:33:01
3	Al 396.153Radial†	4972.2	5273.8	5156.5 ug/L	5156.5 ppb	18:33:01
3	Ca 317.933Radial†	2661.7	2765.6	5233.1 ug/L	5233.1 ppb	18:33:22
3	Fe 238.204 Radial†	434.8	445.8	5180.6 ug/L	5180.6 ppb	18:33:22
3	K 766.490 Radial†	29351.9	28072.3	5342.2 ug/L	5342.2 ppb	18:33:01
3	Mg 279.077 IEC†	126.2	130.4	5378.5 ug/L	5378.5 ppb	18:33:22
3	Na 589.592 Radial†	25872.7	27910.7	9839.1 ug/L	9839.1 ppb	18:33:01
3	Sr 421.552†	61430.7	64170.8	514.34 ug/L	514.34 ppb	18:33:01
3	Sc 361.383	846724.2	846724.2	103.41 %		18:34:30
3	Y 371.029	704989.0	704989.0	101.93 %		18:34:30
3	Ag 328.068†	98588.4	95154.8	497.13 ug/L	497.13 ppb	18:34:35
3	As 188.979†	896.8	894.1	495.09 ug/L	495.09 ppb	18:34:55
3	B 249.677†	17575.4	17533.6	489.62 ug/L	489.62 ppb	18:34:35
3	Ba 233.527†	54234.8	52448.5	492.49 ug/L	492.49 ppb	18:34:35
3	Be 313.107†	1229739.8	1192951.1	509.07 ug/L	509.07 ppb	18:34:30
3	Cd 226.502†	35029.5	34045.9	493.87 ug/L	493.87 ppb	18:34:35
3	Co 228.616†	19899.5	19290.0	498.66 ug/L	498.66 ppb	18:34:35
3	Cr 267.716†	37969.0	36646.4	492.47 ug/L	492.47 ppb	18:34:35
3	Cu 324.752†	158201.8	147437.1	486.76 ug/L	486.76 ppb	18:34:35
3	Mn 257.610†	380839.4	367901.7	484.02 ug/L	484.02 ppb	18:34:35
3	Mo 202.031†	5703.3	5506.8	489.97 ug/L	489.97 ppb	18:34:55
3	Ni 231.604†	16268.9	15648.8	496.66 ug/L	496.66 ppb	18:34:35
3	P 214.914†	3583.0	3277.7	2346.6 ug/L	2346.6 ppb	18:34:55
3	Pb 220.353†	3251.6	3202.7	493.47 ug/L	493.47 ppb	18:34:55
3	S 181.975 Axial†	604.6	554.5	991.62 ug/L	991.62 ppb	18:34:55
3	Sb 206.836†	1230.3	1166.1	505.48 ug/L	505.48 ppb	18:34:55
3	Se 196.026†	600.5	597.7	515.95 ug/L	515.95 ppb	18:34:55
3	Si 251.611†	68535.4	65789.0	2491.5 ug/L	2491.5 ppb	18:34:35
3	Sn 189.927†	2239.9	2159.0	490.56 ug/L	490.56 ppb	18:34:55
3	Ti 334.940†	286943.2	278609.7	484.38 ug/L	484.38 ppb	18:34:35
3	Tl 190.801†	1274.9	1261.9	491.44 ug/L	491.44 ppb	18:34:55
3	U 409.014†	14976.8	16687.5	504.58 ug/L	504.58 ppb	18:34:35
3	V 292.402†	62100.2	61371.4	496.60 ug/L	496.60 ppb	18:34:35
3	Zn 213.857†	42682.5	40706.0	488.62 ug/L	488.62 ppb	18:34:35
3	SiO2†	69618.4	66825.1	5440.4 ug/L	5440.4 ppb	18:35:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	833158.6	101.75 %	1.440			1.42%
Sc Radial	4199.1	95.5 %	0.15			0.15%
Y 371.029	693803.4	100.31 %	1.404			1.40%
Y RADIAL	4675.8	98.22 %	0.283			0.29%
Ag 328.068†	97127.8	507.43 ug/L	9.273	507.43 ppb	9.273	1.83%
QC value within limits for Ag 328.068 Recovery = 101.49%						
Al 396.153Radial†	5320.6	5201.9 ug/L	44.08	5201.9 ppb	44.08	0.85%
QC value within limits for Al 396.153Radial Recovery = 104.04%						
As 188.979†	912.2	505.11 ug/L	9.211	505.11 ppb	9.211	1.82%
QC value within limits for As 188.979 Recovery = 101.02%						
B 249.677†	17979.6	502.09 ug/L	11.020	502.09 ppb	11.020	2.19%
QC value within limits for B 249.677 Recovery = 100.42%						
Ba 233.527†	53615.2	503.44 ug/L	9.682	503.44 ppb	9.682	1.92%
QC value within limits for Ba 233.527 Recovery = 100.69%						
Be 313.107†	1197430.0	511.00 ug/L	1.672	511.00 ppb	1.672	0.33%
QC value within limits for Be 313.107 Recovery = 102.20%						
Ca 317.933Radial†	2775.5	5251.8 ug/L	31.54	5251.8 ppb	31.54	0.60%

QC value within limits for Ca 317.933 Radial Recovery = 105.04%

Cd 226.502†	34788.1	504.64 ug/L	9.431	504.64 ppb	9.431	1.87%
QC value within limits for Cd 226.502 Recovery = 100.93%						
Co 228.616†	19756.2	510.72 ug/L	10.574	510.72 ppb	10.574	2.07%
QC value within limits for Co 228.616 Recovery = 102.14%						
Cr 267.716†	37408.9	502.72 ug/L	9.069	502.72 ppb	9.069	1.80%
QC value within limits for Cr 267.716 Recovery = 100.54%						
Cu 324.752†	150620.7	497.27 ug/L	9.671	497.27 ppb	9.671	1.94%
QC value within limits for Cu 324.752 Recovery = 99.45%						
Fe 238.204 Radial†	453.2	5266.1 ug/L	74.44	5266.1 ppb	74.44	1.41%
QC value within limits for Fe 238.204 Radial Recovery = 105.32%						
K 766.490 Radial†	28376.7	5400.1 ug/L	51.99	5400.1 ppb	51.99	0.96%
QC value within limits for K 766.490 Radial Recovery = 108.00%						
Mg 279.077 IEC†	130.9	5401.4 ug/L	146.82	5401.4 ppb	146.82	2.72%
QC value within limits for Mg 279.077 IEC Recovery = 108.03%						
Mn 257.610†	375901.7	494.54 ug/L	9.316	494.54 ppb	9.316	1.88%
QC value within limits for Mn 257.610 Recovery = 98.91%						
Mo 202.031†	5641.2	501.93 ug/L	10.570	501.93 ppb	10.570	2.11%
QC value within limits for Mo 202.031 Recovery = 100.39%						
Na 589.592 Radial†	28291.1	9973.2 ug/L	116.43	9973.2 ppb	116.43	1.17%
QC value within limits for Na 589.592 Radial Recovery = 99.73%						
Ni 231.604†	15992.5	507.57 ug/L	9.539	507.57 ppb	9.539	1.88%
QC value within limits for Ni 231.604 Recovery = 101.51%						
P 214.914†	3360.3	2406.1 ug/L	53.13	2406.1 ppb	53.13	2.21%
QC value within limits for P 214.914 Recovery = 96.24%						
Pb 220.353†	3263.0	502.76 ug/L	8.222	502.76 ppb	8.222	1.64%
QC value within limits for Pb 220.353 Recovery = 100.55%						
S 181.975 Axial†	561.8	1004.8 ug/L	11.56	1004.8 ppb	11.56	1.15%
QC value within limits for S 181.975 Axial Recovery = 100.48%						
Sb 206.836†	1198.5	519.45 ug/L	12.144	519.45 ppb	12.144	2.34%
QC value within limits for Sb 206.836 Recovery = 103.89%						
Se 196.026†	610.3	526.73 ug/L	9.710	526.73 ppb	9.710	1.84%
QC value within limits for Se 196.026 Recovery = 105.35%						
Si 251.611†	67295.8	2548.6 ug/L	51.01	2548.6 ppb	51.01	2.00%
QC value within limits for Si 251.611 Recovery = 101.94%						
Sn 189.927†	2203.3	500.61 ug/L	8.723	500.61 ppb	8.723	1.74%
QC value within limits for Sn 189.927 Recovery = 100.12%						
Sr 421.552†	64755.9	519.03 ug/L	4.256	519.03 ppb	4.256	0.82%
QC value within limits for Sr 421.552 Recovery = 103.81%						
Ti 334.940†	284527.9	494.67 ug/L	9.181	494.67 ppb	9.181	1.86%
QC value within limits for Ti 334.940 Recovery = 98.93%						
Tl 190.801†	1288.2	501.67 ug/L	9.360	501.67 ppb	9.360	1.87%
QC value within limits for Tl 190.801 Recovery = 100.33%						
U 409.014†	16948.9	512.48 ug/L	7.461	512.48 ppb	7.461	1.46%
QC value within limits for U 409.014 Recovery = 102.50%						
V 292.402†	62620.0	506.73 ug/L	8.960	506.73 ppb	8.960	1.77%
QC value within limits for V 292.402 Recovery = 101.35%						
Zn 213.857†	41669.5	500.20 ug/L	10.218	500.20 ppb	10.218	2.04%
QC value within limits for Zn 213.857 Recovery = 100.04%						
SiO2†	67988.7	5535.0 ug/L	82.21	5535.0 ppb	82.21	1.49%
QC value within limits for SiO2 Recovery = 103.51%						

All analyte(s) passed QC.

Sequence No.: 47

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 6

Date Collected: 3/19/2010 18:37:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4222.9	4222.9	96.1 %		18:39:33
1	Y RADIAL	4704.2	4704.2	98.82 %		18:39:13
1	Al 396.153Radial†	-72.3	2.9	2.8269 ug/L	2.8269 ppb	18:39:33
1	Ca 317.933Radial†	22.1	7.4	13.920 ug/L	13.920 ppb	18:39:33
1	Fe 238.204 Radial†	10.8	2.8	31.870 ug/L	31.870 ppb	18:39:33
1	K 766.490 Radial†	2833.6	350.4	66.765 ug/L	66.765 ppb	18:39:13
1	Mg 279.077 IEC†	-0.1	-1.7	-69.180 ug/L	-69.180 ppb	18:39:33
1	Na 589.592 Radial†	-926.5	-89.2	-31.447 ug/L	-31.447 ppb	18:39:13
1	Sr 421.552†	11.1	-9.3	-0.0744 ug/L	-0.0744 ppb	18:39:13
1	Sc 361.383	832545.7	832545.7	101.68 %		18:40:30
1	Y 371.029	706882.5	706882.5	102.20 %		18:40:30
1	Ag 328.068†	168.5	-19.4	-0.0971 ug/L	-0.0971 ppb	18:40:30
1	As 188.979†	-19.6	7.5	4.1416 ug/L	4.1416 ppb	18:40:50
1	B 249.677†	-217.6	323.3	9.0655 ug/L	9.0655 ppb	18:40:50
1	Ba 233.527†	-0.4	0.3	0.0023 ug/L	0.0023 ppb	18:40:50
1	Be 313.107†	-3755.7	37.2	0.0159 ug/L	0.0159 ppb	18:40:30
1	Cd 226.502†	-180.5	-6.9	-0.1024 ug/L	-0.1024 ppb	18:40:50
1	Co 228.616†	-46.8	0.2	0.0041 ug/L	0.0041 ppb	18:40:50
1	Cr 267.716†	73.0	0.3	0.0052 ug/L	0.0052 ppb	18:40:50
1	Cu 324.752†	5667.7	22.3	0.0730 ug/L	0.0730 ppb	18:40:30
1	Mn 257.610†	430.2	34.1	0.0508 ug/L	0.0508 ppb	18:40:50
1	Mo 202.031†	10.6	1.9	0.1719 ug/L	0.1719 ppb	18:40:50
1	Ni 231.604†	82.0	-3.4	-0.1071 ug/L	-0.1071 ppb	18:40:50
1	P 214.914†	193.2	2.8	2.0077 ug/L	2.0077 ppb	18:40:50
1	Pb 220.353†	-62.5	-3.2	-0.4882 ug/L	-0.4882 ppb	18:40:50
1	S 181.975 Axial†	27.6	-3.1	-5.4906 ug/L	-5.4906 ppb	18:40:50
1	Sb 206.836†	21.8	-2.2	-0.9473 ug/L	-0.9473 ppb	18:40:50
1	Se 196.026†	-19.8	-2.5	-1.9957 ug/L	-1.9957 ppb	18:40:50
1	Si 251.611†	555.4	58.1	2.2033 ug/L	2.2033 ppb	18:40:50
1	Sn 189.927†	4.9	-2.4	-0.5333 ug/L	-0.5333 ppb	18:40:50
1	Ti 334.940†	-1112.8	26.7	0.0520 ug/L	0.0520 ppb	18:40:30
1	Tl 190.801†	-27.5	2.1	0.7994 ug/L	0.7994 ppb	18:40:50
1	U 409.014†	-2092.9	145.8	4.4201 ug/L	4.4201 ppb	18:40:30
1	V 292.402†	-1422.9	-82.0	-0.6497 ug/L	-0.6497 ppb	18:40:30
1	Zn 213.857†	592.0	12.2	0.1430 ug/L	0.1430 ppb	18:40:50
1	SiO2†	559.7	51.1	4.1659 ug/L	4.1659 ppb	18:41:46
2	Sc Radial	4282.6	4282.6	97.4 %		18:39:58
2	Y RADIAL	4793.7	4793.7	100.7 %		18:39:38
2	Al 396.153Radial†	-73.1	3.1	3.0219 ug/L	3.0219 ppb	18:39:58
2	Ca 317.933Radial†	12.2	-3.1	-5.9361 ug/L	-5.9361 ppb	18:39:58
2	Fe 238.204 Radial†	7.7	-0.6	-6.5434 ug/L	-6.5434 ppb	18:39:58
2	K 766.490 Radial†	2719.5	192.1	36.622 ug/L	36.622 ppb	18:39:38
2	Mg 279.077 IEC†	2.7	1.2	50.654 ug/L	50.654 ppb	18:39:58
2	Na 589.592 Radial†	-948.6	-98.4	-34.700 ug/L	-34.700 ppb	18:39:38
2	Sr 421.552†	5.6	-15.1	-0.1207 ug/L	-0.1207 ppb	18:39:38
2	Sc 361.383	825413.8	825413.8	100.80 %		18:40:55
2	Y 371.029	699355.4	699355.4	101.11 %		18:40:55
2	Ag 328.068†	185.6	-1.0	-0.0153 ug/L	-0.0153 ppb	18:40:55
2	As 188.979†	-17.5	9.4	5.1629 ug/L	5.1629 ppb	18:41:15
2	B 249.677†	-229.8	309.4	8.6825 ug/L	8.6825 ppb	18:41:15
2	Ba 233.527†	19.8	20.4	0.1889 ug/L	0.1889 ppb	18:41:15
2	Be 313.107†	-3768.9	-7.8	-0.0032 ug/L	-0.0032 ppb	18:40:55
2	Cd 226.502†	-173.3	-1.3	-0.0165 ug/L	-0.0165 ppb	18:41:15
2	Co 228.616†	-53.5	-6.8	-0.1750 ug/L	-0.1750 ppb	18:41:15
2	Cr 267.716†	52.5	-19.4	-0.2647 ug/L	-0.2647 ppb	18:41:15
2	Cu 324.752†	5591.8	-4.8	-0.0200 ug/L	-0.0200 ppb	18:40:55
2	Mn 257.610†	449.9	57.3	0.0726 ug/L	0.0726 ppb	18:41:15
2	Mo 202.031†	17.1	8.4	0.7482 ug/L	0.7482 ppb	18:41:15
2	Ni 231.604†	81.4	-3.3	-0.1057 ug/L	-0.1057 ppb	18:41:15

2	P 214.914†	199.6	10.7	8.0130 ug/L	8.0130 ppb	18:41:15
2	Pb 220.353†	-51.3	7.4	1.1364 ug/L	1.1364 ppb	18:41:15
2	S 181.975 Axial†	31.5	1.1	1.8904 ug/L	1.8904 ppb	18:41:15
2	Sb 206.836†	39.6	15.6	6.5455 ug/L	6.5455 ppb	18:41:15
2	Se 196.026†	-17.2	-0.1	-0.1318 ug/L	-0.1318 ppb	18:41:15
2	Si 251.611†	564.5	71.8	2.7162 ug/L	2.7162 ppb	18:41:15
2	Sn 189.927†	12.2	4.9	1.1204 ug/L	1.1204 ppb	18:41:15
2	Ti 334.940†	-1091.9	38.0	0.0583 ug/L	0.0583 ppb	18:40:55
2	Tl 190.801†	-27.8	1.5	0.5899 ug/L	0.5899 ppb	18:41:15
2	U 409.014†	-2002.0	218.2	6.6220 ug/L	6.6220 ppb	18:40:55
2	V 292.402†	-1417.7	-88.9	-0.6848 ug/L	-0.6848 ppb	18:40:55
2	Zn 213.857†	589.2	14.4	0.1767 ug/L	0.1767 ppb	18:41:15
2	SiO2†	523.1	19.6	1.5792 ug/L	1.5792 ppb	18:41:51
3	Sc Radial	4264.2	4264.2	97.0 %		18:40:23
3	Y RADIAL	4743.6	4743.6	99.64 %		18:40:03
3	Al 396.153Radial†	-76.0	-0.3	-0.3219 ug/L	-0.3219 ppb	18:40:23
3	Ca 317.933Radial†	15.8	0.5	1.0215 ug/L	1.0215 ppb	18:40:23
3	Fe 238.204 Radial†	11.1	3.0	35.063 ug/L	35.063 ppb	18:40:23
3	K 766.490 Radial†	2733.1	218.3	41.588 ug/L	41.588 ppb	18:40:03
3	Mg 279.077 IEC†	4.1	2.7	110.47 ug/L	110.47 ppb	18:40:23
3	Na 589.592 Radial†	-848.6	0.5	0.1787 ug/L	0.1787 ppb	18:40:03
3	Sr 421.552†	1.3	-19.5	-0.1563 ug/L	-0.1563 ppb	18:40:03
3	Sc 361.383	816639.5	816639.5	99.733 %		18:41:21
3	Y 371.029	692845.0	692845.0	100.17 %		18:41:21
3	Ag 328.068†	215.3	30.8	0.1673 ug/L	0.1673 ppb	18:41:21
3	As 188.979†	-17.0	9.7	5.3450 ug/L	5.3450 ppb	18:41:41
3	B 249.677†	-239.9	296.9	8.3223 ug/L	8.3223 ppb	18:41:41
3	Ba 233.527†	-2.5	-1.8	-0.0157 ug/L	-0.0157 ppb	18:41:41
3	Be 313.107†	-3650.0	71.3	0.0304 ug/L	0.0304 ppb	18:41:21
3	Cd 226.502†	-164.3	5.9	0.0823 ug/L	0.0823 ppb	18:41:41
3	Co 228.616†	-46.2	-0.1	-0.0003 ug/L	-0.0003 ppb	18:41:41
3	Cr 267.716†	68.3	-3.0	-0.0387 ug/L	-0.0387 ppb	18:41:41
3	Cu 324.752†	5598.2	61.1	0.2016 ug/L	0.2016 ppb	18:41:21
3	Mn 257.610†	437.0	49.1	0.0635 ug/L	0.0635 ppb	18:41:41
3	Mo 202.031†	22.0	13.6	1.2073 ug/L	1.2073 ppb	18:41:41
3	Ni 231.604†	76.9	-7.0	-0.2217 ug/L	-0.2217 ppb	18:41:41
3	P 214.914†	184.0	-2.8	-2.1848 ug/L	-2.1848 ppb	18:41:41
3	Pb 220.353†	-43.6	14.5	2.2328 ug/L	2.2328 ppb	18:41:41
3	S 181.975 Axial†	25.2	-4.9	-8.7427 ug/L	-8.7427 ppb	18:41:41
3	Sb 206.836†	28.2	4.6	1.9094 ug/L	1.9094 ppb	18:41:41
3	Se 196.026†	-14.6	2.3	2.0241 ug/L	2.0241 ppb	18:41:41
3	Si 251.611†	567.9	81.3	3.0713 ug/L	3.0713 ppb	18:41:41
3	Sn 189.927†	-2.0	-9.2	-2.0824 ug/L	-2.0824 ppb	18:41:41
3	Ti 334.940†	-1112.3	5.9	-0.0003 ug/L	-0.0003 ppb	18:41:21
3	Tl 190.801†	-29.2	-0.2	-0.0657 ug/L	-0.0657 ppb	18:41:41
3	U 409.014†	-2070.6	128.0	3.8800 ug/L	3.8800 ppb	18:41:21
3	V 292.402†	-1318.2	-4.3	-0.0128 ug/L	-0.0128 ppb	18:41:21
3	Zn 213.857†	609.6	41.1	0.4943 ug/L	0.4943 ppb	18:41:41
3	SiO2†	550.0	52.1	4.2218 ug/L	4.2218 ppb	18:41:56

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824866.3	100.74 %		0.973			0.97%
Sc Radial	4256.5	96.8 %		0.70			0.72%
Y 371.029	699694.3	101.16 %		1.016			1.00%
Y RADIAL	4747.2	99.72 %		0.943			0.95%
Ag 328.068†	3.5	0.0183 ug/L		0.13538	0.0183 ppb	0.13538	739.83%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	1.9	1.8423 ug/L		1.87682	1.8423 ppb	1.87682	101.87%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	8.9	4.8831 ug/L		0.64863	4.8831 ppb	0.64863	13.28%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	309.9	8.6901 ug/L		0.37164	8.6901 ppb	0.37164	4.28%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.3	0.0585 ug/L		0.11330	0.0585 ppb	0.11330	193.67%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	33.6	0.0144 ug/L		0.01683	0.0144 ppb	0.01683	117.05%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.6	3.0017 ug/L		10.07482	3.0017 ppb	10.07482	335.64%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-0.8	-0.0122 ug/L	0.09243	-0.0122 ppb	0.09243	758.82%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-2.3	-0.0571 ug/L	0.10212	-0.0571 ppb	0.10212	178.98%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-7.4	-0.0994 ug/L	0.14483	-0.0994 ppb	0.14483	145.69%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	26.2	0.0849 ug/L	0.11126	0.0849 ppb	0.11126	131.11%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.7	20.130 ug/L	23.1547	20.130 ppb	23.1547	115.03%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	253.6	48.325 ug/L	16.1615	48.325 ppb	16.1615	33.44%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.7	30.648 ug/L	91.4814	30.648 ppb	91.4814	298.49%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	46.8	0.0623 ug/L	0.01096	0.0623 ppb	0.01096	17.58%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	8.0	0.7091 ug/L	0.51882	0.7091 ppb	0.51882	73.16%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-62.4	-21.989 ug/L	19.2669	-21.989 ppb	19.2669	87.62%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-4.6	-0.1448 ug/L	0.06657	-0.1448 ppb	0.06657	45.98%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.6	2.6119 ug/L	5.12570	2.6119 ppb	5.12570	196.24%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	6.3	0.9603 ug/L	1.36903	0.9603 ppb	1.36903	142.56%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.3	-4.1143 ug/L	5.44850	-4.1143 ppb	5.44850	132.43%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	6.0	2.5025 ug/L	3.78147	2.5025 ppb	3.78147	151.11%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.1	-0.0345 ug/L	2.01166	-0.0345 ppb	2.01166	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	70.4	2.6636 ug/L	0.43640	2.6636 ppb	0.43640	16.38%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-2.2	-0.4984 ug/L	1.60167	-0.4984 ppb	1.60167	321.34%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-14.6	-0.1171 ug/L	0.04104	-0.1171 ppb	0.04104	35.03%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	23.5	0.0367 ug/L	0.03220	0.0367 ppb	0.03220	87.79%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.1	0.4412 ug/L	0.45135	0.4412 ppb	0.45135	102.30%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	164.0	4.9740 ug/L	1.45250	4.9740 ppb	1.45250	29.20%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-58.4	-0.4491 ug/L	0.37824	-0.4491 ppb	0.37824	84.22%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	22.6	0.2713 ug/L	0.19383	0.2713 ppb	0.19383	71.43%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	40.9	3.3223 ug/L	1.50985	3.3223 ppb	1.50985	45.45%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 48

Sample ID: 247770004|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 60

Date Collected: 3/19/2010 18:44:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770004|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4290.8	4290.8	97.6 %		18:46:20
1	Y RADIAL	6649.3	6649.3	139.7 %		18:46:00
1	Al 396.153Radial†	11626.1	11986.8	11773 ug/L	11773 ppb	18:46:00
1	Ca 317.933Radial†	3039.2	3097.3	5860.8 ug/L	5860.8 ppb	18:46:20
1	Fe 238.204 Radial†	5099.3	5214.8	60423 ug/L	60423 ppb	18:46:00
1	K 766.490 Radial†	40195.8	38574.2	7344.1 ug/L	7344.1 ppb	18:46:00
1	Mg 279.077 IEC†	27.2	26.3	1022.7 ug/L	1022.7 ppb	18:46:20
1	Na 589.592 Radial†	14036.2	15252.5	5376.8 ug/L	5376.8 ppb	18:46:00
1	Sr 421.552†	1551.8	1568.7	12.530 ug/L	12.530 ppb	18:46:00
1	Sc 361.383	838944.6	838944.6	102.46 %		18:47:18
1	Y 371.029	970764.8	970764.8	140.36 %		18:47:18
1	Ag 328.068†	-3237.3	-3344.8	1.5814 ug/L	1.5814 ppb	18:47:23
1	As 188.979†	-50.2	-22.2	23.917 ug/L	23.917 ppb	18:47:43
1	B 249.677†	129.3	663.6	8.7614 ug/L	8.7614 ppb	18:47:23
1	Ba 233.527†	11365.9	11094.0	105.81 ug/L	105.81 ppb	18:47:23
1	Be 313.107†	-9203.7	-5251.9	3.5250 ug/L	3.5250 ppb	18:47:23
1	Cd 226.502†	287.3	451.0	0.2529 ug/L	0.2529 ppb	18:47:43
1	Co 228.616†	532.1	565.5	8.4425 ug/L	8.4425 ppb	18:47:43
1	Cr 267.716†	13834.1	13430.8	186.66 ug/L	186.66 ppb	18:47:23
1	Cu 324.752†	8161.8	2414.0	11.322 ug/L	11.322 ppb	18:47:23
1	Mn 257.610†	2519729.9	2458911.9	3239.0 ug/L	3239.0 ppb	18:47:18
1	Mo 202.031†	229.8	215.8	23.944 ug/L	23.944 ppb	18:47:43
1	Ni 231.604†	292.3	201.2	6.3821 ug/L	6.3821 ppb	18:47:43
1	P 214.914†	832.1	624.9	418.08 ug/L	418.08 ppb	18:47:43
1	Pb 220.353†	237.3	290.0	38.681 ug/L	38.681 ppb	18:47:43
1	S 181.975 Axial†	36.2	5.2	7.0487 ug/L	7.0487 ppb	18:47:43
1	Sb 206.836†	48.5	23.6	0.8696 ug/L	0.8696 ppb	18:47:43
1	Se 196.026†	-258.5	-235.3	-18.540 ug/L	-18.540 ppb	18:47:43
1	Si 251.611†	737342.4	719171.0	27302 ug/L	27302 ppb	18:47:18
1	Sn 189.927†	-29.2	-35.6	-10.514 ug/L	-10.514 ppb	18:47:43
1	Ti 334.940†	1493964.9	1459257.4	2538.5 ug/L	2538.5 ppb	18:47:18
1	Tl 190.801†	-133.1	-100.8	-2.6033 ug/L	-2.6033 ppb	18:47:43
1	U 409.014†	-11641.9	-9158.5	-285.14 ug/L	-285.14 ppb	18:47:18
1	V 292.402†	2280.9	3543.6	16.501 ug/L	16.501 ppb	18:47:23
1	Zn 213.857†	50156.4	48383.5	577.15 ug/L	577.15 ppb	18:47:23
1	SiO2†	740142.6	721892.9	58914 ug/L	58914 ppb	18:48:51
2	Sc Radial	4270.0	4270.0	97.2 %		18:46:45
2	Y RADIAL	6664.8	6664.8	140.0 %		18:46:25
2	Al 396.153Radial†	11630.6	12049.5	11835 ug/L	11835 ppb	18:46:25
2	Ca 317.933Radial†	3028.8	3101.9	5869.4 ug/L	5869.4 ppb	18:46:45
2	Fe 238.204 Radial†	5088.3	5228.9	60587 ug/L	60587 ppb	18:46:25
2	K 766.490 Radial†	40239.7	38820.0	7390.9 ug/L	7390.9 ppb	18:46:25
2	Mg 279.077 IEC†	27.4	26.7	1036.6 ug/L	1036.6 ppb	18:46:45
2	Na 589.592 Radial†	14048.0	15334.8	5405.8 ug/L	5405.8 ppb	18:46:25
2	Sr 421.552†	1562.2	1587.1	12.678 ug/L	12.678 ppb	18:46:25
2	Sc 361.383	840402.5	840402.5	102.64 %		18:47:49
2	Y 371.029	971138.7	971138.7	140.41 %		18:47:49
2	Ag 328.068†	-3292.4	-3393.0	1.3901 ug/L	1.3901 ppb	18:47:54
2	As 188.979†	-37.0	-9.2	31.044 ug/L	31.044 ppb	18:48:14
2	B 249.677†	141.3	675.0	9.0556 ug/L	9.0556 ppb	18:47:54
2	Ba 233.527†	11456.1	11162.7	106.46 ug/L	106.46 ppb	18:47:54
2	Be 313.107†	-9195.6	-5228.5	3.5314 ug/L	3.5314 ppb	18:47:54
2	Cd 226.502†	282.4	445.8	0.1570 ug/L	0.1570 ppb	18:48:14
2	Co 228.616†	532.9	565.4	8.4399 ug/L	8.4399 ppb	18:48:14
2	Cr 267.716†	13897.0	13468.7	187.19 ug/L	187.19 ppb	18:47:54
2	Cu 324.752†	8113.8	2353.5	11.136 ug/L	11.136 ppb	18:47:54
2	Mn 257.610†	2522536.0	2457379.6	3237.0 ug/L	3237.0 ppb	18:47:49
2	Mo 202.031†	221.3	207.1	23.185 ug/L	23.185 ppb	18:48:14
2	Ni 231.604†	253.4	162.9	5.1635 ug/L	5.1635 ppb	18:48:14

2	P 214.914†	837.3	628.5	420.76 ug/L	420.76 ppb	18:48:14
2	Pb 220.353†	238.7	290.9	38.809 ug/L	38.809 ppb	18:48:14
2	S 181.975 Axial†	31.2	0.3	-1.7620 ug/L	-1.7620 ppb	18:48:14
2	Sb 206.836†	44.2	19.4	-0.8648 ug/L	-0.8648 ppb	18:48:14
2	Se 196.026†	-256.7	-233.1	-16.204 ug/L	-16.204 ppb	18:48:14
2	Si 251.611†	737807.7	718376.0	27271 ug/L	27271 ppb	18:47:49
2	Sn 189.927†	-13.9	-20.7	-7.1401 ug/L	-7.1401 ppb	18:48:14
2	Ti 334.940†	1495626.6	1458346.9	2536.9 ug/L	2536.9 ppb	18:47:49
2	Tl 190.801†	-135.0	-102.4	-3.2458 ug/L	-3.2458 ppb	18:48:14
2	U 409.014†	-11986.3	-9474.3	-294.75 ug/L	-294.75 ppb	18:47:49
2	V 292.402†	2303.3	3561.6	16.594 ug/L	16.594 ppb	18:47:54
2	Zn 213.857†	50492.4	48625.9	580.07 ug/L	580.07 ppb	18:47:54
2	SiO2†	735992.4	716596.1	58482 ug/L	58482 ppb	18:48:56
3	Sc Radial	4332.5	4332.5	98.6 %		18:47:10
3	Y RADIAL	6620.8	6620.8	139.1 %		18:46:50
3	Al 396.153Radial†	11614.7	11860.5	11649 ug/L	11649 ppb	18:46:50
3	Ca 317.933Radial†	3074.4	3103.1	5871.6 ug/L	5871.6 ppb	18:47:10
3	Fe 238.204 Radial†	5065.3	5130.0	59441 ug/L	59441 ppb	18:46:50
3	K 766.490 Radial†	40148.9	38129.9	7259.5 ug/L	7259.5 ppb	18:46:50
3	Mg 279.077 IEC†	27.0	25.9	1005.8 ug/L	1005.8 ppb	18:47:10
3	Na 589.592 Radial†	13970.1	15046.9	5304.4 ug/L	5304.4 ppb	18:46:50
3	Sr 421.552†	1567.8	1569.6	12.538 ug/L	12.538 ppb	18:46:50
3	Sc 361.383	842655.6	842655.6	102.91 %		18:48:20
3	Y 371.029	974494.0	974494.0	140.89 %		18:48:20
3	Ag 328.068†	-3209.0	-3303.4	1.4935 ug/L	1.4935 ppb	18:48:25
3	As 188.979†	-39.3	-11.4	29.605 ug/L	29.605 ppb	18:48:45
3	B 249.677†	170.1	702.7	10.019 ug/L	10.019 ppb	18:48:25
3	Ba 233.527†	11355.5	11035.1	105.23 ug/L	105.23 ppb	18:48:25
3	Be 313.107†	-9289.2	-5295.5	3.5047 ug/L	3.5047 ppb	18:48:25
3	Cd 226.502†	287.7	450.2	0.3417 ug/L	0.3417 ppb	18:48:45
3	Co 228.616†	517.8	549.4	8.0397 ug/L	8.0397 ppb	18:48:45
3	Cr 267.716†	13756.8	13296.2	184.75 ug/L	184.75 ppb	18:48:25
3	Cu 324.752†	8043.1	2263.6	10.775 ug/L	10.775 ppb	18:48:25
3	Mn 257.610†	2527762.3	2455886.5	3234.9 ug/L	3234.9 ppb	18:48:20
3	Mo 202.031†	223.5	208.6	23.231 ug/L	23.231 ppb	18:48:45
3	Ni 231.604†	285.8	193.6	6.1398 ug/L	6.1398 ppb	18:48:45
3	P 214.914†	841.2	630.1	422.87 ug/L	422.87 ppb	18:48:45
3	Pb 220.353†	234.9	286.5	38.265 ug/L	38.265 ppb	18:48:45
3	S 181.975 Axial†	40.8	9.4	14.682 ug/L	14.682 ppb	18:48:45
3	Sb 206.836†	60.2	34.8	5.5769 ug/L	5.5769 ppb	18:48:45
3	Se 196.026†	-258.4	-234.2	-20.426 ug/L	-20.426 ppb	18:48:45
3	Si 251.611†	740836.1	719396.6	27310 ug/L	27310 ppb	18:48:20
3	Sn 189.927†	-17.4	-24.1	-7.8288 ug/L	-7.8288 ppb	18:48:45
3	Ti 334.940†	1500116.2	1458813.2	2537.7 ug/L	2537.7 ppb	18:48:20
3	Tl 190.801†	-133.4	-100.5	-2.5256 ug/L	-2.5256 ppb	18:48:45
3	U 409.014†	-11768.8	-9231.8	-287.25 ug/L	-287.25 ppb	18:48:20
3	V 292.402†	2261.8	3515.2	16.406 ug/L	16.406 ppb	18:48:25
3	Zn 213.857†	49987.7	48003.9	572.70 ug/L	572.70 ppb	18:48:25
3	SiO2†	735051.2	713764.1	58251 ug/L	58251 ppb	18:49:02

Mean Data: 247770004|957488|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
Sc 361.383	840667.6	102.67 %		0.228				0.22%
Sc Radial	4297.7	97.8 %		0.72				0.74%
Y 371.029	972132.5	140.55 %		0.297				0.21%
Y RADIAL	6645.0	139.6 %		0.47				0.34%
Ag 328.068†	-3347.1	1.4883 ug/L		0.09577	1.4883 ppb	0.09577		6.43%
Al 396.153Radial†	11965.6	11753 ug/L		94.5	11753 ppb	94.5		0.80%
As 188.979†	-14.3	28.188 ug/L		3.7689	28.188 ppb	3.7689		13.37%
B 249.677†	680.4	9.2788 ug/L		0.65802	9.2788 ppb	0.65802		7.09%
Ba 233.527†	11097.3	105.83 ug/L		0.616	105.83 ppb	0.616		0.58%
Be 313.107†	-5258.6	3.5204 ug/L		0.01393	3.5204 ppb	0.01393		0.40%
Ca 317.933Radial†	3100.8	5867.3 ug/L		5.70	5867.3 ppb	5.70		0.10%
Cd 226.502†	449.0	0.2506 ug/L		0.09240	0.2506 ppb	0.09240		36.88%
Co 228.616†	560.1	8.3073 ug/L		0.23178	8.3073 ppb	0.23178		2.79%
Cr 267.716†	13398.6	186.20 ug/L		1.282	186.20 ppb	1.282		0.69%
Cu 324.752†	2343.7	11.078 ug/L		0.2784	11.078 ppb	0.2784		2.51%
Fe 238.204 Radial†	5191.3	60150 ug/L		620.0	60150 ppb	620.0		1.03%
K 766.490 Radial†	38508.0	7331.5 ug/L		66.62	7331.5 ppb	66.62		0.91%

Mg 279.077 IEC†	26.3	1021.7 ug/L	15.43	1021.7 ppb	15.43	1.51%
Mn 257.610†	2457392.7	3236.9 ug/L	2.04	3236.9 ppb	2.04	0.06%
Mo 202.031†	210.5	23.453 ug/L	0.4253	23.453 ppb	0.4253	1.81%
Na 589.592 Radial†	15211.4	5362.3 ug/L	52.26	5362.3 ppb	52.26	0.97%
Ni 231.604†	185.9	5.8952 ug/L	0.64511	5.8952 ppb	0.64511	10.94%
P 214.914†	627.8	420.57 ug/L	2.399	420.57 ppb	2.399	0.57%
Pb 220.353†	289.1	38.585 ug/L	0.2846	38.585 ppb	0.2846	0.74%
S 181.975 Axial†	4.9	6.6563 ug/L	8.22910	6.6563 ppb	8.22910	123.63%
Sb 206.836†	25.9	1.8606 ug/L	3.33322	1.8606 ppb	3.33322	179.15%
Se 196.026†	-234.2	-18.390 ug/L	2.1150	-18.390 ppb	2.1150	11.50%
Si 251.611†	718981.2	27294 ug/L	20.4	27294 ppb	20.4	0.07%
Sn 189.927†	-26.8	-8.4943 ug/L	1.78257	-8.4943 ppb	1.78257	20.99%
Sr 421.552†	1575.1	12.582 ug/L	0.0834	12.582 ppb	0.0834	0.66%
Ti 334.940†	1458805.8	2537.7 ug/L	0.79	2537.7 ppb	0.79	0.03%
Tl 190.801†	-101.2	-2.7916 ug/L	0.39531	-2.7916 ppb	0.39531	14.16%
U 409.014†	-9288.2	-289.05 ug/L	5.046	-289.05 ppb	5.046	1.75%
V 292.402†	3540.1	16.500 ug/L	0.0940	16.500 ppb	0.0940	0.57%
Zn 213.857†	48337.8	576.64 ug/L	3.712	576.64 ppb	3.712	0.64%
SiO2†	717417.7	58549 ug/L	336.7	58549 ppb	336.7	0.58%

Sequence No.: 49
 Sample ID: 247770005|957488|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 61
 Date Collected: 3/19/2010 18:51:13
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247770005|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4395.1	4395.1	100.0 %		18:53:07
1	Y RADIAL	5678.7	5678.7	119.3 %		18:53:07
1	Al 396.153Radial†	6641.1	6719.2	6599.9 ug/L	6599.9 ppb	18:53:07
1	Ca 317.933Radial†	1916.0	1900.3	3595.7 ug/L	3595.7 ppb	18:53:27
1	Fe 238.204 Radial†	4347.2	4338.7	50272 ug/L	50272 ppb	18:53:07
1	K 766.490 Radial†	22289.1	19690.4	3748.6 ug/L	3748.6 ppb	18:53:07
1	Mg 279.077 IEC†	32.8	31.2	1236.2 ug/L	1236.2 ppb	18:53:27
1	Na 589.592 Radial†	7245.2	8120.3	2862.6 ug/L	2862.6 ppb	18:53:07
1	Sr 421.552†	1071.3	1050.5	8.3934 ug/L	8.3934 ppb	18:53:07
1	Sc 361.383	839097.6	839097.6	102.48 %		18:54:24
1	Y 371.029	833884.8	833884.8	120.57 %		18:54:24
1	Ag 328.068†	-2811.3	-2928.5	0.5599 ug/L	0.5599 ppb	18:54:29
1	As 188.979†	-50.9	-22.9	20.739 ug/L	20.739 ppb	18:54:49
1	B 249.677†	-86.2	453.2	4.5292 ug/L	4.5292 ppb	18:54:29
1	Ba 233.527†	5993.5	5849.4	56.369 ug/L	56.369 ppb	18:54:29
1	Be 313.107†	-15603.3	-11495.3	0.7451 ug/L	0.7451 ppb	18:54:29
1	Cd 226.502†	223.0	388.2	0.4018 ug/L	0.4018 ppb	18:54:49
1	Co 228.616†	261.9	301.8	1.9016 ug/L	1.9016 ppb	18:54:49
1	Cr 267.716†	453.9	371.4	10.423 ug/L	10.423 ppb	18:54:49
1	Cu 324.752†	8106.8	2358.9	10.566 ug/L	10.566 ppb	18:54:29
1	Mn 257.610†	1172045.9	1143340.0	1508.2 ug/L	1508.2 ppb	18:54:24
1	Mo 202.031†	50.0	40.3	7.5245 ug/L	7.5245 ppb	18:54:49
1	Ni 231.604†	240.9	151.0	4.7907 ug/L	4.7907 ppb	18:54:49
1	P 214.914†	736.1	531.0	355.14 ug/L	355.14 ppb	18:54:49
1	Pb 220.353†	171.9	226.1	29.096 ug/L	29.096 ppb	18:54:49
1	S 181.975 Axial†	39.2	8.0	13.158 ug/L	13.158 ppb	18:54:49
1	Sb 206.836†	30.1	5.7	-6.4617 ug/L	-6.4617 ppb	18:54:49
1	Se 196.026†	-225.8	-203.4	-22.786 ug/L	-22.786 ppb	18:54:49
1	Si 251.611†	565620.7	551467.0	20935 ug/L	20935 ppb	18:54:24
1	Sn 189.927†	-0.9	-8.0	-4.0647 ug/L	-4.0647 ppb	18:54:49
1	Ti 334.940†	1462710.4	1428492.2	2484.7 ug/L	2484.7 ppb	18:54:24
1	Tl 190.801†	-104.0	-72.4	-0.2819 ug/L	-0.2819 ppb	18:54:49
1	U 409.014†	-9412.8	-6981.2	-217.54 ug/L	-217.54 ppb	18:54:24
1	V 292.402†	1630.3	2908.3	12.938 ug/L	12.938 ppb	18:54:29
1	Zn 213.857†	29095.8	27822.7	329.56 ug/L	329.56 ppb	18:54:29
1	SiO2†	556746.6	542796.2	44298 ug/L	44298 ppb	18:55:57
2	Sc Radial	4544.9	4544.9	103 %		18:53:32
2	Y RADIAL	5833.4	5833.4	122.5 %		18:53:32
2	Al 396.153Radial†	6790.1	6644.3	6526.2 ug/L	6526.2 ppb	18:53:32
2	Ca 317.933Radial†	1923.5	1844.3	3489.9 ug/L	3489.9 ppb	18:53:52
2	Fe 238.204 Radial†	4458.3	4302.9	49856 ug/L	49856 ppb	18:53:32
2	K 766.490 Radial†	22822.5	19471.2	3706.9 ug/L	3706.9 ppb	18:53:32
2	Mg 279.077 IEC†	30.6	28.0	1103.8 ug/L	1103.8 ppb	18:53:52
2	Na 589.592 Radial†	7449.1	8078.6	2847.9 ug/L	2847.9 ppb	18:53:32
2	Sr 421.552†	1068.5	1012.5	8.0898 ug/L	8.0898 ppb	18:53:32
2	Sc 361.383	852705.9	852705.9	104.14 %		18:54:55
2	Y 371.029	845879.1	845879.1	122.30 %		18:54:55
2	Ag 328.068†	-2823.9	-2896.9	0.5904 ug/L	0.5904 ppb	18:55:00
2	As 188.979†	-42.5	-14.0	25.499 ug/L	25.499 ppb	18:55:20
2	B 249.677†	10.4	547.4	7.2369 ug/L	7.2369 ppb	18:55:00
2	Ba 233.527†	6026.5	5787.8	55.777 ug/L	55.777 ppb	18:55:00
2	Be 313.107†	-15536.7	-11188.3	0.8754 ug/L	0.8754 ppb	18:55:00
2	Cd 226.502†	213.8	375.9	0.2675 ug/L	0.2675 ppb	18:55:20
2	Co 228.616†	270.4	305.8	2.0178 ug/L	2.0178 ppb	18:55:20
2	Cr 267.716†	419.1	330.9	9.8338 ug/L	9.8338 ppb	18:55:20
2	Cu 324.752†	8065.1	2192.6	9.9926 ug/L	9.9926 ppb	18:55:00
2	Mn 257.610†	1189511.3	1141858.6	1506.2 ug/L	1506.2 ppb	18:54:55
2	Mo 202.031†	74.3	62.8	9.4958 ug/L	9.4958 ppb	18:55:20
2	Ni 231.604†	245.7	151.9	4.8177 ug/L	4.8177 ppb	18:55:20

2	P 214.914†	743.0	526.2	352.03 ug/L	352.03 ppb	18:55:20
2	Pb 220.353†	163.2	215.0	27.445 ug/L	27.445 ppb	18:55:20
2	S 181.975 Axial†	30.6	-0.8	-2.6779 ug/L	-2.6779 ppb	18:55:20
2	Sb 206.836†	36.8	11.6	-3.8965 ug/L	-3.8965 ppb	18:55:20
2	Se 196.026†	-217.3	-191.7	-14.306 ug/L	-14.306 ppb	18:55:20
2	Si 251.611†	574336.5	551027.9	20919 ug/L	20919 ppb	18:54:55
2	Sn 189.927†	7.3	-0.1	-2.2705 ug/L	-2.2705 ppb	18:55:20
2	Ti 334.940†	1486337.8	1428401.4	2484.5 ug/L	2484.5 ppb	18:54:55
2	Tl 190.801†	-102.2	-69.0	1.0065 ug/L	1.0065 ppb	18:55:20
2	U 409.014†	-9404.2	-6826.4	-212.79 ug/L	-212.79 ppb	18:54:55
2	V 292.402†	1564.0	2819.3	12.323 ug/L	12.323 ppb	18:55:00
2	Zn 213.857†	28817.5	27102.4	320.89 ug/L	320.89 ppb	18:55:00
2	SiO2†	565902.4	542917.7	44308 ug/L	44308 ppb	18:56:03
3	Sc Radial	4428.2	4428.2	101 %		18:53:57
3	Y RADIAL	5722.4	5722.4	120.2 %		18:53:57
3	Al 396.153Radial†	6723.1	6750.9	6631.0 ug/L	6631.0 ppb	18:53:57
3	Ca 317.933Radial†	1914.7	1884.7	3566.3 ug/L	3566.3 ppb	18:54:17
3	Fe 238.204 Radial†	4404.9	4363.5	50559 ug/L	50559 ppb	18:53:57
3	K 766.490 Radial†	22534.4	19767.2	3763.3 ug/L	3763.3 ppb	18:53:57
3	Mg 279.077 IEC†	29.3	27.6	1083.7 ug/L	1083.7 ppb	18:54:17
3	Na 589.592 Radial†	7269.5	8090.3	2852.0 ug/L	2852.0 ppb	18:53:57
3	Sr 421.552†	1085.7	1056.8	8.4440 ug/L	8.4440 ppb	18:53:57
3	Sc 361.383	850683.3	850683.3	103.89 %		18:55:26
3	Y 371.029	846236.1	846236.1	122.35 %		18:55:26
3	Ag 328.068†	-2768.4	-2849.8	1.0480 ug/L	1.0480 ppb	18:55:31
3	As 188.979†	-39.7	-11.5	27.019 ug/L	27.019 ppb	18:55:51
3	B 249.677†	-29.1	509.4	6.0564 ug/L	6.0564 ppb	18:55:31
3	Ba 233.527†	5935.8	5714.2	55.111 ug/L	55.111 ppb	18:55:31
3	Be 313.107†	-15584.1	-11269.4	0.8308 ug/L	0.8308 ppb	18:55:31
3	Cd 226.502†	218.0	380.5	0.2614 ug/L	0.2614 ppb	18:55:51
3	Co 228.616†	267.8	304.0	1.9665 ug/L	1.9665 ppb	18:55:51
3	Cr 267.716†	435.4	347.6	10.130 ug/L	10.130 ppb	18:55:51
3	Cu 324.752†	8099.6	2244.3	10.197 ug/L	10.197 ppb	18:55:31
3	Mn 257.610†	1182730.9	1138048.0	1501.3 ug/L	1501.3 ppb	18:55:26
3	Mo 202.031†	57.6	46.9	8.1350 ug/L	8.1350 ppb	18:55:51
3	Ni 231.604†	231.5	138.7	4.4011 ug/L	4.4011 ppb	18:55:51
3	P 214.914†	742.8	527.7	352.56 ug/L	352.56 ppb	18:55:51
3	Pb 220.353†	167.0	219.0	27.980 ug/L	27.980 ppb	18:55:51
3	S 181.975 Axial†	40.4	8.7	14.257 ug/L	14.257 ppb	18:55:51
3	Sb 206.836†	48.6	23.1	0.8564 ug/L	0.8564 ppb	18:55:51
3	Se 196.026†	-227.7	-202.2	-20.964 ug/L	-20.964 ppb	18:55:51
3	Si 251.611†	571389.2	549502.2	20861 ug/L	20861 ppb	18:55:26
3	Sn 189.927†	0.4	-6.8	-3.8171 ug/L	-3.8171 ppb	18:55:51
3	Ti 334.940†	1480140.4	1425829.6	2480.1 ug/L	2480.1 ppb	18:55:26
3	Tl 190.801†	-104.6	-71.6	-0.0419 ug/L	-0.0419 ppb	18:55:51
3	U 409.014†	-9212.1	-6662.9	-207.91 ug/L	-207.91 ppb	18:55:26
3	V 292.402†	1606.5	2863.8	12.570 ug/L	12.570 ppb	18:55:31
3	Zn 213.857†	28712.6	27067.2	320.36 ug/L	320.36 ppb	18:55:31
3	SiO2†	561400.4	539876.3	44060 ug/L	44060 ppb	18:56:08

Mean Data: 247770005|957488|1

Analyte	Mean Corrected	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Conc. Units		Conc. Units		
Sc 361.383	847495.6	103.50 %	0.897			0.87%
Sc Radial	4456.1	101 %	1.8			1.77%
Y 371.029	842000.0	121.74 %	1.016			0.83%
Y RADIAL	5744.8	120.7 %	1.68			1.39%
Ag 328.068†	-2891.7	0.7328 ug/L	0.27344	0.7328 ppb	0.27344	37.31%
Al 396.153Radial†	6704.8	6585.7 ug/L	53.80	6585.7 ppb	53.80	0.82%
As 188.979†	-16.1	24.419 ug/L	3.2763	24.419 ppb	3.2763	13.42%
B 249.677†	503.3	5.9409 ug/L	1.35752	5.9409 ppb	1.35752	22.85%
Ba 233.527†	5783.8	55.752 ug/L	0.6296	55.752 ppb	0.6296	1.13%
Be 313.107†	-11317.7	0.8171 ug/L	0.06624	0.8171 ppb	0.06624	8.11%
Ca 317.933Radial†	1876.5	3550.6 ug/L	54.63	3550.6 ppb	54.63	1.54%
Cd 226.502†	381.5	0.3102 ug/L	0.07936	0.3102 ppb	0.07936	25.58%
Co 228.616†	303.9	1.9620 ug/L	0.05821	1.9620 ppb	0.05821	2.97%
Cr 267.716†	350.0	10.129 ug/L	0.2948	10.129 ppb	0.2948	2.91%
Cu 324.752†	2265.3	10.252 ug/L	0.2907	10.252 ppb	0.2907	2.84%
Fe 238.204 Radial†	4335.0	50229 ug/L	353.0	50229 ppb	353.0	0.70%
K 766.490 Radial†	19642.9	3739.6 ug/L	29.25	3739.6 ppb	29.25	0.78%

Mg 279.077 IEC†	28.9	1141.2 ug/L	82.83	1141.2 ppb	82.83	7.26%
Mn 257.610†	1141082.2	1505.2 ug/L	3.57	1505.2 ppb	3.57	0.24%
Mo 202.031†	50.0	8.3851 ug/L	1.00915	8.3851 ppb	1.00915	12.04%
Na 589.592 Radial†	8096.4	2854.2 ug/L	7.58	2854.2 ppb	7.58	0.27%
Ni 231.604†	147.2	4.6698 ug/L	0.23309	4.6698 ppb	0.23309	4.99%
P 214.914†	528.3	353.24 ug/L	1.664	353.24 ppb	1.664	0.47%
Pb 220.353†	220.0	28.174 ug/L	0.8427	28.174 ppb	0.8427	2.99%
S 181.975 Axial†	5.3	8.2455 ug/L	9.47596	8.2455 ppb	9.47596	114.92%
Sb 206.836†	13.5	-3.1673 ug/L	3.71315	-3.1673 ppb	3.71315	117.24%
Se 196.026†	-199.1	-19.352 ug/L	4.4638	-19.352 ppb	4.4638	23.07%
Si 251.611†	550665.7	20905 ug/L	39.1	20905 ppb	39.1	0.19%
Sn 189.927†	-5.0	-3.3841 ug/L	0.97233	-3.3841 ppb	0.97233	28.73%
Sr 421.552†	1039.9	8.3091 ug/L	0.19159	8.3091 ppb	0.19159	2.31%
Ti 334.940†	1427574.4	2483.1 ug/L	2.63	2483.1 ppb	2.63	0.11%
Tl 190.801†	-71.0	0.2276 ug/L	0.68516	0.2276 ppb	0.68516	301.07%
U 409.014†	-6823.5	-212.75 ug/L	4.813	-212.75 ppb	4.813	2.26%
V 292.402†	2863.8	12.610 ug/L	0.3098	12.610 ppb	0.3098	2.46%
Zn 213.857†	27330.8	323.60 ug/L	5.163	323.60 ppb	5.163	1.60%
SiO2†	541863.4	44222 ug/L	140.5	44222 ppb	140.5	0.32%

Sequence No.: 50

Sample ID: 247770006|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 62

Date Collected: 3/19/2010 18:58:20

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770006|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4292.3	4292.3	97.7 %		19:00:33
1	Y RADIAL	6617.9	6617.9	139.0 %		19:00:13
1	Al 396.153Radial†	8775.3	9063.5	8902.6 ug/L	8902.6 ppb	19:00:13
1	Ca 317.933Radial†	2650.4	2698.2	5105.5 ug/L	5105.5 ppb	19:00:33
1	Fe 238.204 Radial†	4848.3	4955.9	57423 ug/L	57423 ppb	19:00:13
1	K 766.490 Radial†	28524.1	26608.5	5065.2 ug/L	5065.2 ppb	19:00:13
1	Mg 279.077 IEC†	25.0	24.1	932.13 ug/L	932.13 ppb	19:00:33
1	Na 589.592 Radial†	10893.2	12029.2	4240.6 ug/L	4240.6 ppb	19:00:13
1	Sr 421.552†	1439.0	1452.6	11.606 ug/L	11.606 ppb	19:00:13
1	Sc 361.383	825205.2	825205.2	100.78 %		19:01:31
1	Y 371.029	955146.3	955146.3	138.10 %		19:01:31
1	Ag 328.068†	-2990.9	-3152.9	1.6653 ug/L	1.6653 ppb	19:01:36
1	As 188.979†	-49.2	-22.0	22.620 ug/L	22.620 ppb	19:01:56
1	B 249.677†	-31.0	506.6	4.8661 ug/L	4.8661 ppb	19:01:36
1	Ba 233.527†	8391.9	8327.7	79.817 ug/L	79.817 ppb	19:01:36
1	Be 313.107†	-10219.7	-6409.7	2.8447 ug/L	2.8447 ppb	19:01:36
1	Cd 226.502†	246.2	414.9	0.0412 ug/L	0.0412 ppb	19:01:56
1	Co 228.616†	241.3	285.6	1.4542 ug/L	1.4542 ppb	19:01:56
1	Cr 267.716†	1249.0	1167.8	21.895 ug/L	21.895 ppb	19:01:36
1	Cu 324.752†	8379.6	2762.8	12.310 ug/L	12.310 ppb	19:01:36
1	Mn 257.610†	2147316.0	2130324.2	2806.6 ug/L	2806.6 ppb	19:01:31
1	Mo 202.031†	73.8	64.7	10.270 ug/L	10.270 ppb	19:01:56
1	Ni 231.604†	330.0	243.3	7.7233 ug/L	7.7233 ppb	19:01:56
1	P 214.914†	732.0	539.0	355.65 ug/L	355.65 ppb	19:01:56
1	Pb 220.353†	257.9	314.2	42.153 ug/L	42.153 ppb	19:01:56
1	S 181.975 Axial†	32.6	2.1	2.1360 ug/L	2.1360 ppb	19:01:56
1	Sb 206.836†	43.1	19.1	-0.8763 ug/L	-0.8763 ppb	19:01:56
1	Se 196.026†	-241.5	-222.6	-17.532 ug/L	-17.532 ppb	19:01:56
1	Si 251.611†	681993.4	676232.1	25672 ug/L	25672 ppb	19:01:31
1	Sn 189.927†	-12.5	-19.5	-6.8218 ug/L	-6.8218 ppb	19:01:56
1	Ti 334.940†	1421682.2	1411811.1	2455.9 ug/L	2455.9 ppb	19:01:31
1	Tl 190.801†	-120.8	-90.8	-1.4661 ug/L	-1.4661 ppb	19:01:56
1	U 409.014†	-11156.1	-8865.7	-275.55 ug/L	-275.55 ppb	19:01:31
1	V 292.402†	2622.7	3919.8	19.916 ug/L	19.916 ppb	19:01:36
1	Zn 213.857†	35930.5	35082.6	416.43 ug/L	416.43 ppb	19:01:36
1	SiO2†	685739.9	679938.5	55491 ug/L	55491 ppb	19:03:04
2	Sc Radial	4301.2	4301.2	97.9 %		19:00:58
2	Y RADIAL	6616.3	6616.3	139.0 %		19:00:38
2	Al 396.153Radial†	8791.5	9061.5	8900.6 ug/L	8900.6 ppb	19:00:38
2	Ca 317.933Radial†	2656.6	2698.9	5106.8 ug/L	5106.8 ppb	19:00:58
2	Fe 238.204 Radial†	4860.4	4958.0	57448 ug/L	57448 ppb	19:00:38
2	K 766.490 Radial†	28538.4	26562.8	5056.5 ug/L	5056.5 ppb	19:00:38
2	Mg 279.077 IEC†	27.3	26.4	1027.6 ug/L	1027.6 ppb	19:00:58
2	Na 589.592 Radial†	10814.9	11926.2	4204.2 ug/L	4204.2 ppb	19:00:38
2	Sr 421.552†	1421.4	1431.6	11.437 ug/L	11.437 ppb	19:00:38
2	Sc 361.383	843236.0	843236.0	102.98 %		19:02:02
2	Y 371.029	974102.0	974102.0	140.84 %		19:02:02
2	Ag 328.068†	-3043.6	-3140.6	1.7307 ug/L	1.7307 ppb	19:02:07
2	As 188.979†	-49.0	-20.8	22.990 ug/L	22.990 ppb	19:02:27
2	B 249.677†	-77.0	462.6	3.6269 ug/L	3.6269 ppb	19:02:07
2	Ba 233.527†	8369.1	8127.5	77.941 ug/L	77.941 ppb	19:02:07
2	Be 313.107†	-10577.3	-6540.0	2.7057 ug/L	2.7057 ppb	19:02:07
2	Cd 226.502†	255.1	418.3	0.0891 ug/L	0.0891 ppb	19:02:27
2	Co 228.616†	239.1	278.4	1.3394 ug/L	1.3394 ppb	19:02:27
2	Cr 267.716†	1260.3	1152.3	21.688 ug/L	21.688 ppb	19:02:07
2	Cu 324.752†	8452.0	2655.3	11.954 ug/L	11.954 ppb	19:02:07
2	Mn 257.610†	2159239.1	2096341.4	2761.9 ug/L	2761.9 ppb	19:02:02
2	Mo 202.031†	60.3	50.0	8.9650 ug/L	8.9650 ppb	19:02:27
2	Ni 231.604†	325.1	231.6	7.3506 ug/L	7.3506 ppb	19:02:27

2	P 214.914†	753.6	544.5	359.75 ug/L	359.75 ppb	19:02:27
2	Pb 220.353†	263.1	313.8	42.087 ug/L	42.087 ppb	19:02:27
2	S 181.975 Axial†	35.1	3.9	5.3493 ug/L	5.3493 ppb	19:02:27
2	Sb 206.836†	41.0	16.1	-2.0271 ug/L	-2.0271 ppb	19:02:27
2	Se 196.026†	-245.7	-221.7	-16.664 ug/L	-16.664 ppb	19:02:27
2	Si 251.611†	687076.7	666698.1	25310 ug/L	25310 ppb	19:02:02
2	Sn 189.927†	-19.1	-25.8	-8.2341 ug/L	-8.2341 ppb	19:02:27
2	Ti 334.940†	1430972.3	1390667.7	2419.2 ug/L	2419.2 ppb	19:02:02
2	Tl 190.801†	-121.0	-88.4	-1.0499 ug/L	-1.0499 ppb	19:02:27
2	U 409.014†	-11249.7	-8719.9	-271.13 ug/L	-271.13 ppb	19:02:02
2	V 292.402†	2606.1	3848.1	19.370 ug/L	19.370 ppb	19:02:07
2	Zn 213.857†	35905.2	34295.7	406.89 ug/L	406.89 ppb	19:02:07
2	SiO2†	683773.0	663478.8	54148 ug/L	54148 ppb	19:03:09
3	Sc Radial	3879.5	3879.5	88.3 %		19:01:23
3	Y RADIAL	6709.1	6709.1	140.9 %		19:01:03
3	Al 396.153Radial†	8884.3	10143.1	9963.1 ug/L	9963.1 ppb	19:01:03
3	Ca 317.933Radial†	2629.3	2963.1	5606.7 ug/L	5606.7 ppb	19:01:23
3	Fe 238.204 Radial†	4897.9	5540.4	64195 ug/L	64195 ppb	19:01:03
3	K 766.490 Radial†	28937.2	30184.2	5746.1 ug/L	5746.1 ppb	19:01:03
3	Mg 279.077 IEC†	26.1	28.1	1090.6 ug/L	1090.6 ppb	19:01:23
3	Na 589.592 Radial†	11008.6	13346.8	4705.0 ug/L	4705.0 ppb	19:01:03
3	Sr 421.552†	1421.5	1589.5	12.699 ug/L	12.699 ppb	19:01:03
3	Sc 361.383	836887.8	836887.8	102.21 %		19:02:33
3	Y 371.029	965088.4	965088.4	139.53 %		19:02:33
3	Ag 328.068†	-3059.9	-3179.0	3.6094 ug/L	3.6094 ppb	19:02:38
3	As 188.979†	-40.3	-12.7	29.004 ug/L	29.004 ppb	19:02:58
3	B 249.677†	-10.6	527.0	4.3372 ug/L	4.3372 ppb	19:02:38
3	Ba 233.527†	8283.7	8105.6	77.941 ug/L	77.941 ppb	19:02:38
3	Be 313.107†	-10224.9	-6273.2	2.8135 ug/L	2.8135 ppb	19:02:38
3	Cd 226.502†	254.0	419.2	-0.5950 ug/L	-0.5950 ppb	19:02:58
3	Co 228.616†	257.1	297.7	1.7484 ug/L	1.7484 ppb	19:02:58
3	Cr 267.716†	1183.1	1086.0	21.512 ug/L	21.512 ppb	19:02:38
3	Cu 324.752†	8329.0	2597.3	12.118 ug/L	12.118 ppb	19:02:38
3	Mn 257.610†	2140042.2	2093463.4	2758.8 ug/L	2758.8 ppb	19:02:33
3	Mo 202.031†	63.0	53.1	9.7747 ug/L	9.7747 ppb	19:02:58
3	Ni 231.604†	340.7	249.3	7.9133 ug/L	7.9133 ppb	19:02:58
3	P 214.914†	739.4	536.2	348.45 ug/L	348.45 ppb	19:02:58
3	Pb 220.353†	256.2	309.0	40.627 ug/L	40.627 ppb	19:02:58
3	S 181.975 Axial†	29.8	-1.0	-3.6234 ug/L	-3.6234 ppb	19:02:58
3	Sb 206.836†	39.6	15.1	-2.5109 ug/L	-2.5109 ppb	19:02:58
3	Se 196.026†	-239.7	-217.5	6.5237 ug/L	6.5237 ppb	19:02:58
3	Si 251.611†	680883.0	665699.0	25272 ug/L	25272 ppb	19:02:33
3	Sn 189.927†	-6.1	-13.1	-5.6657 ug/L	-5.6657 ppb	19:02:58
3	Ti 334.940†	1418678.2	1389179.2	2416.6 ug/L	2416.6 ppb	19:02:33
3	Tl 190.801†	-120.4	-88.7	-1.2064 ug/L	-1.2064 ppb	19:02:58
3	U 409.014†	-11118.8	-8674.6	-270.52 ug/L	-270.52 ppb	19:02:33
3	V 292.402†	2560.8	3823.0	18.198 ug/L	18.198 ppb	19:02:38
3	Zn 213.857†	35407.2	34072.9	403.18 ug/L	403.18 ppb	19:02:38
3	SiO2†	684644.9	669368.5	54628 ug/L	54628 ppb	19:03:15

Mean Data: 247770006|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	835109.7	101.99 %	1.117			1.10%
Sc Radial	4157.6	94.6 %	5.48			5.79%
Y 371.029	964778.9	139.49 %	1.371			0.98%
Y RADIAL	6647.8	139.6 %	1.11			0.80%
Ag 328.068†	-3157.5	2.3351 ug/L	1.10401	2.3351 ppb	1.10401	47.28%
Al 396.153Radial†	9422.7	9255.4 ug/L	612.84	9255.4 ppb	612.84	6.62%
As 188.979†	-18.5	24.871 ug/L	3.5841	24.871 ppb	3.5841	14.41%
B 249.677†	498.7	4.2768 ug/L	0.62178	4.2768 ppb	0.62178	14.54%
Ba 233.527†	8186.9	78.566 ug/L	1.0831	78.566 ppb	1.0831	1.38%
Be 313.107†	-6407.6	2.7880 ug/L	0.07292	2.7880 ppb	0.07292	2.62%
Ca 317.933Radial†	2786.7	5273.0 ug/L	288.99	5273.0 ppb	288.99	5.48%
Cd 226.502†	417.5	-0.1549 ug/L	0.38188	-0.1549 ppb	0.38188	246.51%
Co 228.616†	287.3	1.5140 ug/L	0.21095	1.5140 ppb	0.21095	13.93%
Cr 267.716†	1135.4	21.698 ug/L	0.1915	21.698 ppb	0.1915	0.88%
Cu 324.752†	2671.8	12.127 ug/L	0.1783	12.127 ppb	0.1783	1.47%
Fe 238.204 Radial†	5151.4	59689 ug/L	3902.5	59689 ppb	3902.5	6.54%
K 766.490 Radial†	27785.1	5289.3 ug/L	395.67	5289.3 ppb	395.67	7.48%

Mg 279.077 IEC†	26.2	1016.8 ug/L	79.77	1016.8 ppb	79.77	7.85%
Mn 257.610†	2106709.7	2775.8 ug/L	26.74	2775.8 ppb	26.74	0.96%
Mo 202.031†	55.9	9.6698 ug/L	0.65867	9.6698 ppb	0.65867	6.81%
Na 589.592 Radial†	12434.1	4383.3 ug/L	279.24	4383.3 ppb	279.24	6.37%
Ni 231.604†	241.4	7.6624 ug/L	0.28626	7.6624 ppb	0.28626	3.74%
P 214.914†	539.9	354.62 ug/L	5.723	354.62 ppb	5.723	1.61%
Pb 220.353†	312.3	41.622 ug/L	0.8624	41.622 ppb	0.8624	2.07%
S 181.975 Axial†	1.7	1.2873 ug/L	4.54614	1.2873 ppb	4.54614	353.15%
Sb 206.836†	16.8	-1.8047 ug/L	0.83970	-1.8047 ppb	0.83970	46.53%
Se 196.026†	-220.6	-9.2242 ug/L	13.64498	-9.2242 ppb	13.64498	147.93%
Si 251.611†	669543.0	25418 ug/L	220.7	25418 ppb	220.7	0.87%
Sn 189.927†	-19.5	-6.9072 ug/L	1.28634	-6.9072 ppb	1.28634	18.62%
Sr 421.552†	1491.2	11.914 ug/L	0.6854	11.914 ppb	0.6854	5.75%
Ti 334.940†	1397219.3	2430.6 ug/L	22.00	2430.6 ppb	22.00	0.91%
Tl 190.801†	-89.3	-1.2408 ug/L	0.21022	-1.2408 ppb	0.21022	16.94%
U 409.014†	-8753.4	-272.40 ug/L	2.744	-272.40 ppb	2.744	1.01%
V 292.402†	3863.6	19.162 ug/L	0.8777	19.162 ppb	0.8777	4.58%
Zn 213.857†	34483.7	408.84 ug/L	6.834	408.84 ppb	6.834	1.67%
SiO2†	670928.6	54755 ug/L	680.6	54755 ppb	680.6	1.24%

Sequence No.: 51

Sample ID: 247770007|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 63

Date Collected: 3/19/2010 19:05:25

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770007|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4306.6	4306.6	98.0 %		19:07:38
1	Y RADIAL	5914.5	5914.5	124.2 %		19:07:18
1	Al 396.153Radial†	10689.6	10987.4	10792 ug/L	10792 ppb	19:07:18
1	Ca 317.933Radial†	1847.1	1869.3	3537.2 ug/L	3537.2 ppb	19:07:38
1	Fe 238.204 Radial†	5676.9	5785.2	67031 ug/L	67031 ppb	19:07:18
1	K 766.490 Radial†	30202.4	28224.3	5373.8 ug/L	5373.8 ppb	19:07:18
1	Mg 279.077 IEC†	52.9	52.5	2095.2 ug/L	2095.2 ppb	19:07:38
1	Na 589.592 Radial†	11800.0	12917.7	4553.7 ug/L	4553.7 ppb	19:07:18
1	Sr 421.552†	1835.1	1852.0	14.819 ug/L	14.819 ppb	19:07:18
1	Sc 361.383	829701.6	829701.6	101.33 %		19:08:36
1	Y 371.029	862958.0	862958.0	124.77 %		19:08:36
1	Ag 328.068†	-3562.6	-3701.1	1.7913 ug/L	1.7913 ppb	19:08:41
1	As 188.979†	-51.4	-23.9	29.381 ug/L	29.381 ppb	19:09:01
1	B 249.677†	0.2	537.5	4.1643 ug/L	4.1643 ppb	19:08:41
1	Ba 233.527†	10680.0	10540.7	100.84 ug/L	100.84 ppb	19:08:41
1	Be 313.107†	-14133.5	-10217.2	2.6778 ug/L	2.6778 ppb	19:08:41
1	Cd 226.502†	347.7	513.8	0.4885 ug/L	0.4885 ppb	19:09:01
1	Co 228.616†	364.1	405.5	3.0834 ug/L	3.0834 ppb	19:09:01
1	Cr 267.716†	792.0	710.2	16.766 ug/L	16.766 ppb	19:08:41
1	Cu 324.752†	6931.5	1288.6	7.9381 ug/L	7.9381 ppb	19:08:41
1	Mn 257.610†	1416841.5	1397878.6	1844.5 ug/L	1844.5 ppb	19:08:36
1	Mo 202.031†	67.9	58.5	10.447 ug/L	10.447 ppb	19:09:01
1	Ni 231.604†	329.8	241.4	7.6606 ug/L	7.6606 ppb	19:09:01
1	P 214.914†	1214.7	1011.4	701.35 ug/L	701.35 ppb	19:09:01
1	Pb 220.353†	165.1	221.2	26.898 ug/L	26.898 ppb	19:09:01
1	S 181.975 Axial†	37.5	6.8	10.207 ug/L	10.207 ppb	19:09:01
1	Sb 206.836†	46.3	22.1	-1.7460 ug/L	-1.7460 ppb	19:09:01
1	Se 196.026†	-283.6	-262.9	-22.886 ug/L	-22.886 ppb	19:09:01
1	Si 251.611†	780798.2	770074.3	29234 ug/L	29234 ppb	19:08:36
1	Sn 189.927†	34.5	26.9	2.8783 ug/L	2.8783 ppb	19:09:01
1	Ti 334.940†	1802679.1	1780168.3	3096.2 ug/L	3096.2 ppb	19:08:36
1	Tl 190.801†	-123.9	-93.2	-1.6965 ug/L	-1.6965 ppb	19:09:01
1	U 409.014†	-10424.6	-8083.7	-252.91 ug/L	-252.91 ppb	19:08:36
1	V 292.402†	2601.4	3884.7	17.620 ug/L	17.620 ppb	19:08:41
1	Zn 213.857†	30134.5	29169.4	343.35 ug/L	343.35 ppb	19:08:41
1	SiO2†	787889.9	777061.9	63417 ug/L	63417 ppb	19:10:09
2	Sc Radial	4319.8	4319.8	98.3 %		19:08:03
2	Y RADIAL	5864.5	5864.5	123.2 %		19:07:43
2	Al 396.153Radial†	10592.7	10855.2	10662 ug/L	10662 ppb	19:07:43
2	Ca 317.933Radial†	1855.3	1871.9	3542.1 ug/L	3542.1 ppb	19:08:03
2	Fe 238.204 Radial†	5638.1	5727.8	66367 ug/L	66367 ppb	19:07:43
2	K 766.490 Radial†	29981.0	27904.3	5312.9 ug/L	5312.9 ppb	19:07:43
2	Mg 279.077 IEC†	51.6	51.0	2034.7 ug/L	2034.7 ppb	19:08:03
2	Na 589.592 Radial†	11648.9	12726.9	4486.5 ug/L	4486.5 ppb	19:07:43
2	Sr 421.552†	1823.8	1834.7	14.680 ug/L	14.680 ppb	19:07:43
2	Sc 361.383	839754.3	839754.3	102.56 %		19:09:07
2	Y 371.029	873944.9	873944.9	126.36 %		19:09:07
2	Ag 328.068†	-3613.9	-3709.0	1.5443 ug/L	1.5443 ppb	19:09:12
2	As 188.979†	-62.0	-33.7	23.862 ug/L	23.862 ppb	19:09:32
2	B 249.677†	56.9	592.9	5.8259 ug/L	5.8259 ppb	19:09:12
2	Ba 233.527†	10787.4	10519.2	100.62 ug/L	100.62 ppb	19:09:12
2	Be 313.107†	-14430.1	-10339.4	2.6254 ug/L	2.6254 ppb	19:09:12
2	Cd 226.502†	334.9	497.2	0.3169 ug/L	0.3169 ppb	19:09:32
2	Co 228.616†	358.2	395.5	2.8342 ug/L	2.8342 ppb	19:09:32
2	Cr 267.716†	735.8	646.0	15.835 ug/L	15.835 ppb	19:09:12
2	Cu 324.752†	7042.8	1315.3	7.9894 ug/L	7.9894 ppb	19:09:12
2	Mn 257.610†	1432429.3	1396339.4	1842.4 ug/L	1842.4 ppb	19:09:07
2	Mo 202.031†	72.0	61.7	10.679 ug/L	10.679 ppb	19:09:32
2	Ni 231.604†	327.7	235.5	7.4722 ug/L	7.4722 ppb	19:09:32

2	P 214.914†	1217.3	999.7	693.07 ug/L	693.07 ppb	19:09:32
2	Pb 220.353†	161.7	216.0	26.158 ug/L	26.158 ppb	19:09:32
2	S 181.975 Axial†	41.5	10.3	16.461 ug/L	16.461 ppb	19:09:32
2	Sb 206.836†	44.7	19.9	-2.6418 ug/L	-2.6418 ppb	19:09:32
2	Se 196.026†	-286.9	-262.8	-24.753 ug/L	-24.753 ppb	19:09:32
2	Si 251.611†	790348.8	770162.5	29238 ug/L	29238 ppb	19:09:07
2	Sn 189.927†	28.5	20.6	1.5005 ug/L	1.5005 ppb	19:09:32
2	Ti 334.940†	1824431.3	1780081.7	3096.1 ug/L	3096.1 ppb	19:09:07
2	Tl 190.801†	-117.8	-85.8	1.1581 ug/L	1.1581 ppb	19:09:32
2	U 409.014†	-10462.0	-7997.0	-250.20 ug/L	-250.20 ppb	19:09:07
2	V 292.402†	2694.8	3945.1	18.207 ug/L	18.207 ppb	19:09:12
2	Zn 213.857†	30575.9	29243.8	344.35 ug/L	344.35 ppb	19:09:12
2	SiO2†	786261.1	766165.5	62528 ug/L	62528 ppb	19:10:15
3	Sc Radial	4284.5	4284.5	97.5 %		19:08:28
3	Y RADIAL	5884.9	5884.9	123.6 %		19:08:08
3	Al 396.153Radial†	10662.4	11015.6	10820 ug/L	10820 ppb	19:08:08
3	Ca 317.933Radial†	1843.4	1875.3	3548.5 ug/L	3548.5 ppb	19:08:28
3	Fe 238.204 Radial†	5653.5	5791.0	67099 ug/L	67099 ppb	19:08:08
3	K 766.490 Radial†	30240.2	28421.8	5411.4 ug/L	5411.4 ppb	19:08:08
3	Mg 279.077 IEC†	55.1	55.0	2198.0 ug/L	2198.0 ppb	19:08:28
3	Na 589.592 Radial†	11773.8	12952.7	4566.1 ug/L	4566.1 ppb	19:08:08
3	Sr 421.552†	1843.3	1870.1	14.963 ug/L	14.963 ppb	19:08:08
3	Sc 361.383	846253.1	846253.1	103.35 %		19:09:38
3	Y 371.029	879717.7	879717.7	127.19 %		19:09:38
3	Ag 328.068†	-3489.6	-3561.6	2.5394 ug/L	2.5394 ppb	19:09:43
3	As 188.979†	-50.3	-21.8	30.523 ug/L	30.523 ppb	19:10:03
3	B 249.677†	29.2	565.6	4.9428 ug/L	4.9428 ppb	19:09:43
3	Ba 233.527†	10918.6	10565.4	101.07 ug/L	101.07 ppb	19:09:43
3	Be 313.107†	-14561.6	-10358.7	2.6160 ug/L	2.6160 ppb	19:09:43
3	Cd 226.502†	327.2	487.3	0.0957 ug/L	0.0957 ppb	19:10:03
3	Co 228.616†	340.5	375.7	2.3132 ug/L	2.3132 ppb	19:10:03
3	Cr 267.716†	757.5	661.5	16.122 ug/L	16.122 ppb	19:09:43
3	Cu 324.752†	7011.0	1231.8	7.7547 ug/L	7.7547 ppb	19:09:43
3	Mn 257.610†	1443086.9	1395925.2	1841.9 ug/L	1841.9 ppb	19:09:38
3	Mo 202.031†	72.1	61.2	10.690 ug/L	10.690 ppb	19:10:03
3	Ni 231.604†	316.5	222.1	7.0487 ug/L	7.0487 ppb	19:10:03
3	P 214.914†	1216.5	989.8	685.20 ug/L	685.20 ppb	19:10:03
3	Pb 220.353†	159.5	212.7	25.582 ug/L	25.582 ppb	19:10:03
3	S 181.975 Axial†	35.8	4.5	5.9522 ug/L	5.9522 ppb	19:10:03
3	Sb 206.836†	46.1	20.9	-2.2043 ug/L	-2.2043 ppb	19:10:03
3	Se 196.026†	-277.0	-251.1	-12.786 ug/L	-12.786 ppb	19:10:03
3	Si 251.611†	797093.6	770770.4	29261 ug/L	29261 ppb	19:09:38
3	Sn 189.927†	38.0	29.6	3.4879 ug/L	3.4879 ppb	19:10:03
3	Ti 334.940†	1838232.1	1779773.5	3095.5 ug/L	3095.5 ppb	19:09:38
3	Tl 190.801†	-125.1	-92.0	-1.2292 ug/L	-1.2292 ppb	19:10:03
3	U 409.014†	-10680.8	-8130.4	-254.33 ug/L	-254.33 ppb	19:09:38
3	V 292.402†	2727.2	3956.2	18.185 ug/L	18.185 ppb	19:09:43
3	Zn 213.857†	30772.9	29205.4	343.78 ug/L	343.78 ppb	19:09:43
3	SiO2†	788305.3	762255.8	62209 ug/L	62209 ppb	19:10:21

Mean Data: 247770007|957488|1

Analyte	Mean Corrected		Calib.	Std.Dev.	Sample		RSD
	Intensity	Conc. Units			Conc. Units	Std.Dev.	
Sc 361.383	838569.7	102.41 %		1.018			0.99%
Sc Radial	4303.6	97.9 %		0.41			0.41%
Y 371.029	872206.8	126.11 %		1.231			0.98%
Y RADIAL	5888.0	123.7 %		0.53			0.43%
Ag 328.068†	-3657.2	1.9584 ug/L		0.51813	1.9584 ppb	0.51813	26.46%
Al 396.153Radial†	10952.7	10758 ug/L		84.1	10758 ppb	84.1	0.78%
As 188.979†	-26.5	27.922 ug/L		3.5625	27.922 ppb	3.5625	12.76%
B 249.677†	565.3	4.9777 ug/L		0.83136	4.9777 ppb	0.83136	16.70%
Ba 233.527†	10541.8	100.84 ug/L		0.228	100.84 ppb	0.228	0.23%
Be 313.107†	-10305.1	2.6397 ug/L		0.03330	2.6397 ppb	0.03330	1.26%
Ca 317.933Radial†	1872.2	3542.6 ug/L		5.68	3542.6 ppb	5.68	0.16%
Cd 226.502†	499.4	0.3004 ug/L		0.19694	0.3004 ppb	0.19694	65.56%
Co 228.616†	392.2	2.7436 ug/L		0.39302	2.7436 ppb	0.39302	14.32%
Cr 267.716†	672.5	16.241 ug/L		0.4769	16.241 ppb	0.4769	2.94%
Cu 324.752†	1278.5	7.8941 ug/L		0.12338	7.8941 ppb	0.12338	1.56%
Fe 238.204 Radial†	5768.0	66832 ug/L		404.6	66832 ppb	404.6	0.61%
K 766.490 Radial†	28183.5	5366.1 ug/L		49.73	5366.1 ppb	49.73	0.93%

Mg 279.077 IEC†	52.8	2109.3 ug/L	82.58	2109.3 ppb	82.58	3.92%
Mn 257.610†	1396714.4	1842.9 ug/L	1.36	1842.9 ppb	1.36	0.07%
Mo 202.031†	60.5	10.605 ug/L	0.1372	10.605 ppb	0.1372	1.29%
Na 589.592 Radial†	12865.8	4535.5 ug/L	42.84	4535.5 ppb	42.84	0.94%
Ni 231.604†	233.0	7.3938 ug/L	0.31341	7.3938 ppb	0.31341	4.24%
P 214.914†	1000.3	693.21 ug/L	8.079	693.21 ppb	8.079	1.17%
Pb 220.353†	216.6	26.213 ug/L	0.6596	26.213 ppb	0.6596	2.52%
S 181.975 Axial†	7.2	10.873 ug/L	5.2860	10.873 ppb	5.2860	48.61%
Sb 206.836†	21.0	-2.1974 ug/L	0.44795	-2.1974 ppb	0.44795	20.39%
Se 196.026†	-258.9	-20.142 ug/L	6.4385	-20.142 ppb	6.4385	31.97%
Si 251.611†	770335.8	29244 ug/L	14.4	29244 ppb	14.4	0.05%
Sn 189.927†	25.7	2.6222 ug/L	1.01815	2.6222 ppb	1.01815	38.83%
Sr 421.552†	1852.3	14.821 ug/L	0.1416	14.821 ppb	0.1416	0.96%
Ti 334.940†	1780007.8	3095.9 ug/L	0.37	3095.9 ppb	0.37	0.01%
Tl 190.801†	-90.3	-0.5892 ug/L	1.53114	-0.5892 ppb	1.53114	259.87%
U 409.014†	-8070.4	-252.48 ug/L	2.098	-252.48 ppb	2.098	0.83%
V 292.402†	3928.7	18.004 ug/L	0.3329	18.004 ppb	0.3329	1.85%
Zn 213.857†	29206.2	343.83 ug/L	0.502	343.83 ppb	0.502	0.15%
SiO2†	768494.4	62718 ug/L	626.2	62718 ppb	626.2	1.00%

Sequence No.: 52

Sample ID: 247770008|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 64

Date Collected: 3/19/2010 19:12:32

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770008|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4347.1	4347.1	98.9 %		19:14:25
1	Y RADIAL	5800.9	5800.9	121.9 %		19:14:25
1	Al 396.153Radial†	11645.4	11852.2	11642 ug/L	11642 ppb	19:14:25
1	Ca 317.933Radial†	1616.8	1619.0	3063.5 ug/L	3063.5 ppb	19:14:45
1	Fe 238.204 Radial†	5602.5	5656.0	65534 ug/L	65534 ppb	19:14:25
1	K 766.490 Radial†	35005.0	32792.9	6244.3 ug/L	6244.3 ppb	19:14:25
1	Mg 279.077 IEC†	47.4	46.4	1844.3 ug/L	1844.3 ppb	19:14:45
1	Na 589.592 Radial†	13007.0	14025.8	4944.4 ug/L	4944.4 ppb	19:14:25
1	Sr 421.552†	1484.6	1480.1	11.841 ug/L	11.841 ppb	19:14:25
1	Sc 361.383	846507.8	846507.8	103.38 %		19:15:43
1	Y 371.029	862071.3	862071.3	124.64 %		19:15:43
1	Ag 328.068†	-3615.7	-3682.6	1.4252 ug/L	1.4252 ppb	19:15:48
1	As 188.979†	-49.9	-21.5	30.175 ug/L	30.175 ppb	19:16:08
1	B 249.677†	-90.2	450.1	1.9577 ug/L	1.9577 ppb	19:15:48
1	Ba 233.527†	8999.7	8706.1	83.604 ug/L	83.604 ppb	19:15:48
1	Be 313.107†	-15775.6	-11528.7	2.0702 ug/L	2.0702 ppb	19:15:48
1	Cd 226.502†	329.4	489.2	0.2861 ug/L	0.2861 ppb	19:16:08
1	Co 228.616†	325.9	361.4	2.0018 ug/L	2.0018 ppb	19:16:08
1	Cr 267.716†	888.2	787.6	17.645 ug/L	17.645 ppb	19:15:48
1	Cu 324.752†	7329.6	1537.9	8.6816 ug/L	8.6816 ppb	19:15:48
1	Mn 257.610†	1428048.2	1380958.2	1822.1 ug/L	1822.1 ppb	19:15:43
1	Mo 202.031†	72.0	61.1	10.558 ug/L	10.558 ppb	19:16:08
1	Ni 231.604†	308.8	214.6	6.8103 ug/L	6.8103 ppb	19:16:08
1	P 214.914†	867.1	651.5	434.48 ug/L	434.48 ppb	19:16:08
1	Pb 220.353†	292.4	341.1	45.715 ug/L	45.715 ppb	19:16:08
1	S 181.975 Axial†	48.2	16.4	27.235 ug/L	27.235 ppb	19:16:08
1	Sb 206.836†	47.5	22.3	-1.5660 ug/L	-1.5660 ppb	19:16:08
1	Se 196.026†	-278.2	-252.1	-17.922 ug/L	-17.922 ppb	19:16:08
1	Si 251.611†	848946.3	820695.4	31156 ug/L	31156 ppb	19:15:43
1	Sn 189.927†	36.2	27.9	3.1074 ug/L	3.1074 ppb	19:16:08
1	Ti 334.940†	1826317.0	1767712.9	3074.5 ug/L	3074.5 ppb	19:15:43
1	Tl 190.801†	-123.8	-90.7	-0.9872 ug/L	-0.9872 ppb	19:16:08
1	U 409.014†	-10624.7	-8073.0	-252.42 ug/L	-252.42 ppb	19:15:43
1	V 292.402†	2485.9	3722.0	16.561 ug/L	16.561 ppb	19:15:48
1	Zn 213.857†	32683.8	31044.9	366.30 ug/L	366.30 ppb	19:15:48
1	SiO2†	828922.2	801315.0	65397 ug/L	65397 ppb	19:17:16
2	Sc Radial	4452.8	4452.8	101 %		19:14:50
2	Y RADIAL	5870.1	5870.1	123.3 %		19:14:50
2	Al 396.153Radial†	11801.8	11726.9	11519 ug/L	11519 ppb	19:14:50
2	Ca 317.933Radial†	1606.0	1569.5	2969.9 ug/L	2969.9 ppb	19:15:10
2	Fe 238.204 Radial†	5661.0	5579.1	64644 ug/L	64644 ppb	19:14:50
2	K 766.490 Radial†	35535.1	32475.5	6183.9 ug/L	6183.9 ppb	19:14:50
2	Mg 279.077 IEC†	49.7	47.6	1895.1 ug/L	1895.1 ppb	19:15:10
2	Na 589.592 Radial†	13217.3	13921.0	4907.4 ug/L	4907.4 ppb	19:14:50
2	Sr 421.552†	1514.3	1473.8	11.792 ug/L	11.792 ppb	19:14:50
2	Sc 361.383	834622.2	834622.2	101.93 %		19:16:14
2	Y 371.029	851896.5	851896.5	123.17 %		19:16:14
2	Ag 328.068†	-3582.0	-3699.3	1.0668 ug/L	1.0668 ppb	19:16:19
2	As 188.979†	-59.3	-31.3	24.430 ug/L	24.430 ppb	19:16:39
2	B 249.677†	-1.8	535.6	4.4978 ug/L	4.4978 ppb	19:16:19
2	Ba 233.527†	8983.9	8814.6	84.595 ug/L	84.595 ppb	19:16:19
2	Be 313.107†	-15956.9	-11923.9	1.8702 ug/L	1.8702 ppb	19:16:19
2	Cd 226.502†	332.0	496.4	0.4815 ug/L	0.4815 ppb	19:16:39
2	Co 228.616†	355.6	395.1	2.9165 ug/L	2.9165 ppb	19:16:39
2	Cr 267.716†	905.8	817.2	17.947 ug/L	17.947 ppb	19:16:19
2	Cu 324.752†	7413.5	1721.1	9.2395 ug/L	9.2395 ppb	19:16:19
2	Mn 257.610†	1400984.2	1374077.8	1813.0 ug/L	1813.0 ppb	19:16:14
2	Mo 202.031†	76.7	66.7	10.980 ug/L	10.980 ppb	19:16:39
2	Ni 231.604†	315.9	225.8	7.1657 ug/L	7.1657 ppb	19:16:39

2	P 214.914†	875.4	671.5	449.95 ug/L	449.95 ppb	19:16:39
2	Pb 220.353†	275.1	328.2	43.832 ug/L	43.832 ppb	19:16:39
2	S 181.975 Axial†	49.4	18.3	30.529 ug/L	30.529 ppb	19:16:39
2	Sb 206.836†	35.0	10.6	-6.3931 ug/L	-6.3931 ppb	19:16:39
2	Se 196.026†	-281.2	-258.9	-26.154 ug/L	-26.154 ppb	19:16:39
2	Si 251.611†	833168.4	816910.4	31012 ug/L	31012 ppb	19:16:14
2	Sn 189.927†	33.5	25.7	2.6599 ug/L	2.6599 ppb	19:16:39
2	Ti 334.940†	1792509.9	1759703.1	3060.6 ug/L	3060.6 ppb	19:16:14
2	Tl 190.801†	-123.8	-92.3	-1.7959 ug/L	-1.7959 ppb	19:16:39
2	U 409.014†	-10473.1	-8070.7	-252.24 ug/L	-252.24 ppb	19:16:14
2	V 292.402†	2528.2	3797.8	17.318 ug/L	17.318 ppb	19:16:19
2	Zn 213.857†	32807.4	31616.4	373.36 ug/L	373.36 ppb	19:16:19
2	SiO2†	840570.9	824161.6	67261 ug/L	67261 ppb	19:17:22
3	Sc Radial	4447.9	4447.9	101 %		19:15:15
3	Y RADIAL	5867.5	5867.5	123.3 %		19:15:15
3	Al 396.153Radial†	11835.0	11772.6	11563 ug/L	11563 ppb	19:15:15
3	Ca 317.933Radial†	1599.2	1564.6	2960.5 ug/L	2960.5 ppb	19:15:35
3	Fe 238.204 Radial†	5693.7	5617.6	65090 ug/L	65090 ppb	19:15:15
3	K 766.490 Radial†	35447.7	32428.0	6174.8 ug/L	6174.8 ppb	19:15:15
3	Mg 279.077 IEC†	47.0	44.9	1783.4 ug/L	1783.4 ppb	19:15:35
3	Na 589.592 Radial†	13277.0	13994.5	4933.4 ug/L	4933.4 ppb	19:15:15
3	Sr 421.552†	1530.7	1491.7	11.935 ug/L	11.935 ppb	19:15:15
3	Sc 361.383	834374.5	834374.5	101.90 %		19:16:45
3	Y 371.029	849831.4	849831.4	122.87 %		19:16:45
3	Ag 328.068†	-3502.0	-3621.9	1.6074 ug/L	1.6074 ppb	19:16:50
3	As 188.979†	-56.0	-28.2	26.334 ug/L	26.334 ppb	19:17:10
3	B 249.677†	-41.2	497.0	3.3425 ug/L	3.3425 ppb	19:16:50
3	Ba 233.527†	9015.8	8848.5	84.926 ug/L	84.926 ppb	19:16:50
3	Be 313.107†	-15837.3	-11811.1	1.9398 ug/L	1.9398 ppb	19:16:50
3	Cd 226.502†	338.5	502.9	0.5298 ug/L	0.5298 ppb	19:17:10
3	Co 228.616†	353.6	393.2	2.8433 ug/L	2.8433 ppb	19:17:10
3	Cr 267.716†	873.4	785.6	17.572 ug/L	17.572 ppb	19:16:50
3	Cu 324.752†	7494.8	1803.1	9.5340 ug/L	9.5340 ppb	19:16:50
3	Mn 257.610†	1406814.6	1380207.6	1821.1 ug/L	1821.1 ppb	19:16:45
3	Mo 202.031†	86.5	76.4	11.880 ug/L	11.880 ppb	19:17:10
3	Ni 231.604†	311.3	221.5	7.0274 ug/L	7.0274 ppb	19:17:10
3	P 214.914†	865.8	662.4	442.74 ug/L	442.74 ppb	19:17:10
3	Pb 220.353†	263.8	317.2	42.087 ug/L	42.087 ppb	19:17:10
3	S 181.975 Axial†	53.4	22.2	37.592 ug/L	37.592 ppb	19:17:10
3	Sb 206.836†	41.7	17.2	-3.6294 ug/L	-3.6294 ppb	19:17:10
3	Se 196.026†	-279.6	-257.4	-23.607 ug/L	-23.607 ppb	19:17:10
3	Si 251.611†	836861.9	820777.7	31159 ug/L	31159 ppb	19:16:45
3	Sn 189.927†	37.9	30.0	3.6061 ug/L	3.6061 ppb	19:17:10
3	Ti 334.940†	1797542.6	1765164.1	3070.1 ug/L	3070.1 ppb	19:16:45
3	Tl 190.801†	-120.7	-89.4	-0.5413 ug/L	-0.5413 ppb	19:17:10
3	U 409.014†	-10482.2	-8082.6	-252.66 ug/L	-252.66 ppb	19:16:45
3	V 292.402†	2537.3	3807.4	17.329 ug/L	17.329 ppb	19:16:50
3	Zn 213.857†	32941.2	31757.2	375.00 ug/L	375.00 ppb	19:16:50
3	SiO2†	843887.3	827661.0	67547 ug/L	67547 ppb	19:17:28

Mean Data: 247770008|957488|1

Analyte	Mean Corrected	Conc. Units	Calib.	Std.Dev.	Conc. Units	Std.Dev.	RSD
Sc 361.383	838501.5	102.40 %		0.847			0.83%
Sc Radial	4415.9	100 %		1.4			1.35%
Y 371.029	854599.7	123.56 %		0.947			0.77%
Y RADIAL	5846.2	122.8 %		0.82			0.67%
Ag 328.068†	-3667.9	1.3665 ug/L		0.27502	1.3665 ppb	0.27502	20.13%
Al 396.153Radial†	11783.9	11575 ug/L		62.3	11575 ppb	62.3	0.54%
As 188.979†	-27.0	26.980 ug/L		2.9261	26.980 ppb	2.9261	10.85%
B 249.677†	494.2	3.2660 ug/L		1.27181	3.2660 ppb	1.27181	38.94%
Ba 233.527†	8789.7	84.375 ug/L		0.6878	84.375 ppb	0.6878	0.82%
Be 313.107†	-11754.6	1.9601 ug/L		0.10148	1.9601 ppb	0.10148	5.18%
Ca 317.933Radial†	1584.4	2997.9 ug/L		56.95	2997.9 ppb	56.95	1.90%
Cd 226.502†	496.2	0.4324 ug/L		0.12903	0.4324 ppb	0.12903	29.84%
Co 228.616†	383.2	2.5872 ug/L		0.50831	2.5872 ppb	0.50831	19.65%
Cr 267.716†	796.8	17.721 ug/L		0.1990	17.721 ppb	0.1990	1.12%
Cu 324.752†	1687.4	9.1517 ug/L		0.43295	9.1517 ppb	0.43295	4.73%
Fe 238.204 Radial†	5617.6	65090 ug/L		445.3	65090 ppb	445.3	0.68%
K 766.490 Radial†	32565.5	6201.0 ug/L		37.77	6201.0 ppb	37.77	0.61%

Mg 279.077 IEC†	46.3	1840.9 ug/L	55.95	1840.9 ppb	55.95	3.04%
Mn 257.610†	1378414.5	1818.7 ug/L	5.00	1818.7 ppb	5.00	0.28%
Mo 202.031†	68.1	11.140 ug/L	0.6749	11.140 ppb	0.6749	6.06%
Na 589.592 Radial†	13980.4	4928.4 ug/L	18.97	4928.4 ppb	18.97	0.38%
Ni 231.604†	220.6	7.0011 ug/L	0.17916	7.0011 ppb	0.17916	2.56%
P 214.914†	661.8	442.39 ug/L	7.740	442.39 ppb	7.740	1.75%
Pb 220.353†	328.9	43.878 ug/L	1.8146	43.878 ppb	1.8146	4.14%
S 181.975 Axial†	19.0	31.785 ug/L	5.2917	31.785 ppb	5.2917	16.65%
Sb 206.836†	16.7	-3.8628 ug/L	2.42201	-3.8628 ppb	2.42201	62.70%
Se 196.026†	-256.1	-22.561 ug/L	4.2147	-22.561 ppb	4.2147	18.68%
Si 251.611†	819461.1	31109 ug/L	83.9	31109 ppb	83.9	0.27%
Sn 189.927†	27.9	3.1245 ug/L	0.47329	3.1245 ppb	0.47329	15.15%
Sr 421.552†	1481.9	11.856 ug/L	0.0727	11.856 ppb	0.0727	0.61%
Ti 334.940†	1764193.4	3068.4 ug/L	7.12	3068.4 ppb	7.12	0.23%
Tl 190.801†	-90.8	-1.1081 ug/L	0.63598	-1.1081 ppb	0.63598	57.39%
U 409.014†	-8075.5	-252.44 ug/L	0.207	-252.44 ppb	0.207	0.08%
V 292.402†	3775.7	17.069 ug/L	0.4406	17.069 ppb	0.4406	2.58%
Zn 213.857†	31472.8	371.55 ug/L	4.620	371.55 ppb	4.620	1.24%
SiO2†	817712.5	66735 ug/L	1167.7	66735 ppb	1167.7	1.75%

Sequence No.: 53

Sample ID: 247770009|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 65

Date Collected: 3/19/2010 19:19:39

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770009|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4448.5	4448.5	101 %		19:21:32
1	Y RADIAL	6791.7	6791.7	142.7 %		19:21:32
1	Al 396.153Radial†	9505.0	9469.0	9300.9 ug/L	9300.9 ppb	19:21:32
1	Ca 317.933Radial†	2611.8	2564.8	4853.1 ug/L	4853.1 ppb	19:21:52
1	Fe 238.204 Radial†	4986.3	4918.0	56984 ug/L	56984 ppb	19:21:32
1	K 766.490 Radial†	30491.5	27526.8	5240.4 ug/L	5240.4 ppb	19:21:32
1	Mg 279.077 IEC†	25.2	23.4	906.40 ug/L	906.40 ppb	19:21:52
1	Na 589.592 Radial†	10051.4	10805.8	3809.3 ug/L	3809.3 ppb	19:21:32
1	Sr 421.552†	1395.5	1357.9	10.848 ug/L	10.848 ppb	19:21:32
1	Sc 361.383	836528.9	836528.9	102.16 %		19:22:50
1	Y 371.029	987610.4	987610.4	142.79 %		19:22:50
1	Ag 328.068†	-3170.1	-3288.1	0.8239 ug/L	0.8239 ppb	19:22:55
1	As 188.979†	-44.8	-17.0	26.961 ug/L	26.961 ppb	19:23:15
1	B 249.677†	-113.6	426.2	2.6806 ug/L	2.6806 ppb	19:22:55
1	Ba 233.527†	8262.4	8088.2	77.556 ug/L	77.556 ppb	19:22:55
1	Be 313.107†	-12316.6	-8324.9	2.4734 ug/L	2.4734 ppb	19:22:55
1	Cd 226.502†	277.7	442.4	0.4836 ug/L	0.4836 ppb	19:23:15
1	Co 228.616†	250.6	291.5	1.1971 ug/L	1.1971 ppb	19:23:15
1	Cr 267.716†	1555.9	1451.4	25.650 ug/L	25.650 ppb	19:22:55
1	Cu 324.752†	7922.4	2202.7	10.438 ug/L	10.438 ppb	19:22:55
1	Mn 257.610†	2160373.1	2114262.3	2785.5 ug/L	2785.5 ppb	19:22:50
1	Mo 202.031†	65.8	55.9	9.4524 ug/L	9.4524 ppb	19:23:15
1	Ni 231.604†	229.1	140.1	4.4461 ug/L	4.4461 ppb	19:23:15
1	P 214.914†	697.6	495.5	324.03 ug/L	324.03 ppb	19:23:15
1	Pb 220.353†	221.5	275.1	36.293 ug/L	36.293 ppb	19:23:15
1	S 181.975 Axial†	29.2	-1.6	-4.6111 ug/L	-4.6111 ppb	19:23:15
1	Sb 206.836†	44.8	20.1	-1.1318 ug/L	-1.1318 ppb	19:23:15
1	Se 196.026†	-260.7	-238.2	-31.622 ug/L	-31.622 ppb	19:23:15
1	Si 251.611†	704009.0	688621.3	26142 ug/L	26142 ppb	19:22:50
1	Sn 189.927†	-22.4	-29.1	-9.0056 ug/L	-9.0056 ppb	19:23:15
1	Ti 334.940†	1556135.9	1524323.3	2651.6 ug/L	2651.6 ppb	19:22:50
1	Tl 190.801†	-129.7	-97.9	-2.6639 ug/L	-2.6639 ppb	19:23:15
1	U 409.014†	-11373.1	-8928.2	-277.41 ug/L	-277.41 ppb	19:22:50
1	V 292.402†	2386.0	3653.0	17.625 ug/L	17.625 ppb	19:22:55
1	Zn 213.857†	35509.4	34187.8	405.68 ug/L	405.68 ppb	19:22:55
1	SiO2†	698407.2	683126.9	55751 ug/L	55751 ppb	19:24:23
2	Sc Radial	4401.4	4401.4	100 %		19:21:57
2	Y RADIAL	6704.9	6704.9	140.8 %		19:21:57
2	Al 396.153Radial†	9405.9	9470.5	9302.3 ug/L	9302.3 ppb	19:21:57
2	Ca 317.933Radial†	2613.9	2594.5	4909.3 ug/L	4909.3 ppb	19:22:17
2	Fe 238.204 Radial†	4954.5	4938.9	57226 ug/L	57226 ppb	19:21:57
2	K 766.490 Radial†	30533.5	27890.7	5309.7 ug/L	5309.7 ppb	19:21:57
2	Mg 279.077 IEC†	23.0	21.4	825.02 ug/L	825.02 ppb	19:22:17
2	Na 589.592 Radial†	10007.2	10867.9	3831.2 ug/L	3831.2 ppb	19:21:57
2	Sr 421.552†	1380.3	1357.5	10.845 ug/L	10.845 ppb	19:21:57
2	Sc 361.383	839109.2	839109.2	102.48 %		19:23:21
2	Y 371.029	990506.6	990506.6	143.21 %		19:23:21
2	Ag 328.068†	-3174.9	-3283.3	0.9251 ug/L	0.9251 ppb	19:23:26
2	As 188.979†	-46.6	-18.7	25.983 ug/L	25.983 ppb	19:23:46
2	B 249.677†	-10.7	526.9	5.4672 ug/L	5.4672 ppb	19:23:26
2	Ba 233.527†	8279.1	8079.6	77.483 ug/L	77.483 ppb	19:23:26
2	Be 313.107†	-12381.6	-8351.3	2.4373 ug/L	2.4373 ppb	19:23:26
2	Cd 226.502†	273.8	437.9	0.3924 ug/L	0.3924 ppb	19:23:46
2	Co 228.616†	265.5	305.3	1.5741 ug/L	1.5741 ppb	19:23:46
2	Cr 267.716†	1539.8	1431.1	25.403 ug/L	25.403 ppb	19:23:26
2	Cu 324.752†	7935.4	2191.6	10.415 ug/L	10.415 ppb	19:23:26
2	Mn 257.610†	2163073.3	2110394.6	2780.4 ug/L	2780.4 ppb	19:23:21
2	Mo 202.031†	71.0	60.8	9.9046 ug/L	9.9046 ppb	19:23:46
2	Ni 231.604†	257.3	167.0	5.2986 ug/L	5.2986 ppb	19:23:46

2	P 214.914†	684.1	480.3	312.55 ug/L	312.55 ppb	19:23:46
2	Pb 220.353†	215.9	269.0	35.314 ug/L	35.314 ppb	19:23:46
2	S 181.975 Axial†	28.6	-2.2	-5.7676 ug/L	-5.7676 ppb	19:23:46
2	Sb 206.836†	34.4	9.9	-5.3433 ug/L	-5.3433 ppb	19:23:46
2	Se 196.026†	-249.3	-226.3	-21.063 ug/L	-21.063 ppb	19:23:46
2	Si 251.611†	703652.7	686154.6	26048 ug/L	26048 ppb	19:23:21
2	Sn 189.927†	-12.0	-18.9	-6.7020 ug/L	-6.7020 ppb	19:23:46
2	Ti 334.940†	1554475.1	1518018.8	2640.6 ug/L	2640.6 ppb	19:23:21
2	Tl 190.801†	-125.0	-92.9	-0.8451 ug/L	-0.8451 ppb	19:23:46
2	U 409.014†	-11454.7	-8973.6	-278.81 ug/L	-278.81 ppb	19:23:21
2	V 292.402†	2433.3	3692.0	17.915 ug/L	17.915 ppb	19:23:26
2	Zn 213.857†	35590.2	34159.8	405.30 ug/L	405.30 ppb	19:23:26
2	SiO2†	704723.8	687188.6	56082 ug/L	56082 ppb	19:24:28
3	Sc Radial	4323.5	4323.5	98.4 %		19:22:23
3	Y RADIAL	6584.8	6584.8	138.3 %		19:22:23
3	Al 396.153Radial†	9205.1	9435.5	9267.9 ug/L	9267.9 ppb	19:22:23
3	Ca 317.933Radial†	2602.2	2629.6	4975.7 ug/L	4975.7 ppb	19:22:43
3	Fe 238.204 Radial†	4860.8	4932.7	57155 ug/L	57155 ppb	19:22:23
3	K 766.490 Radial†	29827.5	27722.3	5277.6 ug/L	5277.6 ppb	19:22:23
3	Mg 279.077 IEC†	23.8	22.7	874.91 ug/L	874.91 ppb	19:22:43
3	Na 589.592 Radial†	9689.4	10724.9	3780.7 ug/L	3780.7 ppb	19:22:23
3	Sr 421.552†	1368.0	1369.8	10.943 ug/L	10.943 ppb	19:22:23
3	Sc 361.383	842330.1	842330.1	102.87 %		19:23:52
3	Y 371.029	992852.4	992852.4	143.55 %		19:23:52
3	Ag 328.068†	-3245.7	-3340.2	0.6029 ug/L	0.6029 ppb	19:23:57
3	As 188.979†	-41.0	-13.0	29.085 ug/L	29.085 ppb	19:24:17
3	B 249.677†	-37.7	500.7	4.7415 ug/L	4.7415 ppb	19:23:57
3	Ba 233.527†	8285.4	8054.9	77.250 ug/L	77.250 ppb	19:23:57
3	Be 313.107†	-12242.2	-8169.6	2.5128 ug/L	2.5128 ppb	19:23:57
3	Cd 226.502†	259.7	423.1	0.1860 ug/L	0.1860 ppb	19:24:17
3	Co 228.616†	268.5	307.2	1.6270 ug/L	1.6270 ppb	19:24:17
3	Cr 267.716†	1504.3	1390.9	24.855 ug/L	24.855 ppb	19:23:57
3	Cu 324.752†	7908.5	2135.8	10.225 ug/L	10.225 ppb	19:23:57
3	Mn 257.610†	2167621.4	2106744.7	2775.6 ug/L	2775.6 ppb	19:23:52
3	Mo 202.031†	76.6	65.9	10.356 ug/L	10.356 ppb	19:24:17
3	Ni 231.604†	251.3	160.2	5.0843 ug/L	5.0843 ppb	19:24:17
3	P 214.914†	684.5	478.1	310.97 ug/L	310.97 ppb	19:24:17
3	Pb 220.353†	245.7	297.1	39.651 ug/L	39.651 ppb	19:24:17
3	S 181.975 Axial†	32.3	1.2	0.3572 ug/L	0.3572 ppb	19:24:17
3	Sb 206.836†	38.0	13.3	-3.9222 ug/L	-3.9222 ppb	19:24:17
3	Se 196.026†	-243.4	-219.6	-15.684 ug/L	-15.684 ppb	19:24:17
3	Si 251.611†	705891.1	685705.0	26031 ug/L	26031 ppb	19:23:52
3	Sn 189.927†	-19.5	-26.1	-8.3268 ug/L	-8.3268 ppb	19:24:17
3	Ti 334.940†	1559969.1	1517559.3	2639.8 ug/L	2639.8 ppb	19:23:52
3	Tl 190.801†	-125.4	-92.8	-0.8583 ug/L	-0.8583 ppb	19:24:17
3	U 409.014†	-11326.1	-8805.9	-273.71 ug/L	-273.71 ppb	19:23:52
3	V 292.402†	2455.3	3704.2	18.041 ug/L	18.041 ppb	19:23:57
3	Zn 213.857†	35687.2	34121.2	404.84 ug/L	404.84 ppb	19:23:57
3	SiO2†	705701.9	685509.9	55945 ug/L	55945 ppb	19:24:34

Mean Data: 247770009|957488|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	839322.7	102.50 %	0.355			0.35%
Sc Radial	4391.1	99.9 %	1.44			1.44%
Y 371.029	990323.1	143.18 %	0.380			0.27%
Y RADIAL	6693.8	140.6 %	2.18			1.55%
Ag 328.068†	-3303.9	0.7840 ug/L	0.16476	0.7840 ppb	0.16476	21.02%
Al 396.153Radial†	9458.3	9290.3 ug/L	19.46	9290.3 ppb	19.46	0.21%
As 188.979†	-16.3	27.343 ug/L	1.5858	27.343 ppb	1.5858	5.80%
B 249.677†	484.6	4.2964 ug/L	1.44568	4.2964 ppb	1.44568	33.65%
Ba 233.527†	8074.3	77.429 ug/L	0.1598	77.429 ppb	0.1598	0.21%
Be 313.107†	-8281.9	2.4745 ug/L	0.03780	2.4745 ppb	0.03780	1.53%
Ca 317.933Radial†	2596.3	4912.7 ug/L	61.34	4912.7 ppb	61.34	1.25%
Cd 226.502†	434.4	0.3540 ug/L	0.15252	0.3540 ppb	0.15252	43.08%
Co 228.616†	301.3	1.4661 ug/L	0.23442	1.4661 ppb	0.23442	15.99%
Cr 267.716†	1424.4	25.303 ug/L	0.4071	25.303 ppb	0.4071	1.61%
Cu 324.752†	2176.7	10.359 ug/L	0.1173	10.359 ppb	0.1173	1.13%
Fe 238.204 Radial†	4929.9	57122 ug/L	124.2	57122 ppb	124.2	0.22%
K 766.490 Radial†	27713.3	5275.9 ug/L	34.69	5275.9 ppb	34.69	0.66%

Mg 279.077 IEC†	22.5	868.78 ug/L	41.035	868.78 ppb	41.035	4.72%
Mn 257.610†	2110467.2	2780.5 ug/L	4.93	2780.5 ppb	4.93	0.18%
Mo 202.031†	60.9	9.9042 ug/L	0.45164	9.9042 ppb	0.45164	4.56%
Na 589.592 Radial†	10799.6	3807.1 ug/L	25.29	3807.1 ppb	25.29	0.66%
Ni 231.604†	155.8	4.9430 ug/L	0.44347	4.9430 ppb	0.44347	8.97%
P 214.914†	484.6	315.85 ug/L	7.128	315.85 ppb	7.128	2.26%
Pb 220.353†	280.4	37.086 ug/L	2.2743	37.086 ppb	2.2743	6.13%
S 181.975 Axial†	-0.9	-3.3405 ug/L	3.25406	-3.3405 ppb	3.25406	97.41%
Sb 206.836†	14.4	-3.4658 ug/L	2.14254	-3.4658 ppb	2.14254	61.82%
Se 196.026†	-228.0	-22.789 ug/L	8.1080	-22.789 ppb	8.1080	35.58%
Si 251.611†	686827.0	26074 ug/L	59.6	26074 ppb	59.6	0.23%
Sn 189.927†	-24.7	-8.0115 ug/L	1.18372	-8.0115 ppb	1.18372	14.78%
Sr 421.552†	1361.7	10.879 ug/L	0.0556	10.879 ppb	0.0556	0.51%
Ti 334.940†	1519967.1	2644.0 ug/L	6.56	2644.0 ppb	6.56	0.25%
Tl 190.801†	-94.5	-1.4558 ug/L	1.04628	-1.4558 ppb	1.04628	71.87%
U 409.014†	-8902.6	-276.64 ug/L	2.634	-276.64 ppb	2.634	0.95%
V 292.402†	3683.0	17.860 ug/L	0.2133	17.860 ppb	0.2133	1.19%
Zn 213.857†	34156.3	405.27 ug/L	0.418	405.27 ppb	0.418	0.10%
SiO2†	685275.1	55926 ug/L	166.6	55926 ppb	166.6	0.30%

Sequence No.: 54

Sample ID: 247770010|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 66

Date Collected: 3/19/2010 19:26:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770010|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4323.8	4323.8	98.4 %		19:28:37
1	Y RADIAL	6351.8	6351.8	133.4 %		19:28:37
1	Al 396.153Radial†	9260.6	9491.3	9322.8 ug/L	9322.8 ppb	19:28:37
1	Ca 317.933Radial†	2818.2	2848.9	5390.8 ug/L	5390.8 ppb	19:28:57
1	Fe 238.204 Radial†	5140.1	5216.4	60441 ug/L	60441 ppb	19:28:37
1	K 766.490 Radial†	26586.3	24425.6	4649.4 ug/L	4649.4 ppb	19:28:37
1	Mg 279.077 IEC†	28.1	27.1	1053.6 ug/L	1053.6 ppb	19:28:57
1	Na 589.592 Radial†	9323.1	10351.8	3649.2 ug/L	3649.2 ppb	19:28:37
1	Sr 421.552†	1629.5	1635.5	13.070 ug/L	13.070 ppb	19:28:37
1	Sc 361.383	839293.1	839293.1	102.50 %		19:29:55
1	Y 371.029	950112.6	950112.6	137.37 %		19:29:55
1	Ag 328.068†	-3330.6	-3434.5	1.1181 ug/L	1.1181 ppb	19:30:00
1	As 188.979†	-53.0	-24.9	22.858 ug/L	22.858 ppb	19:30:20
1	B 249.677†	-39.9	498.4	4.1422 ug/L	4.1422 ppb	19:30:00
1	Ba 233.527†	7433.2	7252.7	69.840 ug/L	69.840 ppb	19:30:00
1	Be 313.107†	-10258.4	-6277.2	3.1959 ug/L	3.1959 ppb	19:30:00
1	Cd 226.502†	283.9	447.6	0.2094 ug/L	0.2094 ppb	19:30:20
1	Co 228.616†	288.0	327.2	2.1990 ug/L	2.1990 ppb	19:30:20
1	Cr 267.716†	1897.4	1779.6	30.412 ug/L	30.412 ppb	19:30:00
1	Cu 324.752†	7959.0	2212.9	10.643 ug/L	10.643 ppb	19:30:00
1	Mn 257.610†	2190675.4	2136861.0	2815.5 ug/L	2815.5 ppb	19:29:55
1	Mo 202.031†	48.8	39.0	8.2267 ug/L	8.2267 ppb	19:30:20
1	Ni 231.604†	388.3	294.8	9.3566 ug/L	9.3566 ppb	19:30:20
1	P 214.914†	758.4	552.6	363.79 ug/L	363.79 ppb	19:30:20
1	Pb 220.353†	297.1	348.2	47.037 ug/L	47.037 ppb	19:30:20
1	S 181.975 Axial†	31.7	0.8	-0.3658 ug/L	-0.3658 ppb	19:30:20
1	Sb 206.836†	43.7	19.0	-1.4412 ug/L	-1.4412 ppb	19:30:20
1	Se 196.026†	-268.5	-244.9	-27.320 ug/L	-27.320 ppb	19:30:20
1	Si 251.611†	686244.5	669020.4	25398 ug/L	25398 ppb	19:29:55
1	Sn 189.927†	-17.3	-24.1	-7.9707 ug/L	-7.9707 ppb	19:30:20
1	Ti 334.940†	1522469.6	1486461.4	2585.8 ug/L	2585.8 ppb	19:29:55
1	Tl 190.801†	-128.9	-96.7	-2.6313 ug/L	-2.6313 ppb	19:30:20
1	U 409.014†	-10688.9	-8224.0	-256.44 ug/L	-256.44 ppb	19:29:55
1	V 292.402†	2721.4	3972.5	19.764 ug/L	19.764 ppb	19:30:00
1	Zn 213.857†	38881.4	37363.1	443.60 ug/L	443.60 ppb	19:30:00
1	SiO2†	690191.1	672859.6	54913 ug/L	54913 ppb	19:31:28
2	Sc Radial	4358.6	4358.6	99.2 %		19:29:02
2	Y RADIAL	6404.0	6404.0	134.5 %		19:29:02
2	Al 396.153Radial†	9345.9	9502.2	9333.6 ug/L	9333.6 ppb	19:29:02
2	Ca 317.933Radial†	2806.2	2814.0	5324.7 ug/L	5324.7 ppb	19:29:23
2	Fe 238.204 Radial†	5174.4	5209.3	60358 ug/L	60358 ppb	19:29:02
2	K 766.490 Radial†	26663.9	24288.4	4623.3 ug/L	4623.3 ppb	19:29:02
2	Mg 279.077 IEC†	29.7	28.4	1108.7 ug/L	1108.7 ppb	19:29:23
2	Na 589.592 Radial†	9350.0	10303.4	3632.2 ug/L	3632.2 ppb	19:29:02
2	Sr 421.552†	1625.4	1618.2	12.931 ug/L	12.931 ppb	19:29:02
2	Sc 361.383	846658.7	846658.7	103.40 %		19:30:26
2	Y 371.029	956782.5	956782.5	138.33 %		19:30:26
2	Ag 328.068†	-3448.3	-3520.0	0.6519 ug/L	0.6519 ppb	19:30:31
2	As 188.979†	-42.9	-14.7	28.441 ug/L	28.441 ppb	19:30:51
2	B 249.677†	-57.3	481.9	3.6941 ug/L	3.6941 ppb	19:30:31
2	Ba 233.527†	7465.5	7220.8	69.540 ug/L	69.540 ppb	19:30:31
2	Be 313.107†	-10312.8	-6242.8	3.2121 ug/L	3.2121 ppb	19:30:31
2	Cd 226.502†	296.8	457.6	0.3621 ug/L	0.3621 ppb	19:30:51
2	Co 228.616†	282.3	319.2	1.9917 ug/L	1.9917 ppb	19:30:51
2	Cr 267.716†	1863.6	1730.9	29.751 ug/L	29.751 ppb	19:30:31
2	Cu 324.752†	7966.6	2152.7	10.441 ug/L	10.441 ppb	19:30:31
2	Mn 257.610†	2212330.7	2139211.2	2818.6 ug/L	2818.6 ppb	19:30:26
2	Mo 202.031†	42.9	33.0	7.6797 ug/L	7.6797 ppb	19:30:51
2	Ni 231.604†	373.1	276.8	8.7854 ug/L	8.7854 ppb	19:30:51

2	P 214.914†	778.4	565.6	373.56 ug/L	373.56 ppb	19:30:51
2	Pb 220.353†	318.5	366.4	49.839 ug/L	49.839 ppb	19:30:51
2	S 181.975 Axial†	32.4	1.1	0.2505 ug/L	0.2505 ppb	19:30:51
2	Sb 206.836†	43.6	18.5	-1.6342 ug/L	-1.6342 ppb	19:30:51
2	Se 196.026†	-264.7	-239.1	-22.646 ug/L	-22.646 ppb	19:30:51
2	Si 251.611†	694299.0	670985.7	25473 ug/L	25473 ppb	19:30:26
2	Sn 189.927†	-10.2	-17.0	-6.3852 ug/L	-6.3852 ppb	19:30:51
2	Ti 334.940†	1536253.7	1486870.5	2586.5 ug/L	2586.5 ppb	19:30:26
2	Tl 190.801†	-135.3	-101.8	-4.5834 ug/L	-4.5834 ppb	19:30:51
2	U 409.014†	-10848.6	-8287.8	-258.37 ug/L	-258.37 ppb	19:30:26
2	V 292.402†	2766.0	3992.5	19.925 ug/L	19.925 ppb	19:30:31
2	Zn 213.857†	39185.7	37327.4	443.19 ug/L	443.19 ppb	19:30:31
2	SiO2†	690486.3	667287.2	54458 ug/L	54458 ppb	19:31:33
3	Sc Radial	4490.8	4490.8	102 %		19:29:28
3	Y RADIAL	6575.8	6575.8	138.1 %		19:29:28
3	Al 396.153Radial†	9538.6	9413.3	9246.2 ug/L	9246.2 ppb	19:29:28
3	Ca 317.933Radial†	2799.5	2724.1	5154.6 ug/L	5154.6 ppb	19:29:48
3	Fe 238.204 Radial†	5289.1	5167.8	59878 ug/L	59878 ppb	19:29:28
3	K 766.490 Radial†	27375.9	24193.4	4605.3 ug/L	4605.3 ppb	19:29:28
3	Mg 279.077 IEC†	31.1	28.9	1129.8 ug/L	1129.8 ppb	19:29:48
3	Na 589.592 Radial†	9650.3	10319.6	3637.9 ug/L	3637.9 ppb	19:29:28
3	Sr 421.552†	1692.7	1635.8	13.074 ug/L	13.074 ppb	19:29:28
3	Sc 361.383	845524.0	845524.0	103.26 %		19:30:57
3	Y 371.029	955467.7	955467.7	138.14 %		19:30:57
3	Ag 328.068†	-3247.9	-3330.5	1.4909 ug/L	1.4909 ppb	19:31:02
3	As 188.979†	-32.6	-4.7	33.777 ug/L	33.777 ppb	19:31:22
3	B 249.677†	-71.7	467.9	3.3801 ug/L	3.3801 ppb	19:31:02
3	Ba 233.527†	7441.3	7207.1	69.396 ug/L	69.396 ppb	19:31:02
3	Be 313.107†	-10282.3	-6226.6	3.2091 ug/L	3.2091 ppb	19:31:02
3	Cd 226.502†	294.1	455.5	0.3800 ug/L	0.3800 ppb	19:31:22
3	Co 228.616†	279.1	316.5	1.9387 ug/L	1.9387 ppb	19:31:22
3	Cr 267.716†	1853.0	1723.0	29.594 ug/L	29.594 ppb	19:31:02
3	Cu 324.752†	7992.7	2188.3	10.534 ug/L	10.534 ppb	19:31:02
3	Mn 257.610†	2205789.3	2135747.8	2814.0 ug/L	2814.0 ppb	19:30:57
3	Mo 202.031†	53.1	42.9	8.5232 ug/L	8.5232 ppb	19:31:22
3	Ni 231.604†	380.8	284.7	9.0361 ug/L	9.0361 ppb	19:31:22
3	P 214.914†	767.4	555.9	366.71 ug/L	366.71 ppb	19:31:22
3	Pb 220.353†	318.2	366.5	49.906 ug/L	49.906 ppb	19:31:22
3	S 181.975 Axial†	25.8	-5.2	-11.087 ug/L	-11.087 ppb	19:31:22
3	Sb 206.836†	35.7	10.9	-4.7970 ug/L	-4.7970 ppb	19:31:22
3	Se 196.026†	-263.5	-238.2	-23.376 ug/L	-23.376 ppb	19:31:22
3	Si 251.611†	693599.8	671209.7	25481 ug/L	25481 ppb	19:30:57
3	Sn 189.927†	-15.6	-22.3	-7.5734 ug/L	-7.5734 ppb	19:31:22
3	Ti 334.940†	1531606.4	1484363.9	2582.1 ug/L	2582.1 ppb	19:30:57
3	Tl 190.801†	-126.0	-92.9	-1.1911 ug/L	-1.1911 ppb	19:31:22
3	U 409.014†	-10896.3	-8348.0	-260.14 ug/L	-260.14 ppb	19:30:57
3	V 292.402†	2754.3	3984.7	19.947 ug/L	19.947 ppb	19:31:02
3	Zn 213.857†	38908.6	37109.9	440.62 ug/L	440.62 ppb	19:31:02
3	SiO2†	686854.6	664666.4	54244 ug/L	54244 ppb	19:31:39

Mean Data: 247770010|957488|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	843825.3	103.05 %		0.484			0.47%
Sc Radial	4391.1	99.9 %		2.00			2.01%
Y 371.029	954120.9	137.95 %		0.511			0.37%
Y RADIAL	6443.9	135.4 %		2.46			1.82%
Ag 328.068†	-3428.4	1.0870 ug/L		0.42036	1.0870 ppb	0.42036	38.67%
Al 396.153Radial†	9468.9	9300.9 ug/L		47.66	9300.9 ppb	47.66	0.51%
As 188.979†	-14.8	28.359 ug/L		5.4599	28.359 ppb	5.4599	19.25%
B 249.677†	482.7	3.7388 ug/L		0.38303	3.7388 ppb	0.38303	10.24%
Ba 233.527†	7226.9	69.592 ug/L		0.2266	69.592 ppb	0.2266	0.33%
Be 313.107†	-6248.8	3.2057 ug/L		0.00865	3.2057 ppb	0.00865	0.27%
Ca 317.933Radial†	2795.7	5290.0 ug/L		121.84	5290.0 ppb	121.84	2.30%
Cd 226.502†	453.6	0.3172 ug/L		0.09377	0.3172 ppb	0.09377	29.56%
Co 228.616†	321.0	2.0431 ug/L		0.13755	2.0431 ppb	0.13755	6.73%
Cr 267.716†	1744.5	29.919 ug/L		0.4340	29.919 ppb	0.4340	1.45%
Cu 324.752†	2184.6	10.539 ug/L		0.1012	10.539 ppb	0.1012	0.96%
Fe 238.204 Radial†	5197.8	60226 ug/L		303.8	60226 ppb	303.8	0.50%
K 766.490 Radial†	24302.4	4626.0 ug/L		22.20	4626.0 ppb	22.20	0.48%

Mg 279.077 IEC†	28.1	1097.4 ug/L	39.33	1097.4 ppb	39.33	3.58%
Mn 257.610†	2137273.3	2816.0 ug/L	2.34	2816.0 ppb	2.34	0.08%
Mo 202.031†	38.3	8.1432 ug/L	0.42788	8.1432 ppb	0.42788	5.25%
Na 589.592 Radial†	10324.9	3639.8 ug/L	8.70	3639.8 ppb	8.70	0.24%
Ni 231.604†	285.4	9.0594 ug/L	0.28630	9.0594 ppb	0.28630	3.16%
P 214.914†	558.0	368.02 ug/L	5.015	368.02 ppb	5.015	1.36%
Pb 220.353†	360.3	48.928 ug/L	1.6372	48.928 ppb	1.6372	3.35%
S 181.975 Axial†	-1.1	-3.7342 ug/L	6.37549	-3.7342 ppb	6.37549	170.73%
Sb 206.836†	16.1	-2.6241 ug/L	1.88420	-2.6241 ppb	1.88420	71.80%
Se 196.026†	-240.7	-24.447 ug/L	2.5148	-24.447 ppb	2.5148	10.29%
Si 251.611†	670405.3	25451 ug/L	45.7	25451 ppb	45.7	0.18%
Sn 189.927†	-21.1	-7.3098 ug/L	0.82494	-7.3098 ppb	0.82494	11.29%
Sr 421.552†	1629.8	13.025 ug/L	0.0813	13.025 ppb	0.0813	0.62%
Ti 334.940†	1485898.6	2584.8 ug/L	2.35	2584.8 ppb	2.35	0.09%
Tl 190.801†	-97.1	-2.8020 ug/L	1.70259	-2.8020 ppb	1.70259	60.76%
U 409.014†	-8286.6	-258.32 ug/L	1.849	-258.32 ppb	1.849	0.72%
V 292.402†	3983.2	19.879 ug/L	0.1000	19.879 ppb	0.1000	0.50%
Zn 213.857†	37266.8	442.47 ug/L	1.615	442.47 ppb	1.615	0.36%
SiO2†	668271.1	54539 ug/L	341.5	54539 ppb	341.5	0.63%

Sequence No.: 55

Sample ID: 247770011|957488|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 67

Date Collected: 3/19/2010 19:33:50

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 247770011|957488|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4410.0	4410.0	100 %		19:35:43
1	Y RADIAL	6564.6	6564.6	137.9 %		19:35:43
1	Al 396.153Radial†	10644.3	10686.3	10497 ug/L	10497 ppb	19:35:43
1	Ca 317.933Radial†	3207.0	3180.4	6018.0 ug/L	6018.0 ppb	19:36:03
1	Fe 238.204 Radial†	5506.4	5479.2	63487 ug/L	63487 ppb	19:35:43
1	K 766.490 Radial†	28991.3	26294.2	5004.9 ug/L	5004.9 ppb	19:35:43
1	Mg 279.077 IEC†	35.5	33.8	1329.4 ug/L	1329.4 ppb	19:36:03
1	Na 589.592 Radial†	10644.3	11483.3	4048.1 ug/L	4048.1 ppb	19:35:43
1	Sr 421.552†	1893.0	1865.8	14.910 ug/L	14.910 ppb	19:35:43
1	Sc 361.383	839019.5	839019.5	102.47 %		19:37:01
1	Y 371.029	969529.2	969529.2	140.18 %		19:37:01
1	Ag 328.068†	-3624.4	-3722.3	0.6021 ug/L	0.6021 ppb	19:37:06
1	As 188.979†	-49.2	-21.2	26.685 ug/L	26.685 ppb	19:37:26
1	B 249.677†	-75.0	464.2	2.6859 ug/L	2.6859 ppb	19:37:06
1	Ba 233.527†	8964.4	8749.4	83.960 ug/L	83.960 ppb	19:37:06
1	Be 313.107†	-9181.1	-5229.1	3.9226 ug/L	3.9226 ppb	19:37:06
1	Cd 226.502†	325.4	488.2	0.4777 ug/L	0.4777 ppb	19:37:26
1	Co 228.616†	306.4	345.2	2.3540 ug/L	2.3540 ppb	19:37:26
1	Cr 267.716†	4130.7	3959.8	59.991 ug/L	59.991 ppb	19:37:06
1	Cu 324.752†	8424.0	2669.2	12.330 ug/L	12.330 ppb	19:37:06
1	Mn 257.610†	2507089.5	2446356.3	3222.7 ug/L	3222.7 ppb	19:37:01
1	Mo 202.031†	43.6	34.0	8.0253 ug/L	8.0253 ppb	19:37:26
1	Ni 231.604†	479.8	384.2	12.195 ug/L	12.195 ppb	19:37:26
1	P 214.914†	886.6	678.0	454.75 ug/L	454.75 ppb	19:37:26
1	Pb 220.353†	323.8	374.4	50.890 ug/L	50.890 ppb	19:37:26
1	S 181.975 Axial†	29.8	-1.1	-3.9195 ug/L	-3.9195 ppb	19:37:26
1	Sb 206.836†	50.1	25.2	0.7203 ug/L	0.7203 ppb	19:37:26
1	Se 196.026†	-272.2	-248.7	-21.337 ug/L	-21.337 ppb	19:37:26
1	Si 251.611†	749462.3	730935.0	27748 ug/L	27748 ppb	19:37:01
1	Sn 189.927†	-13.0	-19.8	-7.0797 ug/L	-7.0797 ppb	19:37:26
1	Ti 334.940†	1594764.6	1557500.7	2709.4 ug/L	2709.4 ppb	19:37:01
1	Tl 190.801†	-132.5	-100.2	-1.0289 ug/L	-1.0289 ppb	19:37:26
1	U 409.014†	-11854.8	-9365.3	-291.48 ug/L	-291.48 ppb	19:37:01
1	V 292.402†	3236.1	4475.6	23.129 ug/L	23.129 ppb	19:37:06
1	Zn 213.857†	42275.7	40688.1	483.41 ug/L	483.41 ppb	19:37:06
1	SiO2†	758438.0	739683.5	60367 ug/L	60367 ppb	19:38:34
2	Sc Radial	4422.0	4422.0	101 %		19:36:08
2	Y RADIAL	6577.1	6577.1	138.2 %		19:36:08
2	Al 396.153Radial†	10692.8	10705.8	10516 ug/L	10516 ppb	19:36:08
2	Ca 317.933Radial†	3234.6	3199.2	6053.5 ug/L	6053.5 ppb	19:36:28
2	Fe 238.204 Radial†	5562.5	5520.2	63961 ug/L	63961 ppb	19:36:08
2	K 766.490 Radial†	28957.5	26182.4	4983.6 ug/L	4983.6 ppb	19:36:08
2	Mg 279.077 IEC†	34.9	33.2	1303.1 ug/L	1303.1 ppb	19:36:28
2	Na 589.592 Radial†	10713.4	11523.3	4062.2 ug/L	4062.2 ppb	19:36:08
2	Sr 421.552†	1877.2	1845.0	14.744 ug/L	14.744 ppb	19:36:08
2	Sc 361.383	849434.6	849434.6	103.74 %		19:37:32
2	Y 371.029	979266.7	979266.7	141.58 %		19:37:32
2	Ag 328.068†	-3571.3	-3627.8	1.2365 ug/L	1.2365 ppb	19:37:37
2	As 188.979†	-41.8	-13.5	30.916 ug/L	30.916 ppb	19:37:57
2	B 249.677†	66.0	601.0	6.4482 ug/L	6.4482 ppb	19:37:37
2	Ba 233.527†	8879.0	8559.8	82.198 ug/L	82.198 ppb	19:37:37
2	Be 313.107†	-9061.6	-5004.0	3.9909 ug/L	3.9909 ppb	19:37:37
2	Cd 226.502†	316.1	475.3	0.2422 ug/L	0.2422 ppb	19:37:57
2	Co 228.616†	290.6	326.3	1.8857 ug/L	1.8857 ppb	19:37:57
2	Cr 267.716†	4102.5	3883.2	59.013 ug/L	59.013 ppb	19:37:37
2	Cu 324.752†	8287.3	2436.7	11.587 ug/L	11.587 ppb	19:37:37
2	Mn 257.610†	2526156.4	2434736.0	3207.5 ug/L	3207.5 ppb	19:37:32
2	Mo 202.031†	47.3	37.1	8.3319 ug/L	8.3319 ppb	19:37:57
2	Ni 231.604†	490.0	388.3	12.325 ug/L	12.325 ppb	19:37:57

2	P 214.914†	876.7	657.8	439.47 ug/L	439.47 ppb	19:37:57
2	Pb 220.353†	320.8	367.5	49.777 ug/L	49.777 ppb	19:37:57
2	S 181.975 Axial†	31.9	0.5	-1.0335 ug/L	-1.0335 ppb	19:37:57
2	Sb 206.836†	41.5	16.3	-2.9780 ug/L	-2.9780 ppb	19:37:57
2	Se 196.026†	-269.3	-242.6	-14.861 ug/L	-14.861 ppb	19:37:57
2	Si 251.611†	756430.0	728683.5	27663 ug/L	27663 ppb	19:37:32
2	Sn 189.927†	-18.0	-24.5	-8.1646 ug/L	-8.1646 ppb	19:37:57
2	Ti 334.940†	1607318.7	1550519.3	2697.2 ug/L	2697.2 ppb	19:37:32
2	Tl 190.801†	-145.1	-110.8	-5.2934 ug/L	-5.2934 ppb	19:37:57
2	U 409.014†	-11999.3	-9362.7	-291.45 ug/L	-291.45 ppb	19:37:32
2	V 292.402†	3200.8	4402.9	22.496 ug/L	22.496 ppb	19:37:37
2	Zn 213.857†	41840.7	39762.9	472.13 ug/L	472.13 ppb	19:37:37
2	SiO2†	746383.4	718987.7	58678 ug/L	58678 ppb	19:38:40
3	Sc Radial	4342.7	4342.7	98.8 %		19:36:33
3	Y RADIAL	6527.0	6527.0	137.1 %		19:36:33
3	Al 396.153Radial†	10481.5	10686.0	10496 ug/L	10496 ppb	19:36:33
3	Ca 317.933Radial†	3228.6	3251.8	6153.1 ug/L	6153.1 ppb	19:36:53
3	Fe 238.204 Radial†	5463.4	5520.9	63969 ug/L	63969 ppb	19:36:33
3	K 766.490 Radial†	28633.5	26380.1	5021.2 ug/L	5021.2 ppb	19:36:33
3	Mg 279.077 IEC†	32.8	31.6	1237.5 ug/L	1237.5 ppb	19:36:53
3	Na 589.592 Radial†	10416.6	11417.3	4024.9 ug/L	4024.9 ppb	19:36:33
3	Sr 421.552†	1835.7	1837.1	14.679 ug/L	14.679 ppb	19:36:33
3	Sc 361.383	842601.8	842601.8	102.90 %		19:38:03
3	Y 371.029	972181.0	972181.0	140.56 %		19:38:03
3	Ag 328.068†	-3526.5	-3612.1	1.3173 ug/L	1.3173 ppb	19:38:08
3	As 188.979†	-38.8	-10.9	32.373 ug/L	32.373 ppb	19:38:28
3	B 249.677†	-139.0	402.3	0.8728 ug/L	0.8728 ppb	19:38:08
3	Ba 233.527†	8884.4	8634.4	82.897 ug/L	82.897 ppb	19:38:08
3	Be 313.107†	-9026.1	-5040.3	3.9779 ug/L	3.9779 ppb	19:38:08
3	Cd 226.502†	314.3	476.1	0.2535 ug/L	0.2535 ppb	19:38:28
3	Co 228.616†	313.1	350.5	2.5065 ug/L	2.5065 ppb	19:38:28
3	Cr 267.716†	4113.0	3925.4	59.579 ug/L	59.579 ppb	19:38:08
3	Cu 324.752†	8329.7	2542.7	11.936 ug/L	11.936 ppb	19:38:08
3	Mn 257.610†	2509042.8	2437852.2	3211.6 ug/L	3211.6 ppb	19:38:03
3	Mo 202.031†	46.3	36.5	8.2810 ug/L	8.2810 ppb	19:38:28
3	Ni 231.604†	516.2	417.5	13.254 ug/L	13.254 ppb	19:38:28
3	P 214.914†	864.4	652.7	435.57 ug/L	435.57 ppb	19:38:28
3	Pb 220.353†	336.4	385.3	52.498 ug/L	52.498 ppb	19:38:28
3	S 181.975 Axial†	34.0	2.9	3.1414 ug/L	3.1414 ppb	19:38:28
3	Sb 206.836†	35.6	10.9	-5.2251 ug/L	-5.2251 ppb	19:38:28
3	Se 196.026†	-280.0	-255.1	-25.272 ug/L	-25.272 ppb	19:38:28
3	Si 251.611†	750967.4	729288.1	27686 ug/L	27686 ppb	19:38:03
3	Sn 189.927†	-13.2	-20.0	-7.1253 ug/L	-7.1253 ppb	19:38:28
3	Ti 334.940†	1595035.6	1551147.2	2698.4 ug/L	2698.4 ppb	19:38:03
3	Tl 190.801†	-137.3	-104.4	-2.7861 ug/L	-2.7861 ppb	19:38:28
3	U 409.014†	-11815.3	-9277.7	-288.88 ug/L	-288.88 ppb	19:38:03
3	V 292.402†	3189.6	4417.0	22.609 ug/L	22.609 ppb	19:38:08
3	Zn 213.857†	41941.3	40187.6	477.27 ug/L	477.27 ppb	19:38:08
3	SiO2†	753629.1	731863.4	59729 ug/L	59729 ppb	19:38:46

Mean Data: 247770011|957488|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	843685.3	103.04 %		0.646			0.63%
Sc Radial	4391.6	99.9 %		0.97			0.97%
Y 371.029	973659.0	140.77 %		0.728			0.52%
Y RADIAL	6556.2	137.7 %		0.55			0.40%
Ag 328.068†	-3654.1	1.0520 ug/L		0.39171	1.0520 ppb	0.39171	37.24%
Al 396.153Radial†	10692.7	10503 ug/L		11.1	10503 ppb	11.1	0.11%
As 188.979†	-15.2	29.991 ug/L		2.9542	29.991 ppb	2.9542	9.85%
B 249.677†	489.1	3.3356 ug/L		2.84394	3.3356 ppb	2.84394	85.26%
Ba 233.527†	8647.8	83.018 ug/L		0.8876	83.018 ppb	0.8876	1.07%
Be 313.107†	-5091.2	3.9638 ug/L		0.03625	3.9638 ppb	0.03625	0.91%
Ca 317.933Radial†	3210.5	6074.9 ug/L		70.05	6074.9 ppb	70.05	1.15%
Cd 226.502†	479.8	0.3245 ug/L		0.13284	0.3245 ppb	0.13284	40.94%
Co 228.616†	340.7	2.2487 ug/L		0.32353	2.2487 ppb	0.32353	14.39%
Cr 267.716†	3922.8	59.528 ug/L		0.4910	59.528 ppb	0.4910	0.82%
Cu 324.752†	2549.5	11.951 ug/L		0.3716	11.951 ppb	0.3716	3.11%
Fe 238.204 Radial†	5506.8	63806 ug/L		276.1	63806 ppb	276.1	0.43%
K 766.490 Radial†	26285.5	5003.3 ug/L		18.88	5003.3 ppb	18.88	0.38%

Mg 279.077 IEC†	32.9	1290.0 ug/L	47.33	1290.0 ppb	47.33	3.67%
Mn 257.610†	2439648.1	3213.9 ug/L	7.88	3213.9 ppb	7.88	0.25%
Mo 202.031†	35.9	8.2128 ug/L	0.16433	8.2128 ppb	0.16433	2.00%
Na 589.592 Radial†	11474.6	4045.1 ug/L	18.86	4045.1 ppb	18.86	0.47%
Ni 231.604†	396.7	12.591 ug/L	0.5776	12.591 ppb	0.5776	4.59%
P 214.914†	662.8	443.26 ug/L	10.134	443.26 ppb	10.134	2.29%
Pb 220.353†	375.7	51.055 ug/L	1.3681	51.055 ppb	1.3681	2.68%
S 181.975 Axial†	0.8	-0.6039 ug/L	3.54998	-0.6039 ppb	3.54998	587.87%
Sb 206.836†	17.5	-2.4943 ug/L	3.00205	-2.4943 ppb	3.00205	120.36%
Se 196.026†	-248.8	-20.490 ug/L	5.2569	-20.490 ppb	5.2569	25.66%
Si 251.611†	729635.5	27699 ug/L	44.2	27699 ppb	44.2	0.16%
Sn 189.927†	-21.5	-7.4565 ug/L	0.61362	-7.4565 ppb	0.61362	8.23%
Sr 421.552†	1849.3	14.778 ug/L	0.1192	14.778 ppb	0.1192	0.81%
Ti 334.940†	1553055.8	2701.7 ug/L	6.71	2701.7 ppb	6.71	0.25%
Tl 190.801†	-105.1	-3.0361 ug/L	2.14323	-3.0361 ppb	2.14323	70.59%
U 409.014†	-9335.2	-290.61 ug/L	1.495	-290.61 ppb	1.495	0.51%
V 292.402†	4431.8	22.744 ug/L	0.3376	22.744 ppb	0.3376	1.48%
Zn 213.857†	40212.9	477.61 ug/L	5.648	477.61 ppb	5.648	1.18%
SiO2†	730178.2	59591 ug/L	852.9	59591 ppb	852.9	1.43%

Sequence No.: 56
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 1
 Date Collected: 3/19/2010 19:40:57
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4181.3	4181.3	95.1 %		19:43:09
1	Y RADIAL	4494.9	4494.9	94.42 %		19:42:49
1	Al 396.153Radial†	5008.1	5342.2	5223.2 ug/L	5223.2 ppb	19:42:49
1	Ca 317.933Radial†	2615.3	2733.3	5172.0 ug/L	5172.0 ppb	19:43:09
1	Fe 238.204 Radial†	436.5	450.4	5233.9 ug/L	5233.9 ppb	19:43:09
1	K 766.490 Radial†	29527.3	28438.4	5411.8 ug/L	5411.8 ppb	19:42:49
1	Mg 279.077 IEC†	122.1	126.8	5232.3 ug/L	5232.3 ppb	19:43:09
1	Na 589.592 Radial†	26641.4	28878.9	10180 ug/L	10180 ppb	19:42:49
1	Sr 421.552†	62311.8	65477.3	524.81 ug/L	524.81 ppb	19:42:49
1	Sc 361.383	827255.8	827255.8	101.03 %		19:44:06
1	Y 371.029	690694.0	690694.0	99.862 %		19:44:06
1	Ag 328.068†	99519.1	98319.7	513.63 ug/L	513.63 ppb	19:44:11
1	As 188.979†	903.0	920.6	509.76 ug/L	509.76 ppb	19:44:31
1	B 249.677†	17553.1	17911.5	500.17 ug/L	500.17 ppb	19:44:11
1	Ba 233.527†	54674.5	54118.0	508.16 ug/L	508.16 ppb	19:44:11
1	Be 313.107†	1195593.7	1187139.8	506.63 ug/L	506.63 ppb	19:44:06
1	Cd 226.502†	35325.7	35136.3	509.70 ug/L	509.70 ppb	19:44:11
1	Co 228.616†	20099.3	19940.6	515.48 ug/L	515.48 ppb	19:44:11
1	Cr 267.716†	38398.0	37935.2	509.78 ug/L	509.78 ppb	19:44:11
1	Cu 324.752†	159503.4	152325.8	502.89 ug/L	502.89 ppb	19:44:11
1	Mn 257.610†	384039.0	379736.0	499.59 ug/L	499.59 ppb	19:44:11
1	Mo 202.031†	5717.2	5650.4	502.74 ug/L	502.74 ppb	19:44:31
1	Ni 231.604†	16431.6	16180.0	513.52 ug/L	513.52 ppb	19:44:11
1	P 214.914†	3588.6	3364.7	2408.3 ug/L	2408.3 ppb	19:44:31
1	Pb 220.353†	3250.2	3275.4	504.66 ug/L	504.66 ppb	19:44:31
1	S 181.975 Axial†	596.6	560.3	1002.1 ug/L	1002.1 ppb	19:44:31
1	Sb 206.836†	1230.2	1194.0	517.57 ug/L	517.57 ppb	19:44:31
1	Se 196.026†	602.3	613.1	528.97 ug/L	528.97 ppb	19:44:31
1	Si 251.611†	69184.7	67991.4	2575.0 ug/L	2575.0 ppb	19:44:11
1	Sn 189.927†	2237.3	2207.3	501.51 ug/L	501.51 ppb	19:44:31
1	Ti 334.940†	289204.5	287378.3	499.62 ug/L	499.62 ppb	19:44:11
1	Tl 190.801†	1270.0	1286.1	500.89 ug/L	500.89 ppb	19:44:31
1	U 409.014†	15078.2	17128.8	517.92 ug/L	517.92 ppb	19:44:11
1	V 292.402†	62613.1	63292.4	512.12 ug/L	512.12 ppb	19:44:11
1	Zn 213.857†	43108.2	42098.8	505.36 ug/L	505.36 ppb	19:44:11
1	SiO2†	68228.4	67033.7	5457.1 ug/L	5457.1 ppb	19:45:38
2	Sc Radial	4187.7	4187.7	95.3 %		19:43:34
2	Y RADIAL	4756.6	4756.6	99.92 %		19:43:14
2	Al 396.153Radial†	4945.9	5268.9	5151.5 ug/L	5151.5 ppb	19:43:14
2	Ca 317.933Radial†	2629.5	2744.0	5192.3 ug/L	5192.3 ppb	19:43:34
2	Fe 238.204 Radial†	436.4	449.6	5224.1 ug/L	5224.1 ppb	19:43:34
2	K 766.490 Radial†	29133.3	27977.2	5324.0 ug/L	5324.0 ppb	19:43:14
2	Mg 279.077 IEC†	121.5	126.0	5198.9 ug/L	5198.9 ppb	19:43:34
2	Na 589.592 Radial†	26274.4	28450.6	10029 ug/L	10029 ppb	19:43:14
2	Sr 421.552†	61513.6	64539.0	517.29 ug/L	517.29 ppb	19:43:14
2	Sc 361.383	840467.0	840467.0	102.64 %		19:44:37
2	Y 371.029	701014.1	701014.1	101.35 %		19:44:37
2	Ag 328.068†	99492.6	96745.5	505.43 ug/L	505.43 ppb	19:44:42
2	As 188.979†	905.5	909.0	503.34 ug/L	503.34 ppb	19:45:02
2	B 249.677†	17553.2	17638.5	492.54 ug/L	492.54 ppb	19:44:42
2	Ba 233.527†	54456.4	53054.9	498.19 ug/L	498.19 ppb	19:44:42
2	Be 313.107†	1218256.9	1190617.5	508.09 ug/L	508.09 ppb	19:44:37
2	Cd 226.502†	35155.7	34421.0	499.32 ug/L	499.32 ppb	19:44:42
2	Co 228.616†	19970.1	19502.0	504.14 ug/L	504.14 ppb	19:44:42
2	Cr 267.716†	38183.4	37128.6	498.95 ug/L	498.95 ppb	19:44:42
2	Cu 324.752†	159618.4	149956.2	495.07 ug/L	495.07 ppb	19:44:42
2	Mn 257.610†	382570.4	372330.0	489.85 ug/L	489.85 ppb	19:44:42
2	Mo 202.031†	5723.4	5567.5	495.37 ug/L	495.37 ppb	19:45:02
2	Ni 231.604†	16407.6	15901.0	504.67 ug/L	504.67 ppb	19:44:42

2	P 214.914†	3571.3	3292.1	2355.7 ug/L	2355.7 ppb	19:45:02
2	Pb 220.353†	3239.4	3214.3	495.25 ug/L	495.25 ppb	19:45:02
2	S 181.975 Axial†	598.0	552.4	987.94 ug/L	987.94 ppb	19:45:02
2	Sb 206.836†	1234.2	1178.7	510.92 ug/L	510.92 ppb	19:45:02
2	Se 196.026†	592.1	593.8	512.87 ug/L	512.87 ppb	19:45:02
2	Si 251.611†	68956.4	66692.6	2525.8 ug/L	2525.8 ppb	19:44:42
2	Sn 189.927†	2237.3	2172.5	493.62 ug/L	493.62 ppb	19:45:02
2	Ti 334.940†	288835.6	282519.2	491.18 ug/L	491.18 ppb	19:44:42
2	Tl 190.801†	1274.8	1271.1	495.03 ug/L	495.03 ppb	19:45:02
2	U 409.014†	14911.3	16731.5	505.90 ug/L	505.90 ppb	19:44:42
2	V 292.402†	62558.0	62264.5	503.79 ug/L	503.79 ppb	19:44:42
2	Zn 213.857†	42991.7	41314.6	495.93 ug/L	495.93 ppb	19:44:42
2	SiO2†	67719.7	65476.6	5330.2 ug/L	5330.2 ppb	19:45:43
3	Sc Radial	4226.0	4226.0	96.2 %		19:43:59
3	Y RADIAL	4540.2	4540.2	95.37 %		19:43:39
3	Al 396.153Radial†	4784.5	5054.0	4940.1 ug/L	4940.1 ppb	19:43:39
3	Ca 317.933Radial†	2646.7	2736.9	5178.7 ug/L	5178.7 ppb	19:43:59
3	Fe 238.204 Radial†	437.6	446.6	5190.3 ug/L	5190.3 ppb	19:43:59
3	K 766.490 Radial†	28450.2	26989.7	5136.0 ug/L	5136.0 ppb	19:43:39
3	Mg 279.077 IEC†	124.6	128.0	5281.7 ug/L	5281.7 ppb	19:43:59
3	Na 589.592 Radial†	25218.4	27102.5	9554.2 ug/L	9554.2 ppb	19:43:39
3	Sr 421.552†	59349.1	61702.8	494.56 ug/L	494.56 ppb	19:43:39
3	Sc 361.383	828623.1	828623.1	101.20 %		19:45:08
3	Y 371.029	691643.8	691643.8	100.000 %		19:45:08
3	Ag 328.068†	99030.1	97673.9	510.25 ug/L	510.25 ppb	19:45:13
3	As 188.979†	902.5	918.7	508.67 ug/L	508.67 ppb	19:45:33
3	B 249.677†	17567.5	17897.1	499.79 ug/L	499.79 ppb	19:45:13
3	Ba 233.527†	54284.0	53642.8	503.71 ug/L	503.71 ppb	19:45:13
3	Be 313.107†	1198111.8	1187675.4	506.85 ug/L	506.85 ppb	19:45:08
3	Cd 226.502†	35031.6	34788.0	504.65 ug/L	504.65 ppb	19:45:13
3	Co 228.616†	19903.6	19714.5	509.64 ug/L	509.64 ppb	19:45:13
3	Cr 267.716†	38079.3	37557.5	504.70 ug/L	504.70 ppb	19:45:13
3	Cu 324.752†	158602.8	151175.3	499.09 ug/L	499.09 ppb	19:45:13
3	Mn 257.610†	381066.2	376171.1	494.89 ug/L	494.89 ppb	19:45:13
3	Mo 202.031†	5715.5	5639.4	501.76 ug/L	501.76 ppb	19:45:33
3	Ni 231.604†	16320.1	16043.0	509.18 ug/L	509.18 ppb	19:45:13
3	P 214.914†	3566.2	3336.7	2388.2 ug/L	2388.2 ppb	19:45:33
3	Pb 220.353†	3245.8	3265.7	503.12 ug/L	503.12 ppb	19:45:33
3	S 181.975 Axial†	596.8	559.5	1000.8 ug/L	1000.8 ppb	19:45:33
3	Sb 206.836†	1238.7	1200.4	520.22 ug/L	520.22 ppb	19:45:33
3	Se 196.026†	595.8	605.7	522.62 ug/L	522.62 ppb	19:45:33
3	Si 251.611†	68561.6	67262.7	2547.3 ug/L	2547.3 ppb	19:45:13
3	Sn 189.927†	2229.1	2195.6	498.85 ug/L	498.85 ppb	19:45:33
3	Ti 334.940†	287569.4	285290.2	495.99 ug/L	495.99 ppb	19:45:13
3	Tl 190.801†	1268.7	1282.8	499.57 ug/L	499.57 ppb	19:45:33
3	U 409.014†	15050.3	17076.6	516.36 ug/L	516.36 ppb	19:45:13
3	V 292.402†	62415.9	62995.3	509.74 ug/L	509.74 ppb	19:45:13
3	Zn 213.857†	42800.4	41724.2	500.86 ug/L	500.86 ppb	19:45:13
3	SiO2†	69005.8	67690.5	5510.7 ug/L	5510.7 ppb	19:45:48

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832115.3	101.62 %	0.887			0.87%
Sc Radial	4198.3	95.5 %	0.55			0.58%
Y 371.029	694450.6	100.41 %	0.825			0.82%
Y RADIAL	4597.2	96.57 %	2.939			3.04%
Ag 328.068†	97579.7	509.77 ug/L	4.121	509.77 ppb	4.121	0.81%
QC value within limits for Ag 328.068 Recovery = 101.95%						
Al 396.153Radial†	5221.7	5104.9 ug/L	147.17	5104.9 ppb	147.17	2.88%
QC value within limits for Al 396.153Radial Recovery = 102.10%						
As 188.979†	916.1	507.26 ug/L	3.434	507.26 ppb	3.434	0.68%
QC value within limits for As 188.979 Recovery = 101.45%						
B 249.677†	17815.7	497.50 ug/L	4.296	497.50 ppb	4.296	0.86%
QC value within limits for B 249.677 Recovery = 99.50%						
Ba 233.527†	53605.2	503.35 ug/L	4.998	503.35 ppb	4.998	0.99%
QC value within limits for Ba 233.527 Recovery = 100.67%						
Be 313.107†	1188477.6	507.19 ug/L	0.788	507.19 ppb	0.788	0.16%
QC value within limits for Be 313.107 Recovery = 101.44%						
Ca 317.933Radial†	2738.1	5181.0 ug/L	10.34	5181.0 ppb	10.34	0.20%

QC value within limits for Ca 317.933 Radial Recovery = 103.62%

Cd 226.502†	34781.8	504.56 ug/L	5.193	504.56 ppb	5.193	1.03%
QC value within limits for Cd 226.502 Recovery = 100.91%						
Co 228.616†	19719.1	509.75 ug/L	5.669	509.75 ppb	5.669	1.11%
QC value within limits for Co 228.616 Recovery = 101.95%						
Cr 267.716†	37540.4	504.48 ug/L	5.415	504.48 ppb	5.415	1.07%
QC value within limits for Cr 267.716 Recovery = 100.90%						
Cu 324.752†	151152.5	499.02 ug/L	3.909	499.02 ppb	3.909	0.78%
QC value within limits for Cu 324.752 Recovery = 99.80%						
Fe 238.204 Radial†	448.9	5216.1 ug/L	22.88	5216.1 ppb	22.88	0.44%
QC value within limits for Fe 238.204 Radial Recovery = 104.32%						
K 766.490 Radial†	27801.7	5290.6 ug/L	140.89	5290.6 ppb	140.89	2.66%
QC value within limits for K 766.490 Radial Recovery = 105.81%						
Mg 279.077 IEC†	127.0	5237.7 ug/L	41.68	5237.7 ppb	41.68	0.80%
QC value within limits for Mg 279.077 IEC Recovery = 104.75%						
Mn 257.610†	376079.0	494.78 ug/L	4.870	494.78 ppb	4.870	0.98%
QC value within limits for Mn 257.610 Recovery = 98.96%						
Mo 202.031†	5619.1	499.95 ug/L	4.004	499.95 ppb	4.004	0.80%
QC value within limits for Mo 202.031 Recovery = 99.99%						
Na 589.592 Radial†	28144.0	9921.4 ug/L	326.80	9921.4 ppb	326.80	3.29%
QC value within limits for Na 589.592 Radial Recovery = 99.21%						
Ni 231.604†	16041.4	509.12 ug/L	4.427	509.12 ppb	4.427	0.87%
QC value within limits for Ni 231.604 Recovery = 101.82%						
P 214.914†	3331.2	2384.1 ug/L	26.55	2384.1 ppb	26.55	1.11%
QC value within limits for P 214.914 Recovery = 95.36%						
Pb 220.353†	3251.8	501.01 ug/L	5.050	501.01 ppb	5.050	1.01%
QC value within limits for Pb 220.353 Recovery = 100.20%						
S 181.975 Axial†	557.4	996.95 ug/L	7.830	996.95 ppb	7.830	0.79%
QC value within limits for S 181.975 Axial Recovery = 99.70%						
Sb 206.836†	1191.0	516.24 ug/L	4.790	516.24 ppb	4.790	0.93%
QC value within limits for Sb 206.836 Recovery = 103.25%						
Se 196.026†	604.2	521.49 ug/L	8.109	521.49 ppb	8.109	1.56%
QC value within limits for Se 196.026 Recovery = 104.30%						
Si 251.611†	67315.6	2549.3 ug/L	24.67	2549.3 ppb	24.67	0.97%
QC value within limits for Si 251.611 Recovery = 101.97%						
Sn 189.927†	2191.8	498.00 ug/L	4.014	498.00 ppb	4.014	0.81%
QC value within limits for Sn 189.927 Recovery = 99.60%						
Sr 421.552†	63906.4	512.22 ug/L	15.752	512.22 ppb	15.752	3.08%
QC value within limits for Sr 421.552 Recovery = 102.44%						
Ti 334.940†	285062.6	495.60 ug/L	4.231	495.60 ppb	4.231	0.85%
QC value within limits for Ti 334.940 Recovery = 99.12%						
Tl 190.801†	1280.0	498.49 ug/L	3.075	498.49 ppb	3.075	0.62%
QC value within limits for Tl 190.801 Recovery = 99.70%						
U 409.014†	16979.0	513.39 ug/L	6.537	513.39 ppb	6.537	1.27%
QC value within limits for U 409.014 Recovery = 102.68%						
V 292.402†	62850.7	508.55 ug/L	4.286	508.55 ppb	4.286	0.84%
QC value within limits for V 292.402 Recovery = 101.71%						
Zn 213.857†	41712.5	500.72 ug/L	4.718	500.72 ppb	4.718	0.94%
QC value within limits for Zn 213.857 Recovery = 100.14%						
SiO2†	66733.6	5432.6 ug/L	92.70	5432.6 ppb	92.70	1.71%
QC value within limits for SiO2 Recovery = 101.59%						

All analyte(s) passed QC.

Sequence No.: 57
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 6
 Date Collected: 3/19/2010 19:47:58
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4253.6	4253.6	96.8 %		19:50:10
1	Y RADIAL	4761.2	4761.2	100.0 %		19:49:50
1	Al 396.153Radial†	-75.1	0.4	0.4100 ug/L	0.4100 ppb	19:50:10
1	Ca 317.933Radial†	14.1	-1.2	-2.1965 ug/L	-2.1965 ppb	19:50:10
1	Fe 238.204 Radial†	7.5	-0.7	-8.2674 ug/L	-8.2674 ppb	19:50:10
1	K 766.490 Radial†	2792.5	286.6	54.614 ug/L	54.614 ppb	19:49:50
1	Mg 279.077 IEC†	1.5	0.0	0.7784 ug/L	0.7784 ppb	19:50:10
1	Na 589.592 Radial†	-936.9	-92.9	-32.752 ug/L	-32.752 ppb	19:49:50
1	Sr 421.552†	0.1	-20.7	-0.1662 ug/L	-0.1662 ppb	19:49:50
1	Sc 361.383	815543.9	815543.9	99.599 %		19:51:07
1	Y 371.029	693562.1	693562.1	100.28 %		19:51:07
1	Ag 328.068†	175.7	-8.7	-0.0487 ug/L	-0.0487 ppb	19:51:07
1	As 188.979†	-25.5	1.2	0.6673 ug/L	0.6673 ppb	19:51:27
1	B 249.677†	-343.2	192.8	5.4093 ug/L	5.4093 ppb	19:51:27
1	Ba 233.527†	8.7	9.5	0.0865 ug/L	0.0865 ppb	19:51:27
1	Be 313.107†	-3723.8	-7.7	-0.0030 ug/L	-0.0030 ppb	19:51:07
1	Cd 226.502†	-173.1	-3.1	-0.0453 ug/L	-0.0453 ppb	19:51:27
1	Co 228.616†	-41.4	4.6	0.1203 ug/L	0.1203 ppb	19:51:27
1	Cr 267.716†	90.7	19.6	0.2620 ug/L	0.2620 ppb	19:51:27
1	Cu 324.752†	5634.7	105.4	0.3492 ug/L	0.3492 ppb	19:51:07
1	Mn 257.610†	422.9	35.6	0.0459 ug/L	0.0459 ppb	19:51:27
1	Mo 202.031†	15.1	6.6	0.5883 ug/L	0.5883 ppb	19:51:27
1	Ni 231.604†	69.0	-14.8	-0.4686 ug/L	-0.4686 ppb	19:51:27
1	P 214.914†	189.7	3.2	2.3299 ug/L	2.3299 ppb	19:51:27
1	Pb 220.353†	-48.7	9.4	1.4484 ug/L	1.4484 ppb	19:51:27
1	S 181.975 Axial†	21.3	-8.8	-15.711 ug/L	-15.711 ppb	19:51:27
1	Sb 206.836†	25.5	1.9	0.8201 ug/L	0.8201 ppb	19:51:27
1	Se 196.026†	-22.1	-5.2	-4.3410 ug/L	-4.3410 ppb	19:51:27
1	Si 251.611†	533.5	47.4	1.7935 ug/L	1.7935 ppb	19:51:27
1	Sn 189.927†	6.5	-0.6	-0.1346 ug/L	-0.1346 ppb	19:51:27
1	Ti 334.940†	-1052.1	64.9	0.1139 ug/L	0.1139 ppb	19:51:07
1	Tl 190.801†	-25.6	3.4	1.3193 ug/L	1.3193 ppb	19:51:27
1	U 409.014†	-2304.4	-109.5	-3.3217 ug/L	-3.3217 ppb	19:51:07
1	V 292.402†	-1421.3	-109.6	-0.8723 ug/L	-0.8723 ppb	19:51:07
1	Zn 213.857†	588.0	20.3	0.2494 ug/L	0.2494 ppb	19:51:27
1	SiO2†	562.7	65.6	5.3384 ug/L	5.3384 ppb	19:52:23
2	Sc Radial	4259.3	4259.3	96.9 %		19:50:35
2	Y RADIAL	4783.4	4783.4	100.5 %		19:50:15
2	Al 396.153Radial†	-74.2	1.5	1.4611 ug/L	1.4611 ppb	19:50:35
2	Ca 317.933Radial†	20.7	5.7	10.771 ug/L	10.771 ppb	19:50:35
2	Fe 238.204 Radial†	6.6	-1.7	-19.426 ug/L	-19.426 ppb	19:50:35
2	K 766.490 Radial†	2740.3	228.9	43.623 ug/L	43.623 ppb	19:50:15
2	Mg 279.077 IEC†	1.9	0.4	16.482 ug/L	16.482 ppb	19:50:35
2	Na 589.592 Radial†	-967.3	-123.1	-43.378 ug/L	-43.378 ppb	19:50:15
2	Sr 421.552†	3.4	-17.3	-0.1391 ug/L	-0.1391 ppb	19:50:15
2	Sc 361.383	821013.4	821013.4	100.27 %		19:51:32
2	Y 371.029	698655.9	698655.9	101.01 %		19:51:32
2	Ag 328.068†	196.5	10.9	0.0468 ug/L	0.0468 ppb	19:51:32
2	As 188.979†	-17.6	9.2	5.0535 ug/L	5.0535 ppb	19:51:52
2	B 249.677†	-322.8	215.4	6.0458 ug/L	6.0458 ppb	19:51:52
2	Ba 233.527†	5.1	5.8	0.0544 ug/L	0.0544 ppb	19:51:52
2	Be 313.107†	-3678.8	62.1	0.0259 ug/L	0.0259 ppb	19:51:32
2	Cd 226.502†	-164.6	6.5	0.0973 ug/L	0.0973 ppb	19:51:52
2	Co 228.616†	-45.6	0.7	0.0204 ug/L	0.0204 ppb	19:51:52
2	Cr 267.716†	74.9	3.2	0.0394 ug/L	0.0394 ppb	19:51:52
2	Cu 324.752†	5573.0	6.1	0.0164 ug/L	0.0164 ppb	19:51:32
2	Mn 257.610†	447.3	57.0	0.0724 ug/L	0.0724 ppb	19:51:52
2	Mo 202.031†	11.0	2.4	0.2127 ug/L	0.2127 ppb	19:51:52
2	Ni 231.604†	78.1	-6.1	-0.1947 ug/L	-0.1947 ppb	19:51:52

2	P 214.914†	175.0	-12.7	-9.4657 ug/L	-9.4657 ppb	19:51:52
2	Pb 220.353†	-39.7	18.7	2.8731 ug/L	2.8731 ppb	19:51:52
2	S 181.975 Axial†	27.2	-3.0	-5.4312 ug/L	-5.4312 ppb	19:51:52
2	Sb 206.836†	26.7	3.0	1.2671 ug/L	1.2671 ppb	19:51:52
2	Se 196.026†	-17.3	-0.3	-0.3381 ug/L	-0.3381 ppb	19:51:52
2	Si 251.611†	527.8	38.2	1.4491 ug/L	1.4491 ppb	19:51:52
2	Sn 189.927†	8.8	1.6	0.3589 ug/L	0.3589 ppb	19:51:52
2	Ti 334.940†	-1263.9	-139.3	-0.2444 ug/L	-0.2444 ppb	19:51:32
2	Tl 190.801†	-20.0	9.1	3.5183 ug/L	3.5183 ppb	19:51:52
2	U 409.014†	-2047.1	162.6	4.9350 ug/L	4.9350 ppb	19:51:32
2	V 292.402†	-1305.5	15.4	0.1392 ug/L	0.1392 ppb	19:51:32
2	Zn 213.857†	581.1	9.5	0.1192 ug/L	0.1192 ppb	19:51:52
2	SiO2†	532.5	31.7	2.5832 ug/L	2.5832 ppb	19:52:28
3	Sc Radial	4237.1	4237.1	96.4 %		19:51:00
3	Y RADIAL	4796.6	4796.6	100.8 %		19:50:40
3	Al 396.153Radial†	-89.3	-14.6	-14.351 ug/L	-14.351 ppb	19:51:00
3	Ca 317.933Radial†	16.2	1.2	2.1762 ug/L	2.1762 ppb	19:51:00
3	Fe 238.204 Radial†	11.4	3.3	38.466 ug/L	38.466 ppb	19:51:00
3	K 766.490 Radial†	2688.3	189.8	36.184 ug/L	36.184 ppb	19:50:40
3	Mg 279.077 IEC†	0.7	-0.8	-33.173 ug/L	-33.173 ppb	19:51:00
3	Na 589.592 Radial†	-960.0	-120.7	-42.555 ug/L	-42.555 ppb	19:50:40
3	Sr 421.552†	18.2	-2.0	-0.0158 ug/L	-0.0158 ppb	19:50:40
3	Sc 361.383	810601.4	810601.4	98.996 %		19:51:57
3	Y 371.029	688977.6	688977.6	99.614 %		19:51:57
3	Ag 328.068†	203.6	20.5	0.1150 ug/L	0.1150 ppb	19:51:57
3	As 188.979†	-24.5	2.1	1.1367 ug/L	1.1367 ppb	19:52:17
3	B 249.677†	-346.5	187.3	5.2485 ug/L	5.2485 ppb	19:52:17
3	Ba 233.527†	-6.4	-5.7	-0.0524 ug/L	-0.0524 ppb	19:52:17
3	Be 313.107†	-3710.1	-16.8	-0.0070 ug/L	-0.0070 ppb	19:51:57
3	Cd 226.502†	-176.0	-7.1	-0.1063 ug/L	-0.1063 ppb	19:52:17
3	Co 228.616†	-39.2	6.6	0.1717 ug/L	0.1717 ppb	19:52:17
3	Cr 267.716†	64.9	-5.9	-0.0768 ug/L	-0.0768 ppb	19:52:17
3	Cu 324.752†	5523.8	27.8	0.0914 ug/L	0.0914 ppb	19:51:57
3	Mn 257.610†	462.3	77.9	0.1076 ug/L	0.1076 ppb	19:52:17
3	Mo 202.031†	14.1	5.7	0.5101 ug/L	0.5101 ppb	19:52:17
3	Ni 231.604†	75.7	-7.6	-0.2411 ug/L	-0.2411 ppb	19:52:17
3	P 214.914†	192.2	6.9	5.0563 ug/L	5.0563 ppb	19:52:17
3	Pb 220.353†	-64.7	-7.1	-1.0910 ug/L	-1.0910 ppb	19:52:17
3	S 181.975 Axial†	33.4	3.6	6.4214 ug/L	6.4214 ppb	19:52:17
3	Sb 206.836†	21.7	-1.7	-0.7282 ug/L	-0.7282 ppb	19:52:17
3	Se 196.026†	-19.8	-3.1	-2.4512 ug/L	-2.4512 ppb	19:52:17
3	Si 251.611†	553.1	70.6	2.6736 ug/L	2.6736 ppb	19:52:17
3	Sn 189.927†	4.3	-2.8	-0.6474 ug/L	-0.6474 ppb	19:52:17
3	Ti 334.940†	-1085.8	24.4	0.0435 ug/L	0.0435 ppb	19:51:57
3	Tl 190.801†	-25.2	3.6	1.3923 ug/L	1.3923 ppb	19:52:17
3	U 409.014†	-2034.7	148.9	4.5133 ug/L	4.5133 ppb	19:51:57
3	V 292.402†	-1294.4	9.9	0.0886 ug/L	0.0886 ppb	19:51:57
3	Zn 213.857†	591.9	27.8	0.3324 ug/L	0.3324 ppb	19:52:17
3	SiO2†	558.8	65.1	5.3011 ug/L	5.3011 ppb	19:52:33

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815719.5	99.621 %	0.6361			0.64%
Sc Radial	4250.0	96.7 %	0.26			0.27%
Y 371.029	693731.8	100.30 %	0.700			0.70%
Y RADIAL	4780.4	100.4 %	0.38			0.37%
Ag 328.068†	7.6	0.0377 ug/L	0.08222	0.0377 ppb	0.08222	217.97%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-4.2	-4.1598 ug/L	8.84105	-4.1598 ppb	8.84105	212.53%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	4.2	2.2859 ug/L	2.40835	2.2859 ppb	2.40835	105.36%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	198.5	5.5679 ug/L	0.42162	5.5679 ppb	0.42162	7.57%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	3.2	0.0295 ug/L	0.07270	0.0295 ppb	0.07270	246.36%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	12.5	0.0053 ug/L	0.01796	0.0053 ppb	0.01796	341.13%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.9	3.5836 ug/L	6.59747	3.5836 ppb	6.59747	184.10%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	-1.2	-0.0181 ug/L	0.10449	-0.0181 ppb		0.10449 577.31%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	4.0	0.1041 ug/L	0.07693	0.1041 ppb		0.07693 73.87%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.6	0.0749 ug/L	0.17217	0.0749 ppb		0.17217 230.02%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	46.4	0.1524 ug/L	0.17456	0.1524 ppb		0.17456 114.56%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	0.3	3.5908 ug/L	30.71399	3.5908 ppb		30.71399 855.36%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	235.1	44.807 ug/L	9.2718	44.807 ppb		9.2718 20.69%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.1	-5.3043 ug/L	25.38050	-5.3043 ppb		25.38050 478.49%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	56.8	0.0753 ug/L	0.03094	0.0753 ppb		0.03094 41.10%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.9	0.4370 ug/L	0.19817	0.4370 ppb		0.19817 45.34%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-112.2	-39.562 ug/L	5.9116	-39.562 ppb		5.9116 14.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-9.5	-0.3014 ug/L	0.14664	-0.3014 ppb		0.14664 48.64%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-0.9	-0.6932 ug/L	7.71855	-0.6932 ppb		7.71855 >999.9%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	7.0	1.0768 ug/L	2.00803	1.0768 ppb		2.00803 186.48%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.7	-4.9069 ug/L	11.07544	-4.9069 ppb		11.07544 225.71%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	1.1	0.4530 ug/L	1.04707	0.4530 ppb		1.04707 231.14%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.9	-2.3767 ug/L	2.00249	-2.3767 ppb		2.00249 84.25%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	52.1	1.9721 ug/L	0.63144	1.9721 ppb		0.63144 32.02%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.6	-0.1410 ug/L	0.50322	-0.1410 ppb		0.50322 356.80%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-13.4	-0.1071 ug/L	0.08014	-0.1071 ppb		0.08014 74.86%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-16.7	-0.0290 ug/L	0.18981	-0.0290 ppb		0.18981 654.86%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.4	2.0766 ug/L	1.24904	2.0766 ppb		1.24904 60.15%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	67.3	2.0422 ug/L	4.65006	2.0422 ppb		4.65006 227.70%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-28.1	-0.2148 ug/L	0.56996	-0.2148 ppb		0.56996 265.32%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	19.2	0.2337 ug/L	0.10744	0.2337 ppb		0.10744 45.98%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	54.2	4.4076 ug/L	1.58010	4.4076 ppb		1.58010 35.85%
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: Sunday, April 11, 2010 12:25:51

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1043

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	3223.8	3223.764	50.641	1.6
Mg	24.0	89591.9	89591.887	1041.216	1.2
Co	58.9	77961.8	77961.763	628.495	0.8
Rh	102.9	143543.8	143543.773	594.571	0.4
In	114.9	197887.8	197887.795	1158.717	0.6
Pb	208.0	229905.9	229905.890	1624.773	0.7
[> Ba	137.9	191326.2	191326.179	1418.614	0.7
[Ba++	69.0	2760.8	0.014	0.000	1.7
[> Ce	139.9	235666.5	235666.484	2198.898	0.9
[CeO	155.9	4920.4	0.021	0.000	1.4
Bkgd	220.0	21.9	21.900	3.305	15.1

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	8.5	4298.3
Co	59	21	9.3	70972.2
In	115	21	10.3	196918.6

ICPMS #5 Instrument Tuning Report

File Name: 100411.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	599	2072	0.544
Be	9.0	9.0	2060	2088	0.571
Mg	24.0	24.0	5695	2100	0.538
Mg	25.0	25.0	5935	2100	0.530
Mg	26.0	26.0	6181	2100	0.543
Co	58.9	58.9	14189	2125	0.561
Rh	102.9	102.9	24872	2180	0.569
In	114.9	114.9	27788	2200	0.570
Ce	139.9	139.9	33870	2220	0.574
Pb	206.0	206.0	49948	2305	0.576
Pb	207.0	207.0	50171	2240	0.633
Pb	208.0	208.0	50451	2280	0.689
U	238.1	238.0	57732	2295	0.690

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Sunday, April 11, 2010 15:29:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: C:\elandata\Dataset\100411\Blank.049

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9		ug/L		20	
[>	Sc	45		ug/L		1014523	
[	Ni	60		ug/L		101	
[>	Ge	74		ug/L		403250	
[	As	75		ug/L		-253	
[	Se	77		ug/L		5171	
[	Se	82		ug/L		14	
[	Kr	83		ug/L		94	
[>	Lu	175		ug/L		546184	
[	Tl	205		ug/L		2516	
[	U	238		ug/L		128	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Tl	205	Linear Thru Zero	
U	238	Linear Thru Zero	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9					
[>	Sc	45					
[	Ni	60					
[>	Ge	74					
[	As	75					
[	Se	77					
[	Se	82					
[	Kr	83					
[>	Lu	175					
[	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

Sample ID: Blank

Report Date/Time: Sunday, April 11, 2010 15:30:00

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Sunday, April 11, 2010 15:33:22

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soli.mth

Dataset File: C:\elandata\Dataset\100411\Standard 1.050

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	10.000	ug/L	0.790	3810	0.004
|>	Sc	45		ug/L		1003367	1003367.275
[	Ni	60	10.000	ug/L	2.008	13842	0.014
|>	Ge	74		ug/L		401913	401912.922
|	As	75	10.000	ug/L	1.804	9744	0.025
|	Se	77		ug/L		6368	0.003
|	Se	82	10.000	ug/L	4.691	975	0.002
[	Kr	83		ug/L		102	0.000
|>	Lu	175		ug/L		539043	539043.465
|	Tl	205	10.000	ug/L	2.573	213529	0.392
[	U	238	10.000	ug/L	1.162	505219	0.937

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9					
|>	Sc	45					
[	Ni	60					
|>	Ge	74					
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
|>	Lu	175					
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: Standard 1

Report Date/Time: Sunday, April 11, 2010 15:34:02

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Sunday, April 11, 2010 15:37:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\Standard 2.051

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	100.008	ug/L	1.258	36884	0.038
Sc	45		ug/L		968491	968491.210
Ni	60	99.959	ug/L	2.632	127395	0.131
Ge	74		ug/L		386018	386017.989
As	75	100.020	ug/L	1.736	97765	0.254
Se	77		ug/L		11341	0.017
Se	82	100.075	ug/L	1.822	10011	0.026
Kr	83		ug/L		115	0.000
Lu	175		ug/L		523588	523588.380
Tl	205	99.912	ug/L	1.764	1885586	3.597
U	238	99.932	ug/L	1.545	4590791	8.769

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45						
Ni	60						
Ge	74						
As	75						
Se	77						
Se	82						
Kr	83						
Lu	175						
Tl	205						
U	238						

QC Out Of Limits

Measurement Type: Analyte

MassOut of Limits Message

QC Action

Sample ID: Standard 2

Report Date/Time: Sunday, April 11, 2010 15:38:05

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Sunday, April 11, 2010 15:41:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 1.052

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.823	ug/L	1.789	18952	0.020
> Sc	45		ug/L		959964	959964.344
Ni	60	53.519	ug/L	2.236	67651	0.070
> Ge	74		ug/L		385593	385592.829
As	75	51.864	ug/L	1.842	50528	0.132
Se	77		ug/L		8039	0.008
Se	82	51.399	ug/L	1.692	5142	0.013
Kr	83		ug/L		95	0.000
> Lu	175		ug/L		522869	522869.346
Ti	205	52.679	ug/L	1.923	993910	1.897
U	238	52.537	ug/L	1.869	2410243	4.610

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9	103.646				
> Sc	45		94.6			
Ni	60	107.039				
> Ge	74		95.6			
As	75	103.729				
Se	77					
Se	82	102.797				
Kr	83					
> Lu	175		95.7			
Ti	205	105.358				
U	238	105.074				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

Sample ID: QC Std 1

Report Date/Time: Sunday, April 11, 2010 15:42:09

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Sunday, April 11, 2010 15:45:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 2.053

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.010	ug/L	48.663	16	-0.000
> Sc	45		ug/L		992102	992102.083
Ni	60	-0.004	ug/L	60.222	93	-0.000
> Ge	74		ug/L		395139	395139.100
As	75	0.285	ug/L	126.997	38	0.001
Se	77		ug/L		5186	0.000
Se	82	0.205	ug/L	93.504	34	0.000
Kr	83		ug/L		86	-0.000
> Lu	175		ug/L		539395	539394.952
Tl	205	0.057	ug/L	8.348	3593	0.002
U	238	0.002	ug/L	18.906	220	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		97.8				
Ni	60						
> Ge	74		98.0				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		98.8				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

Sample ID: QC Std 2

Report Date/Time: Sunday, April 11, 2010 15:46:17

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Sunday, April 11, 2010 15:49:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 3.054

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.623	ug/L	4.593	242	0.000
[> Sc	45		ug/L		943972	943971.545
[Ni	60	2.535	ug/L	0.803	3242	0.003
[> Ge	74		ug/L		384763	384762.755
[As	75	6.476	ug/L	2.957	6082	0.016
[Se	77		ug/L		4934	0.000
[Se	82	5.868	ug/L	2.206	597	0.002
[Kr	83		ug/L		94	0.000
[> Lu	175		ug/L		512548	512547.628
[Tl	205	1.308	ug/L	1.743	26502	0.047
[U	238	0.335	ug/L	1.885	15189	0.029

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	124.557					
[> Sc	45		93.0				
[Ni	60	126.766					
[> Ge	74		95.4				
[As	75	129.514					
[Se	77						
[Se	82	117.356					
[Kr	83						
[> Lu	175		93.8				
[Tl	205	130.836					
[U	238	167.516					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	Tl	205CRDL is out of limits
QC Std 3	U	238CRDL is out of limits

Sample ID: QC Std 3

Report Date/Time: Sunday, April 11, 2010 15:50:21

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Sunday, April 11, 2010 15:53:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 4.055

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.107	ug/L	30.464	55	0.000
> Sc	45		ug/L		904375	904374.518
Ni	60	3.096	ug/L	1.123	3773	0.004
> Ge	74		ug/L		365439	365438.512
As	75	-0.294	ug/L	60.989	-501	-0.001
Se	77		ug/L		5607	0.003
Se	82	-1.090	ug/L	13.466	-91	-0.000
Kr	83		ug/L		223	0.000
> Lu	175		ug/L		494529	494529.324
Tl	205	-0.036	ug/L	2.274	1641	-0.001
U	238	0.001	ug/L	8.631	173	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		89.1			
Ni	60	93.546				
> Ge	74		90.6			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		90.5			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 4

Report Date/Time: Sunday, April 11, 2010 15:54:26

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Sunday, April 11, 2010 15:57:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 5.056

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	19.483	ug/L	1.002	6612	0.007
[> Sc	45		ug/L		889305	889304.507
[Ni	60	21.784	ug/L	0.791	25568	0.029
[> Ge	74		ug/L		355945	355945.493
[As	75	19.543	ug/L	4.042	17433	0.050
[Se	77		ug/L		6773	0.006
[Se	82	19.085	ug/L	1.337	1770	0.005
[Kr	83		ug/L		215	0.000
[> Lu	175		ug/L		499283	499283.082
[Tl	205	19.370	ug/L	1.717	350456	0.697
[U	238	20.880	ug/L	0.933	914850	1.832

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	97.415					
[> Sc	45		87.7				
[Ni	60	93.453					
[> Ge	74		88.3				
[As	75	97.716					
[Se	77						
[Se	82	95.425					
[Kr	83						
[> Lu	175		91.4				
[Tl	205	96.851					
[U	238	104.401					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 5

Report Date/Time: Sunday, April 11, 2010 15:58:31

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, April 11, 2010 16:01:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 6.057

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.621	ug/L	1.741	18794	0.021
> Sc	45		ug/L		886698	886697.990
Ni	60	55.949	ug/L	0.906	65330	0.074
> Ge	74		ug/L		361233	361232.608
As	75	54.207	ug/L	2.467	49465	0.138
Se	77		ug/L		7691	0.008
Se	82	53.934	ug/L	2.114	5053	0.014
Kr	83		ug/L		82	-0.000
> Lu	175		ug/L		506568	506568.500
Tl	205	55.043	ug/L	1.504	1006086	1.982
U	238	55.558	ug/L	0.488	2469698	4.875

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	111.242					
> Sc	45		87.4				
Ni	60	111.899					
> Ge	74		89.6				
As	75	108.414					
Se	77						
Se	82	107.869					
Kr	83						
> Lu	175		92.7				
Tl	205	110.085					
U	238	111.117					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 6	Be	9CCV is out of limits (+/- 10%)
QC Std 6	Ni	60CCV is out of limits (+/- 10%)
QC Std 6	Tl	205CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Sunday, April 11, 2010 16:02:36

Page 1

QC Std 6

U

238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 6

Report Date/Time: Sunday, April 11, 2010 16:02:36

Page 2

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, April 11, 2010 16:06:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 7.058

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.005	ug/L	294.392	21	0.000
[>	Sc	45		ug/L		950670	950670.347
[	Ni	60	-0.001	ug/L	594.578	93	-0.000
[>	Ge	74		ug/L		386357	386356.917
[	As	75	0.120	ug/L	179.327	-125	0.000
[	Se	77		ug/L		5050	0.000
[	Se	82	0.178	ug/L	170.821	31	0.000
[	Kr	83		ug/L		93	0.000
[>	Lu	175		ug/L		536398	536398.060
[	Tl	205	0.043	ug/L	14.556	3292	0.002
[	U	238	0.001	ug/L	35.576	179	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	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
[>	Sc	45		93.7				
[	Ni	60						
[>	Ge	74		95.8				
[	As	75						
[	Se	77						
[	Se	82						
[	Kr	83						
[>	Lu	175		98.2				
[	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: QC Std 7

Report Date/Time: Sunday, April 11, 2010 16:06:44

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 16:38:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.066

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.409	ug/L	2.396	18841	0.021
> Sc	45		ug/L		892428	892428.154
Ni	60	55.256	ug/L	1.210	64952	0.073
> Ge	74		ug/L		366725	366725.035
As	75	52.326	ug/L	1.649	48475	0.133
Se	77		ug/L		8382	0.010
Se	82	51.774	ug/L	1.286	4926	0.013
Kr	83		ug/L		98	0.000
> Lu	175		ug/L		515448	515448.376
Tl	205	54.072	ug/L	0.904	1005786	1.947
U	238	54.125	ug/L	1.167	2448093	4.749

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9	110.818				
> Sc	45		88.0			
Ni	60	110.512				
> Ge	74		90.9			
As	75	104.652				
Se	77					
Se	82	103.547				
Kr	83					
> Lu	175		94.4			
Tl	205	108.145				
U	238	108.251				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 8	Be	9CCV is out of limits (+/- 10%)
QC Std 8	Ni	60CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 16:39:22

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 16:42:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.067

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.020	ug/L	35.262	11	-0.000
> Sc	45		ug/L		946853	946852.961
[Ni	60	-0.004	ug/L	297.935	90	-0.000
> Ge	74		ug/L		382112	382111.716
[As	75	0.178	ug/L	143.091	-67	0.000
| Se	77		ug/L		5795	0.002
| Se	82	0.055	ug/L	242.509	18	0.000
[Kr	83		ug/L		85	-0.000
> Lu	175		ug/L		537441	537440.972
| Tl	205	0.077	ug/L	10.146	3962	0.003
[U	238	0.002	ug/L	25.305	206	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	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		93.3				
[Ni	60						
> Ge	74		94.8				
[As	75						
| Se	77						
| Se	82						
[Kr	83						
> Lu	175		98.4				
| Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 16:43:30

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 17:19:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.076

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	58.795	ug/L	1.137	18273	0.022
> Sc	45		ug/L		815826	815826.033
Ni	60	54.154	ug/L	1.552	58190	0.071
> Ge	74		ug/L		335556	335555.638
As	75	53.073	ug/L	0.594	44998	0.135
Se	77		ug/L		6606	0.007
Se	82	52.451	ug/L	1.940	4566	0.014
Kr	83		ug/L		87	0.000
> Lu	175		ug/L		490442	490442.331
Tl	205	54.610	ug/L	1.109	966362	1.966
U	238	55.216	ug/L	1.850	2375712	4.845

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
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	117.589				
> Sc	45		80.4			
Ni	60	108.308				
> Ge	74		83.2			
As	75	106.145				
Se	77					
Se	82	104.903				
Kr	83					
> Lu	175		89.8			
Tl	205	109.220				
U	238	110.431				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)
QC Std 8	U	238	CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 17:20:14

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 17:23:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.077

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.010	ug/L	210.980	20	0.000
> Sc	45		ug/L		834896	834896.049
Ni	60	0.002	ug/L	688.187	85	0.000
> Ge	74		ug/L		341745	341745.051
As	75	0.215	ug/L	169.877	-28	0.001
Se	77		ug/L		4074	-0.001
Se	82	0.160	ug/L	107.113	26	0.000
Kr	83		ug/L		78	-0.000
> Lu	175		ug/L		501242	501241.800
Tl	205	0.031	ug/L	16.533	2861	0.001
U	238	0.004	ug/L	22.550	299	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		82.3			
Ni	60					
> Ge	74		84.7			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		91.8			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 17:24:22

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 18:00:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.086

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	60.631	ug/L	1.962	18279	0.023
> Sc	45		ug/L		791578	791578.243
Ni	60	55.531	ug/L	1.767	57889	0.073
> Ge	74		ug/L		324832	324832.025
As	75	53.582	ug/L	0.955	43975	0.136
Se	77		ug/L		6226	0.006
Se	82	53.203	ug/L	3.106	4483	0.014
Kr	83		ug/L		98	0.000
> Lu	175		ug/L		483317	483317.283
Ti	205	55.628	ug/L	1.763	970000	2.003
U	238	56.413	ug/L	1.988	2391865	4.950

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	121.261					
> Sc	45		78.0				
Ni	60	111.061					
> Ge	74		80.6				
As	75	107.164					
Se	77						
Se	82	106.406					
Kr	83						
> Lu	175		88.5				
Ti	205	111.256					
U	238	112.825					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 8	Be	9CCV is out of limits (+/- 10%)
In 115 Int Std for QCStd	45	
QC Std 8	Ni	60CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 18:01:10

Page 1

QC Std 8	TI	205CCV is out of limits (+/- 10%)
QC Std 8	U	238CCV is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 18:04:34

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.087

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.011	ug/L	64.073	20	0.000
[> Sc	45		ug/L		821064	821063.897
[Ni	60	0.010	ug/L	95.327	92	0.000
[> Ge	74		ug/L		333371	333371.481
| As	75	0.031	ug/L	305.789	-183	0.000
| Se	77		ug/L		3450	-0.002
| Se	82	-0.093	ug/L	151.374	3	-0.000
[Kr	83		ug/L		86	0.000
[> Lu	175		ug/L		501387	501387.424
| Tl	205	0.024	ug/L	24.843	2736	0.001
[U	238	0.002	ug/L	4.536	221	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		80.9				
[Ni	60						
[> Ge	74		82.7				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		91.8				
| Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 18:05:17

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 18:37:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.095

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	56.556	ug/L	1.691	17502	0.022
> Sc	45		ug/L		812233	812232.591
[Ni	60	52.820	ug/L	0.615	56503	0.069
> Ge	74		ug/L		332346	332346.410
[As	75	51.431	ug/L	1.019	43183	0.131
[Se	77		ug/L		6196	0.006
[Se	82	51.429	ug/L	2.977	4434	0.013
[Kr	83		ug/L		93	0.000
> Lu	175		ug/L		503907	503907.342
[Tl	205	52.717	ug/L	0.384	958699	1.898
[U	238	53.182	ug/L	0.642	2351654	4.667

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
Be	9	113.112				
> Sc	45		80.1			
[Ni	60	105.640				
> Ge	74		82.4			
[As	75	102.862				
[Se	77					
[Se	82	102.858				
[Kr	83					
> Lu	175		92.3			
[Tl	205	105.433				
[U	238	106.364				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 8	Be	9CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 18:38:03

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 18:41:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.096

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.012	ug/L	201.202	21	0.000
> Sc	45		ug/L		855535	855535.218
Ni	60	-0.003	ug/L	380.398	82	-0.000
> Ge	74		ug/L		346132	346131.906
As	75	0.345	ug/L	26.592	86	0.001
Se	77		ug/L		3591	-0.002
Se	82	0.104	ug/L	86.564	21	0.000
Kr	83		ug/L		83	0.000
> Lu	175		ug/L		508762	508761.595
Tl	205	0.129	ug/L	1.085	4706	0.005
U	238	0.004	ug/L	13.124	294	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	1.0000
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		84.3			
Ni	60					
> Ge	74		85.8			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		93.1			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 18:42:11

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 19:18:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.105

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	57.535	ug/L	2.290	17929	0.022
> Sc	45		ug/L		818227	818227.087
Ni	60	52.694	ug/L	1.228	56793	0.069
> Ge	74		ug/L		335966	335965.766
As	75	51.301	ug/L	0.655	43538	0.130
Se	77		ug/L		6014	0.005
Se	82	51.205	ug/L	1.425	4464	0.013
Kr	83		ug/L		83	0.000
> Lu	175		ug/L		500653	500653.461
Tl	205	53.156	ug/L	0.707	960425	1.914
U	238	53.402	ug/L	2.933	2345730	4.686

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	115.070					
> Sc	45		80.7				
Ni	60	105.387					
> Ge	74		83.3				
As	75	102.602					
Se	77						
Se	82	102.410					
Kr	83						
> Lu	175		91.7				
Tl	205	106.312					
U	238	106.805					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Be	9	CCV is out of limits (+/- 10%)

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 19:19:07

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 19:22:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.106

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	-0.001	ug/L	1017.715	16	-0.000
[> Sc	45		ug/L		832117	832116.872
[Ni	60	0.003	ug/L	375.579	87	0.000
[> Ge	74		ug/L		334870	334870.348
[As	75	0.001	ug/L	16502.318	-209	0.000
[Se	77		ug/L		3209	-0.003
[Se	82	0.047	ug/L	300.465	15	0.000
[Kr	83		ug/L		77	-0.000
[> Lu	175		ug/L		507888	507887.612
[Tl	205	0.044	ug/L	15.429	3139	0.002
[U	238	0.001	ug/L	31.097	176	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		82.0				
[Ni	60						
[> Ge	74		83.0				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		93.0				
[Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 19:23:14

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 20:03:40

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.116

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	56.862	ug/L	2.255	17492	0.022
> Sc	45		ug/L		807701	807701.054
Ni	60	53.753	ug/L	1.014	57173	0.071
> Ge	74		ug/L		333858	333857.782
As	75	52.249	ug/L	1.739	44063	0.133
Se	77		ug/L		6334	0.006
Se	82	51.684	ug/L	0.892	4477	0.013
Kr	83		ug/L		91	0.000
> Lu	175		ug/L		500895	500894.810
Tl	205	53.168	ug/L	0.726	961094	1.914
U	238	53.856	ug/L	0.658	2367137	4.726

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	113.724					
> Sc	45		79.6				
Ni	60	107.506					
> Ge	74		82.8				
As	75	104.497					
Se	77						
Se	82	103.367					
Kr	83						
> Lu	175		91.7				
Tl	205	106.337					
U	238	107.712					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 8	Be	9CCV is out of limits (+/- 10%)
In 115 Int Std for QCSc		45

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 20:04:22

Page 1

QC Action

QC Action Line: Continue

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ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 20:07:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.117

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.014	ug/L	73.859	21	0.000
> Sc	45		ug/L		832814	832813.617
[Ni	60	0.023	ug/L	70.576	108	0.000
> Ge	74		ug/L		343271	343270.667
| As	75	0.257	ug/L	67.825	9	0.001
| Se	77		ug/L		3632	-0.002
| Se	82	-0.063	ug/L	180.229	6	-0.000
[Kr	83		ug/L		87	0.000
> Lu	175		ug/L		510834	510834.271
| Tl	205	0.039	ug/L	17.184	3072	0.001
[U	238	0.002	ug/L	14.861	192	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		82.1			
[Ni	60					
> Ge	74		85.1			
| As	75					
| Se	77					
| Se	82					
[Kr	83					
> Lu	175		93.5			
| Tl	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 20:08:30

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053047

Sample Date/Time: Sunday, April 11, 2010 20:11:54

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\ani soil.mth

Dataset File: C:\elandata\Dataset\100411\1202053047.118

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.016	ug/L	206.702	21	0.000
> Sc	45		ug/L		800622	800621.896
[Ni	60	0.204	ug/L	3.126	295	0.000
> Ge	74		ug/L		321440	321440.259
[As	75	0.086	ug/L	137.109	-131	0.000
[Se	77		ug/L		2779	-0.004
[Se	82	-0.254	ug/L	130.591	-10	-0.000
[Kr	83		ug/L		92	0.000
> Lu	175		ug/L		499887	499886.951
[Ti	205	-0.020	ug/L	22.870	1942	-0.001
[U	238	0.005	ug/L	7.647	338	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
> Sc	45		78.9				
[Ni	60						
> Ge	74		79.7				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
> Lu	175		91.5				
[Ti	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: 1202053047

Report Date/Time: Sunday, April 11, 2010 20:12:37

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053052

Sample Date/Time: Sunday, April 11, 2010 20:16:01

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957490|40|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\1202053052.119

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	25.150	ug/L	1.127	7902	0.010
Sc	45		ug/L		823762	823762.236
Ni	60	39.866	ug/L	2.409	43257	0.052
Ge	74		ug/L		334933	334932.511
As	75	30.425	ug/L	3.816	25649	0.077
Se	77		ug/L		8700	0.013
Se	82	79.970	ug/L	1.663	6942	0.021
Kr	83		ug/L		88	0.000
Lu	175		ug/L		507131	507130.997
Tl	205	34.596	ug/L	2.736	633883	1.246
U	238	0.674	ug/L	1.086	30094	0.059

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		81.2			
Ni	60					
Ge	74		83.1			
As	75					
Se	77					
Se	82					
Kr	83					
Lu	175		92.8			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: 1202053052

Report Date/Time: Sunday, April 11, 2010 20:16:44

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770001

Sample Date/Time: Sunday, April 11, 2010 20:20:09

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770001.120

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	4.150	ug/L	6.742	1305	0.002
> Sc	45		ug/L		816550	816549.796
Ni	60	3.594	ug/L	4.072	3940	0.005
> Ge	74		ug/L		326430	326429.575
As	75	2.932	ug/L	14.283	2225	0.007
Se	77		ug/L		2673	-0.005
Se	82	0.372	ug/L	25.779	42	0.000
Kr	83		ug/L		147	0.000
> Lu	175		ug/L		538170	538170.435
Tl	205	0.302	ug/L	8.412	8336	0.011
U	238	3.163	ug/L	2.007	149463	0.278

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		80.5			
Ni	60					
> Ge	74		80.9			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		98.5			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: 247770001

Report Date/Time: Sunday, April 11, 2010 20:20:52

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053048

Sample Date/Time: Sunday, April 11, 2010 20:24:16

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\ani soil.mth

Dataset File: C:\elandata\Dataset\100411\1202053048.121

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	4.910	ug/L	3.797	1533	0.002
>	Sc	45		ug/L		812308	812307.542
[	Ni	60	4.252	ug/L	0.413	4623	0.006
>	Ge	74		ug/L		326231	326231.214
|	As	75	3.543	ug/L	15.493	2723	0.009
|	Se	77		ug/L		2569	-0.005
|	Se	82	0.418	ug/L	124.214	47	0.000
[	Kr	83		ug/L		164	0.000
>	Lu	175		ug/L		535567	535566.716
|	Tl	205	0.136	ug/L	3.251	5091	0.005
[	U	238	3.655	ug/L	2.590	171886	0.321

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[	Be	9				
>	Sc	45		80.1		
[	Ni	60				
>	Ge	74		80.9		
|	As	75				
|	Se	77				
|	Se	82				
[	Kr	83				
>	Lu	175		98.1		
|	Tl	205				
[	U	238				

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

Sample ID: 1202053048

Report Date/Time: Sunday, April 11, 2010 20:24:59

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053050

Sample Date/Time: Sunday, April 11, 2010 20:28:24

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\1202053050.122

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	32.784	ug/L	2.524	9934	0.012
[>	Sc	45		ug/L		795009	795008.633
[	Ni	60	29.580	ug/L	1.904	31007	0.039
[>	Ge	74		ug/L		316515	316515.305
[	As	75	40.161	ug/L	1.263	32066	0.102
[	Se	77		ug/L		2999	-0.003
[	Se	82	9.400	ug/L	5.801	781	0.002
[	Kr	83		ug/L		160	0.000
[>	Lu	175		ug/L		524211	524211.038
[	Tl	205	49.350	ug/L	3.885	933328	1.777
[	U	238	30.402	ug/L	1.959	1398209	2.668

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
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	78.4			
[	Ni	60				
[>	Ge	74	78.5			
[	As	75				
[	Se	77				
[	Se	82				
[	Kr	83				
[>	Lu	175	96.0			
[	Tl	205				
[U	238				

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
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QC Action

Sample ID: 1202053050

Report Date/Time: Sunday, April 11, 2010 20:29:07

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053051

Sample Date/Time: Sunday, April 11, 2010 20:32:32

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\1202053051.123

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	31.357	ug/L	1.647	9667	0.012
[> Sc	45		ug/L		808483	808482.612
[Ni	60	28.204	ug/L	1.402	30066	0.037
[> Ge	74		ug/L		324127	324127.412
[As	75	38.832	ug/L	1.382	31741	0.099
[Se	77		ug/L		3009	-0.004
[Se	82	8.523	ug/L	3.828	726	0.002
[Kr	83		ug/L		165	0.000
[> Lu	175		ug/L		533946	533946.451
[Tl	205	47.385	ug/L	0.615	913384	1.706
[U	238	28.919	ug/L	0.294	1355040	2.538

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		79.7				
[Ni	60						
[> Ge	74		80.4				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		97.8				
[Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: 1202053051

Report Date/Time: Sunday, April 11, 2010 20:33:14

Page 1

QC Action Line: No QC out of limits detected

Sample ID: 1202053051

Report Date/Time: Sunday, April 11, 2010 20:33:14

Page 2

ICPMS#5 - Summary Report

Sample ID: 1202053049

Sample Date/Time: Sunday, April 11, 2010 20:36:39

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957490|10|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\1202053049.124

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.869	ug/L	5.070	275	0.000
> Sc	45		ug/L		784828	784827.637
Ni	60	0.958	ug/L	2.040	1067	0.001
> Ge	74		ug/L		318948	318948.394
As	75	0.689	ug/L	41.401	357	0.002
Se	77		ug/L		3047	-0.003
Se	82	0.108	ug/L	121.217	20	0.000
Kr	83		ug/L		85	0.000
> Lu	175		ug/L		494669	494668.646
Tl	205	0.158	ug/L	7.529	5087	0.006
U	238	0.674	ug/L	2.018	29359	0.059

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
> Sc	45		77.4				
Ni	60						
> Ge	74		79.1				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		90.6				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

Sample ID: 1202053049

Report Date/Time: Sunday, April 11, 2010 20:37:22

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Sunday, April 11, 2010 20:40:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 8.125

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	54.513	ug/L	1.048	17076	0.021
>	Sc	45		ug/L		822213	822212.755
[	Ni	60	50.552	ug/L	1.066	54740	0.066
>	Ge	74		ug/L		338600	338599.533
|	As	75	49.265	ug/L	1.966	42128	0.125
|	Se	77		ug/L		6358	0.006
|	Se	82	49.616	ug/L	1.211	4359	0.013
[	Kr	83		ug/L		81	0.000
>	Lu	175		ug/L		513079	513079.429
|	Tl	205	51.186	ug/L	1.195	947796	1.843
[	U	238	51.889	ug/L	1.284	2336080	4.553

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
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	109.026					
>	Sc	45		81.0				
[	Ni	60	101.104					
>	Ge	74		84.0				
|	As	75	98.529					
|	Se	77						
|	Se	82	99.231					
[	Kr	83						
>	Lu	175		93.9				
|	Tl	205	102.372					
[	U	238	103.777					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: QC Std 8

Report Date/Time: Sunday, April 11, 2010 20:41:28

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Sunday, April 11, 2010 20:44:53

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nani soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 9.126

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.002	ug/L	333.841	17	0.000
> Sc	45		ug/L		811034	811033.743
Ni	60	0.007	ug/L	164.061	89	0.000
> Ge	74		ug/L		336033	336032.891
As	75	0.177	ug/L	326.671	-61	0.000
Se	77		ug/L		3734	-0.002
Se	82	-0.157	ug/L	172.725	-2	-0.000
Kr	83		ug/L		87	0.000
> Lu	175		ug/L		505750	505749.566
Tl	205	0.097	ug/L	1.181	4092	0.003
U	238	0.003	ug/L	19.523	270	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		79.9				
Ni	60						
> Ge	74		83.3				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		92.6				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for QCStd		45	

Sample ID: QC Std 9

Report Date/Time: Sunday, April 11, 2010 20:45:36

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: 247770002

Sample Date/Time: Sunday, April 11, 2010 20:49:00

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soll.mth

Dataset File: C:\elandata\Dataset\100411\247770002.127

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.670	ug/L	2.089	848	0.001
> Sc	45		ug/L		818565	818565.400
[Ni	60	3.631	ug/L	1.571	3990	0.005
> Ge	74		ug/L		327052	327052.143
| As	75	1.779	ug/L	15.138	1270	0.005
| Se	77		ug/L		2665	-0.005
| Se	82	0.623	ug/L	19.078	64	0.000
[Kr	83		ug/L		176	0.000
> Lu	175		ug/L		552390	552390.280
| Tl	205	0.053	ug/L	6.291	3590	0.002
[U	238	4.689	ug/L	1.094	227421	0.411

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
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		80.7			
[Ni	60					
> Ge	74		81.1			
| As	75					
| Se	77					
| Se	82					
[Kr	83					
> Lu	175		101.1			
| Tl	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: 247770002

Report Date/Time: Sunday, April 11, 2010 20:49:43

Page 1

QC Action Line: No QC out of limits detected

Sample ID: 247770002

Report Date/Time: Sunday, April 11, 2010 20:49:43

Page 2

ICPMS#5 - Summary Report

Sample ID: 247770003

Sample Date/Time: Sunday, April 11, 2010 20:53:08

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770003.128

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.125	ug/L	3.206	371	0.000
[> Sc	45		ug/L		829272	829272.281
[Ni	60	1.893	ug/L	3.726	2148	0.002
[> Ge	74		ug/L		332482	332481.886
[As	75	0.665	ug/L	12.543	353	0.002
[Se	77		ug/L		2572	-0.005
[Se	82	0.273	ug/L	46.016	35	0.000
[Kr	83		ug/L		121	0.000
[> Lu	175		ug/L		531778	531778.238
[Tl	205	-0.005	ug/L	99.312	2351	-0.000
[U	238	2.407	ug/L	2.959	112411	0.211

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		81.7			
[Ni	60					
[> Ge	74		82.5			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		97.4			
[Tl	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: 247770003

Report Date/Time: Sunday, April 11, 2010 20:53:51

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770004

Sample Date/Time: Sunday, April 11, 2010 20:57:16

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770004.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	3.033	ug/L	2.498	950	0.001
[> Sc	45		ug/L		809039	809038.771
[Ni	60	3.316	ug/L	2.140	3608	0.004
[> Ge	74		ug/L		323394	323394.470
[As	75	2.079	ug/L	10.819	1505	0.005
[Se	77		ug/L		2523	-0.005
[Se	82	0.448	ug/L	51.221	48	0.000
[Kr	83		ug/L		191	0.000
[> Lu	175		ug/L		552966	552965.937
[Tl	205	0.012	ug/L	7.870	2779	0.000
[U	238	5.261	ug/L	1.677	255357	0.462

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		79.7			
[Ni	60					
[> Ge	74		80.2			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		101.2			
[Tl	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: 247770004

Report Date/Time: Sunday, April 11, 2010 20:57:59

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770005

Sample Date/Time: Sunday, April 11, 2010 21:01:24

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770005.130

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	1.770	ug/L	4.248	557	0.001
[>	Sc	45		ug/L		803750	803750.084
[	Ni	60	2.657	ug/L	1.452	2889	0.003
[>	Ge	74		ug/L		320838	320838.130
|	As	75	0.888	ug/L	16.270	523	0.002
|	Se	77		ug/L		2417	-0.005
|	Se	82	0.110	ug/L	336.288	20	0.000
[	Kr	83		ug/L		157	0.000
[>	Lu	175		ug/L		534378	534378.476
|	Tl	205	-0.025	ug/L	1.262	1974	-0.001
[	U	238	3.749	ug/L	1.408	175883	0.329

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
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		79.2			
[	Ni	60					
[>	Ge	74		79.6			
|	As	75					
|	Se	77					
|	Se	82					
[	Kr	83					
[>	Lu	175		97.8			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: 247770005

Report Date/Time: Sunday, April 11, 2010 21:02:07

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770006

Sample Date/Time: Sunday, April 11, 2010 21:05:32

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770006.131

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.439	ug/L	1.775	750	0.001
> Sc	45		ug/L		791116	791115.653
Ni	60	2.190	ug/L	1.435	2358	0.003
> Ge	74		ug/L		318353	318352.698
As	75	1.258	ug/L	24.272	817	0.003
Se	77		ug/L		2409	-0.005
Se	82	0.508	ug/L	41.998	52	0.000
Kr	83		ug/L		165	0.000
> Lu	175		ug/L		542815	542815.485
Tl	205	-0.028	ug/L	5.046	1949	-0.001
U	238	4.927	ug/L	1.955	234816	0.432

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		78.0			
Ni	60					
> Ge	74		78.9			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		99.4			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

Sample ID: 247770006

Report Date/Time: Sunday, April 11, 2010 21:06:15

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770007

Sample Date/Time: Sunday, April 11, 2010 21:09:40

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770007.132

Concentration Results

	Analyte	Mass	Conc.	Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	2.010		ug/L	9.625	629	0.001
[>	Sc	45			ug/L		801938	801937.746
[	Ni	60	3.201		ug/L	1.110	3456	0.004
[>	Ge	74			ug/L		321596	321595.950
|	As	75	1.424		ug/L	12.537	961	0.004
|	Se	77			ug/L		2400	-0.005
|	Se	82	0.297		ug/L	19.290	35	0.000
[	Kr	83			ug/L		136	0.000
[>	Lu	175			ug/L		540993	540993.428
|	Tl	205	-0.015		ug/L	14.738	2207	-0.001
|	U	238	2.867		ug/L	1.213	136215	0.252

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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		79.0			
[Ni	60					
[> Ge	74		79.8			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		99.0			
[Tl	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: 247770007

Report Date/Time: Sunday, April 11, 2010 21:10:23

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770008

Sample Date/Time: Sunday, April 11, 2010 21:13:48

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soli.mth

Dataset File: C:\elandata\Dataset\100411\247770008.133

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.620	ug/L	7.866	504	0.001
> Sc	45		ug/L		791374	791374.415
Ni	60	3.267	ug/L	1.552	3479	0.004
> Ge	74		ug/L		318036	318035.775
As	75	0.777	ug/L	44.446	429	0.002
Se	77		ug/L		2345	-0.005
Se	82	0.102	ug/L	75.851	19	0.000
Kr	83		ug/L		147	0.000
> Lu	175		ug/L		521704	521703.769
Tl	205	-0.014	ug/L	12.766	2134	-0.001
U	238	3.354	ug/L	0.917	153677	0.294

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
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		78.0				
Ni	60						
> Ge	74		78.9				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		95.5				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte

Mass Out of Limits Message

QC Action

Sample ID: 247770008

Report Date/Time: Sunday, April 11, 2010 21:14:31

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770009

Sample Date/Time: Sunday, April 11, 2010 21:17:56

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770009.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.679	ug/L	3.943	829	0.001
[> Sc	45		ug/L		798114	798113.963
[Ni	60	1.885	ug/L	2.615	2059	0.002
[> Ge	74		ug/L		316265	316265.346
[As	75	1.626	ug/L	27.390	1107	0.004
[Se	77		ug/L		2295	-0.006
[Se	82	0.287	ug/L	56.173	34	0.000
[Kr	83		ug/L		186	0.000
[> Lu	175		ug/L		540794	540793.718
[Ti	205	-0.048	ug/L	3.440	1564	-0.002
[U	238	4.941	ug/L	1.493	234587	0.434

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Ti	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		78.7			
[Ni	60					
[> Ge	74		78.4			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		99.0			
[Ti	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

Sample ID: 247770009

Report Date/Time: Sunday, April 11, 2010 21:18:39

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770010

Sample Date/Time: Sunday, April 11, 2010 21:22:04

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\ani soil.mth

Dataset File: C:\elandata\Dataset\100411\247770010.135

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.837	ug/L	1.103	877	0.001
Sc	45		ug/L		797172	797171.879
Ni	60	2.700	ug/L	3.066	2910	0.004
Ge	74		ug/L		315107	315106.777
As	75	1.442	ug/L	15.035	956	0.004
Se	77		ug/L		2341	-0.005
Se	82	0.377	ug/L	36.579	41	0.000
Kr	83		ug/L		160	0.000
Lu	175		ug/L		535803	535803.120
Tl	205	-0.043	ug/L	5.569	1630	-0.002
U	238	4.577	ug/L	1.521	215289	0.402

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		78.6				
Ni	60						
Ge	74		78.1				
As	75						
Se	77						
Se	82						
Kr	83						
Lu	175		98.1				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

Sample ID: 247770010

Report Date/Time: Sunday, April 11, 2010 21:22:47

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770011

Sample Date/Time: Sunday, April 11, 2010 21:26:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\247770011.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.982	ug/L	2.678	916	0.001
[> Sc	45		ug/L		793375	793374.564
[Ni	60	3.626	ug/L	2.021	3862	0.005
[> Ge	74		ug/L		317968	317968.329
[As	75	1.307	ug/L	10.250	855	0.003
[Se	77		ug/L		2368	-0.005
[Se	82	0.424	ug/L	37.029	46	0.000
[Kr	83		ug/L		161	0.000
[> Lu	175		ug/L		536201	536201.048
[Tl	205	-0.040	ug/L	7.011	1688	-0.001
[U	238	4.802	ug/L	2.195	226031	0.421

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45		78.2			
[Ni	60					
[> Ge	74		78.9			
[As	75					
[Se	77					
[Se	82					
[Kr	83					
[> Lu	175		98.2			
[Tl	205					
[U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

Sample ID: 247770011

Report Date/Time: Sunday, April 11, 2010 21:26:50

Page 1

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Sunday, April 11, 2010 21:30:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 6.137

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	55.757	ug/L	1.892	17445	0.021
> Sc	45		ug/L		821464	821464.411
[Ni	60	51.734	ug/L	0.221	55974	0.068
[> Ge	74		ug/L		334817	334816.587
| As	75	50.692	ug/L	1.935	42866	0.129
| Se	77		ug/L		6172	0.006
| Se	82	51.211	ug/L	0.959	4448	0.013
[Kr	83		ug/L		90	0.000
[> Lu	175		ug/L		509767	509766.722
| Tl	205	52.557	ug/L	2.077	966737	1.892
[U	238	53.049	ug/L	2.004	2372589	4.655

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	111.514					
> Sc	45		81.0				
[Ni	60	103.468					
[> Ge	74		83.0				
| As	75	101.384					
| Se	77						
| Se	82	102.422					
[Kr	83						
[> Lu	175		93.3				
| Tl	205	105.114					
[U	238	106.097					

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 6	Be	9	CCV is out of limits (+/- 10%)

Sample ID: QC Std 6

Report Date/Time: Sunday, April 11, 2010 21:30:56

Page 1

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Sunday, April 11, 2010 21:34:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil.mth

Dataset File: C:\elandata\Dataset\100411\QC Std 7.138

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.005	ug/L	245.057	17	0.000
[> Sc	45		ug/L		798318	798317.646
[Ni	60	0.004	ug/L	251.103	84	0.000
[> Ge	74		ug/L		327012	327012.112
[As	75	0.255	ug/L	148.828	5	0.001
[Se	77		ug/L		3428	-0.002
[Se	82	0.029	ug/L	791.724	13	0.000
[Kr	83		ug/L		74	-0.000
[> Lu	175		ug/L		491668	491668.114
[Tl	205	0.047	ug/L	12.677	3089	0.002
[U	238	0.001	ug/L	27.470	179	0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		78.7				
[Ni	60						
[> Ge	74		81.1				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		90.0				
[Tl	205						
[U	238						

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
In 115 Int Std for QCStd		45

Sample ID: QC Std 7

Report Date/Time: Sunday, April 11, 2010 21:35:04

Page 1

QC Action

QC Action Line: Continue

ICPMS #5 Daily Performance Report

Sample ID: Sample

Sample Date/Time: Monday, April 12, 2010 12:06:55

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1047

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	1600.7	1600.690	66.606	4.2
Mg	24.0	42537.5	42537.482	1284.267	3.0
Co	58.9	65006.2	65006.172	391.198	0.6
Rh	102.9	127267.0	127267.002	942.029	0.7
In	114.9	184150.5	184150.534	1137.512	0.6
Pb	208.0	214713.3	214713.337	559.415	0.3
[> Ba	137.9	172158.1	172158.058	849.562	0.5
[Ba++	69.0	1998.4	0.012	0.000	1.4
[> Ce	139.9	211469.3	211469.349	1635.986	0.8
[CeO	155.9	4156.7	0.020	0.001	2.7
Bkgd	220.0	20.6	20.600	2.559	12.4

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	7.0	3575.4
Co	59	21	8.3	64290.0
In	115	21	9.8	174307.3

ICPMS #5 Instrument Tuning Report

File Name: 100412.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	601	2072	0.537
Be	9.0	9.0	2052	2088	0.534
Mg	24.0	24.0	5693	2100	0.514
Mg	25.0	25.0	5933	2100	0.500
Mg	26.0	26.0	6180	2100	0.514
Co	58.9	58.9	14187	2125	0.535
Rh	102.9	102.9	24877	2180	0.538
In	114.9	114.9	27793	2200	0.533
Ce	139.9	139.9	33875	2220	0.545
Pb	206.0	206.0	49948	2305	0.528
Pb	207.0	207.0	50171	2240	0.592
Pb	208.0	208.0	50451	2280	0.646
U	238.1	238.0	57726	2295	0.643

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, April 12, 2010 17:46:35

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\Blank.128

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9		ug/L		18	
[> Sc	45		ug/L		718101	
[Ni	60		ug/L		117	
[Zn	66		ug/L		336	
| Zn	67		ug/L		5654	
| Zn	68		ug/L		727	
[> Ge	74		ug/L		297379	
| As	75		ug/L		-310	
| Se	77		ug/L		4467	
| Se	82		ug/L		-3	
[Kr	83		ug/L		87	
[> Lu	175		ug/L		413623	
[Pb	208		ug/L		4166	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Linear Thru Zero	
Sc	45	Linear Thru Zero	
Ni	60	Linear Thru Zero	
Zn	66	Linear Thru Zero	
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
Ge	74	Linear Thru Zero	
As	75	Linear Thru Zero	
Se	77	Linear Thru Zero	
Se	82	Linear Thru Zero	
Kr	83	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel. % Difference
[Be	9					
[> Sc	45					
[Ni	60					
[Zn	66					
| Zn	67					
| Zn	68					
[> Ge	74					
| As	75					
| Se	77					
| Se	82					
[Kr	83					
[> Lu	175					
[Pb	208					

Sample ID: Blank

Report Date/Time: Monday, April 12, 2010 17:47:30

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, April 12, 2010 17:49:28

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil 3.mth

Dataset File: C:\elandata\Dataset\100412\Standard 1.129

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	10.000	ug/L	7.792	1883	0.003
> Sc	45		ug/L		711358	711357.688
[Ni	60	10.000	ug/L	0.614	10626	0.015
[Zn	66	10.000	ug/L	0.546	8502	0.028
| Zn	67		ug/L		6880	0.004
| Zn	68		ug/L		6473	0.019
> Ge	74		ug/L		295892	295891.845
| As	75	10.000	ug/L	5.855	7493	0.026
| Se	77		ug/L		5025	0.002
| Se	82	10.000	ug/L	5.130	740	0.003
[Kr	83		ug/L		88	0.000
> Lu	175		ug/L		408659	408659.188
[Pb	208	10.000	ug/L	0.853	318995	0.771

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[Be	9					
> Sc	45					
[Ni	60					
[Zn	66					
| Zn	67					
| Zn	68					
> Ge	74					
| As	75					
| Se	77					
| Se	82					
[Kr	83					
> Lu	175					
[Pb	208					

Sample ID: Standard 1

Report Date/Time: Monday, April 12, 2010 17:50:20

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, April 12, 2010 17:52:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\Standard 2.130

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	99.972	ug/L	6.368	18513	0.026
> Sc	45		ug/L		724996	724996.191
[Ni	60	99.948	ug/L	1.451	101919	0.140
[Zn	66	99.994	ug/L	1.150	82397	0.274
| Zn	67		ug/L		17787	0.040
| Zn	68		ug/L		57895	0.191
> Ge	74		ug/L		299158	299157.980
| As	75	99.978	ug/L	0.589	76824	0.258
| Se	77		ug/L		10150	0.019
| Se	82	100.025	ug/L	1.078	7707	0.026
[Kr	83		ug/L		101	0.000
> Lu	175		ug/L		423573	423572.729
[Pb	208	99.901	ug/L	1.031	2970121	7.003

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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						
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
> Ge	74						
| As	75						
| Se	77						
| Se	82						
[Kr	83						
> Lu	175						
[Pb	208						

Sample ID: Standard 2

Report Date/Time: Monday, April 12, 2010 17:53:11

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, April 12, 2010 17:55:09

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 1.131

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	49.563	ug/L	5.506	9531	0.013
> Sc	45		ug/L		752011	752011.431
[Ni	60	49.013	ug/L	1.645	51901	0.069
[Zn	66	48.720	ug/L	1.530	41551	0.134
| Zn	67		ug/L		11974	0.020
| Zn	68		ug/L		29328	0.093
> Ge	74		ug/L		308322	308321.753
| As	75	49.222	ug/L	1.671	38813	0.127
| Se	77		ug/L		7520	0.009
| Se	82	50.323	ug/L	6.279	3993	0.013
[Kr	83		ug/L		88	-0.000
> Lu	175		ug/L		436061	436061.185
[Pb	208	49.413	ug/L	0.612	1514732	3.464

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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	99.126					
> Sc	45		104.7				
[Ni	60	98.027					
[Zn	66	97.440					
| Zn	67						
| Zn	68						
> Ge	74		103.7				
| As	75	98.444					
| Se	77						
| Se	82	100.646					
[Kr	83						
> Lu	175		105.4				
[Pb	208	98.826					

Sample ID: QC Std 1

Report Date/Time: Monday, April 12, 2010 17:56:02

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, April 12, 2010 17:58:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 2.132

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.011	ug/L	76.098	21	0.000
> Sc	45		ug/L		743400	743399.964
[Ni	60	-0.010	ug/L	106.814	111	-0.000
[Zn	66	0.010	ug/L	187.637	355	0.000
| Zn	67		ug/L		5832	-0.000
| Zn	68		ug/L		753	0.000
> Ge	74		ug/L		306851	306851.253
| As	75	0.295	ug/L	129.678	-87	0.001
| Se	77		ug/L		4669	0.000
| Se	82	0.277	ug/L	92.445	18	0.000
[Kr	83		ug/L		82	-0.000
> Lu	175		ug/L		422665	422664.920
[Pb	208	-0.017	ug/L	31.446	3766	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		103.5				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
> Ge	74		103.2				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
> Lu	175		102.2				
[Pb	208						

Sample ID: QC Std 2

Report Date/Time: Monday, April 12, 2010 17:58:57

Page 1

QC Out Of Limits

Measurement Type: Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, April 12, 2010 18:00:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 3.133

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.577	ug/L	17.507	125	0.000
>	Sc	45		ug/L		727560	727560.027
[	Ni	60	2.338	ug/L	2.069	2508	0.003
|	Zn	66	11.384	ug/L	0.319	9800	0.031
|	Zn	67		ug/L		7373	0.005
|	Zn	68		ug/L		7386	0.022
>	Ge	74		ug/L		302867	302867.327
|	As	75	5.669	ug/L	5.166	4113	0.015
|	Se	77		ug/L		4881	0.001
|	Se	82	5.389	ug/L	9.543	417	0.001
[	Kr	83		ug/L		94	0.000
>	Lu	175		ug/L		411906	411905.868
[	Pb	208	2.411	ug/L	0.496	73757	0.169

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9	115.381					
>	Sc	45		101.3				
[	Ni	60	116.882					
[	Zn	66	113.836					
|	Zn	67						
|	Zn	68						
>	Ge	74		101.8				
|	As	75	113.371					
|	Se	77						
|	Se	82	107.776					
[	Kr	83						
>	Lu	175		99.6				
[	Pb	208	120.542					

Sample ID: QC Std 3

Report Date/Time: Monday, April 12, 2010 18:01:49

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 12, 2010 18:03:47

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 4.134

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.091	ug/L	19.694	33	0.000
> Sc	45		ug/L		675218	675217.865
[Ni	60	2.919	ug/L	4.641	2878	0.004
[Zn	66	3.422	ug/L	3.196	2927	0.009
| Zn	67		ug/L		5151	-0.001
| Zn	68		ug/L		1266	0.002
> Ge	74		ug/L		278312	278311.655
| As	75	0.019	ug/L	1234.273	-276	0.000
| Se	77		ug/L		4818	0.002
| Se	82	-0.879	ug/L	30.294	-66	-0.000
[Kr	83		ug/L		177	0.000
> Lu	175		ug/L		386548	386547.839
[Pb	208	0.206	ug/L	2.298	9462	0.014

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[Be	9					
> Sc	45		94.0			
[Ni	60	88.180				
[Zn	66	91.008				
| Zn	67					
| Zn	68					
> Ge	74		93.6			
| As	75					
| Se	77					
| Se	82					
[Kr	83					
> Lu	175		93.5			
[Pb	208	108.763				

Sample ID: QC Std 4

Report Date/Time: Monday, April 12, 2010 18:04:41

Page 1

QC Out Of Limits

Measurement Type: Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 12, 2010 18:06:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 5.135

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	21.033	ug/L	5.685	3571	0.005
[> Sc	45		ug/L		662460	662459.992
[Ni	60	22.219	ug/L	0.668	20787	0.031
[Zn	66	22.289	ug/L	1.460	16928	0.061
[Zn	67		ug/L		7177	0.007
[Zn	68		ug/L		11041	0.038
[> Ge	74		ug/L		271828	271827.572
[As	75	20.656	ug/L	0.463	14197	0.053
[Se	77		ug/L		5750	0.006
[Se	82	20.549	ug/L	2.180	1436	0.005
[Kr	83		ug/L		175	0.000
[> Lu	175		ug/L		377788	377788.130
[Pb	208	20.825	ug/L	0.657	555245	1.460

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[Be	9	105.165					
[> Sc	45		92.3				
[Ni	60	95.319					
[Zn	66	93.811					
[Zn	67						
[Zn	68						
[> Ge	74		91.4				
[As	75	103.278					
[Se	77						
[Se	82	102.747					
[Kr	83						
[> Lu	175		91.3				
[Pb	208	103.149					

Sample ID: QC Std 5

Report Date/Time: Monday, April 12, 2010 18:07:33

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 12, 2010 18:09:32

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 6.136

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	48.721	ug/L	9.649	9283	0.012
> Sc	45		ug/L		745747	745746.512
Ni	60	48.636	ug/L	0.906	51076	0.068
Zn	66	47.950	ug/L	1.376	40114	0.132
Zn	67		ug/L		11474	0.019
Zn	68		ug/L		28825	0.093
> Ge	74		ug/L		302377	302377.171
As	75	49.186	ug/L	1.274	38038	0.127
Se	77		ug/L		7405	0.009
Se	82	50.338	ug/L	1.448	3918	0.013
Kr	83		ug/L		95	0.000
> Lu	175		ug/L		423612	423612.286
Pb	208	49.765	ug/L	1.064	1481847	3.488

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	97.442					
> Sc	45		103.8				
Ni	60	97.272					
Zn	66	95.900					
Zn	67						
Zn	68						
> Ge	74		101.7				
As	75	98.372					
Se	77						
Se	82	100.675					
Kr	83						
> Lu	175		102.4				
Pb	208	99.529					

Sample ID: QC Std 6

Report Date/Time: Monday, April 12, 2010 18:10:26

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 12, 2010 18:12:26

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 7.137

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.040	ug/L	32.588	26	0.000
>	Sc	45		ug/L		729200	729199.549
[	Ni	60	0.002	ug/L	26.528	121	0.000
[	Zn	66	-0.007	ug/L	323.567	329	-0.000
|	Zn	67		ug/L		5441	-0.001
|	Zn	68		ug/L		699	-0.000
>	Ge	74		ug/L		296246	296246.085
|	As	75	0.649	ug/L	47.663	187	0.002
|	Se	77		ug/L		4683	0.001
|	Se	82	0.228	ug/L	61.159	14	0.000
[	Kr	83		ug/L		79	-0.000
>	Lu	175		ug/L		413419	413419.329
[	Pb	208	0.005	ug/L	101.291	4307	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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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		101.5				
[	Ni	60						
[	Zn	66						
|	Zn	67						
|	Zn	68						
>	Ge	74		99.6				
|	As	75						
|	Se	77						
|	Se	82						
[	Kr	83						
>	Lu	175		100.0				
[	Pb	208						

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 18:13:21

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Monday, April 12, 2010 18:13:21

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ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Monday, April 12, 2010 18:15:19

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 10.138

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1013.904	ug/L	7.594	171399	0.259
[> Sc	45		ug/L		662564	662564.155
[Ni	60	930.346	ug/L	1.696	866006	1.307
[Zn	66	2154.146	ug/L	2.233	1616861	5.909
[Zn	67		ug/L		266552	0.955
[Zn	68		ug/L		1150525	4.204
[> Ge	74		ug/L		273612	273611.801
[As	75	951.134	ug/L	2.435	670720	2.453
[Se	77		ug/L		30099	0.095
[Se	82	496.482	ug/L	1.967	34996	0.128
[Kr	83		ug/L		152	0.000
[> Lu	175		ug/L		390884	390883.546
[Pb	208	5020.955	ug/L	1.286	137559258	351.942

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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	101.390				
[> Sc	45		92.3			
[Ni	60	93.035				
[Zn	66	86.166				
[Zn	67					
[Zn	68					
[> Ge	74		92.0			
[As	75	95.113				
[Se	77					
[Se	82	99.296				
[Kr	83					
[> Lu	175		94.5			
[Pb	208	100.419				

Sample ID: QC Std 10

Report Date/Time: Monday, April 12, 2010 18:16:12

Page 1

QC Out Of Limits

Measurement Type Analyte
QC Std 10 Zn

MassOut of Limits Message
66LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Monday, April 12, 2010 18:18:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 11.139

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	49.074	ug/L	5.043	8913	0.013
> Sc	45		ug/L		710255	710254.891
Ni	60	50.997	ug/L	1.044	51000	0.072
Zn	66	49.638	ug/L	1.214	40319	0.136
Zn	67		ug/L		11713	0.021
Zn	68		ug/L		28565	0.095
> Ge	74		ug/L		293692	293691.787
As	75	50.958	ug/L	0.880	38290	0.131
Se	77		ug/L		6795	0.008
Se	82	51.394	ug/L	1.078	3886	0.013
Kr	83		ug/L		93	0.000
> Lu	175		ug/L		422533	422532.532
Pb	208	50.824	ug/L	0.810	1509402	3.562

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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	98.148					
> Sc	45		98.9				
Ni	60	101.993					
Zn	66	99.277					
Zn	67						
Zn	68						
> Ge	74		98.8				
As	75	101.916					
Se	77						
Se	82	102.789					
Kr	83						
> Lu	175		102.2				
Pb	208	101.647					

Sample ID: QC Std 11

Report Date/Time: Monday, April 12, 2010 18:19:03

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Monday, April 12, 2010 18:21:03

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 12.140

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.001	ug/L	3527.240	18	0.000
[> Sc	45		ug/L		700880	700880.428
[Ni	60	0.007	ug/L	19.606	121	0.000
[Zn	66	0.039	ug/L	57.892	364	0.000
| Zn	67		ug/L		5687	0.000
| Zn	68		ug/L		769	0.000
[> Ge	74		ug/L		293801	293800.651
| As	75	0.241	ug/L	139.463	-124	0.001
| Se	77		ug/L		4233	-0.001
| Se	82	0.201	ug/L	65.480	12	0.000
[Kr	83		ug/L		91	0.000
[> Lu	175		ug/L		407317	407316.892
[Pb	208	0.014	ug/L	34.610	4491	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		97.6				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		98.8				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		98.5				
[Pb	208						

Sample ID: QC Std 12

Report Date/Time: Monday, April 12, 2010 18:21:58

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053047

Sample Date/Time: Monday, April 12, 2010 18:23:58

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\1202053047.141

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.016	ug/L	130.544	20	0.000
> Sc	45		ug/L		698114	698114.330
Ni	60	0.208	ug/L	9.934	318	0.000
Zn	66	1.486	ug/L	2.996	1489	0.004
Zn	67		ug/L		4941	-0.002
Zn	68		ug/L		1495	0.003
> Ge	74		ug/L		286033	286033.423
As	75	0.241	ug/L	73.189	-122	0.001
Se	77		ug/L		3158	-0.004
Se	82	0.044	ug/L	209.918	-0	0.000
Kr	83		ug/L		90	0.000
> Lu	175		ug/L		411082	411082.227
Pb	208	-0.007	ug/L	13.745	3947	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
> Sc	45		97.2			
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		96.2			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		99.4			
Pb	208					

Sample ID: 1202053047

Report Date/Time: Monday, April 12, 2010 18:24:53

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053052

Sample Date/Time: Monday, April 12, 2010 18:26:52

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957490|40|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\1202053052.142

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	21.669	ug/L	4.817	3992	0.006
> Sc	45		ug/L		718777	718776.699
[Ni	60	39.528	ug/L	0.330	40032	0.056
[Zn	66	167.912	ug/L	1.754	136009	0.461
| Zn	67		ug/L		25378	0.067
| Zn	68		ug/L		96022	0.324
> Ge	74		ug/L		294578	294577.955
| As	75	30.161	ug/L	2.251	22605	0.078
| Se	77		ug/L		8707	0.015
| Se	82	82.528	ug/L	0.767	6261	0.021
[Kr	83		ug/L		100	0.000
> Lu	175		ug/L		416204	416204.437
[Pb	208	24.658	ug/L	0.866	723532	1.728

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		100.1				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
> Ge	74		99.1				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
> Lu	175		100.6				
[Pb	208						

Sample ID: 1202053052

Report Date/Time: Monday, April 12, 2010 18:27:47

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770001

Sample Date/Time: Monday, April 12, 2010 18:29:47

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770001.143

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	4.006	ug/L	10.888	758	0.001
[> Sc	45		ug/L		724153	724153.128
[Ni	60	3.671	ug/L	2.567	3852	0.005
[Zn	66	151.510	ug/L	1.086	121321	0.416
[Zn	67		ug/L		22173	0.057
[Zn	68		ug/L		84583	0.288
[> Ge	74		ug/L		291110	291109.765
[As	75	3.358	ug/L	2.215	2218	0.009
[Se	77		ug/L		3013	-0.005
[Se	82	0.904	ug/L	21.249	64	0.000
[Kr	83		ug/L		141	0.000
[> Lu	175		ug/L		438928	438928.435
[Pb	208	17.697	ug/L	0.138	548880	1.240

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		100.8				
[Ni	60						
[Zn	66						
[Zn	67						
[Zn	68						
[> Ge	74		97.9				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		106.1				
[Pb	208						

Sample ID: 247770001

Report Date/Time: Monday, April 12, 2010 18:30:42

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053048

Sample Date/Time: Monday, April 12, 2010 18:32:42

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\1202053048.144

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	4.291	ug/L	5.624	836	0.001
[> Sc	45		ug/L		746791	746791.297
[Ni	60	4.219	ug/L	1.073	4548	0.006
[Zn	66	162.764	ug/L	1.287	134188	0.447
| Zn	67		ug/L		23984	0.061
| Zn	68		ug/L		93073	0.308
[> Ge	74		ug/L		299773	299772.589
| As	75	3.629	ug/L	9.953	2492	0.009
| Se	77		ug/L		3012	-0.005
| Se	82	0.418	ug/L	60.702	29	0.000
[Kr	83		ug/L		169	0.000
[> Lu	175		ug/L		448748	448748.300
[Pb	208	20.488	ug/L	2.006	648792	1.436

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		104.0				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		100.8				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		108.5				
[Pb	208						

Sample ID: 1202053048

Report Date/Time: Monday, April 12, 2010 18:33:37

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053050

Sample Date/Time: Monday, April 12, 2010 18:35:37

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\1202053050.145

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	30.378	ug/L	6.644	5544	0.008
> Sc	45		ug/L		713172	713171.795
Ni	60	30.291	ug/L	1.232	30463	0.043
Zn	66	177.392	ug/L	0.343	138671	0.487
Zn	67		ug/L		24904	0.069
Zn	68		ug/L		97767	0.341
> Ge	74		ug/L		284300	284299.632
As	75	42.965	ug/L	0.870	31204	0.111
Se	77		ug/L		3450	-0.003
Se	82	9.836	ug/L	3.905	717	0.003
Kr	83		ug/L		174	0.000
> Lu	175		ug/L		427698	427698.468
Pb	208	117.877	ug/L	0.940	3538015	8.263

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
Be	9						
> Sc	45		99.3				
Ni	60						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		95.6				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		103.4				
Pb	208						

Sample ID: 1202053050

Report Date/Time: Monday, April 12, 2010 18:36:32

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053051

Sample Date/Time: Monday, April 12, 2010 18:38:32

Sample Type:

Sample Description: LANL 6020 MSD

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\1202053051.146

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	29.045	ug/L	5.496	5377	0.007
> Sc	45		ug/L		722629	722628.713
Ni	60	28.382	ug/L	2.434	28923	0.040
Zn	66	161.470	ug/L	0.350	126742	0.443
Zn	67		ug/L		22916	0.061
Zn	68		ug/L		89395	0.311
> Ge	74		ug/L		285398	285397.513
As	75	41.698	ug/L	0.588	30393	0.108
Se	77		ug/L		3332	-0.003
Se	82	9.678	ug/L	5.079	709	0.002
Kr	83		ug/L		167	0.000
> Lu	175		ug/L		425360	425359.542
Pb	208	112.955	ug/L	1.764	3371739	7.918

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9					
> Sc	45		100.6			
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		96.0			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		102.8			
Pb	208					

Sample ID: 1202053051

Report Date/Time: Monday, April 12, 2010 18:39:27

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 1202053049

Sample Date/Time: Monday, April 12, 2010 18:41:27

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957490|10|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\1202053049.147

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.859	ug/L	12.287	177	0.000
> Sc	45		ug/L		724947	724947.146
[Ni	60	0.929	ug/L	3.375	1064	0.001
[Zn	66	30.924	ug/L	1.047	24888	0.085
| Zn	67		ug/L		8250	0.009
| Zn	68		ug/L		17556	0.058
> Ge	74		ug/L		289504	289504.227
| As	75	1.115	ug/L	14.260	531	0.003
| Se	77		ug/L		3796	-0.002
| Se	82	0.347	ug/L	39.043	23	0.000
[Kr	83		ug/L		90	0.000
> Lu	175		ug/L		407225	407224.629
[Pb	208	3.666	ug/L	0.906	108746	0.257

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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				101.0						
[Ni	60										
[Zn	66										
| Zn	67										
| Zn	68										
> Ge	74				97.4						
| As	75										
| Se	77										
| Se	82										
[Kr	83										
> Lu	175				98.5						
[Pb	208										

Sample ID: 1202053049

Report Date/Time: Monday, April 12, 2010 18:42:22

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 12, 2010 18:44:21

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 8.148

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	51.726	ug/L	4.721	9272	0.013
[> Sc	45		ug/L		701098	701097.956
[Ni	60	50.942	ug/L	1.326	50288	0.072
[Zn	66	50.436	ug/L	0.514	40459	0.138
[Zn	67		ug/L		11246	0.020
[Zn	68		ug/L		28741	0.097
[> Ge	74		ug/L		290047	290047.085
[As	75	51.228	ug/L	2.133	38018	0.132
[Se	77		ug/L		7387	0.010
[Se	82	50.387	ug/L	1.764	3763	0.013
[Kr	83		ug/L		74	-0.000
[> Lu	175		ug/L		398259	398258.763
[Pb	208	52.673	ug/L	1.088	1474389	3.692

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	103.451					
[> Sc	45		97.6				
[Ni	60	101.885					
[Zn	66	100.873					
[Zn	67						
[Zn	68						
[> Ge	74		97.5				
[As	75	102.457					
[Se	77						
[Se	82	100.773					
[Kr	83						
[> Lu	175		96.3				
[Pb	208	105.346					

Sample ID: QC Std 8

Report Date/Time: Monday, April 12, 2010 18:45:15

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, April 12, 2010 18:47:15

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 9.149

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.016	ug/L	106.524	21	0.000
> Sc	45		ug/L		722965	722964.968
Ni	60	-0.010	ug/L	133.374	107	-0.000
Zn	66	-0.002	ug/L	637.032	333	-0.000
Zn	67		ug/L		5334	-0.001
Zn	68		ug/L		669	-0.000
> Ge	74		ug/L		296256	296256.373
As	75	0.292	ug/L	61.208	-86	0.001
Se	77		ug/L		4571	0.000
Se	82	0.286	ug/L	44.272	18	0.000
Kr	83		ug/L		73	-0.000
> Lu	175		ug/L		403815	403814.752
Pb	208	-0.005	ug/L	56.954	3912	-0.000

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		100.7				
Ni	60						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		99.6				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		97.6				
Pb	208						

Sample ID: QC Std 9

Report Date/Time: Monday, April 12, 2010 18:48:10

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

-

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770002

Sample Date/Time: Monday, April 12, 2010 18:50:10

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soli 3.mth

Dataset File: C:\elandata\Dataset\100412\247770002.150

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.488	ug/L	7.583	485	0.001
> Sc	45		ug/L		735217	735217.129
Ni	60	3.648	ug/L	2.204	3888	0.005
Zn	66	169.742	ug/L	0.495	133935	0.466
Zn	67		ug/L		23777	0.064
Zn	68		ug/L		93574	0.324
> Ge	74		ug/L		286936	286935.875
As	75	2.010	ug/L	13.068	1188	0.005
Se	77		ug/L		3240	-0.004
Se	82	0.652	ug/L	48.889	45	0.000
Kr	83		ug/L		177	0.000
> Lu	175		ug/L		447147	447147.468
Pb	208	18.381	ug/L	1.307	580594	1.288

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		102.4			
Ni	60					
Zn	66					
Zn	67					
Zn	68					
> Ge	74		96.5			
As	75					
Se	77					
Se	82					
Kr	83					
> Lu	175		108.1			
Pb	208					

Sample ID: 247770002

Report Date/Time: Monday, April 12, 2010 18:51:05

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770003

Sample Date/Time: Monday, April 12, 2010 18:53:05

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770003.151

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.147	ug/L	8.060	234	0.000
[> Sc	45		ug/L		737277	737277.473
[Ni	60	1.851	ug/L	3.223	2037	0.003
[Zn	66	119.278	ug/L	1.979	96572	0.327
| Zn	67		ug/L		18071	0.042
| Zn	68		ug/L		67405	0.227
[> Ge	74		ug/L		294167	294167.430
| As	75	0.830	ug/L	27.514	322	0.002
| Se	77		ug/L		2931	-0.005
| Se	82	0.424	ug/L	55.109	29	0.000
[Kr	83		ug/L		134	0.000
[> Lu	175		ug/L		426667	426667.184
[Pb	208	10.306	ug/L	1.207	312516	0.722

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		102.7				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		98.9				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		103.2				
[Pb	208						

Sample ID: 247770003

Report Date/Time: Monday, April 12, 2010 18:54:01

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247770003

Report Date/Time: Monday, April 12, 2010 18:54:01

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ICPMS#5 - Summary Report

Sample ID: 247770004

Sample Date/Time: Monday, April 12, 2010 18:56:01

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\ani soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770004.152

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.992	ug/L	3.191	577	0.001
[> Sc	45		ug/L		731212	731212.034
[Ni	60	3.430	ug/L	2.613	3644	0.005
[Zn	66	267.833	ug/L	0.863	209997	0.735
| Zn	67		ug/L		34789	0.103
| Zn	68		ug/L		146060	0.509
[> Ge	74		ug/L		285384	285384.367
| As	75	2.497	ug/L	15.897	1541	0.006
| Se	77		ug/L		2938	-0.005
| Se	82	0.789	ug/L	22.421	55	0.000
[Kr	83		ug/L		176	0.000
[> Lu	175		ug/L		446949	446948.820
[Pb	208	17.011	ug/L	1.089	537416	1.192

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		101.8				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		96.0				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		108.1				
[Pb	208						

Sample ID: 247770004

Report Date/Time: Monday, April 12, 2010 18:56:56

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770005

Sample Date/Time: Monday, April 12, 2010 18:58:56

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770005.153

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.661	ug/L	9.895	322	0.000
[> Sc	45		ug/L		717505	717505.194
[Ni	60	2.567	ug/L	0.628	2704	0.004
[Zn	66	155.072	ug/L	0.778	120063	0.425
[Zn	67		ug/L		21419	0.057
[Zn	68		ug/L		84478	0.298
[> Ge	74		ug/L		281489	281489.399
[As	75	1.160	ug/L	22.150	548	0.003
[Se	77		ug/L		2736	-0.005
[Se	82	0.152	ug/L	111.492	8	0.000
[Kr	83		ug/L		147	0.000
[> Lu	175		ug/L		424726	424726.287
[Pb	208	14.597	ug/L	0.506	438849	1.023

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		99.9				
[Ni	60						
[Zn	66						
[Zn	67						
[Zn	68						
[> Ge	74		94.7				
[As	75						
[Se	77						
[Se	82						
[Kr	83						
[> Lu	175		102.7				
[Pb	208						

Sample ID: 247770005

Report Date/Time: Monday, April 12, 2010 18:59:51

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QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770006

Sample Date/Time: Monday, April 12, 2010 19:01:51

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\ani soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770006.154

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.348	ug/L	11.046	440	0.001
[> Sc	45		ug/L		705404	705403.619
[Ni	60	2.196	ug/L	2.611	2291	0.003
[Zn	66	157.921	ug/L	0.338	120113	0.433
| Zn	67		ug/L		21377	0.058
| Zn	68		ug/L		83847	0.301
[> Ge	74		ug/L		276533	276532.612
| As	75	1.653	ug/L	12.795	891	0.004
| Se	77		ug/L		2792	-0.005
| Se	82	0.738	ug/L	60.884	49	0.000
[Kr	83		ug/L		157	0.000
[> Lu	175		ug/L		432969	432969.479
[Pb	208	16.593	ug/L	0.936	507909	1.163

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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		98.2				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		93.0				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		104.7				
[Pb	208						

Sample ID: 247770006

Report Date/Time: Monday, April 12, 2010 19:02:47

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 12, 2010 19:04:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Vanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 8.155

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.033	ug/L	6.877	9343	0.013
> Sc	45		ug/L		702504	702503.728
Ni	60	50.604	ug/L	1.014	50058	0.071
Zn	66	49.206	ug/L	2.769	39337	0.135
Zn	67		ug/L		10573	0.018
Zn	68		ug/L		27944	0.094
> Ge	74		ug/L		289072	289072.161
As	75	50.947	ug/L	0.620	37682	0.131
Se	77		ug/L		6957	0.009
Se	82	50.176	ug/L	0.966	3735	0.013
Kr	83		ug/L		96	0.000
> Lu	175		ug/L		401023	401023.487
Pb	208	51.854	ug/L	0.888	1461583	3.635

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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	104.065					
> Sc	45		97.8				
Ni	60	101.208					
Zn	66	98.411					
Zn	67						
Zn	68						
> Ge	74		97.2				
As	75	101.894					
Se	77						
Se	82	100.353					
Kr	83						
> Lu	175		97.0				
Pb	208	103.707					

Sample ID: QC Std 8

Report Date/Time: Monday, April 12, 2010 19:05:40

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 9
 Sample Date/Time: Monday, April 12, 2010 19:07:40
 Sample Type:
 Sample Description:
 Number of Replicates: 3
 Batch ID:
 Method File: c:\elandata\Method\ani soil 3.mth
 Dataset File: C:\elandata\Dataset\100412\QC Std 9.156

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.011	ug/L	424.520	20	0.000
[> Sc	45		ug/L		702611	702610.963
[Ni	60	-0.024	ug/L	22.576	90	-0.000
[Zn	66	-0.020	ug/L	121.320	311	-0.000
| Zn	67		ug/L		5100	-0.001
| Zn	68		ug/L		662	-0.000
[> Ge	74		ug/L		288730	288730.470
| As	75	0.036	ug/L	771.905	-275	0.000
| Se	77		ug/L		4270	-0.000
| Se	82	-0.006	ug/L	2512.576	-4	-0.000
[Kr	83		ug/L		91	0.000
[> Lu	175		ug/L		403114	403113.759
[Pb	208	-0.021	ug/L	13.767	3474	-0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		97.8				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		97.1				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		97.5				
[Pb	208						

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770007

Sample Date/Time: Monday, April 12, 2010 19:10:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770007.157

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1.874	ug/L	10.599	354	0.000
> Sc	45		ug/L		703461	703460.667
Ni	60	3.219	ug/L	0.957	3296	0.005
Zn	66	133.518	ug/L	1.379	101237	0.366
Zn	67		ug/L		19086	0.050
Zn	68		ug/L		70658	0.254
> Ge	74		ug/L		275557	275557.372
As	75	1.968	ug/L	11.511	1111	0.005
Se	77		ug/L		3039	-0.004
Se	82	0.571	ug/L	51.487	37	0.000
Kr	83		ug/L		135	0.000
> Lu	175		ug/L		411065	411065.039
Pb	208	11.795	ug/L	0.643	343982	0.827

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		98.0				
Ni	60						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		92.7				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		99.4				
Pb	208						

Sample ID: 247770007

Report Date/Time: Monday, April 12, 2010 19:11:31

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770008

Sample Date/Time: Monday, April 12, 2010 19:13:31

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770008.158

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	1.485	ug/L	11.782	287	0.000
[> Sc	45		ug/L		711391	711391.256
[Ni	60	3.173	ug/L	0.927	3287	0.004
[Zn	66	134.487	ug/L	1.141	103385	0.369
| Zn	67		ug/L		18987	0.049
| Zn	68		ug/L		72765	0.258
[> Ge	74		ug/L		279375	279375.456
| As	75	1.031	ug/L	35.462	451	0.003
| Se	77		ug/L		2754	-0.005
| Se	82	0.335	ug/L	67.903	21	0.000
[Kr	83		ug/L		132	0.000
[> Lu	175		ug/L		416264	416264.021
[Pb	208	21.710	ug/L	4.775	637365	1.522

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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		99.1				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		93.9				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		100.6				
[Pb	208						

Sample ID: 247770008

Report Date/Time: Monday, April 12, 2010 19:14:26

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770009

Sample Date/Time: Monday, April 12, 2010 19:16:26

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770009.159

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.411	ug/L	0.751	454	0.001
[> Sc	45		ug/L		708530	708529.864
[Ni	60	1.810	ug/L	1.152	1917	0.003
[Zn	66	154.682	ug/L	2.589	117128	0.424
| Zn	67		ug/L		20970	0.057
| Zn	68		ug/L		82284	0.296
[> Ge	74		ug/L		275370	275369.560
| As	75	1.802	ug/L	13.000	991	0.005
| Se	77		ug/L		2663	-0.005
| Se	82	0.535	ug/L	10.975	35	0.000
[Kr	83		ug/L		177	0.000
[> Lu	175		ug/L		431897	431897.295
[Pb	208	14.194	ug/L	0.501	434036	0.995

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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		98.7				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		92.6				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		104.4				
[Pb	208						

Sample ID: 247770009

Report Date/Time: Monday, April 12, 2010 19:17:22

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770010

Sample Date/Time: Monday, April 12, 2010 19:19:22

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770010.160

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	2.642	ug/L	10.978	498	0.001
> Sc	45		ug/L		712328	712328.037
[Ni	60	2.572	ug/L	1.566	2690	0.004
[Zn	66	167.379	ug/L	1.931	128559	0.459
| Zn	67		ug/L		22283	0.061
| Zn	68		ug/L		90256	0.321
> Ge	74		ug/L		279319	279318.605
| As	75	1.715	ug/L	17.834	946	0.004
| Se	77		ug/L		2706	-0.005
| Se	82	0.571	ug/L	45.823	38	0.000
[Kr	83		ug/L		160	0.000
> Lu	175		ug/L		432872	432872.018
[Pb	208	21.644	ug/L	0.391	661093	1.517

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[Be	9						
> Sc	45		99.2				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
> Ge	74		93.9				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
> Lu	175		104.7				
[Pb	208						

Sample ID: 247770010

Report Date/Time: Monday, April 12, 2010 19:20:17

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: 247770011

Sample Date/Time: Monday, April 12, 2010 19:22:15

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957490|2|prb

Method File: c:\elandata\Method\Natl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\247770011.161

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	2.949	ug/L	6.805	536	0.001
> Sc	45		ug/L		689898	689898.327
Ni	60	3.603	ug/L	2.470	3604	0.005
Zn	66	177.875	ug/L	1.787	132582	0.488
Zn	67		ug/L		22900	0.065
Zn	68		ug/L		93020	0.341
> Ge	74		ug/L		271087	271087.296
As	75	1.544	ug/L	11.260	797	0.004
Se	77		ug/L		2656	-0.005
Se	82	0.477	ug/L	21.579	30	0.000
Kr	83		ug/L		167	0.000
> Lu	175		ug/L		423435	423435.493
Pb	208	21.093	ug/L	0.621	630286	1.478

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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		96.1				
Ni	60						
Zn	66						
Zn	67						
Zn	68						
> Ge	74		91.2				
As	75						
Se	77						
Se	82						
Kr	83						
> Lu	175		102.4				
Pb	208						

Sample ID: 247770011

Report Date/Time: Monday, April 12, 2010 19:23:08

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 12, 2010 19:25:06

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 8.162

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.988	ug/L	4.396	9257	0.013
[> Sc	45		ug/L		710158	710157.815
[Ni	60	48.684	ug/L	0.756	48686	0.068
[Zn	66	48.299	ug/L	0.320	38763	0.132
| Zn	67		ug/L		10421	0.017
| Zn	68		ug/L		27461	0.092
[> Ge	74		ug/L		290081	290080.631
| As	75	49.120	ug/L	0.729	36444	0.127
| Se	77		ug/L		6719	0.008
| Se	82	50.216	ug/L	2.266	3750	0.013
[Kr	83		ug/L		97	0.000
[> Lu	175		ug/L		408375	408374.912
[Pb	208	50.972	ug/L	0.744	1463163	3.573

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
Zn	66	Linear Thru Zero	1.0000
Zn	67	Linear Thru Zero	
Zn	68	Linear Thru Zero	
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	
Pb	208	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	101.975					
[> Sc	45		98.9				
[Ni	60	97.368					
[Zn	66	96.598					
| Zn	67						
| Zn	68						
[> Ge	74		97.5				
| As	75	98.240					
| Se	77						
| Se	82	100.432					
[Kr	83						
[> Lu	175		98.7				
[Pb	208	101.945					

Sample ID: QC Std 8

Report Date/Time: Monday, April 12, 2010 19:26:01

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Monday, April 12, 2010 19:26:01

Page 2

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Monday, April 12, 2010 19:28:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl soil 3.mth

Dataset File: C:\elandata\Dataset\100412\QC Std 9.163

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.027	ug/L	57.748	22	0.000
[> Sc	45		ug/L		691134	691133.829
[Ni	60	-0.011	ug/L	49.199	102	-0.000
[Zn	66	-0.036	ug/L	45.703	291	-0.000
| Zn	67		ug/L		5000	-0.001
| Zn	68		ug/L		649	-0.000
[> Ge	74		ug/L		282067	282066.981
| As	75	0.232	ug/L	153.411	-125	0.001
| Se	77		ug/L		4055	-0.001
| Se	82	0.209	ug/L	20.151	12	0.000
[Kr	83		ug/L		82	-0.000
[> Lu	175		ug/L		398554	398553.618
[Pb	208	-0.022	ug/L	9.862	3395	-0.002

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Ni	60Linear Thru Zero	1.0000
Zn	66Linear Thru Zero	1.0000
Zn	67Linear Thru Zero	
Zn	68Linear Thru Zero	
Ge	74Linear Thru Zero	
As	75Linear Thru Zero	1.0000
Se	77Linear Thru Zero	
Se	82Linear Thru Zero	1.0000
Kr	83Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear 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		96.2				
[Ni	60						
[Zn	66						
| Zn	67						
| Zn	68						
[> Ge	74		94.9				
| As	75						
| Se	77						
| Se	82						
[Kr	83						
[> Lu	175		96.4				
[Pb	208						

Sample ID: QC Std 9

Report Date/Time: Monday, April 12, 2010 19:28:56

Page 1

QC Out Of Limits

Measurement Type Analyte

MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

=====
Analysis BegunLogged In Analyst: Administrator
Spectrometer Model: FIMS-100, S/N B050-9550Technique: AA FIMS-MHS
Autosampler Model: S10Sample Information File: C:\data-AA\Administrator\Sample Information\030810S1.SIF
Batch ID:
Results Data Set: 030810S1
Results Library: C:\data-AA\Administrator\Results\Results.mdb=====
Method Loaded

Method Name: SOIL

Method Last Saved: 1/4/2010 13:53:20

Method Description: 7471A, ILM04 ANALYST JXL

=====
Sequence No.: 1

Sample ID: Calib Blank

Analyst:

Autosampler Location: 1

Date Collected: 3/8/2010 09:08:29

Data Type: Original

Replicate Data: Calib Blank

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.00]	0.0005	0.0034	0.0005	09:09:19	Yes
2		[0.00]	0.0002	-0.0008	0.0002	09:09:49	Yes
Mean:		[0.00]	0.0004				
SD:		0.00	0.0002				
%RSD:		0.00	58.13				

Auto-zero performed.

=====
Sequence No.: 2

Sample ID: S0.2

Analyst:

Autosampler Location: 2

Date Collected: 3/8/2010 09:10:08

Data Type: Original

Replicate Data: S0.2

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.2]	0.0023	0.0101	0.0027	09:10:58	Yes
2		[0.2]	0.0020	0.0074	0.0024	09:11:28	Yes
Mean:		[0.2]	0.0022				
SD:		0.0	0.0002				
%RSD:		0.0	9.02				

Standard number 1 applied. [0.2]

Correlation Coef.: 1.000000 Slope: 0.01091 Intercept: 0.00000

=====
Sequence No.: 3

Sample ID: S0.5

Analyst:

Autosampler Location: 3

Date Collected: 3/8/2010 09:11:47

Data Type: Original

Replicate Data: S0.5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1		[0.5]	0.0060	0.0258	0.0064	09:12:38	Yes
2		[0.5]	0.0060	0.0252	0.0064	09:13:07	Yes
Mean:		[0.5]	0.0060				
SD:		0.0	0.0000				
%RSD:		0.0	0.04				

Standard number 2 applied. [0.5]

Correlation Coef.: 0.999167 Slope: 0.01204 Intercept: -0.00009

=====
Sequence No.: 4

Sample ID: S2.0

Analyst:

Autosampler Location: 4

Date Collected: 3/8/2010 09:13:27

Data Type: Original

Replicate Data: S2.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[2.0]	0.0249	0.1095	0.0253	09:14:18	Yes
2		[2.0]	0.0248	0.1097	0.0252	09:14:48	Yes
Mean:		[2.0]	0.0249				
SD:		0.0	0.0000				
%RSD:		0.0	0.10				

Standard number 3 applied. [2.0]
Correlation Coef.: 0.999923 Slope: 0.01251 Intercept: -0.00018

Sequence No.: 5

Autosampler Location: 5

Sample ID: S5.0

Date Collected: 3/8/2010 09:15:08

Analyst:

Data Type: Original

Replicate Data: S5.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[5.0]	0.0607	0.2659	0.0611	09:15:59	Yes
2		[5.0]	0.0608	0.2652	0.0611	09:16:29	Yes
Mean:		[5.0]	0.0607				
SD:		0.0	0.0000				
%RSD:		0.0	0.05				

Standard number 4 applied. [5.0]
Correlation Coef.: 0.999931 Slope: 0.01219 Intercept: -0.00001

Sequence No.: 6

Autosampler Location: 6

Sample ID: S10.0

Date Collected: 3/8/2010 09:16:49

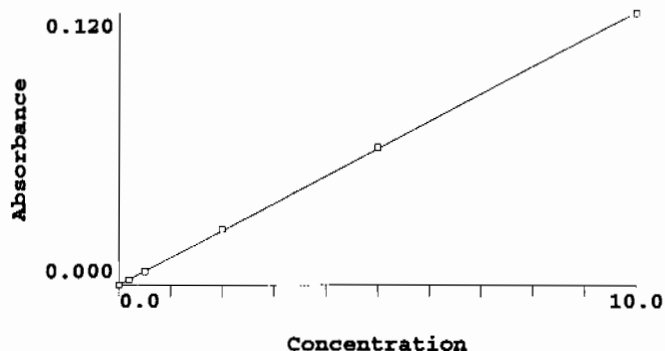
Analyst:

Data Type: Original

Replicate Data: S10.0

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1		[10.0]	0.1209	0.5312	0.1212	09:17:40	Yes
2		[10.0]	0.1196	0.5255	0.1199	09:18:10	Yes
Mean:		[10.0]	0.1202				
SD:		0.0	0.0009				
%RSD:		0.0	0.76				

Standard number 5 applied. [10.0]
Correlation Coef.: 0.999961 Slope: 0.01204 Intercept: 0.00016

-----
Calibration data for Hg 253.7

Equation: Linear, Calculated Intercept

ID	Mean Signal (Abs)	Entered Conc. ug/L	Calculated Conc. ug/L	Standard Deviation	%RSD
Calib Blank	0.0000	0	-0.013	0.00	58.1
S0.2	0.0022	0.2	0.168	0.00	9.0
S0.5	0.0060	0.5	0.485	0.00	0.0
S2.0	0.0249	2.0	2.053	0.00	0.1

S5.0 0.0607 5.0 5.033 0.00 0.1
S10.0 0.1202 10.0 9.974 0.00 0.8
Correlation Coef.: 0.999961 Slope: 0.01204 Intercept: 0.00016

Sequence No.: 7

Sample ID: ICV

Analyst:

Autosampler Location: 9

Date Collected: 3/8/2010 09:18:29

Data Type: Original

Replicate Data: ICV

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.227	5.227	0.0631	0.2766	0.0634	09:19:19	Yes
2	5.168	5.168	0.0624	0.2730	0.0627	09:19:49	Yes
Mean:	5.198	5.198	0.0627				
SD:	0.042	0.042	0.0005				
%RSD:	0.800	0.800	0.80				

QC value within limits for Hg 253.7 Recovery = 103.95%
All analyte(s) passed QC.

Sequence No.: 8

Sample ID: ICB

Analyst:

Autosampler Location: 10

Date Collected: 3/8/2010 09:20:09

Data Type: Original

Replicate Data: ICB

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0000	0.0001	0.0003	09:21:00	Yes
2	-0.022	-0.022	-0.0001	-0.0004	0.0003	09:21:30	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	16.88	16.88	51.71				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9

Sample ID: CRDL

Analyst:

Autosampler Location: 11

Date Collected: 3/8/2010 09:21:50

Data Type: Original

Replicate Data: CRDL

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.192	0.192	0.0025	0.0115	0.0028	09:22:41	Yes
2	0.191	0.191	0.0025	0.0114	0.0028	09:23:11	Yes
Mean:	0.192	0.192	0.0025				
SD:	0.001	0.001	0.0000				
%RSD:	0.407	0.407	0.38				

QC value within limits for Hg 253.7 Recovery = 95.92%
All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/8/2010 09:23:31

Data Type: Original

Replicate Data: CCV

Repl #	SampleConc ug/L	StdndConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	5.175	5.175	0.0624	0.2740	0.0628	09:24:21	Yes
2	5.178	5.178	0.0625	0.2737	0.0629	09:24:51	Yes
Mean:	5.176	5.176	0.0625				
SD:	0.002	0.002	0.0000				
%RSD:	0.043	0.043	0.04				

QC value within limits for Hg 253.7 Recovery = 103.53%
All analyte(s) passed QC.

Sequence No.: 11
Sample ID: CCB
Analyst:

Autosampler Location: 8
Date Collected: 3/8/2010 09:25:10
Data Type: Original

Replicate Data: CCB

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.017	-0.017	-0.0000	0.0006	0.0003	09:26:01	Yes
2	-0.021	-0.021	-0.0001	0.0001	0.0003	09:26:31	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	16.17	16.17	52.61				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 12
Sample ID: 1202056019|958678|1
Analyst: JXL

Autosampler Location: 12
Date Collected: 3/8/2010 09:26:50
Data Type: Original

Replicate Data: 1202056019|958678|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.022	-0.022	-0.0001	-0.0003	0.0003	09:27:41	Yes
2	-0.010	-0.010	0.0000	0.0013	0.0004	09:28:11	Yes
Mean:	-0.016	-0.016	-0.0000				
SD:	0.009	0.009	0.0001				
%RSD:	53.16	53.16	296.29				

Sequence No.: 13
Sample ID: 1202056020|958678|10
Analyst: JXL

Autosampler Location: 13
Date Collected: 3/8/2010 09:28:31
Data Type: Original

Replicate Data: 1202056020|958678|10

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.733	3.733	0.0451	0.1992	0.0455	09:29:24	Yes
2	3.742	3.742	0.0452	0.1979	0.0456	09:29:53	Yes
Mean:	3.738	3.738	0.0452				
SD:	0.006	0.006	0.0001				
%RSD:	0.163	0.163	0.16				

Sequence No.: 14
Sample ID: 247539001|958678|1
Analyst: JXL

Autosampler Location: 14
Date Collected: 3/8/2010 09:30:14
Data Type: Original

Replicate Data: 247539001|958678|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.033	0.033	0.0006	0.0032	0.0009	09:31:04	Yes
2	0.029	0.029	0.0005	0.0028	0.0009	09:31:34	Yes
Mean:	0.031	0.031	0.0005				
SD:	0.003	0.003	0.0000				
%RSD:	8.928	8.928	6.29				

Sequence No.: 15
Sample ID: 1202056021|958678|1
Analyst: JXL

Autosampler Location: 15
Date Collected: 3/8/2010 09:31:53
Data Type: Original

Replicate Data: 1202056021|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
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Replicate Data: 247539003|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.107	0.107	0.0014	0.0080	0.0018	09:41:02	Yes
2	0.097	0.097	0.0013	0.0065	0.0017	09:41:32	Yes
Mean:	0.102	0.102	0.0014				
SD:	0.007	0.007	0.0001				
%RSD:	6.950	6.950	6.16				

Sequence No.: 21

Autosampler Location: 21

Sample ID: 247539004|958678|1

Date Collected: 3/8/2010 09:41:51

Analyst: JXL

Data Type: Original

Replicate Data: 247539004|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.111	0.111	0.0015	0.0075	0.0019	09:42:42	Yes
2	0.116	0.116	0.0016	0.0084	0.0019	09:43:12	Yes
Mean:	0.113	0.113	0.0015				
SD:	0.004	0.004	0.0000				
%RSD:	3.327	3.327	2.98				

Sequence No.: 22

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/8/2010 09:43:32

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.320	5.320	0.0642	0.2780	0.0646	09:44:22	Yes
2	5.284	5.284	0.0638	0.2751	0.0641	09:44:52	Yes
Mean:	5.302	5.302	0.0640				
SD:	0.025	0.025	0.0003				
%RSD:	0.480	0.480	0.48				

QC value within limits for Hg 253.7 Recovery = 106.05%

All analyte(s) passed QC.

Sequence No.: 23

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/8/2010 09:45:11

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.026	-0.026	-0.0002	-0.0003	0.0002	09:46:01	Yes
2	-0.017	-0.017	-0.0000	0.0007	0.0003	09:46:31	Yes
Mean:	-0.022	-0.022	-0.0001				
SD:	0.007	0.007	0.0001				
%RSD:	31.30	31.30	79.37				

QC value within limits for Hg 253.7 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 24

Autosampler Location: 22

Sample ID: 247539005|958678|1

Date Collected: 3/8/2010 09:46:51

Analyst: JXL

Data Type: Original

Replicate Data: 247539005|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.210	0.210	0.0027	0.0134	0.0031	09:47:42	Yes
2	0.205	0.205	0.0026	0.0124	0.0030	09:48:12	Yes

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.018	0.018	0.0004	0.0033	0.0007	09:56:08	Yes
2	0.022	0.022	0.0004	0.0041	0.0008	09:56:38	Yes
Mean:	0.020	0.020	0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	14.52	14.52	8.71				

Sequence No.: 30

Sample ID: 247539011|958678|1

Analyst: JXL

Autosampler Location: 28

Date Collected: 3/8/2010 09:56:57

Data Type: Original

Replicate Data: 247539011|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	1.413	1.413	0.0172	0.0772	0.0175	09:57:48	Yes
2	1.412	1.412	0.0172	0.0760	0.0175	09:58:18	Yes
Mean:	1.413	1.413	0.0172				
SD:	0.000	0.000	0.0000				
%RSD:	0.020	0.020	0.02				

Sequence No.: 31

Sample ID: 247542001|958678|1

Analyst: JXL

Autosampler Location: 29

Date Collected: 3/8/2010 09:58:37

Data Type: Original

Replicate Data: 247542001|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.257	0.257	0.0033	0.0180	0.0036	09:59:28	Yes
2	0.237	0.237	0.0030	0.0154	0.0034	09:59:58	Yes
Mean:	0.247	0.247	0.0031				
SD:	0.014	0.014	0.0002				
%RSD:	5.704	5.704	5.42				

Sequence No.: 32

Sample ID: 247542002|958678|1

Analyst: JXL

Autosampler Location: 30

Date Collected: 3/8/2010 10:00:17

Data Type: Original

Replicate Data: 247542002|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.141	0.141	0.0019	0.0110	0.0022	10:01:08	Yes
2	0.131	0.131	0.0017	0.0093	0.0021	10:01:37	Yes
Mean:	0.136	0.136	0.0018				
SD:	0.007	0.007	0.0001				
%RSD:	5.121	5.121	4.67				

Sequence No.: 33

Sample ID: 247543001|958678|1

Analyst: JXL

Autosampler Location: 31

Date Collected: 3/8/2010 10:01:57

Data Type: Original

Replicate Data: 247543001|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.144	0.144	0.0019	0.0096	0.0023	10:02:47	Yes
2	0.145	0.145	0.0019	0.0096	0.0023	10:03:17	Yes
Mean:	0.145	0.145	0.0019				
SD:	0.001	0.001	0.0000				
%RSD:	0.432	0.432	0.40				

Sequence No.: 34

Sample ID: CCV

Autosampler Location: 7

Date Collected: 3/8/2010 10:03:36

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.404	5.404	0.0652	0.2837	0.0656	10:04:27	Yes
2	5.395	5.395	0.0651	0.2816	0.0655	10:04:57	Yes
Mean:	5.399	5.399	0.0652				
SD:	0.006	0.006	0.0001				
%RSD:	0.120	0.120	0.12				

QC value within limits for Hg 253.7 Recovery = 107.99%
All analyte(s) passed QC.

=====

Sequence No.: 35

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/8/2010 10:05:16

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0001	0.0005	0.0003	10:06:06	Yes
2	-0.018	-0.018	-0.0001	0.0008	0.0003	10:06:36	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	8.088	8.088	25.37				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 36

Autosampler Location: 32

Sample ID: 247543002|958678|1

Date Collected: 3/8/2010 10:06:55

Analyst: JXL

Data Type: Original

Replicate Data: 247543002|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.056	0.056	0.0008	0.0051	0.0012	10:07:46	Yes
2	0.062	0.062	0.0009	0.0053	0.0013	10:08:16	Yes
Mean:	0.059	0.059	0.0009				
SD:	0.004	0.004	0.0001				
%RSD:	7.214	7.214	5.91				

=====

Sequence No.: 37

Autosampler Location: 33

Sample ID: 247543003|958678|1

Date Collected: 3/8/2010 10:08:35

Analyst: JXL

Data Type: Original

Replicate Data: 247543003|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.046	0.046	0.0007	0.0047	0.0011	10:09:26	Yes
2	0.045	0.045	0.0007	0.0048	0.0011	10:09:56	Yes
Mean:	0.045	0.045	0.0007				
SD:	0.001	0.001	0.0000				
%RSD:	1.588	1.588	1.23				

=====

Sequence No.: 38

Autosampler Location: 34

Sample ID: 247543004|958678|1

Date Collected: 3/8/2010 10:10:16

Analyst: JXL

Data Type: Original

Replicate Data: 247543004|958678|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.081	0.081	0.0011	0.0070	0.0015	10:11:07	Yes

2	0.095	0.095	0.0013	0.0091	0.0017	10:11:37	Yes
Mean:	0.088	0.088	0.0012				
SD:	0.010	0.010	0.0001				
%RSD:	11.05	11.05	9.61				

Sequence No.: 39

Sample ID: 1202056041|958689|1

Analyst: JXL

Autosampler Location: 35

Date Collected: 3/8/2010 10:11:56

Data Type: Original

Replicate Data: 1202056041|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.010	-0.010	0.0000	0.0030	0.0004	10:12:48	Yes
2	-0.004	-0.004	0.0001	0.0041	0.0005	10:13:18	Yes
Mean:	-0.007	-0.007	0.0001				
SD:	0.004	0.004	0.0001				
%RSD:	61.15	61.15	67.64				

Sequence No.: 40

Sample ID: 1202056042|958689|10

Analyst: JXL

Autosampler Location: 36

Date Collected: 3/8/2010 10:13:38

Data Type: Original

Replicate Data: 1202056042|958689|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.675	3.675	0.0444	0.1933	0.0448	10:14:30	Yes
2	3.657	3.657	0.0442	0.1909	0.0445	10:15:00	Yes
Mean:	3.666	3.666	0.0443				
SD:	0.013	0.013	0.0002				
%RSD:	0.346	0.346	0.34				

Sequence No.: 41

Sample ID: 247546001|958689|1

Analyst: JXL

Autosampler Location: 37

Date Collected: 3/8/2010 10:15:20

Data Type: Original

Replicate Data: 247546001|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.156	0.156	0.0020	0.0100	0.0024	10:16:12	Yes
2	0.152	0.152	0.0020	0.0100	0.0024	10:16:42	Yes
Mean:	0.154	0.154	0.0020				
SD:	0.003	0.003	0.0000				
%RSD:	1.802	1.802	1.66				

Sequence No.: 42

Sample ID: 1202056043|958689|1

Analyst: JXL

Autosampler Location: 38

Date Collected: 3/8/2010 10:17:02

Data Type: Original

Replicate Data: 1202056043|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.111	0.111	0.0015	0.0085	0.0019	10:17:53	Yes
2	0.095	0.095	0.0013	0.0068	0.0017	10:18:23	Yes
Mean:	0.103	0.103	0.0014				
SD:	0.011	0.011	0.0001				
%RSD:	10.90	10.90	9.67				

Sequence No.: 43

Sample ID: 1202056044|958689|1

Analyst: JXL

Autosampler Location: 39

Date Collected: 3/8/2010 10:18:43

Data Type: Original

Replicate Data: 1202056044|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.345	2.345	0.0284	0.1251	0.0288	10:19:34	Yes
2	2.337	2.337	0.0283	0.1236	0.0287	10:20:04	Yes
Mean:	2.341	2.341	0.0283				
SD:	0.006	0.006	0.0001				
%RSD:	0.242	0.242	0.24				

Sequence No.: 44

Autosampler Location: 40

Sample ID: 1202056051|958689|1

Date Collected: 3/8/2010 10:20:23

Analyst: JXL

Data Type: Original

Replicate Data: 1202056051|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.398	2.398	0.0290	0.1280	0.0294	10:21:14	Yes
2	2.397	2.397	0.0290	0.1287	0.0294	10:21:44	Yes
Mean:	2.398	2.398	0.0290				
SD:	0.000	0.000	0.0000				
%RSD:	0.013	0.013	0.01				

Sequence No.: 45

Autosampler Location: 41

Sample ID: 1202056050|958689|5

Date Collected: 3/8/2010 10:22:04

Analyst: JXL

Data Type: Original

Replicate Data: 1202056050|958689|5

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.023	0.023	0.0004	0.0037	0.0008	10:22:55	Yes
2	0.020	0.020	0.0004	0.0035	0.0008	10:23:25	Yes
Mean:	0.021	0.021	0.0004				
SD:	0.003	0.003	0.0000				
%RSD:	12.05	12.05	7.48				

Sequence No.: 46

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/8/2010 10:23:44

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.108	5.108	0.0616	0.2685	0.0620	10:24:35	Yes
2	5.093	5.093	0.0615	0.2684	0.0618	10:25:05	Yes
Mean:	5.101	5.101	0.0616				
SD:	0.010	0.010	0.0001				
%RSD:	0.202	0.202	0.20				

QC value within limits for Hg 253.7 Recovery = 102.01%

All analyte(s) passed QC.

Sequence No.: 47

Autosampler Location: 8

Sample ID: CCB

Date Collected: 3/8/2010 10:25:24

Analyst:

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.013	-0.013	0.0000	0.0015	0.0004	10:26:14	Yes
2	-0.011	-0.011	0.0000	0.0021	0.0004	10:26:44	Yes
Mean:	-0.012	-0.012	0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	7.968	7.968	83.24				

QC value within limits for Hg 253.7 Recovery = Not calculated

1	0.111	0.111	0.0015	0.0083	0.0019	10:34:36	Yes
2	0.110	0.110	0.0015	0.0080	0.0018	10:35:06	Yes
Mean:	0.110	0.110	0.0015				
SD:	0.000	0.000	0.0000				
%RSD:	0.301	0.301	0.27				

Sequence No.: 53

Autosampler Location: 47

Sample ID: 247551002|958689|1

Date Collected: 3/8/2010 10:35:26

Analyst: JXL

Data Type: Original

Replicate Data: 247551002|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	0.238	0.238	0.0030	0.0149	0.0034	10:36:17	Yes
2	0.226	0.226	0.0029	0.0135	0.0032	10:36:47	Yes
Mean:	0.232	0.232	0.0029				
SD:	0.009	0.009	0.0001				
%RSD:	3.775	3.775	3.57				

Sequence No.: 54

Autosampler Location: 48

Sample ID: 247552002|958689|1

Date Collected: 3/8/2010 10:37:07

Analyst: JXL

Data Type: Original

Replicate Data: 247552002|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.006	-0.006	0.0001	0.0019	0.0005	10:37:59	Yes
2	-0.009	-0.009	0.0000	0.0019	0.0004	10:38:29	Yes
Mean:	-0.007	-0.007	0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	34.69	34.69	45.26				

Sequence No.: 55

Autosampler Location: 49

Sample ID: 247770001|958689|1

Date Collected: 3/8/2010 10:38:49

Analyst: JXL

Data Type: Original

Replicate Data: 247770001|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.009	-0.009	0.0001	0.0020	0.0004	10:39:41	Yes
2	-0.015	-0.015	-0.0000	0.0005	0.0003	10:40:11	Yes
Mean:	-0.012	-0.012	0.0000				
SD:	0.004	0.004	0.0001				
%RSD:	36.73	36.73	266.48				

Sequence No.: 56

Autosampler Location: 50

Sample ID: 247770002|958689|1

Date Collected: 3/8/2010 10:40:31

Analyst: JXL

Data Type: Original

Replicate Data: 247770002|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.025	-0.025	-0.0001	0.0006	0.0002	10:41:22	Yes
2	-0.019	-0.019	-0.0001	0.0007	0.0003	10:41:52	Yes
Mean:	-0.022	-0.022	-0.0001				
SD:	0.005	0.005	0.0001				
%RSD:	20.93	20.93	51.34				

Sequence No.: 57

Autosampler Location: 51

Sample ID: 247770003|958689|1

Date Collected: 3/8/2010 10:42:12

Analyst: JXL

Data Type: Original

Replicate Data: 247770003|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	-0.0001	0.0010	0.0003	10:43:02	Yes
2	-0.015	-0.015	-0.0000	0.0019	0.0003	10:43:32	Yes
Mean:	-0.017	-0.017	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	15.47	15.47	69.20				

Sequence No.: 58

Sample ID: CCV

Analyst:

Autosampler Location: 7

Date Collected: 3/8/2010 10:43:52

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.183	5.183	0.0626	0.2692	0.0629	10:44:42	Yes
2	5.170	5.170	0.0624	0.2687	0.0628	10:45:12	Yes
Mean:	5.177	5.177	0.0625				
SD:	0.009	0.009	0.0001				
%RSD:	0.180	0.180	0.18				

QC value within limits for Hg 253.7 Recovery = 103.54%
All analyte(s) passed QC.

Sequence No.: 59

Sample ID: CCB

Analyst:

Autosampler Location: 8

Date Collected: 3/8/2010 10:45:31

Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	-0.0000	0.0009	0.0003	10:46:21	Yes
2	-0.018	-0.018	-0.0001	0.0007	0.0003	10:46:51	Yes
Mean:	-0.017	-0.017	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	8.223	8.223	37.77				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 60

Sample ID: 247770004|958689|1

Analyst: JXL

Autosampler Location: 52

Date Collected: 3/8/2010 10:47:11

Data Type: Original

Replicate Data: 247770004|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.019	-0.019	-0.0001	0.0009	0.0003	10:48:01	Yes
2	-0.023	-0.023	-0.0001	0.0002	0.0002	10:48:31	Yes
Mean:	-0.021	-0.021	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	11.38	11.38	29.91				

Sequence No.: 61

Sample ID: 247770005|958689|1

Analyst: JXL

Autosampler Location: 53

Date Collected: 3/8/2010 10:48:51

Data Type: Original

Replicate Data: 247770005|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.025	-0.025	-0.0001	0.0006	0.0002	10:49:42	Yes
2	-0.017	-0.017	-0.0000	0.0015	0.0003	10:50:12	Yes
Mean:	-0.021	-0.021	-0.0001				

SD: 0.006 0.006 0.0001
%RSD: 26.88 26.88 73.00

Sequence No.: 62

Sample ID: 247770006|958689|1

Analyst: JXL

Autosampler Location: 54

Date Collected: 3/8/2010 10:50:32

Data Type: Original

Replicate Data: 247770006|958689|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.024	-0.024	-0.0001	0.0008	0.0002	10:51:23	Yes
2	-0.019	-0.019	-0.0001	0.0007	0.0003	10:51:53	Yes
Mean:	-0.022	-0.022	-0.0001				
SD:	0.003	0.003	0.0000				
%RSD:	14.79	14.79	37.59				

Sequence No.: 63

Sample ID: 247770007|958689|1

Analyst: JXL

Autosampler Location: 55

Date Collected: 3/8/2010 10:52:12

Data Type: Original

Replicate Data: 247770007|958689|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.016	-0.016	-0.0000	0.0011	0.0003	10:53:03	Yes
2	-0.016	-0.016	-0.0000	0.0013	0.0003	10:53:33	Yes
Mean:	-0.016	-0.016	-0.0000				
SD:	0.000	0.000	0.0000				
%RSD:	3.059	3.059	17.56				

Sequence No.: 64

Sample ID: 247770008|958689|1

Analyst: JXL

Autosampler Location: 56

Date Collected: 3/8/2010 10:53:53

Data Type: Original

Replicate Data: 247770008|958689|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.014	-0.014	-0.0000	0.0019	0.0004	10:54:44	Yes
2	-0.018	-0.018	-0.0001	0.0009	0.0003	10:55:14	Yes
Mean:	-0.016	-0.016	-0.0000				
SD:	0.003	0.003	0.0000				
%RSD:	19.73	19.73	103.65				

Sequence No.: 65

Sample ID: 247770009|958689|1

Analyst: JXL

Autosampler Location: 57

Date Collected: 3/8/2010 10:55:33

Data Type: Original

Replicate Data: 247770009|958689|1

Repl #	SampleConc ug/L	StdConc ug/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0000	0.0017	0.0004	10:56:24	Yes
2	-0.018	-0.018	-0.0001	0.0008	0.0003	10:56:54	Yes
Mean:	-0.014	-0.014	-0.0000				
SD:	0.005	0.005	0.0001				
%RSD:	36.02	36.02	487.51				

Sequence No.: 66

Sample ID: 247770010|958689|1

Analyst: JXL

Autosampler Location: 58

Date Collected: 3/8/2010 10:57:14

Data Type: Original

Replicate Data: 247770010|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored

#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.018	-0.018	-0.0001	0.0014	0.0003	10:58:05	Yes
2	-0.020	-0.020	-0.0001	0.0010	0.0003	10:58:35	Yes
Mean:	-0.019	-0.019	-0.0001				
SD:	0.001	0.001	0.0000				
%RSD:	7.691	7.691	25.40				

Sequence No.: 67

Autosampler Location: 59

Sample ID: 247770011|958689|1

Date Collected: 3/8/2010 10:58:55

Analyst: JXL

Data Type: Original

Replicate Data: 247770011|958689|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.032	-0.032	-0.0002	-0.0008	0.0001	10:59:46	Yes
2	-0.025	-0.025	-0.0001	0.0004	0.0002	11:00:16	Yes
Mean:	-0.029	-0.029	-0.0002				
SD:	0.005	0.005	0.0001				
%RSD:	18.50	18.50	34.26				

Sequence No.: 68

Autosampler Location: 60

Sample ID: 1202056088|958710|1

Date Collected: 3/8/2010 11:00:36

Analyst: JXL

Data Type: Original

Replicate Data: 1202056088|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.028	-0.028	-0.0002	0.0005	0.0002	11:01:28	Yes
2	-0.024	-0.024	-0.0001	0.0013	0.0002	11:01:58	Yes
Mean:	-0.026	-0.026	-0.0002				
SD:	0.003	0.003	0.0000				
%RSD:	11.70	11.70	23.67				

Sequence No.: 69

Autosampler Location: 61

Sample ID: 1202056089|958710|10

Date Collected: 3/8/2010 11:02:18

Analyst: JXL

Data Type: Original

Replicate Data: 1202056089|958710|10

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	3.455	3.455	0.0417	0.1788	0.0421	11:03:09	Yes
2	3.449	3.449	0.0417	0.1781	0.0420	11:03:39	Yes
Mean:	3.452	3.452	0.0417				
SD:	0.004	0.004	0.0001				
%RSD:	0.122	0.122	0.12				

Sequence No.: 70

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/8/2010 11:04:00

Analyst:

Data Type: Original

Replicate Data: CCV

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	5.205	5.205	0.0628	0.2687	0.0632	11:04:50	Yes
2	5.192	5.192	0.0627	0.2674	0.0630	11:05:20	Yes
Mean:	5.199	5.199	0.0627				
SD:	0.009	0.009	0.0001				
%RSD:	0.171	0.171	0.17				

QC value within limits for Hg 253.7 Recovery = 103.97%
All analyte(s) passed QC.

Sequence No.: 71

Autosampler Location: 8

Sample ID: CCB
Analyst:

Date Collected: 3/8/2010 11:05:39
Data Type: Original

Replicate Data: CCB

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.020	-0.020	-0.0001	0.0006	0.0003	11:06:30	Yes
2	-0.023	-0.023	-0.0001	-0.0000	0.0003	11:07:00	Yes
Mean:	-0.021	-0.021	-0.0001				
SD:	0.002	0.002	0.0000				
%RSD:	9.829	9.829	26.09				

QC value within limits for Hg 253.7 Recovery = Not calculated
All analyte(s) passed QC.

=====

Sequence No.: 72
Sample ID: 247794001|958710|1
Analyst: JXL

Autosampler Location: 62
Date Collected: 3/8/2010 11:07:19
Data Type: Original

Replicate Data: 247794001|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.012	-0.012	0.0000	0.0018	0.0004	11:08:10	Yes
2	-0.015	-0.015	-0.0000	0.0015	0.0003	11:08:40	Yes
Mean:	-0.013	-0.013	-0.0000				
SD:	0.002	0.002	0.0000				
%RSD:	12.21	12.21	593.80				

=====

Sequence No.: 73
Sample ID: 1202056090|958710|1
Analyst: JXL

Autosampler Location: 63
Date Collected: 3/8/2010 11:08:59
Data Type: Original

Replicate Data: 1202056090|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	-0.016	-0.016	-0.0000	0.0012	0.0003	11:09:50	Yes
2	-0.018	-0.018	-0.0001	0.0011	0.0003	11:10:20	Yes
Mean:	-0.017	-0.017	-0.0000				
SD:	0.001	0.001	0.0000				
%RSD:	8.344	8.344	38.31				

=====

Sequence No.: 74
Sample ID: 1202056091|958710|1
Analyst: JXL

Autosampler Location: 64
Date Collected: 3/8/2010 11:10:40
Data Type: Original

Replicate Data: 1202056091|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.327	2.327	0.0282	0.1218	0.0285	11:11:31	Yes
2	2.327	2.327	0.0282	0.1215	0.0285	11:12:01	Yes
Mean:	2.327	2.327	0.0282				
SD:	0.000	0.000	0.0000				
%RSD:	0.013	0.013	0.01				

=====

Sequence No.: 75
Sample ID: 1202056093|958710|1
Analyst: JXL

Autosampler Location: 65
Date Collected: 3/8/2010 11:12:21
Data Type: Original

Replicate Data: 1202056093|958710|1

Repl	SampleConc	StdConc	BlkCorr	Peak	Peak	Time	Peak
#	ug/L	ug/L	Signal	Area	Height		Stored
1	2.307	2.307	0.0279	0.1207	0.0283	11:13:12	Yes
2	2.290	2.290	0.0277	0.1192	0.0281	11:13:42	Yes

Miscellaneous

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 957489.0 Verified by: _____ Lab SOP: GL-MA-E-009 REV# 19
 Analyst: Anthony Green Instrument: BAL-001
 Method: SW846 3050B

Sample ID	Run Date	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check
1202053047 MB	26-FEB-2010 06:00:00	0.516	50	96.89922	
1202053052 LCS	26-FEB-2010 06:00:00	0.517	50	96.71118	
247770001	26-FEB-2010 06:00:00	0.512	50	97.65625	
1202053048 DUP (247770001)	26-FEB-2010 06:00:00	0.52	50	96.15385	
1202053049 SDIL.T (247770001)	26-FEB-2010 06:00:00	0.512	50	97.65625	
1202053050 MS (247770001)	26-FEB-2010 06:00:00	0.509	50	98.23183	
1202053051 MSD (247770001)	26-FEB-2010 06:00:00	0.516	50	96.89922	
247770002	26-FEB-2010 06:00:00	0.5	50	100	
247770003	26-FEB-2010 06:00:00	0.512	50	97.65625	
247770004	26-FEB-2010 06:00:00	0.543	50	92.08103	
247770005	26-FEB-2010 06:00:00	0.519	50	96.33911	
247770006	26-FEB-2010 06:00:00	0.53	50	94.33962	
247770007	26-FEB-2010 06:00:00	0.504	50	99.20635	
247770008	26-FEB-2010 06:00:00	0.529	50	94.51796	
247770009	26-FEB-2010 06:00:00	0.503	50	99.40358	
247770010	26-FEB-2010 06:00:00	0.515	50	97.08738	
247770011	26-FEB-2010 06:00:00	0.509	50	98.23183	

Type	Sample Id	Description	Serial Number	Spike Amt	Units	Comments:
LCS	1202053052	Metals Soil LCS SRM ICPMS	U1062540-MS	.517	g	
MS	1202053050	ICP-MS Spike for soil products.	U1090827-A	.5	mL	Sample 247770001 consist of medium gray soil.
MS	1202053050	ICP-MS Spike for Soil Products	U1090827-B	.5	mL	
MSD	1202053051	ICP-MS Spike for soil products.	U1090827-A	.5	mL	
MSD	1202053051	ICP-MS Spike for Soil Products	U1090827-B	.5	mL	
REGNT All		Hydrogen Peroxide 30%	1250038-02	1.5	mL	
REGNT All		Nitric Acid CONC.	1274969	.5	mL	

Prep Logbook

Acid Digestion of Sediments, Sludges, and Soils

Batch ID: 957487.0
 Analyst: Anthony Green
 Method: SW846 3050B
 Lab SOP: GL-MA-E-009 REV# 19
 Instrument: BAL-001

Verified by:

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053046	Metals Soil LCS SRM ICP/Hg	U1062540-1	.506	g
MS	1202053044	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202053044	Metals Spike Mix II	U1100205-06	.25	mL
MSD	1202053045	Metals Spike Mix I	U1100205-01	.25	mL
MSD	1202053045	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202053041 MB	26-FEB-2010 07:30:00	Soil	0.521	50	95.96929	
1202053046 LCS	26-FEB-2010 07:30:00	Soil	0.506	50	98.81423	
247770001	26-FEB-2010 07:30:00	Soil	0.518	50	96.5251	
1202053042 DUP (247770001)	26-FEB-2010 07:30:00	Soil	0.508	50	98.4252	
1202053043 SDILT (247770001)	26-FEB-2010 07:30:00	Soil	0.518	50	96.5251	
1202053044 MS (247770001)	26-FEB-2010 07:30:00	Soil	0.521	50	95.96929	
1202053045 MSD (247770001)	26-FEB-2010 07:30:00	Soil	0.527	50	94.87666	
247770002	26-FEB-2010 07:30:00	Soil	0.516	50	96.89922	
247770003	26-FEB-2010 07:30:00	Soil	0.526	50	95.05703	
247770004	26-FEB-2010 07:30:00	Soil	0.506	50	98.81423	
247770005	26-FEB-2010 07:30:00	Soil	0.52	50	96.15385	
247770006	26-FEB-2010 07:30:00	Soil	0.528	50	94.69697	
247770007	26-FEB-2010 07:30:00	Soil	0.507	50	98.61933	
247770008	26-FEB-2010 07:30:00	Soil	0.512	50	97.65625	
247770009	26-FEB-2010 07:30:00	Soil	0.526	50	95.05703	
247770010	26-FEB-2010 07:30:00	Soil	0.508	50	98.4252	
247770011	26-FEB-2010 07:30:00	Soil	0.53	50	94.33962	

Reagent/Solvent Lot ID	Description	Amount	Comments:
1265209	HYDROCHLORIC ACID	10 mL	Sample 247770001 consist of medium, gray soil.
1274969	Nitric Acid CONC.	1.25 mL	

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID:	958687.0	Verified by:	
Analyst:	Tara Griffin		
Method:	SW846 7471A Prep		
Lab SOP:	GL-MA-E-010 REV# 23		
Instrument:	BAL-002		

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check	Serial Number	Spike Amount	Spike Units
1202056041 MB	06-MAR-2010 14:10:00	Soil	0.514	30	58.36576		U1031809A	.203	g
1202056042 LCS	06-MAR-2010 14:10:00	Soil	0.203	30	147.78325				
247546001	06-MAR-2010 14:10:00	Soil	0.549	30	54.64481				
1202056043 DUP (247546001)	06-MAR-2010 14:10:00	Soil	0.5	30	60				
1202056044 MS (247546001)	06-MAR-2010 14:10:00	Soil	0.553	30	54.24955		WHG100306-14	.3	mL
1202056051 MSD (247546001)	06-MAR-2010 14:10:00	Soil	0.541	30	55.45287		WHG100306-14	.3	mL
1202056050 SDILT (247546001)	06-MAR-2010 14:10:00	Soil	0.549	30	54.64481				
247546002	06-MAR-2010 14:10:00	Soil	0.513	30	58.47953				
247546003	06-MAR-2010 14:10:00	Soil	0.562	30	53.38078				
247546004	06-MAR-2010 14:10:00	Soil	0.53	30	56.60377				
247550001	06-MAR-2010 14:10:00	Soil	0.535	30	56.07477				
247551001	06-MAR-2010 14:10:00	Soil	0.559	30	53.66726				
247551002	06-MAR-2010 14:10:00	Soil	0.542	30	55.35055				
247552002	06-MAR-2010 14:10:00	Soil	0.512	30	58.59375				
247770001	06-MAR-2010 14:10:00	Soil	0.545	30	55.04587				
247770002	06-MAR-2010 14:10:00	Soil	0.593	30	50.59022				
247770003	06-MAR-2010 14:10:00	Soil	0.58	30	51.72414				
247770004	06-MAR-2010 14:10:00	Soil	0.55	30	54.54545				
247770005	06-MAR-2010 14:10:00	Soil	0.561	30	53.47594				
247770006	06-MAR-2010 14:10:00	Soil	0.576	30	52.08333				
247770007	06-MAR-2010 14:10:00	Soil	0.554	30	54.15162				
247770008	06-MAR-2010 14:10:00	Soil	0.59	30	50.84746				
247770009	06-MAR-2010 14:10:00	Soil	0.537	30	55.86592				
247770010	06-MAR-2010 14:10:00	Soil	0.505	30	59.40594				
247770011	06-MAR-2010 14:10:00	Soil	0.529	30	56.71078				

Reagent/Solvent Lot ID Description Amount

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 958687.0
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	1202056042	Metals LCS Soil SRM	UF031809A	.203	g
MS	1202056044	Mercury soil working intermediate standard for MS	WHG100306-14	.3	mL
MSD	1202056051	Mercury soil working intermediate standard for MS	WHG100306-14	.3	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
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				
WHG100306-07	Mercury Working Standard 1st Source	CAL S 30 uL				
WHG100306-08	Mercury Working Standard 1st Source	CAL S 75 uL				
WHG100306-09	Mercury Working 1st Source	CAL S 2.0				
WHG100306-10	Mercury Working 1st Source	CAL S 5.0/CCV				
WHG100306-11	Mercury Working 1st Source	CAL S 10.0				
WHG100306-12	Mercury Working 2nd Source	S 5.0/CCV				

Comments:
 Sample 247546001 is a gray-brown soil with rocks.
 Digestion Start Date: 06-MAR-10 14:10
 Digestion End Date: 06-MAR-10 14:40

DATA EXCEPTION REPORT

Mo. Day Yr.
22-MAR-10

Division:
Industrial

Quality Criteria:
Specifications

Type:
Process

Instrument Type:
ICP

Test / Method:
SW846 3050B/6010B

Matrix Type:
Solid

Client Code:
LANL

Batch ID:
957488

Sample Numbers:
See Below

Potentially affected work order(s)(SDG): 247770(10-1973)

Application Issues:

Failed Recovery for MS/PS

Failed Recovery for MSD/PSD

**Specification and Requirements
Exception Description:**

1. Failed Recovery for MS/PS:

QC 1202053044MS

2. Failed Recovery for MSD/PSD:

QC 1202053045MSD

DER Disposition:

1. The matrix spike recovery failed outside of the control limits for aluminum, magnesium, potassium and sodium 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 duplicate recovery failed outside of the control limits for aluminum, potassium and sodium 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:

Helen Camello 22-MAR-10

Data Validator/Group Leader:

Christopher Louviere 22-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:** 12-JUN-10
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:** 12-JAN-10
Employee: Bryan Davis
Supplier: ERA
Description: Metals Soil LCS SRM ICPMS
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	10500 mg/kg	Antimony	67.4 mg/kg
Arsenic	104 mg/kg	Barium	198 mg/kg
Beryllium	77.6 mg/kg	Boron	141 mg/kg
Cadmium	60.6 mg/kg	Calcium	9870 mg/kg
Chromium	236 mg/kg	Cobalt	91.2 mg/kg
Copper	174 mg/kg	Iron	18000 mg/kg
Lead	86 mg/kg	Lithium	10.6 mg/kg
Magnesium	4000 mg/kg	Manganese	558 mg/kg
Mercury	8.46 mg/kg	Molybdenum	48.6 mg/kg
Nickel	134 mg/kg	Phosphorous	755 mg/kg
Potassium	4300 mg/kg	Selenium	286 mg/kg
Silver	30.1 mg/kg	Sodium	1020 mg/kg

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Strontium	227 mg/kg	Thallium	121 mg/kg
Thorium	9.84 mg/kg	Tin	104 mg/kg
Titanium	462 mg/kg	Uranium	2.13 mg/kg
Uranium-235	.0153 mg/kg	Uranium-238	2.11 mg/kg
Vanadium	92.4 mg/kg	Zinc	594 mg/kg
Zirconium	10.6 mg/kg		

Serial ID: 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% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **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
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Aluminum	100 mg/L	Antimony	5 mg/L
Arsenic	15 mg/L	Barium	2.5 mg/L
Beryllium	2.5 mg/L	Boron	25 mg/L
Cadmium	2.5 mg/L	Calcium	100 mg/L
Chromium	2.5 mg/L	Cobalt	2.5 mg/L
Copper	5 mg/L	Iron	50 mg/L
Lead	5 mg/L	Magnesium	150 mg/L
Manganese	5 mg/L	Molybdenum	5 mg/L
Nickel	2.5 mg/L	Phosphorous	75 mg/L
Potassium	75 mg/L	Selenium	15 mg/L
Silicon	50 mg/L	Silver	2.5 mg/L
Sodium	150 mg/L	Strontium	2.5 mg/L
Sulfur	50 mg/L	Thallium	10 mg/L
Tin	5 mg/L	Titanium	2.5 mg/L
Uranium	25 mg/L	Vanadium	2.5 mg/L
Zinc	5 mg/L		

Serial ID: 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

Standard Logbook

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: 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
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Standard Logbook

Analyte	Concentration	Analyte	Concentration
Antimony	200 mg/L	Molybdenum	200 mg/L
Silver	200 mg/L	Sulfur	400 mg/L
Tin	200 mg/L	Titanium	200 mg/L

Serial ID: UI091102-42 **Opened:** 17-NOV-09 **Amount :** 200 mL
Name: SILICON **Received:** 02-NOV-09 **Catalog Number :** HP100050-4F
Type: Source Material **Expires:** 17-NOV-10 **Lot Number :** 0921924
Employee: Helen Camello **Solvent :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: UI100205-01 **Opened:** 05-FEB-10 **Lot Number :** 1018514
Name: METALSPIKE-1 **Received:** 05-FEB-10
Type: Source Material **Expres:** 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 **Expres:** 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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICSA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
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: 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: O2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L
Vanadium	10000 ug/L	Zinc	15000 ug/L

Standard Logbook

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: Q2SI
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: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV SOLN A - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	2020 mg/L	Calcium	2000 mg/L
Iron	2000 mg/L	Magnesium	2000 mg/L
Phosphorous	2000 mg/L	Potassium	2000 mg/L
Sodium	2000 mg/L		

Serial ID: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: Q2SI
Description: ICPMS ICV/CCV Soln B - 10ppm
Comments: None

Analyte	Concentration	Analyte	Concentration
Arsenic	20 mg/L	Barium	20 mg/L
Beryllium	20 mg/L	Boron	40 mg/L
Cadmium	20 mg/L	Chromium	20 mg/L
Cobalt	20 mg/L	Copper	20 mg/L
Lead	20 mg/L	Lithium	20 mg/L
Manganese	20 mg/L	Nickel	20 mg/L
Selenium	20 mg/L	Strontium	20 mg/L
Thallium	20 mg/L	Thorium	20 mg/L
Uranium	20 mg/L	Vanadium	20 mg/L
Zinc	20 mg/L		

Standard Logbook

Serial ID: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
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: UI100318-11 **Opened:** 18-MAR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 18-MAR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 18-MAR-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: UI100405-12 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 05-APR-10 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019466
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Thallium	2 mg/L	Thorium	2 mg/L
Uranium	2 mg/L	Vanadium	2 mg/L
Zinc	2 mg/L		

Serial ID: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: Q2SI
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: UI100405-60 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
Employee: Paul Boyd **Solvent :** 2%HNO3 + Tr HF
Supplier: Q2SI
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		

Standard Logbook

Serial ID: UI100405-61 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
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: UMS100226-01 **Opened:** 26-FEB-10 **Amount :** 250 mL
Name: ICPMS Cal SPIKE B **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: ICPMS Cal SPIKE A **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		

Standard Logbook

Serial ID: UMS100226-03 **Opened:** 26-FEB-10 **Amount :** 250 ml
Name: ICPMSCaSPIKEC **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: IHG100306-01 **Opened:** 06-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 06-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 07-MAR-10 **Solvent :** 1mL HNO3 + TypeI 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: IHG100306-02 **Opened:** 06-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 07-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

Serial ID: WHG100306-07 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.2CRA **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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.
IHG100306-01	Mercury	200 ug/L	30 uL	30 mL	.2 ug/L

Standard Logbook

Serial ID: WHG100306-08 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS0.5 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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.
IHG100306-01	Mercury	200 ug/L	75 uL	30 mL	.5 ug/L

Serial ID: WHG100306-09 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS2.0 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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.
IHG100306-01	Mercury	200 ug/L	300 uL	30 mL	2 ug/L

Serial ID: WHG100306-10 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS5.0CCV **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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.
IHG100306-01	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100306-11 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCALS10.0 **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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.
IHG100306-01	Mercury	200 ug/L	1.5 mL	30 mL	10 ug/L

Standard Logbook

Serial ID: WHG100306-12 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKS5.0ICV **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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.
IHG100306-02	Mercury	200 ug/L	750 uL	30 mL	5 ug/L

Serial ID: WHG100306-14 **Opened:** 06-MAR-10 **Pipet Id :** Hg1289245
Name: MHGSOILMSSPIKE **Received:** 06-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 13-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: WI100319-42 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.1 PPM STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expres:** 20-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.
WI100319-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100319-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100319-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100319-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100319-43 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100319-44 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100319-45 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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: WI100319-46 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Boron	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cadmium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Calcium	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Chromium	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Cobalt	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100319-47 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100411-04 **Opened:** 11-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 11-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1296562
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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100411-04A **Opened:** 11-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 11-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100411-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100411-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100411-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100411-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100411-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100411-05 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 11-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100411-06 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 11-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS CRDL
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Phosphorous	50 mg/L	.05 mL	50 mL	50 ug/L
UI090701-09	Potassium	300 mg/L	.05 mL	50 mL	300 ug/L
UI090701-09	Selenium	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Sodium	250 mg/L	.05 mL	50 mL	250 ug/L
UI090701-09	Strontium	10 mg/L	.05 mL	50 mL	10 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100411-07 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 11-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 12-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1296562
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100411-08 **Opened:** 11-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 11-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 12-APR-10 **Solvent :** 2%HNO3/1%HCl - 1296562
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100412-04 **Opened:** 12-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 12-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 13-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1300209
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100412-04A **Opened:** 12-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 12-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100412-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
WMS100412-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100412-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100412-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100412-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100412-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100412-05 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS ICV **Received:** 12-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICV
Comments: None

Parent Material	Analyte	Parent Conc.	Allquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100412-06 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS CRDL **Received:** 12-APR-10 **Pipet Id :** 3820544
Type: Working **Expires:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100412-07 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 12-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 13-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1300209
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: <u>WMS100412-08</u>	Opened: <u>12-APR-10</u>	Balance Id : <u>40245216</u>
Name: <u>ICPMS ICSAB</u>	Received: <u>12-APR-10</u>	Pipet Id : <u>1758088</u>
Type: <u>Working</u>	Expires: <u>13-APR-10</u>	Solvent : <u>2%HNO3/1%HCl - 1300209</u>
Employee: <u>Paul Boyd</u>		
Supplier: <u>GEL</u>		
Description: <u>ICPMS ICSAB</u>		
Comments: <u>None</u>		

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100318-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100318-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100318-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100318-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L

Serial ID: WMS100412-70 **Opened:** 12-APR-10 **Balance Id :** 40245216
Name: ICPMS LINEAR RANGE ST **Received:** 12-APR-10 **Pipet Id :** 1758088
Type: Working **Expres:** 13-APR-10 **Solvent :** 2%HNO3/1%HCl - 1300209
Employee: Paul Boyd
Supplier: 02SI
Description: ICPMS LINEAR RANGE STANDARD
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100405-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

Standard Logbook

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: Hydroxylamine 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

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

Standard Logbook

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: 1274969 **Opened:** 24-FEB-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
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

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: 1277916 **Opened:** 02-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 02-MAR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Standard Logbook

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 Carnello
Supplier: GEL
Description: 3%HCL+1%HNO3 RINSE SOLN.
Comments: None

Serial ID: 1291278 **Opened:** 25-MAR-10 **Lot Number :** J 08035 L
Name: I-HNO3 **Received:** 25-MAR-10
Type: Reagent/Solvent **Expires:** 25-MAR-11
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1296562 **Opened:** 05-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCL-ICPMS **Received:** 05-APR-10
Type: Reagent/Solvent **Expires:** 12-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Serial ID: 1300209 **Opened:** 12-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCL-ICPMS **Received:** 12-APR-10
Type: Reagent/Solvent **Expires:** 19-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

Metals Analysis

Case Narrative

**Metals Fractional Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1973-1**

Sample Analysis

Sample ID	Client ID
247771001	RE15-10-8272
1202053053	Method Blank (MB) ICP
1202053054	Laboratory Control Sample (LCS)
1202053057	247830002(GW29-10-13277L) Serial Dilution (SD)
1202053055	247830002(GW29-10-13277D) Sample Duplicate (DUP)
1202053056	247830002(GW29-10-13277S) Matrix Spike (MS)
1202053058	Method Blank (MB) ICP-MS
1202053059	Laboratory Control Sample (LCS)
1202053062	247830002(GW29-10-13277L) Serial Dilution (SD)
1202053060	247830002(GW29-10-13277D) Sample Duplicate (DUP)
1202053061	247830002(GW29-10-13277S) Matrix Spike (MS)
1202056223	Method Blank (MB) CVAA
1202056224	Laboratory Control Sample (LCS)
1202056227	247771001(RE15-10-8272L) Serial Dilution (SD)
1202056225	247771001(RE15-10-8272D) Sample Duplicate (DUP)
1202056226	247771001(RE15-10-8272S) Matrix Spike (MS)

The samples in this SDG were analyzed on an "as received" basis.

Method/Analysis Information

Analytical Batch:	957492, 957494 and 958777
Prep Batch :	957491, 957493 and 958775
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 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 standards met the advisory control limits with the exception of zinc that recovered outside of the advisory control 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: 247830002 (GW29-10-13277)-ICP and ICP-MS and 247771001 (RE15-10-8272)-CVAA.

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 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 established criteria of less than 10% difference (%D) with the exception of manganese as indicated by the "E" qualifier.

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: Nick-Cole A. Emore Date: 4/21/10

Sample Data Summary

METALS
-1-
INORGANICS ANALYSIS DATA PACKAGE

SDG No: 10-1973-1

CONTRACT: LANL01004

METHOD TYPE: SW846

SAMPLE ID: 247771001

BASIS: As Received

DATE COLLECTED 16-FEB-10

CLIENT ID: RE15-10-8272

LEVEL: Low

DATE RECEIVED 23-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	03/19/10 13:43	031910-1	957492
7440-36-0	Antimony	3	ug/L	U	1	3	3	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7440-38-2	Arsenic	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-39-3	Barium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-41-7	Beryllium	0.50	ug/L	U	0.1	0.5	0.5	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7440-43-9	Cadmium	1	ug/L	U	0.11	1	1	1	MS	SKJ	04/20/10 16:06	100420-5	957494
7440-70-2	Calcium	62.9	ug/L	J	50	200	200	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-47-3	Chromium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-48-4	Cobalt	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-50-8	Copper	10	ug/L	U	3	10	10	1	P	HSC	03/19/10 13:43	031910-1	957492
7439-89-6	Iron	100	ug/L	U	30	100	100	1	P	HSC	03/19/10 13:43	031910-1	957492
7439-92-1	Lead	2	ug/L	U	0.5	2	2	1	MS	SKJ	04/20/10 16:06	100420-5	957494
7439-95-4	Magnesium	300	ug/L	U	85	300	300	1	P	HSC	03/19/10 13:43	031910-1	957492
7439-96-5	Manganese	2.51	ug/L	J	1	5	5	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7439-97-6	Mercury	0.20	ug/L	U	0.066	0.2	0.2	1	AV	JXL	03/03/10 11:12	030310W2-6	958777
7440-02-0	Nickel	5	ug/L	U	1.5	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-09-7	Potassium	462	ug/L		50	150	150	1	P	HSC	03/19/10 13:43	031910-1	957492
7782-49-2	Selenium	30	ug/L	U	5	30	30	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-22-4	Silver	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-23-5	Sodium	341	ug/L		100	300	300	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-28-0	Thallium	0.381	ug/L	J	0.3	1	1	1	MS	SKJ	04/20/10 13:17	100420-3	957494
7440-62-2	Vanadium	5	ug/L	U	1	5	5	1	P	HSC	03/19/10 13:43	031910-1	957492
7440-66-6	Zinc	10	ug/L	U	3.3	10	10	1	P	HSC	03/19/10 13:43	031910-1	957492

Prep Information:

Analytical Batch	Prep Batch	Prep Method	Initial wt./vol.	Units	Final wt./vol.	Units	Date	Analyst
957492	957491	SW846 3005A	50	mL	50	mL	03/01/10	BXA1
957494	957493	SW846 3005A	50	mL	50	mL	03/02/10	FGA
958777	958775	SW846 7470A Prep	20	mL	20	mL	03/02/10	TXB3

Quality Control Summary

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICV01										
	Mercury	5.03	ug/L	5	ug/L	100.6	90.0 – 110.0	AV	03-MAR-10 10:32	030310W2-6
	Aluminum	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Arsenic	480	ug/L	500	ug/L	96.1	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Barium	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Calcium	5170	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Chromium	491	ug/L	500	ug/L	98.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Cobalt	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Copper	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Iron	5240	ug/L	5000	ug/L	104.9	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Magnesium	5440	ug/L	5000	ug/L	108.8	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Nickel	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Potassium	2560	ug/L	2500	ug/L	102.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Selenium	2610	ug/L	2500	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Silver	260	ug/L	250	ug/L	104.2	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Sodium	2460	ug/L	2500	ug/L	98.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Vanadium	516	ug/L	500	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Zinc	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 07:43	031910-1
	Antimony	49.1	ug/L	50	ug/L	98.1	90.0 – 110.0	MS	20-APR-10 12:39	100420-3
	Beryllium	49.2	ug/L	50	ug/L	98.4	90.0 – 110.0	MS	20-APR-10 12:39	100420-3
	Manganese	50.4	ug/L	50	ug/L	100.8	90.0 – 110.0	MS	20-APR-10 12:39	100420-3
	Thallium	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	20-APR-10 12:39	100420-3
	Cadmium	52.3	ug/L	50	ug/L	104.6	90.0 – 110.0	MS	20-APR-10 15:46	100420-5
	Lead	52	ug/L	50	ug/L	104.1	90.0 – 110.0	MS	20-APR-10 15:46	100420-5
CCV01										
	Mercury	5.12	ug/L	5	ug/L	102.5	80.0 – 120.0	AV	03-MAR-10 10:38	030310W2-6
	Aluminum	5010	ug/L	5000	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Arsenic	510	ug/L	500	ug/L	101.9	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Barium	496	ug/L	500	ug/L	99.1	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.9	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Chromium	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	19-MAR-10 08:47	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: JCPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Cobalt	502	ug/L	500	ug/L	100.4	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Copper	489	ug/L	500	ug/L	97.8	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Iron	5300	ug/L	5000	ug/L	106	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Magnesium	5370	ug/L	5000	ug/L	107.5	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Nickel	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Potassium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Selenium	522	ug/L	500	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Silver	497	ug/L	500	ug/L	99.5	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Sodium	10300	ug/L	10000	ug/L	103.1	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Vanadium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Zinc	494	ug/L	500	ug/L	98.7	90.0 – 110.0	P	19-MAR-10 08:47	031910-1
	Antimony	50	ug/L	50	ug/L	99.9	90.0 – 110.0	MS	20-APR-10 12:55	100420-3
	Beryllium	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	20-APR-10 12:55	100420-3
	Manganese	51.1	ug/L	50	ug/L	102.2	90.0 – 110.0	MS	20-APR-10 12:55	100420-3
	Thallium	51	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	20-APR-10 12:55	100420-3
	Cadmium	51.3	ug/L	50	ug/L	102.5	90.0 – 110.0	MS	20-APR-10 15:57	100420-5
	Lead	52.4	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	20-APR-10 15:57	100420-5
CCV02	Mercury	5.41	ug/L	5	ug/L	108.2	80.0 – 120.0	AV	03-MAR-10 11:02	030310W2-6
	Aluminum	5140	ug/L	5000	ug/L	102.9	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Arsenic	507	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Barium	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Calcium	5190	ug/L	5000	ug/L	103.8	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Chromium	500	ug/L	500	ug/L	100	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Cobalt	508	ug/L	500	ug/L	101.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Copper	494	ug/L	500	ug/L	98.8	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Iron	5230	ug/L	5000	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Magnesium	5410	ug/L	5000	ug/L	108.2	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Nickel	506	ug/L	500	ug/L	101.2	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 09:08	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: JCPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Selenium	522	ug/L	500	ug/L	104.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Silver	502	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Sodium	9900	ug/L	10000	ug/L	99	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Vanadium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Zinc	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 09:08	031910-1
	Antimony	49.5	ug/L	50	ug/L	98.9	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Beryllium	51.3	ug/L	50	ug/L	102.6	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Manganese	51.4	ug/L	50	ug/L	102.9	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Thallium	50.9	ug/L	50	ug/L	101.9	90.0 – 110.0	MS	20-APR-10 13:04	100420-3
	Cadmium	50.9	ug/L	50	ug/L	101.8	90.0 – 110.0	MS	20-APR-10 16:15	100420-5
	Lead	52.3	ug/L	50	ug/L	104.7	90.0 – 110.0	MS	20-APR-10 16:15	100420-5
CCV03										
	Mercury	5.14	ug/L	5	ug/L	102.8	80.0 – 120.0	AV	03-MAR-10 11:26	030310W2-6
	Aluminum	5090	ug/L	5000	ug/L	101.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Arsenic	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Barium	498	ug/L	500	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Calcium	5200	ug/L	5000	ug/L	104	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Cobalt	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Copper	491	ug/L	500	ug/L	98.2	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Iron	5320	ug/L	5000	ug/L	106.4	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Magnesium	5390	ug/L	5000	ug/L	107.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Nickel	503	ug/L	500	ug/L	100.6	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Potassium	5220	ug/L	5000	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Selenium	523	ug/L	500	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Silver	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Sodium	10500	ug/L	10000	ug/L	104.9	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Vanadium	501	ug/L	500	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Zinc	495	ug/L	500	ug/L	99	90.0 – 110.0	P	19-MAR-10 10:18	031910-1
	Antimony	49	ug/L	50	ug/L	98	90.0 – 110.0	MS	20-APR-10 13:36	100420-3

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Beryllium	50.2	ug/L	50	ug/L	100.5	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Manganese	50.5	ug/L	50	ug/L	101	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Thallium	49.4	ug/L	50	ug/L	98.7	90.0 - 110.0	MS	20-APR-10 13:36	100420-3
	Cadmium	51.2	ug/L	50	ug/L	102.3	90.0 - 110.0	MS	20-APR-10 16:35	100420-5
	Lead	53	ug/L	50	ug/L	106	90.0 - 110.0	MS	20-APR-10 16:35	100420-5
CCV04										
	Aluminum	5250	ug/L	5000	ug/L	105	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Arsenic	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Barium	504	ug/L	500	ug/L	100.9	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Calcium	5230	ug/L	5000	ug/L	104.7	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Chromium	505	ug/L	500	ug/L	101	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Cobalt	512	ug/L	500	ug/L	102.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Copper	497	ug/L	500	ug/L	99.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Iron	5270	ug/L	5000	ug/L	105.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Magnesium	5330	ug/L	5000	ug/L	106.6	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Nickel	511	ug/L	500	ug/L	102.2	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Potassium	5370	ug/L	5000	ug/L	107.4	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Selenium	523	ug/L	500	ug/L	104.6	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Silver	506	ug/L	500	ug/L	101.1	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Sodium	10200	ug/L	10000	ug/L	102.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Vanadium	508	ug/L	500	ug/L	101.5	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Zinc	503	ug/L	500	ug/L	100.6	90.0 - 110.0	P	19-MAR-10 11:38	031910-1
	Antimony	48.9	ug/L	50	ug/L	97.9	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
	Beryllium	52.2	ug/L	50	ug/L	104.3	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
	Manganese	50.8	ug/L	50	ug/L	101.7	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
	Thallium	49.8	ug/L	50	ug/L	99.6	90.0 - 110.0	MS	20-APR-10 14:10	100420-3
CCV05										
	Aluminum	5150	ug/L	5000	ug/L	103	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Arsenic	510	ug/L	500	ug/L	102	90.0 - 110.0	P	19-MAR-10 12:49	031910-1
	Barium	506	ug/L	500	ug/L	101.2	90.0 - 110.0	P	19-MAR-10 12:49	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Calcium	5210	ug/L	5000	ug/L	104.1	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Chromium	506	ug/L	500	ug/L	101.3	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Cobalt	513	ug/L	500	ug/L	102.5	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Copper	499	ug/L	500	ug/L	99.9	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Iron	5290	ug/L	5000	ug/L	105.9	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Magnesium	5320	ug/L	5000	ug/L	106.5	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Nickel	511	ug/L	500	ug/L	102.1	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Potassium	5290	ug/L	5000	ug/L	105.8	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Selenium	524	ug/L	500	ug/L	104.9	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Silver	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Sodium	10400	ug/L	10000	ug/L	104.3	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Vanadium	511	ug/L	500	ug/L	102.2	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
	Zinc	504	ug/L	500	ug/L	100.7	90.0 – 110.0	P	19-MAR-10 12:49	031910-1
CCV06	Aluminum	5040	ug/L	5000	ug/L	100.8	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Arsenic	519	ug/L	500	ug/L	103.8	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Barium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Calcium	5150	ug/L	5000	ug/L	103	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Chromium	517	ug/L	500	ug/L	103.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Cobalt	524	ug/L	500	ug/L	104.7	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Copper	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Iron	5230	ug/L	5000	ug/L	104.6	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Magnesium	5290	ug/L	5000	ug/L	105.7	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Nickel	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Potassium	5160	ug/L	5000	ug/L	103.3	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Selenium	534	ug/L	500	ug/L	106.9	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Silver	518	ug/L	500	ug/L	103.6	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Sodium	10000	ug/L	10000	ug/L	100.2	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Vanadium	521	ug/L	500	ug/L	104.2	90.0 – 110.0	P	19-MAR-10 13:15	031910-1
	Zinc	512	ug/L	500	ug/L	102.4	90.0 – 110.0	P	19-MAR-10 13:15	031910-1

METALS
--2a--
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CCV07										
	Aluminum	5110	ug/L	5000	ug/L	102.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Arsenic	508	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Barium	499	ug/L	500	ug/L	99.8	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Calcium	5180	ug/L	5000	ug/L	103.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Chromium	498	ug/L	500	ug/L	99.7	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Cobalt	508	ug/L	500	ug/L	101.6	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Copper	492	ug/L	500	ug/L	98.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Iron	5250	ug/L	5000	ug/L	105.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Magnesium	5350	ug/L	5000	ug/L	107	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Nickel	505	ug/L	500	ug/L	101.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Potassium	5270	ug/L	5000	ug/L	105.4	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Selenium	520	ug/L	500	ug/L	104.1	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Silver	503	ug/L	500	ug/L	100.5	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Sodium	10300	ug/L	10000	ug/L	102.9	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Vanadium	502	ug/L	500	ug/L	100.3	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
	Zinc	496	ug/L	500	ug/L	99.2	90.0 – 110.0	P	19-MAR-10 14:17	031910-1
CCV08										
	Aluminum	4930	ug/L	5000	ug/L	98.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Arsenic	509	ug/L	500	ug/L	101.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Barium	505	ug/L	500	ug/L	101	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Calcium	4980	ug/L	5000	ug/L	99.6	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Chromium	504	ug/L	500	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Cobalt	513	ug/L	500	ug/L	102.7	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Copper	500	ug/L	500	ug/L	100.1	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Iron	5040	ug/L	5000	ug/L	100.9	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Magnesium	5180	ug/L	5000	ug/L	103.5	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Nickel	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Potassium	5070	ug/L	5000	ug/L	101.4	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Selenium	522	ug/L	500	ug/L	104.4	90.0 – 110.0	P	19-MAR-10 15:12	031910-1
	Silver	510	ug/L	500	ug/L	102	90.0 – 110.0	P	19-MAR-10 15:12	031910-1

METALS
-2a-
Initial and Continuing Calibration Verification

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Initial Calibration Source: Solutions Plus

Continuing Calibration Source: O2Si

Instrument ID: ICPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Sodium	9760	ug/L	10000	ug/L	97.6	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Vanadium	509	ug/L	500	ug/L	101.7	90.0 - 110.0	P	19-MAR-10 15:12	031910-1
	Zinc	502	ug/L	500	ug/L	100.5	90.0 - 110.0	P	19-MAR-10 15:12	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source: SPEX

ICP CRDL Standard Source Solutions Plus

Instrument ID: ICPMS5,MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
CRDL01										
	Mercury	.156	ug/L	.2	ug/L	77.8	70.0 – 130.0	AV	03-MAR-10 10:36	030310W2-6
	Manganese	6.17	ug/L	5	ug/L	123.4	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Thallium	1.23	ug/L	1	ug/L	122.5	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Antimony	2.85	ug/L	3	ug/L	94.9	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Beryllium	.64	ug/L	.5	ug/L	128	70.0 – 130.0	MS	20-APR-10 12:46	100420-3
	Lead	2.49	ug/L	2	ug/L	124.7	70.0 – 130.0	MS	20-APR-10 15:51	100420-5
	Cadmium	1.24	ug/L	1	ug/L	124	70.0 – 130.0	MS	20-APR-10 15:51	100420-5
PQL01										
	Copper	10.4	ug/L	10	ug/L	104	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Chromium	5.11	ug/L	5	ug/L	102.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Barium	5.23	ug/L	5	ug/L	104.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Arsenic	34.4	ug/L	30	ug/L	114.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Sodium	286	ug/L	300	ug/L	95.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Silver	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Potassium	170	ug/L	150	ug/L	113.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Nickel	5.46	ug/L	5	ug/L	109.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Magnesium	344	ug/L	300	ug/L	114.8	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Iron	117	ug/L	100	ug/L	116.6	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Cobalt	5.16	ug/L	5	ug/L	103.2	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Vanadium	4.92	ug/L	5	ug/L	98.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Zinc	13.7	ug/L	10	ug/L	137.3	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Calcium	223	ug/L	200	ug/L	111.7	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
	Selenium	30.3	ug/L	30	ug/L	101.1	70.0 – 130.0	P	19-MAR-10 07:57	031910-1
PQL02										
	Aluminum	211	ug/L	200	ug/L	105.6	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Iron	107	ug/L	100	ug/L	107.5	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Magnesium	384	ug/L	300	ug/L	128	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Nickel	5.52	ug/L	5	ug/L	110.4	70.0 – 130.0	P	19-MAR-10 10:25	031910-1
	Potassium	171	ug/L	150	ug/L	113.7	70.0 – 130.0	P	19-MAR-10 10:25	031910-1

METALS
-2b-
CRDL Standard for AA & ICP

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

AA CRDL Standard Source:

ICP CRDL Standard Source

Instrument ID: ICPMS5.MER536,OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Advisory Limits (%R)</u>	<u>M</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	5.08	ug/L	5	ug/L	101.7	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Sodium	287	ug/L	300	ug/L	95.6	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Arsenic	32.7	ug/L	30	ug/L	109	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Barium	5.33	ug/L	5	ug/L	106.6	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Cobalt	5.4	ug/L	5	ug/L	108.1	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Copper	10.1	ug/L	10	ug/L	101.2	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Vanadium	5.01	ug/L	5	ug/L	100.3	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Zinc	13.6	ug/L	10	ug/L	135.7	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Calcium	221	ug/L	200	ug/L	110.5	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Selenium	31	ug/L	30	ug/L	103.4	70.0 - 130.0	P	19-MAR-10 10:25	031910-1
	Chromium	5.12	ug/L	5	ug/L	102.3	70.0 - 130.0	P	19-MAR-10 10:25	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
ICB01										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	03-MAR-10 10:34	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 07:50	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 07:50	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 07:50	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 07:50	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 07:50	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 07:50	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 07:50	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 07:50	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 07:50	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 07:50	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 07:50	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 12:43	100420-3
	Beryllium	0.1	+/- .5	U	0.1	0.5	LIQ	MS	20-APR-10 12:43	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 12:43	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 12:43	100420-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 15:48	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 15:48	100420-5
CCB01										
	Mercury	0.066	+/- .2	U	0.066	0.2	LIQ	AV	03-MAR-10 10:40	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 08:54	031910-1
	Arsenic	5.21	+/-30	J	5.0	30.0	LIQ	P	19-MAR-10 08:54	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 08:54	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1

SW846

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 08:54	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 08:54	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 08:54	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Potassium	79.8	+/-150	J	50.0	150	LIQ	P	19-MAR-10 08:54	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 08:54	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 08:54	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 08:54	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 08:54	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 12:58	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 12:58	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 12:58	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 12:58	100420-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 15:59	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 15:59	100420-5
CCB02	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	03-MAR-10 11:04	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 09:15	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 09:15	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 09:15	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 09:15	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 09:15	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 09:15	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 09:15	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 09:15	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ng/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 09:15	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 09:15	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 09:15	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 13:07	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 13:07	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 13:07	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 13:07	100420-3
	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 16:17	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 16:17	100420-5
CCB03	Mercury	0.066	+/-2	U	0.066	0.2	LIQ	AV	03-MAR-10 11:28	030310W2-6
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 10:32	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 10:32	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 10:32	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 10:32	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 10:32	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 10:32	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 10:32	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 10:32	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 10:32	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 10:32	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 10:32	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 13:39	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 13:39	100420-3
	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 13:39	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 13:39	100420-3

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
CCB04	Cadmium	0.11	+/-1	U	0.11	1.0	LIQ	MS	20-APR-10 16:37	100420-5
	Lead	0.5	+/-2	U	0.5	2.0	LIQ	MS	20-APR-10 16:37	100420-5
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 11:45	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 11:45	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 11:45	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 11:45	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 11:45	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 11:45	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 11:45	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 11:45	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 11:45	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 11:45	031910-1
	Zinc	4.13	+/-10	J	3.3	10.0	LIQ	P	19-MAR-10 11:45	031910-1
	Antimony	1.0	+/-3	U	1.0	3.0	LIQ	MS	20-APR-10 14:13	100420-3
	Beryllium	0.1	+/-5	U	0.1	0.5	LIQ	MS	20-APR-10 14:13	100420-3
CCB05	Manganese	1.0	+/-5	U	1.0	5.0	LIQ	MS	20-APR-10 14:13	100420-3
	Thallium	0.3	+/-1	U	0.3	1.0	LIQ	MS	20-APR-10 14:13	100420-3
	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 12:56	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 12:56	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 12:56	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 12:56	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 12:56	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 12:56	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Potassium	50.99	+/-150	J	50.0	150	LIQ	P	19-MAR-10 12:56	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 12:56	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 12:56	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 12:56	031910-1
	Zinc	3.36	+/-10	J	3.3	10.0	LIQ	P	19-MAR-10 12:56	031910-1
CCB06	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 13:22	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 13:22	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 13:22	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 13:22	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 13:22	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 13:22	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 13:22	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 13:22	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 13:22	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 13:22	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 13:22	031910-1
CCB07	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 14:24	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 14:24	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 14:24	031910-1

Metals
-3a-
Initial and Continuing Calibration Blank Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u> <u>ug/L</u>	<u>Acceptance</u>	<u>Conc</u> <u>Qual</u>	<u>MDL</u>	<u>RDL</u>	<u>Matrix</u>	<u>M</u>	<u>Analysis</u> <u>Date/Time</u>	<u>Run</u>
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 14:24	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 14:24	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 14:24	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 14:24	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 14:24	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 14:24	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 14:24	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 14:24	031910-1
CCB08	Aluminum	68.0	+/-200	U	68.0	200	LIQ	P	19-MAR-10 15:19	031910-1
	Arsenic	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 15:19	031910-1
	Barium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Calcium	50.0	+/-200	U	50.0	200	LIQ	P	19-MAR-10 15:19	031910-1
	Chromium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Cobalt	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Copper	3.0	+/-10	U	3.0	10.0	LIQ	P	19-MAR-10 15:19	031910-1
	Iron	30.0	+/-100	U	30.0	100	LIQ	P	19-MAR-10 15:19	031910-1
	Magnesium	85.0	+/-300	U	85.0	300	LIQ	P	19-MAR-10 15:19	031910-1
	Nickel	1.5	+/-5	U	1.5	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Potassium	50.0	+/-150	U	50.0	150	LIQ	P	19-MAR-10 15:19	031910-1
	Selenium	5.0	+/-30	U	5.0	30.0	LIQ	P	19-MAR-10 15:19	031910-1
	Silver	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Sodium	100	+/-300	U	100	300	LIQ	P	19-MAR-10 15:19	031910-1
	Vanadium	1.0	+/-5	U	1.0	5.0	LIQ	P	19-MAR-10 15:19	031910-1
	Zinc	3.3	+/-10	U	3.3	10.0	LIQ	P	19-MAR-10 15:19	031910-1

METALS
-3b-
PREPARATION BLANK SUMMARY

SDG NO. 10-1973-1

Contract: LANL01004

Matrix: WATER

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Acceptance Window</u>	<u>Conc Qual</u>	<u>M</u>	<u>MDL</u>	<u>RDL</u>
1202053053								
	Magnesium	85	ug/L	+/-300	U	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
	Arsenic	5	ug/L	+/-30	U	P	5	30
	Iron	30	ug/L	+/-100	U	P	30	100
	Copper	3	ug/L	+/-10	U	P	3	10
	Cobalt	1	ug/L	+/-5	U	P	1	5
	Chromium	1.7	ug/L	+/-5	J	P	1	5
	Aluminum	68	ug/L	+/-200	U	P	68	200
	Calcium	50	ug/L	+/-200	U	P	50	200
	Barium	1	ug/L	+/-5	U	P	1	5
1202053058								
	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
1202056223								
	Mercury	0.066	ug/L	+/-0.2	U	AV	0.066	0.2

METALS

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Interference Check Sample

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: OPTIMA3

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Aluminum	512000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Arsenic	8.97	ug/L					19-MAR-10 08:04	031910-1
	Barium	0.525	ug/L					19-MAR-10 08:04	031910-1
	Calcium	473000	ug/L	500000	ug/L	94.6	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Chromium	0.655	ug/L					19-MAR-10 08:04	031910-1
	Cobalt	-1.25	ug/L					19-MAR-10 08:04	031910-1
	Copper	2.12	ug/L					19-MAR-10 08:04	031910-1
	Iron	185000	ug/L	200000	ug/L	92.5	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Magnesium	488000	ug/L	500000	ug/L	97.7	80.0 – 120.0	19-MAR-10 08:04	031910-1
	Nickel	3.43	ug/L					19-MAR-10 08:04	031910-1
	Potassium	-190.0	ug/L					19-MAR-10 08:04	031910-1
	Selenium	-1.44	ug/L					19-MAR-10 08:04	031910-1
	Silver	-1.58	ug/L					19-MAR-10 08:04	031910-1
	Sodium	9.4	ug/L					19-MAR-10 08:04	031910-1
	Vanadium	-3.12	ug/L					19-MAR-10 08:04	031910-1
	Zinc	0.975	ug/L					19-MAR-10 08:04	031910-1
ICSAB01									
	Aluminum	514000	ug/L	500000	ug/L	103	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Arsenic	525	ug/L	500	ug/L	105	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Barium	492	ug/L	500	ug/L	98.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Calcium	478000	ug/L	500000	ug/L	95.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Chromium	486	ug/L	500	ug/L	97.2	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Cobalt	445	ug/L	500	ug/L	89	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Copper	547	ug/L	500	ug/L	110	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Iron	188000	ug/L	200000	ug/L	94	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Magnesium	492000	ug/L	500000	ug/L	98.4	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Nickel	452	ug/L	500	ug/L	90.5	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Potassium	5280	ug/L	5000	ug/L	106	80.0 – 120.0	19-MAR-10 08:11	031910-1
	Selenium	2560	ug/L	2500	ug/L	102	80.0 – 120.0	19-MAR-10 08:11	031910-1

METALS

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Interference Check Sample

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

ICS:

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
	Silver	274	ug/L	250	ug/L	110	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Sodium	5500	ug/L	5000	ug/L	110	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Vanadium	508	ug/L	500	ug/L	102	80.0 - 120.0	19-MAR-10 08:11	031910-1
	Zinc	493	ug/L	500	ug/L	98.5	80.0 - 120.0	19-MAR-10 08:11	031910-1

METALS

-4-

Interference Check Sample

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01									
	Antimony	0.108	ug/L					20-APR-10 12:49	100420-3
	Beryllium	0.125	ug/L					20-APR-10 12:49	100420-3
	Manganese	5.63	ug/L					20-APR-10 12:49	100420-3
	Thallium	-0.014	ug/L					20-APR-10 12:49	100420-3
ICSAB01									
	Antimony	18.8	ug/L	20	ug/L	94.1	80.0 - 120.0	20-APR-10 12:52	100420-3
	Beryllium	19.8	ug/L	20	ug/L	98.8	80.0 - 120.0	20-APR-10 12:52	100420-3
	Manganese	25.2	ug/L	25.8	ug/L	97.6	80.0 - 120.0	20-APR-10 12:52	100420-3
	Thallium	19.5	ug/L	20	ug/L	97.5	80.0 - 120.0	20-APR-10 12:52	100420-3

METALS

-4-

Interference Check Sample

SDG No: 10-1973-1

Contract: LANL01004

Lab Code: GEL

ICS: O2Si

Instrument: ICPMS5

<u>Sample ID</u>	<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>True Value</u>	<u>Units</u>	<u>% Recovery</u>	<u>Acceptance Window (%R)</u>	<u>Analysis Date/Time</u>	<u>Run Number</u>
ICSA01	Cadmium	0.465	ug/L					20-APR-10 15:53	100420-5
	Lead	0.197	ug/L					20-APR-10 15:53	100420-5
ICSAB01	Cadmium	19.1	ug/L	20.44	ug/L	93.2	80.0 - 120.0	20-APR-10 15:55	100420-5
	Lead	19.8	ug/L	20.19	ug/L	98.3	80.0 - 120.0	20-APR-10 15:55	100420-5

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1973-1

Client ID GW29-10-13277S

Contract: LANL01006

Level: Low

Matrix: WATER

% Solids:

Sample ID: 247830002

Spike ID: 1202053056

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Aluminum	ug/L	75-125	11000		4770		5000	124		P
Arsenic	ug/L	75-125	527		8.89	J	500	104		P
Barium	ug/L	75-125	886		352		500	107		P
Calcium	ug/L		33500		26800		5000	134	N/A	P
Chromium	ug/L	75-125	528		25.6		500	100		P
Cobalt	ug/L	75-125	575		78.5		500	99.3		P
Copper	ug/L	75-125	561		33.5		500	106		P
Iron	ug/L		63700		51700		5000	240	N/A	P
Magnesium	ug/L	75-125	12100		6410		5000	113		P
Nickel	ug/L	75-125	547		44		500	101		P
Potassium	ug/L	75-125	10100		4470		5000	113		P
Selenium	ug/L	75-125	513		5	U	500	103		P
Silver	ug/L	75-125	503		1	U	500	100		P
Sodium	ug/L		26000		21600		5000	87	N/A	P
Vanadium	ug/L	75-125	535		16.2		500	104		P
Zinc	ug/L		3930		3320		500	122	N/A	P

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1973-1 Client ID GW29-10-13277S

Contract: LANL01006 Level: Low

Matrix: WATER % Solids:

Sample ID: 247830002 Spike ID: 1202053061

Analyte	Units	Acceptance Limit	Spiked Result	C	Sample Result	C	Spike Added	% Recovery	Qual	M
Antimony	ug/L	75-125	201		1	U	200	101		MS
Beryllium	ug/L	75-125	50.4		0.452	J	50	99.9		MS
Cadmium	ug/L	75-125	10.5		0.214	J	10	103		MS
Lead	ug/L	75-125	42.4		4.26		40	95.3		MS
Manganese	ug/L		1030		900		50	254	N/A	MS
Thallium	ug/L	75-125	78		0.3	U	100	77.9		MS

METALS

-5a-

Matrix Spike Summary

SDG NO. 10-1973-1 **Client ID** RE15-10-8272S**Contract:** LANL01004 **Level:** Low**Matrix:** WATER **% Solids:****Sample ID:** 247771001 **Spike ID:** 1202056226

<u>Analyte</u>	<u>Units</u>	<u>Acceptance Limit</u>	<u>Spiked Result</u>	<u>C</u>	<u>Sample Result</u>	<u>C</u>	<u>Spike Added</u>	<u>% Recovery</u>	<u>Qual</u>	<u>M</u>
Mercury	ug/L	75-125	2.18		0.066	U	2	108		AV

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: GW29-10-13277D

Sample ID: 247830002

Duplicate ID: 1202053055

Percent Solids for Dup: N/A

Analyte	Units	Acceptance Limit	Sample Result	C	Duplicate Result	C	RPD	Qual	M
Aluminum	ug/L	+/-20%	4770		5340		11.4		P
Arsenic	ug/L	+/-30	8.89 J		7.25 J		20.4		P
Barium	ug/L	+/-20%	352		371		5.23		P
Calcium	ug/L	+/-20%	26800		27500		2.38		P
Chromium	ug/L	+/-20%	25.6		28.5		10.9		P
Cobalt	ug/L	+/-20%	78.5		82.3		4.78		P
Copper	ug/L	+/-10	33.5		36.9		9.69		P
Iron	ug/L	+/-20%	51700		55800		7.7		P
Magnesium	ug/L	+/-20%	6410		6580		2.57		P
Nickel	ug/L	+/-20%	44		47.6		7.75		P
Potassium	ug/L	+/-20%	4470		4540		1.55		P
Selenium	ug/L		5 U		5 U				P
Silver	ug/L		1 U		1 U				P
Sodium	ug/L	+/-20%	21600		20400		5.57		P
Vanadium	ug/L	+/-5	16.2		17.7		9.19		P
Zinc	ug/L	+/-20%	3320		3450		3.84		P

Metals
-6-
Duplicate Sample Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: GW29-10-13277D

Sample ID: 247830002

Duplicate ID: 1202053060

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	+/- .5	0.452 J		0.477 J		5.38		MS
Cadmium	ug/L	+/-1	0.214 J		0.21 J		1.89		MS
Lead	ug/L	+/-2	4.26		4.22		1.16		MS
Manganese	ug/L	+/-20%	900		913		1.43		MS
Thallium	ug/L		0.3 U		0.3 U				MS

Metals

-6-

Duplicate Sample Summary

SDG No.: 10-1973-1

Contract: LANL01004

Lab Code: GEL

Matrix: LIQUID

Level: Low

Client ID: RE15-10-8272D

Sample ID: 247771001

Duplicate ID: 1202056225

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. 10-1973-1

Contract: LANL01004

Aqueous LCS Source:OS2I

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202053054								
	Aluminum	ug/L	5000	5090		102	80-120	P
	Arsenic	ug/L	500	518		104	80-120	P
	Barium	ug/L	500	521		104	80-120	P
	Calcium	ug/L	5000	5120		102	80-120	P
	Chromium	ug/L	500	509		102	80-120	P
	Cobalt	ug/L	500	511		102	80-120	P
	Copper	ug/L	500	513		103	80-120	P
	Iron	ug/L	5000	5140		103	80-120	P
	Magnesium	ug/L	5000	5280		106	80-120	P
	Nickel	ug/L	500	518		104	80-120	P
	Potassium	ug/L	5000	5200		104	80-120	P
	Selenium	ug/L	500	526		105	80-120	P
	Silver	ug/L	500	501		100	80-120	P
	Sodium	ug/L	5000	5150		103	80-120	P
	Vanadium	ug/L	500	519		104	80-120	P
	Zinc	ug/L	500	500		100	80-120	P

METALS

-7-

Laboratory Control Sample Summary

SDG NO. 10-1973-1

Contract: LANL01004

Aqueous LCS Source:O2si

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202053059								
	Antimony	ug/L	50	51.2		102	80-120	MS
	Beryllium	ug/L	50	54.7		109	80-120	MS
	Cadmium	ug/L	50	50.9		102	80-120	MS
	Lead	ug/L	50	51.7		103	80-120	MS
	Manganese	ug/L	50	51.1		102	80-120	MS
	Thallium	ug/L	50	44.3		88.7	80-120	MS

METALS
-7-
Laboratory Control Sample Summary

SDG NO. 10-1973-1
Contract: LANL01004
Aqueous LCS Source:GEL

Solid LCS Source:

<u>Sample ID</u>	<u>Analyte</u>	<u>Units</u>	<u>True Value</u>	<u>Result</u>	<u>C</u>	<u>% Recovery</u>	<u>Acceptance Limit</u>	<u>M</u>
1202056224	Mercury	ug/L	2	2.24		112	80-120	AV

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1973-1 Client ID GW29-10-13277L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247830002 Serial Dilution ID: 1202053057

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Aluminum	4770		4760		.21		10	P
Arsenic	8.89	J	25	U	100			P
Barium	352		356		1.14		10	P
Calcium	26800		26500		1.12		10	P
Chromium	25.6		25.2		1.76			P
Cobalt	78.5		80		1.91		10	P
Copper	33.5		32.7	J	2.39			P
Iron	51700		51500		.387		10	P
Magnesium	6410		6750		5.3		10	P
Nickel	44		43.9		.341			P
Potassium	4470		4440		.783		10	P
Selenium	5	U	25	U				P
Silver	1	U	5	U				P
Sodium	21600		21000		3.01		10	P
Vanadium	16.2		15.2	J	6.48			P
Zinc	3320		3400		2.26		10	P

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1973-1 Client ID GW29-10-13277L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247830002 Serial Dilution ID: 1202053062

Analyte	Initial Value ug/L	C	Serial Value ug/L	C	% Difference	Qual	Acceptance Limit	M
Antimony	1	U	5	U				MS
Beryllium	.452	J	.765	J	69.2			MS
Cadmium	.214	J	.55	U	100			MS
Lead	4.26		4.5	J	5.63			MS
Manganese	900		1010		12.2	E	10	MS
Thallium	.3	U	5.3					MS

METALS

-9-

Serial Dilution Sample Summary

SDG NO. 10-1973-1 Client ID RE15-10-8272L

Contract: LANL01004

Matrix: LIQUID Level: Low

Sample ID: 247771001 Serial Dilution ID: 1202056227

<u>Analyte</u>	<u>Initial Value ug/L</u>	<u>C</u>	<u>Serial Value ug/L</u>	<u>C</u>	<u>% Difference</u>	<u>Qual</u>	<u>Acceptance Limit</u>	<u>M</u>
Mercury	.066	U	.33	U				AV

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1973-1

Method Type: P

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 957491							
1202053053	MB for batch 957491	MB	W	01-MAR-10	50mL	50mL	
1202053054	LCS for batch 957491	LCS	W	01-MAR-10	50mL	50mL	
1202053056	GW29-10-13277S	MS	W	01-MAR-10	50mL	50mL	
1202053055	GW29-10-13277D	DUP	W	01-MAR-10	50mL	50mL	
247771001	RE15-10-8272	SAMPLE	W	01-MAR-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1973-1

Method Type: MS

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 957493							
1202053058	MB for batch 957493	MB	W	02-MAR-10	50mL	50mL	
1202053059	LCS for batch 957493	LCS	W	02-MAR-10	50mL	50mL	
1202053061	GW29-10-13277S	MS	W	02-MAR-10	50mL	50mL	
1202053060	GW29-10-13277D	DUP	W	02-MAR-10	50mL	50mL	
247771001	RE15-10-8272	SAMPLE	W	02-MAR-10	50mL	50mL	

SW846

METALS
-13-
SAMPLE PREPARATION SUMMARY

SDG No: 10-1973-1

Method Type: AV

Contract: LANL01004

Lab Code: GEL

<u>Sample ID</u>	<u>Client ID</u>	<u>Sample Type</u>	<u>Matrix</u>	<u>Prep Date</u>	<u>Initial Sample Size</u>	<u>Final Sample Volume</u>	<u>Percent Solids</u>
Batch Number 958775							
1202056223	MB for batch 958775	MB	W	02-MAR-10	20mL	20mL	
1202056224	LCS for batch 958775	LCS	W	02-MAR-10	20mL	20mL	
1202056226	RE15-10-8272S	MS	W	02-MAR-10	20mL	20mL	
1202056225	RE15-10-8272D	DUP	W	02-MAR-10	20mL	20mL	
247771001	RE15-10-8272	SAMPLE	W	02-MAR-10	20mL	20mL	

SW846

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 20-APR-10

End Date: 20-APR-10

Client Sdg: 10-1973-1

Method: MS

Data File: 100420-3

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	V	Zn
S0.0	1	12:30:00		X			X									X							X		
S10	1	12:33:00		X			X									X							X		
S100	1	12:36:00		X			X									X							X		
ICV01	1	12:39:00		X			X									X							X		
ICB01	1	12:43:00		X			X									X							X		
CRDL01	1	12:46:00		X			X									X							X		
ICSA01	1	12:49:00		X			X									X							X		
ICSAB01	1	12:52:00		X			X									X							X		
CCV01	1	12:55:00		X			X									X							X		
CCB01	1	12:58:00		X			X									X							X		
LR01	1	13:01:00		X			X									X							X		
CCV02	1	13:04:00		X			X									X							X		
CCB02	1	13:07:00		X			X									X							X		
1202053058	1	13:11:00		X			X									X							X		
1202053059	1	13:14:00		X			X									X							X		
247771001	1	13:17:00		X			X									X							X		
ZZZZZZ	1	13:20:00																							
ZZZZZZ	1	13:23:00																							
ZZZZZZ	1	13:26:00																							
ZZZZZZ	1	13:29:00																							
ZZZZZZ	1	13:32:00																							
CCV03	1	13:36:00		X			X									X							X		
CCB03	1	13:39:00		X			X									X							X		
ZZZZZZ	10	13:42:00																							
ZZZZZZ	10	13:45:00																							
ZZZZZZ	10	13:48:00																							
ZZZZZZ	50	13:51:00																							
ZZZZZZ	1	13:54:00																							
1202053060	1	13:57:00		X			X									X							X		
1202053061	1	14:00:00		X			X									X							X		
1202053062	5	14:04:00		X			X									X							X		
ZZZZZZ	1	14:07:00																							
CCV04	1	14:10:00		X			X									X							X		
CCB04	1	14:13:00		X			X									X							X		

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: ICPMS5

Start Date: 20-APR-10

End Date: 20-APR-10

Client Sdg: 10-1973-1

Method MS

Data File: 100420-5

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	V	Zn
S0.0	1	15:40:00						X						X											
S10	1	15:42:00						X						X											
S100	1	15:44:00						X						X											
ICV01	1	15:46:00						X						X											
ICB01	1	15:48:00						X						X											
CRDL01	1	15:51:00						X						X											
ICSA01	1	15:53:00						X						X											
ICSAB01	1	15:55:00						X						X											
CCV01	1	15:57:00						X						X											
CCB01	1	15:59:00						X						X											
1202053058	1	16:02:00						X						X											
1202053059	1	16:04:00						X						X											
247771001	1	16:06:00						X						X											
ZZZZZZ	1	16:08:00																							
ZZZZZZ	1	16:11:00																							
ZZZZZZ	1	16:13:00																							
CCV02	1	16:15:00						X						X											
CCB02	1	16:17:00						X						X											
ZZZZZZ	1	16:19:00																							
ZZZZZZ	1	16:22:00																							
ZZZZZZ	1	16:24:00																							
1202053060	1	16:26:00						X						X											
1202053061	1	16:28:00						X						X											
1202053062	5	16:30:00						X						X											
ZZZZZZ	1	16:33:00																							
CCV03	1	16:35:00						X						X											
CCB03	1	16:37:00						X						X											

Metals
-14-
Analysis Run Log

Contract: LANL01004

Lab Code: GEL

Inst Name: OPTIMA3

Start Date: 19-MAR-10

End Date: 19-MAR-10

Client Sdg: 10-1973-1

Method P

Data File: 031910-1

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	V	Zn
S0.0	1	07:10:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
S0.1	1	07:17:00			X	X				X	X	X						X	X	X	X			X	X
S0.5	1	07:23:00	X		X	X			X	X	X	X			X			X	X	X	X			X	X
SCAL	1	07:30:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
S10	1	07:37:00	X						X				X		X							X			
ICV01	1	07:43:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICB01	1	07:50:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
PQL01	1	07:57:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICSA01	1	08:04:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ICSAB01	1	08:11:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR01	1	08:18:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR02	1	08:24:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	08:31:00																							
ZZZZZZ	1	08:38:00																							
CCV01	1	08:47:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB01	1	08:54:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
LR03	1	09:01:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCV02	1	09:08:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB02	1	09:15:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	09:29:00																							
ZZZZZZ	1	09:36:00																							
ZZZZZZ	1	09:43:00																							
ZZZZZZ	1	09:49:00																							
ZZZZZZ	20	09:56:00																							
ZZZZZZ	20	10:03:00																							
ZZZZZZ	10	10:11:00																							
CCV03	1	10:18:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
PQL02	1	10:25:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB03	1	10:32:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	10:42:00																							
ZZZZZZ	1	10:49:00																							
ZZZZZZ	1	10:56:00																							
ZZZZZZ	1	11:03:00																							
ZZZZZZ	1	11:10:00																							
ZZZZZZ	1	11:17:00																							
ZZZZZZ	5	11:24:00																							
ZZZZZZ	1	11:31:00																							
CCV04	1	11:38:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
CCB04	1	11:45:00	X		X	X			X	X	X	X	X		X			X	X	X	X	X		X	X
ZZZZZZ	1	11:52:00																							

Metals
-14-
Analysis Run Log

Samp No.	D/F	Run Time																		
ZZZZZZ	1	11:59:00																		
ZZZZZZ	1	12:07:00																		
ZZZZZZ	1	12:14:00																		
ZZZZZZ	1	12:21:00																		
ZZZZZZ	1	12:28:00																		
ZZZZZZ	1	12:35:00																		
ZZZZZZ	1	12:42:00																		
CCV05	1	12:49:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
CCB05	1	12:56:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
CCV06	1	13:15:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
CCB06	1	13:22:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
1202053053	1	13:29:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
1202053054	1	13:36:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
247771001	1	13:43:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
ZZZZZZ	1	13:50:00																		
ZZZZZZ	1	13:56:00																		
ZZZZZZ	1	14:03:00																		
ZZZZZZ	1	14:10:00																		
CCV07	1	14:17:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
CCB07	1	14:24:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
ZZZZZZ	1	14:31:00																		
ZZZZZZ	1	14:38:00																		
1202053055	1	14:45:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
1202053056	1	14:52:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
1202053057	5	14:59:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
ZZZZZZ	1	15:05:00																		
CCV08	1	15:12:00	X		X	X			X	X	X	X	X	X		X	X	X	X	X
CCB08	1	15:19:00	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: 03-MAR-10

End Date: 03-MAR-10

Client Sdg: 10-1973-1

Method: AV

Data File: 030310W2-6

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	V	Zn
S0.0	1	10:20:00															X								
S0.2	1	10:22:00															X								
S0.5	1	10:24:00															X								
S2.0	1	10:26:00															X								
S5.0	1	10:28:00															X								
S10	1	10:30:00															X								
ICV01	1	10:32:00															X								
ICB01	1	10:34:00															X								
CRDL01	1	10:36:00															X								
CCV01	1	10:38:00															X								
CCB01	1	10:40:00															X								
ZZZZZZ	1	10:42:00																							
ZZZZZZ	1	10:44:00																							
ZZZZZZ	1	10:46:00																							
ZZZZZZ	1	10:48:00																							
ZZZZZZ	1	10:50:00																							
ZZZZZZ	5	10:52:00																							
ZZZZZZ	1	10:54:00																							
ZZZZZZ	1	10:56:00																							
ZZZZZZ	1	10:58:00																							
ZZZZZZ	1	11:00:00																							
CCV02	1	11:02:00															X								
CCB02	1	11:04:00															X								
ZZZZZZ	1	11:06:00																							
1202056223	1	11:08:00															X								
1202056224	1	11:10:00															X								
247771001	1	11:12:00															X								
1202056225	1	11:14:00															X								
1202056226	1	11:16:00															X								
1202056227	5	11:18:00															X								
ZZZZZZ	1	11:20:00																							
ZZZZZZ	1	11:22:00																							
ZZZZZZ	1	11:24:00																							
CCV03	1	11:26:00															X								
CCB03	1	11:28:00															X								

Standards

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1973-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP/MS	Analyte	<u>Wavelength</u>	<u>MDL</u>	<u>RDL</u>
		(nm)	ug/L	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
	Vanadium		3.0	10
	Zinc		3.0	10

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1973-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u> <u>ug/L</u>	<u>RDL</u> <u>ug/L</u>
MERCURY				
LIQUID	Mercury		0.066	.2

METALS
-10-
Instrument Detection Limits

SDG NO. 10-1973-1

Contract: LANL01004

Lab Code: GEL

MDL Effective Date: 01-JUL-09

ICP	<u>Analyte</u>	<u>Wavelength</u> <u>(nm)</u>	<u>MDL</u>	<u>RDL</u>
			<u>ug/L</u>	<u>ug/L</u>
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
	Vanadium	292.402	1.0	5
	Zinc	213.857	3.3	10

METALS
-11-
Interelement Correction Factors

Lab Code: GEL

GEL Job No: 10-1973-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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

GEL Job No: 10-1973-1

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: 01-FEB-10

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Parmname	Wavelength	Boron	Cadmium	Chromium	Cobalt	Copper
Aluminum	396.153	0.00000	0.00000	0.00000	0.00000	0.00000
Antimony	206.836	0.00000	0.00000	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: 10-1973-1

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

GEL Job No: 10-1973-1

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: GELGEL Job No: **10-1973-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

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: GELGEL Job No: **10-1973-1**

Contract: LANL01004

Instrument: OPTIMA3

Effective Dates: **01-FEB-10**

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

		Tin	Titanium	Uranium	Vanadium	Zinc
Parmname	Wavelength					
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. 10-1973-1

Contract: LANL01004

Lab Code: GEL

Instrument ID ICPMS5

<u>Analyte</u>	<u>Integration Time (msec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
Aluminum	1	50000	ug/L	01-FEB-10
Antimony	1000	250	ug/L	01-FEB-10
Arsenic	1000	1000	ug/L	01-FEB-10
Barium	1000	1000	ug/L	01-FEB-10
Beryllium	1000	1000	ug/L	01-FEB-10
Cadmium	1000	1000	ug/L	01-FEB-10
Calcium	500	50000	ug/L	01-FEB-10
Chromium	1000	1000	ug/L	01-FEB-10
Cobalt	1000	1000	ug/L	01-FEB-10
Copper	1000	1000	ug/L	01-FEB-10
Iron	500	50000	ug/L	01-FEB-10
Lead	1000	5000	ug/L	01-FEB-10
Magnesium	1	50000	ug/L	01-FEB-10
Manganese	1000	1000	ug/L	01-FEB-10
Nickel	1000	1000	ug/L	01-FEB-10
Potassium	1	50000	ug/L	01-FEB-10
Selenium	1000	500	ug/L	01-FEB-10
Silver	1000	250	ug/L	01-FEB-10
Sodium	1	50000	ug/L	01-FEB-10
Thallium	1000	500	ug/L	01-FEB-10
Vanadium	1000	100	ug/L	01-FEB-10
Zinc	1000	2500	ug/L	01-FEB-10

METALS
-12-
Linear Ranges

SDG NO. 10-1973-1

Contract: LANL01004

Lab Code: GEL

Instrument ID OPTIMA3

<u>Analyte</u>	<u>Integration Time (sec)</u>	<u>LDR</u>	<u>Units</u>	<u>Effective Date</u>
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
Vanadium	20	10000	ug/L	01-FEB-10
Zinc	20	15000	ug/L	01-FEB-10

Raw Data

3/19/2010 06:54:45 Hg ReAlign... Actual peak offset (nm): -0.009
Drift (nm): -0.000 Slit adjustment: 0

Analysis Begun

Start Time: 3/19/2010 07:10:13 Plasma On Time: 3/15/2010 06:51:19
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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/18/2010 18:42:02

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 396.153 Radial	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 317.933 Radial	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: 8

Sample ID: S0

Date Collected: 3/19/2010 07:10:15

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:

Replicate Data: S0

Net

Corrected

Calib.

Analysis

Repl#	Analyte	Intensity	Intensity	Conc. Units	Time
1	Sc Radial	4353.7	4353.7	0.000 %	07:12:08
1	Y RADIAL	4701.2	4701.2	0.000 %	07:12:08
1	Al 396.153Radial†	-70.7	-71.4	[0.00] ug/L	07:12:28
1	Ca 317.933Radial†	17.3	17.5	[0.00] ug/L	07:12:28
1	Fe 238.204 Radial†	9.7	9.8	[0.00] ug/L	07:12:28
1	K 766.490 Radial†	2594.9	2619.5	[0.00] ug/L	07:12:08
1	Mg 279.077 IEC†	0.4	0.4	[0.00] ug/L	07:12:28
1	Na 589.592 Radial†	-880.1	-888.4	[0.00] ug/L	07:12:08
1	Sr 421.552†	28.7	28.9	[0.00] ug/L	07:12:08
1	Sc 361.383	813923.1	813923.1	0.0000 %	07:13:24
1	Y 371.029	687856.7	687856.7	0.0000 %	07:13:24
1	Ag 328.068†	163.2	164.2	[0.00] ug/L	07:13:24
1	As 188.979†	-27.2	-27.4	[0.00] ug/L	07:13:44
1	B 249.677†	-533.0	-536.2	[0.00] ug/L	07:13:44
1	Ba 233.527†	-6.3	-6.3	[0.00] ug/L	07:13:44
1	Be 313.107†	-3672.2	-3694.3	[0.00] ug/L	07:13:24
1	Cd 226.502†	-177.2	-178.3	[0.00] ug/L	07:13:44
1	Co 228.616†	-39.2	-39.4	[0.00] ug/L	07:13:44
1	Cr 267.716†	70.5	70.9	[0.00] ug/L	07:13:44
1	Cu 324.752†	5494.6	5527.6	[0.00] ug/L	07:13:24
1	Mn 257.610†	391.2	393.5	[0.00] ug/L	07:13:44
1	Mo 202.031†	4.3	4.3	[0.00] ug/L	07:13:44
1	Ni 231.604†	78.3	78.8	[0.00] ug/L	07:13:44
1	P 214.914†	181.5	182.6	[0.00] ug/L	07:13:44
1	Pb 220.353†	-56.8	-57.2	[0.00] ug/L	07:13:44
1	S 181.975 Axial†	28.5	28.7	[0.00] ug/L	07:13:44
1	Sb 206.836†	27.2	27.4	[0.00] ug/L	07:13:44
1	Se 196.026†	-14.5	-14.6	[0.00] ug/L	07:13:44
1	Si 251.611†	480.1	483.0	[0.00] ug/L	07:13:44
1	Sn 189.927†	11.1	11.2	[0.00] ug/L	07:13:44
1	Ti 334.940†	-1120.6	-1127.3	[0.00] ug/L	07:13:24
1	Tl 190.801†	-33.9	-34.1	[0.00] ug/L	07:13:44
1	U 409.014†	-2254.8	-2268.4	[0.00] ug/L	07:13:24
1	V 292.402†	-1344.0	-1352.1	[0.00] ug/L	07:13:24
1	Zn 213.857†	561.6	565.0	[0.00] ug/L	07:13:44
1	SiO2†	511.8	514.9	[0.00] ug/L	07:14:55
2	Sc Radial	4414.0	4414.0	0.000 %	07:12:33
2	Y RADIAL	4778.8	4778.8	0.000 %	07:12:33
2	Al 396.153Radial†	-78.8	-78.5	[0.00] ug/L	07:12:53
2	Ca 317.933Radial†	16.9	16.9	[0.00] ug/L	07:12:53
2	Fe 238.204 Radial†	7.2	7.2	[0.00] ug/L	07:12:53
2	K 766.490 Radial†	2539.4	2528.4	[0.00] ug/L	07:12:33
2	Mg 279.077 IEC†	1.1	1.0	[0.00] ug/L	07:12:53
2	Na 589.592 Radial†	-865.3	-861.6	[0.00] ug/L	07:12:33
2	Sr 421.552†	13.8	13.7	[0.00] ug/L	07:12:33
2	Sc 361.383	820260.9	820260.9	0.0000 %	07:13:50
2	Y 371.029	692610.2	692610.2	0.0000 %	07:13:50
2	Ag 328.068†	188.4	188.1	[0.00] ug/L	07:13:50
2	As 188.979†	-24.0	-23.9	[0.00] ug/L	07:14:10
2	B 249.677†	-538.2	-537.3	[0.00] ug/L	07:14:10
2	Ba 233.527†	-4.3	-4.3	[0.00] ug/L	07:14:10
2	Be 313.107†	-3734.7	-3728.2	[0.00] ug/L	07:13:50
2	Cd 226.502†	-161.4	-161.2	[0.00] ug/L	07:14:10
2	Co 228.616†	-38.5	-38.4	[0.00] ug/L	07:14:10
2	Cr 267.716†	73.2	73.0	[0.00] ug/L	07:14:10
2	Cu 324.752†	5607.8	5597.9	[0.00] ug/L	07:13:50
2	Mn 257.610†	387.1	386.5	[0.00] ug/L	07:14:10
2	Mo 202.031†	6.2	6.2	[0.00] ug/L	07:14:10
2	Ni 231.604†	95.9	95.7	[0.00] ug/L	07:14:10
2	P 214.914†	197.1	196.7	[0.00] ug/L	07:14:10
2	Pb 220.353†	-49.7	-49.6	[0.00] ug/L	07:14:10
2	S 181.975 Axial†	30.2	30.2	[0.00] ug/L	07:14:10
2	Sb 206.836†	22.6	22.5	[0.00] ug/L	07:14:10
2	Se 196.026†	-17.3	-17.3	[0.00] ug/L	07:14:10
2	Si 251.611†	500.7	499.8	[0.00] ug/L	07:14:10
2	Sn 189.927†	4.3	4.3	[0.00] ug/L	07:14:10
2	Ti 334.940†	-1112.7	-1110.8	[0.00] ug/L	07:13:50
2	Tl 190.801†	-27.8	-27.8	[0.00] ug/L	07:14:10
2	U 409.014†	-2181.2	-2177.4	[0.00] ug/L	07:13:50
2	V 292.402†	-1308.1	-1305.8	[0.00] ug/L	07:13:50

2	Zn 213.857†	572.4	571.4	[0.00]	ug/L	07:14:10
2	SiO2†	481.0	480.2	[0.00]	ug/L	07:15:15
3	Sc Radial	4417.5	4417.5	0.000	%	07:12:58
3	Y RADIAL	4801.7	4801.7	0.000	%	07:12:58
3	Al 396.153Radial†	-84.8	-84.4	[0.00]	ug/L	07:13:18
3	Ca 317.933Radial†	12.8	12.8	[0.00]	ug/L	07:13:18
3	Fe 238.204 Radial†	8.5	8.4	[0.00]	ug/L	07:13:18
3	K 766.490 Radial†	2661.8	2648.3	[0.00]	ug/L	07:12:58
3	Mg 279.077 IEC†	3.1	3.1	[0.00]	ug/L	07:13:18
3	Na 589.592 Radial†	-879.8	-875.3	[0.00]	ug/L	07:12:58
3	Sr 421.552†	19.9	19.8	[0.00]	ug/L	07:12:58
3	Sc 361.383	822290.3	822290.3	0.0000	%	07:14:15
3	Y 371.029	694473.4	694473.4	0.0000	%	07:14:15
3	Ag 328.068†	204.0	203.1	[0.00]	ug/L	07:14:15
3	As 188.979†	-29.2	-29.1	[0.00]	ug/L	07:14:35
3	B 249.677†	-540.9	-538.6	[0.00]	ug/L	07:14:35
3	Ba 233.527†	8.5	8.5	[0.00]	ug/L	07:14:35
3	Be 313.107†	-3786.6	-3770.6	[0.00]	ug/L	07:14:15
3	Cd 226.502†	-173.2	-172.5	[0.00]	ug/L	07:14:35
3	Co 228.616†	-61.1	-60.8	[0.00]	ug/L	07:14:35
3	Cr 267.716†	70.8	70.5	[0.00]	ug/L	07:14:35
3	Cu 324.752†	5553.8	5530.4	[0.00]	ug/L	07:14:15
3	Mn 257.610†	388.8	387.2	[0.00]	ug/L	07:14:35
3	Mo 202.031†	15.1	15.1	[0.00]	ug/L	07:14:35
3	Ni 231.604†	78.0	77.7	[0.00]	ug/L	07:14:35
3	P 214.914†	183.3	182.6	[0.00]	ug/L	07:14:35
3	Pb 220.353†	-68.4	-68.2	[0.00]	ug/L	07:14:35
3	S 181.975 Axial†	31.8	31.7	[0.00]	ug/L	07:14:35
3	Sb 206.836†	21.2	21.1	[0.00]	ug/L	07:14:35
3	Se 196.026†	-19.1	-19.0	[0.00]	ug/L	07:14:35
3	Si 251.611†	483.8	481.8	[0.00]	ug/L	07:14:35
3	Sn 189.927†	6.0	6.0	[0.00]	ug/L	07:14:35
3	Ti 334.940†	-1130.3	-1125.5	[0.00]	ug/L	07:14:15
3	Tl 190.801†	-25.5	-25.4	[0.00]	ug/L	07:14:35
3	U 409.014†	-2176.0	-2166.9	[0.00]	ug/L	07:14:15
3	V 292.402†	-1299.9	-1294.4	[0.00]	ug/L	07:14:15
3	Zn 213.857†	576.3	573.9	[0.00]	ug/L	07:14:35
3	SiO2†	505.1	502.9	[0.00]	ug/L	07:15:35

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	818824.8	4364.54	0.53%	0.0000 %
Sc Radial	4395.1	35.85	0.82%	0.000 %
Y 371.029	691646.8	3411.92	0.49%	0.0000 %
Y RADIAL	4760.6	52.66	1.11%	0.000 %
Ag 328.068†	185.1	19.62	10.60%	[0.00] ug/L
Al 396.153Radial†	-78.1	6.49	8.31%	[0.00] ug/L
As 188.979†	-26.8	2.63	9.80%	[0.00] ug/L
B 249.677†	-537.4	1.22	0.23%	[0.00] ug/L
Ba 233.527†	-0.7	8.03	>999.9%	[0.00] ug/L
Be 313.107†	-3731.0	38.23	1.02%	[0.00] ug/L
Ca 317.933Radial†	15.7	2.56	16.28%	[0.00] ug/L
Cd 226.502†	-170.6	8.70	5.10%	[0.00] ug/L
Co 228.616†	-46.2	12.65	27.38%	[0.00] ug/L
Cr 267.716†	71.5	1.34	1.87%	[0.00] ug/L
Cu 324.752†	5552.0	39.81	0.72%	[0.00] ug/L
Fe 238.204 Radial†	8.5	1.30	15.32%	[0.00] ug/L
K 766.490 Radial†	2598.8	62.57	2.41%	[0.00] ug/L
Mg 279.077 IEC†	1.5	1.42	93.27%	[0.00] ug/L
Mn 257.610†	389.1	3.91	1.00%	[0.00] ug/L
Mo 202.031†	8.5	5.74	67.28%	[0.00] ug/L
Na 589.592 Radial†	-875.1	13.40	1.53%	[0.00] ug/L
Ni 231.604†	84.1	10.11	12.03%	[0.00] ug/L
P 214.914†	187.3	8.17	4.36%	[0.00] ug/L
Pb 220.353†	-58.3	9.33	16.01%	[0.00] ug/L
S 181.975 Axial†	30.2	1.49	4.94%	[0.00] ug/L
Sb 206.836†	23.7	3.28	13.84%	[0.00] ug/L
Se 196.026†	-17.0	2.24	13.19%	[0.00] ug/L
Si 251.611†	488.2	10.08	2.06%	[0.00] ug/L

Sn 189.927†	7.2	3.58	49.92%	[0.00] ug/L
Sr 421.552†	20.8	7.65	36.76%	[0.00] ug/L
Ti 334.940†	-1121.2	9.07	0.81%	[0.00] ug/L
Tl 190.801†	-29.1	4.53	15.58%	[0.00] ug/L
U 409.014†	-2204.2	55.80	2.53%	[0.00] ug/L
V 292.402†	-1317.4	30.53	2.32%	[0.00] ug/L
Zn 213.857†	570.1	4.60	0.81%	[0.00] ug/L
SiO2†	499.3	17.63	3.53%	[0.00] ug/L

Sequence No.: 2
 Sample ID: S0.1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 2
 Date Collected: 3/19/2010 07:17:46
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.1

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4299.2	4299.2	97.8 %		07:19:44
1	Y RADIAL	4673.1	4673.1	98.16 %		07:19:44
1	K 766.490 Radial†	7813.6	5389.1	[1000] ug/L		07:19:39
1	Sr 421.552†	12088.1	12336.8	[100] ug/L		07:19:44
1	Sc 361.383	819565.4	819565.4	100.09 %		07:20:11
1	Y 371.029	689971.2	689971.2	99.758 %		07:20:11
1	Ag 328.068†	19793.2	19590.2	[100] ug/L		07:20:11
1	As 188.979†	168.5	195.1	[100] ug/L		07:20:31
1	B 249.677†	2888.3	3423.0	[100] ug/L		07:20:11
1	Ba 233.527†	10948.2	10939.0	[100] ug/L		07:20:11
1	Be 313.107†	234967.8	238486.5	[100] ug/L		07:20:11
1	Cd 226.502†	6701.2	6865.8	[100] ug/L		07:20:31
1	Co 228.616†	3917.8	3960.4	[100] ug/L		07:20:31
1	Cr 267.716†	7686.1	7607.7	[100] ug/L		07:20:11
1	Cu 324.752†	36199.8	30615.1	[100] ug/L		07:20:11
1	Mn 257.610†	79100.7	78640.2	[100] ug/L		07:20:11
1	Mo 202.031†	1143.2	1133.6	[100] ug/L		07:20:31
1	Ni 231.604†	3285.2	3198.1	[100] ug/L		07:20:31
1	P 214.914†	856.5	668.4	[500] ug/L		07:20:31
1	Pb 220.353†	619.7	677.4	[100] ug/L		07:20:31
1	S 181.975 Axial†	142.1	111.8	[200] ug/L		07:20:31
1	Sb 206.836†	263.5	239.6	[100] ug/L		07:20:31
1	Se 196.026†	105.0	121.8	[100] ug/L		07:20:31
1	Si 251.611†	13768.7	13268.1	[500] ug/L		07:20:11
1	Sn 189.927†	444.8	437.2	[100] ug/L		07:20:31
1	Ti 334.940†	56944.7	58014.5	[100] ug/L		07:20:11
1	Tl 190.801†	236.6	265.5	[100] ug/L		07:20:31
1	U 409.014†	1277.7	3480.8	[100] ug/L		07:20:11
1	V 292.402†	11266.0	12573.2	[100] ug/L		07:20:11
1	Zn 213.857†	8992.7	8414.5	[100] ug/L		07:20:11
1	SiO2†	13699.9	13188.2	[1069.5] ug/L		07:21:27
2	Sc Radial	4351.7	4351.7	99.0 %		07:19:54
2	Y RADIAL	4736.2	4736.2	99.49 %		07:19:54
2	K 766.490 Radial†	7639.5	5116.9	[1000] ug/L		07:19:49
2	Sr 421.552†	12186.1	12286.7	[100] ug/L		07:19:54
2	Sc 361.383	806559.5	806559.5	98.502 %		07:20:36
2	Y 371.029	679008.4	679008.4	98.173 %		07:20:36
2	Ag 328.068†	19410.1	19520.1	[100] ug/L		07:20:36
2	As 188.979†	160.0	189.2	[100] ug/L		07:20:57
2	B 249.677†	2853.4	3434.1	[100] ug/L		07:20:36
2	Ba 233.527†	10778.3	10943.0	[100] ug/L		07:20:36
2	Be 313.107†	231279.8	238527.9	[100] ug/L		07:20:36
2	Cd 226.502†	6685.7	6958.0	[100] ug/L		07:20:57
2	Co 228.616†	3912.0	4017.7	[100] ug/L		07:20:57
2	Cr 267.716†	7564.8	7608.4	[100] ug/L		07:20:36
2	Cu 324.752†	35581.8	30570.9	[100] ug/L		07:20:36
2	Mn 257.610†	77938.0	78734.1	[100] ug/L		07:20:36
2	Mo 202.031†	1144.1	1152.9	[100] ug/L		07:20:57
2	Ni 231.604†	3297.2	3263.3	[100] ug/L		07:20:57
2	P 214.914†	848.3	673.9	[500] ug/L		07:20:57
2	Pb 220.353†	620.7	688.5	[100] ug/L		07:20:57
2	S 181.975 Axial†	146.4	118.4	[200] ug/L		07:20:57
2	Sb 206.836†	264.3	244.6	[100] ug/L		07:20:57
2	Se 196.026†	107.5	126.1	[100] ug/L		07:20:57
2	Si 251.611†	13541.3	13259.0	[500] ug/L		07:20:36
2	Sn 189.927†	446.3	445.9	[100] ug/L		07:20:57
2	Ti 334.940†	56083.7	58057.7	[100] ug/L		07:20:36
2	Tl 190.801†	232.7	265.4	[100] ug/L		07:20:57
2	U 409.014†	1337.0	3561.5	[100] ug/L		07:20:36

2	V 292.402†	11053.6	12539.2	[100]	ug/L	07:20:36
2	Zn 213.857†	8858.1	8422.7	[100]	ug/L	07:20:36
2	SiO2†	13722.0	13431.3	[1069.5]	ug/L	07:21:32
3	Sc Radial	4298.2	4298.2	97.8	%	07:20:04
3	Y RADIAL	4680.6	4680.6	98.32	%	07:20:04
3	K 766.490 Radial†	7824.1	5401.6	[1000]	ug/L	07:19:59
3	Sr 421.552†	12067.8	12318.9	[100]	ug/L	07:20:04
3	Sc 361.383	819475.4	819475.4	100.08	%	07:21:02
3	Y 371.029	690004.4	690004.4	99.763	%	07:21:02
3	Ag 328.068†	19783.4	19582.5	[100]	ug/L	07:21:02
3	As 188.979†	160.2	186.9	[100]	ug/L	07:21:22
3	B 249.677†	2918.4	3453.5	[100]	ug/L	07:21:02
3	Ba 233.527†	10967.6	10959.6	[100]	ug/L	07:21:02
3	Be 313.107†	234959.9	238504.4	[100]	ug/L	07:21:02
3	Cd 226.502†	6644.2	6809.6	[100]	ug/L	07:21:22
3	Co 228.616†	3875.7	3918.8	[100]	ug/L	07:21:22
3	Cr 267.716†	7681.2	7603.6	[100]	ug/L	07:21:02
3	Cu 324.752†	36243.6	30662.8	[100]	ug/L	07:21:02
3	Mn 257.610†	79237.9	78785.9	[100]	ug/L	07:21:02
3	Mo 202.031†	1142.7	1133.3	[100]	ug/L	07:21:22
3	Ni 231.604†	3256.6	3170.0	[100]	ug/L	07:21:22
3	P 214.914†	855.5	667.5	[500]	ug/L	07:21:22
3	Pb 220.353†	594.6	652.4	[100]	ug/L	07:21:22
3	S 181.975 Axial†	141.7	111.4	[200]	ug/L	07:21:22
3	Sb 206.836†	256.8	232.9	[100]	ug/L	07:21:22
3	Se 196.026†	97.7	114.6	[100]	ug/L	07:21:22
3	Si 251.611†	13838.2	13339.0	[500]	ug/L	07:21:02
3	Sn 189.927†	447.8	440.3	[100]	ug/L	07:21:22
3	Ti 334.940†	57007.2	58083.1	[100]	ug/L	07:21:02
3	Tl 190.801†	233.6	262.6	[100]	ug/L	07:21:22
3	U 409.014†	1393.7	3596.8	[100]	ug/L	07:21:02
3	V 292.402†	11249.5	12558.0	[100]	ug/L	07:21:02
3	Zn 213.857†	9030.1	8452.9	[100]	ug/L	07:21:02
3	SiO2†	13379.9	12869.9	[1069.5]	ug/L	07:21:37

Mean Data: S0.1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	815200.1	7483.11	0.92%	99.557	%
Sc Radial	4316.4	30.60	0.71%	98.2	%
Y 371.029	686328.0	6339.00	0.92%	99.231	%
Y RADIAL	4696.6	34.45	0.73%	98.66	%
Ag 328.068†	19564.3	38.44	0.20%	[100]	ug/L
As 188.979†	190.4	4.23	2.22%	[100]	ug/L
B 249.677†	3436.9	15.41	0.45%	[100]	ug/L
Ba 233.527†	10947.2	10.95	0.10%	[100]	ug/L
Be 313.107†	238506.3	20.75	0.01%	[100]	ug/L
Cd 226.502†	6877.8	74.92	1.09%	[100]	ug/L
Co 228.616†	3965.6	49.63	1.25%	[100]	ug/L
Cr 267.716†	7606.6	2.55	0.03%	[100]	ug/L
Cu 324.752†	30616.3	45.95	0.15%	[100]	ug/L
K 766.490 Radial†	5302.5	160.89	3.03%	[1000]	ug/L
Mn 257.610†	78720.1	73.87	0.09%	[100]	ug/L
Mo 202.031†	1139.9	11.27	0.99%	[100]	ug/L
Ni 231.604†	3210.5	47.86	1.49%	[100]	ug/L
P 214.914†	670.0	3.47	0.52%	[500]	ug/L
Pb 220.353†	672.8	18.46	2.74%	[100]	ug/L
S 181.975 Axial†	113.9	3.97	3.49%	[200]	ug/L
Sb 206.836†	239.0	5.88	2.46%	[100]	ug/L
Se 196.026†	120.8	5.83	4.83%	[100]	ug/L
Si 251.611†	13288.7	43.81	0.33%	[500]	ug/L
Sn 189.927†	441.1	4.43	1.00%	[100]	ug/L
Sr 421.552†	12314.1	25.41	0.21%	[100]	ug/L
Ti 334.940†	58051.8	34.72	0.06%	[100]	ug/L
Tl 190.801†	264.5	1.66	0.63%	[100]	ug/L
U 409.014†	3546.4	59.46	1.68%	[100]	ug/L
V 292.402†	12556.8	17.06	0.14%	[100]	ug/L
Zn 213.857†	8430.0	20.23	0.24%	[100]	ug/L
SiO2†	13163.2	281.55	2.14%	[1069.5]	ug/L

Sequence No.: 3
 Sample ID: S0.5
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 3
 Date Collected: 3/19/2010 07:23:48
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S0.5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4176.8	4176.8	95.0 %		07:26:01
1	Y RADIAL	4651.6	4651.6	97.71 %		07:25:41
1	Al 396.153Radial†	4914.3	5249.1	[5000] ug/L		07:25:41
1	Ca 317.933Radial†	2634.9	2756.9	[5000] ug/L		07:26:01
1	K 766.490 Radial†	28253.2	27130.7	[5000] ug/L		07:25:41
1	Mg 279.077 IEC†	121.5	126.4	[5000] ug/L		07:26:01
1	Sr 421.552†	60226.2	63352.3	[500] ug/L		07:25:41
1	Sc 361.383	821637.6	821637.6	100.34 %		07:26:58
1	Y 371.029	685019.0	685019.0	99.042 %		07:26:58
1	Ag 328.068†	98692.4	98169.4	[500] ug/L		07:27:03
1	As 188.979†	887.8	911.5	[500] ug/L		07:27:23
1	B 249.677†	17522.6	18000.0	[500] ug/L		07:27:03
1	Ba 233.527†	54446.1	54260.5	[500] ug/L		07:27:03
1	Be 313.107†	1185449.4	1185122.2	[500] ug/L		07:26:58
1	Cd 226.502†	35110.5	35160.9	[500] ug/L		07:27:03
1	Co 228.616†	20009.0	19986.7	[500] ug/L		07:27:03
1	Cr 267.716†	38103.4	37901.5	[500] ug/L		07:27:03
1	Cu 324.752†	159261.1	153163.9	[500] ug/L		07:27:03
1	Mn 257.610†	382996.5	381296.3	[500] ug/L		07:26:58
1	Mo 202.031†	5661.9	5634.0	[500] ug/L		07:27:23
1	Ni 231.604†	16362.9	16222.8	[500] ug/L		07:27:03
1	P 214.914†	3554.2	3354.8	[2500] ug/L		07:27:23
1	Pb 220.353†	3215.7	3263.0	[500] ug/L		07:27:23
1	S 181.975 Axial†	589.7	557.5	[1000] ug/L		07:27:23
1	Sb 206.836†	1218.1	1190.2	[500] ug/L		07:27:23
1	Se 196.026†	576.1	591.1	[500] ug/L		07:27:23
1	Si 251.611†	67712.5	66992.5	[2500] ug/L		07:27:03
1	Sn 189.927†	2220.6	2205.8	[500] ug/L		07:27:23
1	Ti 334.940†	286976.2	287114.9	[500] ug/L		07:27:03
1	Tl 190.801†	1277.6	1302.4	[500] ug/L		07:27:23
1	U 409.014†	14882.9	17036.1	[500] ug/L		07:27:03
1	V 292.402†	62512.7	63616.1	[500] ug/L		07:27:03
1	Zn 213.857†	42904.3	42187.4	[500] ug/L		07:27:03
1	SiO2†	66118.3	65392.6	[5347.5] ug/L		07:28:31
2	Sc Radial	4187.9	4187.9	95.3 %		07:26:26
2	Y RADIAL	4622.9	4622.9	97.11 %		07:26:06
2	Al 396.153Radial†	4898.9	5219.3	[5000] ug/L		07:26:06
2	Ca 317.933Radial†	2632.3	2746.8	[5000] ug/L		07:26:26
2	K 766.490 Radial†	28051.2	26840.0	[5000] ug/L		07:26:06
2	Mg 279.077 IEC†	123.8	128.4	[5000] ug/L		07:26:26
2	Sr 421.552†	59628.2	62556.9	[500] ug/L		07:26:06
2	Sc 361.383	825022.8	825022.8	100.76 %		07:27:29
2	Y 371.029	687439.8	687439.8	99.392 %		07:27:29
2	Ag 328.068†	97697.4	96778.3	[500] ug/L		07:27:34
2	As 188.979†	890.6	910.7	[500] ug/L		07:27:54
2	B 249.677†	17330.0	17737.2	[500] ug/L		07:27:34
2	Ba 233.527†	53830.4	53426.7	[500] ug/L		07:27:34
2	Be 313.107†	1189558.3	1184352.8	[500] ug/L		07:27:29
2	Cd 226.502†	34616.6	34527.2	[500] ug/L		07:27:34
2	Co 228.616†	19815.7	19713.0	[500] ug/L		07:27:34
2	Cr 267.716†	37703.7	37349.0	[500] ug/L		07:27:34
2	Cu 324.752†	157566.2	150830.5	[500] ug/L		07:27:34
2	Mn 257.610†	384618.0	381339.5	[500] ug/L		07:27:29
2	Mo 202.031†	5644.3	5593.4	[500] ug/L		07:27:54
2	Ni 231.604†	16177.2	15971.6	[500] ug/L		07:27:34
2	P 214.914†	3569.2	3355.1	[2500] ug/L		07:27:54
2	Pb 220.353†	3211.8	3245.9	[500] ug/L		07:27:54
2	S 181.975 Axial†	589.2	554.6	[1000] ug/L		07:27:54
2	Sb 206.836†	1221.4	1188.5	[500] ug/L		07:27:54

2	Se 196.026†	590.5	603.1	[500]	ug/L	07:27:54
2	Si 251.611†	66983.6	65992.2	[2500]	ug/L	07:27:34
2	Sn 189.927†	2206.0	2182.2	[500]	ug/L	07:27:54
2	Ti 334.940†	284172.9	283159.3	[500]	ug/L	07:27:34
2	Tl 190.801†	1271.4	1291.0	[500]	ug/L	07:27:54
2	U 409.014†	14780.1	16873.3	[500]	ug/L	07:27:34
2	V 292.402†	61704.6	62558.5	[500]	ug/L	07:27:34
2	Zn 213.857†	42493.9	41604.6	[500]	ug/L	07:27:34
2	SiO2†	66791.9	65790.8	[5347.5]	ug/L	07:28:36
3	Sc Radial	4203.5	4203.5	95.6	%	07:26:51
3	Y RADIAL	4694.9	4694.9	98.62	%	07:26:31
3	Al 396.153Radial†	4935.9	5239.0	[5000]	ug/L	07:26:31
3	Ca 317.933Radial†	2631.7	2735.9	[5000]	ug/L	07:26:51
3	K 766.490 Radial†	28217.2	26904.4	[5000]	ug/L	07:26:31
3	Mg 279.077 IEC†	124.5	128.6	[5000]	ug/L	07:26:51
3	Sr 421.552†	60103.1	62821.5	[500]	ug/L	07:26:31
3	Sc 361.383	826571.9	826571.9	100.95	%	07:28:00
3	Y 371.029	687898.7	687898.7	99.458	%	07:28:00
3	Ag 328.068†	99152.7	98038.2	[500]	ug/L	07:28:05
3	As 188.979†	889.6	908.1	[500]	ug/L	07:28:25
3	B 249.677†	17693.7	18065.2	[500]	ug/L	07:28:05
3	Ba 233.527†	54817.6	54304.6	[500]	ug/L	07:28:05
3	Be 313.107†	1190349.2	1182923.6	[500]	ug/L	07:28:00
3	Cd 226.502†	35274.6	35114.6	[500]	ug/L	07:28:05
3	Co 228.616†	20091.0	19948.9	[500]	ug/L	07:28:05
3	Cr 267.716†	38295.2	37864.7	[500]	ug/L	07:28:05
3	Cu 324.752†	160283.3	153229.1	[500]	ug/L	07:28:05
3	Mn 257.610†	385572.6	381569.8	[500]	ug/L	07:28:00
3	Mo 202.031†	5688.1	5626.2	[500]	ug/L	07:28:25
3	Ni 231.604†	16456.1	16217.8	[500]	ug/L	07:28:05
3	P 214.914†	3559.1	3338.4	[2500]	ug/L	07:28:25
3	Pb 220.353†	3226.6	3254.6	[500]	ug/L	07:28:25
3	S 181.975 Axial†	594.2	558.4	[1000]	ug/L	07:28:25
3	Sb 206.836†	1241.9	1206.6	[500]	ug/L	07:28:25
3	Se 196.026†	590.7	602.1	[500]	ug/L	07:28:25
3	Si 251.611†	68168.0	67040.9	[2500]	ug/L	07:28:05
3	Sn 189.927†	2212.7	2184.8	[500]	ug/L	07:28:25
3	Ti 334.940†	289122.7	287534.1	[500]	ug/L	07:28:05
3	Tl 190.801†	1277.8	1294.9	[500]	ug/L	07:28:25
3	U 409.014†	15107.2	17169.8	[500]	ug/L	07:28:05
3	V 292.402†	62733.4	63462.9	[500]	ug/L	07:28:05
3	Zn 213.857†	43215.4	42240.3	[500]	ug/L	07:28:05
3	SiO2†	66865.0	65739.0	[5347.5]	ug/L	07:28:41

Mean Data: S0.5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	824410.7	2523.46	0.31%	100.68	%
Sc Radial	4189.4	13.40	0.32%	95.3	%
Y 371.029	686785.8	1547.25	0.23%	99.297	%
Y RADIAL	4656.5	36.25	0.78%	97.81	%
Ag 328.068†	97662.0	768.09	0.79%	[500]	ug/L
Al 396.153Radial†	5235.8	15.16	0.29%	[5000]	ug/L
As 188.979†	910.1	1.80	0.20%	[500]	ug/L
B 249.677†	17934.1	173.65	0.97%	[500]	ug/L
Ba 233.527†	53997.2	494.58	0.92%	[500]	ug/L
Be 313.107†	1184132.9	1115.71	0.09%	[500]	ug/L
Ca 317.933Radial†	2746.5	10.52	0.38%	[5000]	ug/L
Cd 226.502†	34934.2	353.27	1.01%	[500]	ug/L
Co 228.616†	19882.9	148.31	0.75%	[500]	ug/L
Cr 267.716†	37705.1	308.91	0.82%	[500]	ug/L
Cu 324.752†	152407.8	1366.39	0.90%	[500]	ug/L
K 766.490 Radial†	26958.4	152.71	0.57%	[5000]	ug/L
Mg 279.077 IEC†	127.8	1.24	0.97%	[5000]	ug/L
Mn 257.610†	381401.8	147.04	0.04%	[500]	ug/L
Mo 202.031†	5617.9	21.56	0.38%	[500]	ug/L
Ni 231.604†	16137.4	143.62	0.89%	[500]	ug/L
P 214.914†	3349.4	9.54	0.28%	[2500]	ug/L
Pb 220.353†	3254.5	8.54	0.26%	[500]	ug/L
S 181.975 Axial†	556.8	1.98	0.36%	[1000]	ug/L

Sb 206.836†	1195.1	9.96	0.83%	[500]	ug/L
Se 196.026†	598.8	6.64	1.11%	[500]	ug/L
Si 251.611†	66675.2	592.00	0.89%	[2500]	ug/L
Sn 189.927†	2190.9	12.95	0.59%	[500]	ug/L
Sr 421.552†	62910.2	405.09	0.64%	[500]	ug/L
Ti 334.940†	285936.1	2413.92	0.84%	[500]	ug/L
Tl 190.801†	1296.1	5.78	0.45%	[500]	ug/L
U 409.014†	17026.4	148.49	0.87%	[500]	ug/L
V 292.402†	63212.5	571.55	0.90%	[500]	ug/L
Zn 213.857†	42010.8	352.73	0.84%	[500]	ug/L
SiO2†	65640.8	216.53	0.33%	[5347.5]	ug/L

Sequence No.: 4
 Sample ID: SCAL
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 4
 Date Collected: 3/19/2010 07:30:51
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: SCAL

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4344.4	4344.4	98.8	%	07:32:44
1	Y RADIAL	4668.8	4668.8	98.07	%	07:32:44
1	Al 396.153Radial†	9900.0	10093.5	[10000]	ug/L	07:32:44
1	Ca 317.933Radial†	5333.2	5379.7	[10000]	ug/L	07:32:44
1	Fe 238.204 Radial†	855.1	856.7	[10000]	ug/L	07:33:04
1	K 766.490 Radial†	54124.1	52156.7	[10000]	ug/L	07:32:44
1	Mg 279.077 IEC†	245.6	246.9	[10000]	ug/L	07:33:04
1	Na 589.592 Radial†	26296.6	27478.5	[10000]	ug/L	07:32:44
1	Sr 421.552†	122992.3	124406.1	[1000]	ug/L	07:32:44
1	Sc 361.383	819368.6	819368.6	100.07	%	07:34:03
1	Y 371.029	681762.9	681762.9	98.571	%	07:34:03
1	Ag 328.068†	192124.2	191811.5	[1000]	ug/L	07:34:03
1	As 188.979†	1787.9	1813.5	[1000]	ug/L	07:34:23
1	B 249.677†	35038.7	35552.8	[1000]	ug/L	07:34:03
1	Ba 233.527†	106549.2	106479.2	[1000]	ug/L	07:34:03
1	Be 313.107†	2343163.6	2345339.4	[1000]	ug/L	07:34:03
1	Cd 226.502†	68574.5	68699.6	[1000]	ug/L	07:34:03
1	Co 228.616†	38220.4	38241.3	[1000]	ug/L	07:34:23
1	Cr 267.716†	74436.4	74315.5	[1000]	ug/L	07:34:03
1	Cu 324.752†	307593.6	301837.4	[1000]	ug/L	07:34:03
1	Mn 257.610†	760183.6	759290.0	[1000]	ug/L	07:34:03
1	Mo 202.031†	11214.5	11198.6	[1000]	ug/L	07:34:23
1	Ni 231.604†	31271.9	31167.1	[1000]	ug/L	07:34:23
1	P 214.914†	6883.9	6692.0	[5000]	ug/L	07:34:23
1	Pb 220.353†	6420.7	6474.7	[1000]	ug/L	07:34:23
1	S 181.975 Axial†	1148.2	1117.2	[2000]	ug/L	07:34:23
1	Sb 206.836†	2390.0	2364.7	[1000]	ug/L	07:34:23
1	Se 196.026†	1177.1	1193.2	[1000]	ug/L	07:34:23
1	Si 251.611†	131710.3	131134.7	[5000]	ug/L	07:34:03
1	Sn 189.927†	4409.0	4398.9	[1000]	ug/L	07:34:23
1	Ti 334.940†	574509.8	575249.8	[1000]	ug/L	07:34:03
1	Tl 190.801†	2539.4	2566.8	[1000]	ug/L	07:34:23
1	U 409.014†	30310.0	32494.1	[1000]	ug/L	07:34:03
1	V 292.402†	123779.9	125015.2	[1000]	ug/L	07:34:03
1	Zn 213.857†	82765.8	82140.8	[1000]	ug/L	07:34:03
1	SiO2†	132053.9	131467.0	[10695]	ug/L	07:35:24
2	Sc Radial	4357.0	4357.0	99.1	%	07:33:09
2	Y RADIAL	4710.6	4710.6	98.95	%	07:33:09
2	Al 396.153Radial†	9962.0	10127.1	[10000]	ug/L	07:33:09
2	Ca 317.933Radial†	5341.3	5372.3	[10000]	ug/L	07:33:09
2	Fe 238.204 Radial†	854.5	853.6	[10000]	ug/L	07:33:29
2	K 766.490 Radial†	54185.4	52060.1	[10000]	ug/L	07:33:09
2	Mg 279.077 IEC†	247.3	247.9	[10000]	ug/L	07:33:29
2	Na 589.592 Radial†	26245.8	27350.2	[10000]	ug/L	07:33:09
2	Sr 421.552†	123608.6	124667.8	[1000]	ug/L	07:33:09
2	Sc 361.383	825030.9	825030.9	100.76	%	07:34:31
2	Y 371.029	685551.0	685551.0	99.119	%	07:34:31
2	Ag 328.068†	193526.5	191885.6	[1000]	ug/L	07:34:31
2	As 188.979†	1800.1	1813.4	[1000]	ug/L	07:34:51
2	B 249.677†	35389.2	35660.3	[1000]	ug/L	07:34:31
2	Ba 233.527†	107337.0	106530.3	[1000]	ug/L	07:34:31
2	Be 313.107†	2360060.0	2346038.1	[1000]	ug/L	07:34:31
2	Cd 226.502†	69252.4	68902.1	[1000]	ug/L	07:34:31
2	Co 228.616†	38675.7	38431.0	[1000]	ug/L	07:34:51
2	Cr 267.716†	75156.9	74520.0	[1000]	ug/L	07:34:31
2	Cu 324.752†	310179.0	302293.8	[1000]	ug/L	07:34:31
2	Mn 257.610†	766947.4	760789.2	[1000]	ug/L	07:34:31
2	Mo 202.031†	11357.1	11263.1	[1000]	ug/L	07:34:51
2	Ni 231.604†	31613.1	31291.2	[1000]	ug/L	07:34:51

2	P 214.914†	6950.8	6711.2	[5000]	ug/L	07:34:51
2	Pb 220.353†	6501.7	6511.1	[1000]	ug/L	07:34:51
2	S 181.975 Axial†	1154.9	1116.1	[2000]	ug/L	07:34:51
2	Sb 206.836†	2442.5	2400.4	[1000]	ug/L	07:34:51
2	Se 196.026†	1199.8	1207.7	[1000]	ug/L	07:34:51
2	Si 251.611†	132902.2	131414.3	[5000]	ug/L	07:34:31
2	Sn 189.927†	4443.2	4402.6	[1000]	ug/L	07:34:51
2	Ti 334.940†	579279.1	576042.9	[1000]	ug/L	07:34:31
2	Tl 190.801†	2581.0	2590.7	[1000]	ug/L	07:34:51
2	U 409.014†	30791.4	32764.0	[1000]	ug/L	07:34:31
2	V 292.402†	124696.3	125075.7	[1000]	ug/L	07:34:31
2	Zn 213.857†	83432.2	82234.5	[1000]	ug/L	07:34:31
2	SiO2†	132062.1	130569.4	[10695]	ug/L	07:35:29
3	Sc Radial	4286.2	4286.2	97.5	%	07:33:35
3	Y RADIAL	4648.8	4648.8	97.65	%	07:33:35
3	Al 396.153Radial†	9858.2	10186.7	[10000]	ug/L	07:33:35
3	Ca 317.933Radial†	5285.1	5403.6	[10000]	ug/L	07:33:35
3	Fe 238.204 Radial†	857.4	870.7	[10000]	ug/L	07:33:55
3	K 766.490 Radial†	53393.5	52151.0	[10000]	ug/L	07:33:35
3	Mg 279.077 IEC†	248.5	253.3	[10000]	ug/L	07:33:55
3	Na 589.592 Radial†	25596.1	27121.3	[10000]	ug/L	07:33:35
3	Sr 421.552†	121376.4	124438.7	[1000]	ug/L	07:33:35
3	Sc 361.383	819528.5	819528.5	100.09	%	07:34:58
3	Y 371.029	680490.9	680490.9	98.387	%	07:34:58
3	Ag 328.068†	192351.3	192001.0	[1000]	ug/L	07:34:58
3	As 188.979†	1810.4	1835.6	[1000]	ug/L	07:35:18
3	B 249.677†	35087.9	35595.1	[1000]	ug/L	07:34:58
3	Ba 233.527†	106371.3	106280.7	[1000]	ug/L	07:34:58
3	Be 313.107†	2336429.7	2338154.4	[1000]	ug/L	07:34:58
3	Cd 226.502†	68339.3	68451.2	[1000]	ug/L	07:34:58
3	Co 228.616†	38543.9	38557.0	[1000]	ug/L	07:35:18
3	Cr 267.716†	74336.2	74200.8	[1000]	ug/L	07:34:58
3	Cu 324.752†	308824.8	303007.6	[1000]	ug/L	07:34:58
3	Mn 257.610†	760159.6	759117.9	[1000]	ug/L	07:34:58
3	Mo 202.031†	11311.6	11293.3	[1000]	ug/L	07:35:18
3	Ni 231.604†	31511.2	31400.1	[1000]	ug/L	07:35:18
3	P 214.914†	6937.1	6743.8	[5000]	ug/L	07:35:18
3	Pb 220.353†	6481.7	6534.5	[1000]	ug/L	07:35:18
3	S 181.975 Axial†	1151.4	1120.2	[2000]	ug/L	07:35:18
3	Sb 206.836†	2431.5	2405.7	[1000]	ug/L	07:35:18
3	Se 196.026†	1185.9	1201.9	[1000]	ug/L	07:35:18
3	Si 251.611†	131907.0	131305.6	[5000]	ug/L	07:34:58
3	Sn 189.927†	4448.1	4437.1	[1000]	ug/L	07:35:18
3	Ti 334.940†	575356.7	575983.9	[1000]	ug/L	07:34:58
3	Tl 190.801†	2562.9	2589.7	[1000]	ug/L	07:35:18
3	U 409.014†	30555.8	32733.8	[1000]	ug/L	07:34:58
3	V 292.402†	123490.0	124701.4	[1000]	ug/L	07:34:58
3	Zn 213.857†	82686.9	82045.8	[1000]	ug/L	07:34:58
3	SiO2†	131524.8	130912.6	[10695]	ug/L	07:35:34

Mean Data: SCAL

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Sc 361.383	821309.3	3223.93	0.39%	100.30	%
Sc Radial	4329.2	37.77	0.87%	98.5	%
Y 371.029	682601.6	2632.21	0.39%	98.692	%
Y RADIAL	4676.1	31.56	0.67%	98.22	%
Ag 328.068†	191899.4	95.49	0.05%	[1000]	ug/L
Al 396.153Radial†	10135.8	47.17	0.47%	[10000]	ug/L
As 188.979†	1820.9	12.80	0.70%	[1000]	ug/L
B 249.677†	35602.8	54.15	0.15%	[1000]	ug/L
Ba 233.527†	106430.1	131.89	0.12%	[1000]	ug/L
Be 313.107†	2343177.3	4363.95	0.19%	[1000]	ug/L
Ca 317.933Radial†	5385.2	16.38	0.30%	[10000]	ug/L
Cd 226.502†	68684.3	225.84	0.33%	[1000]	ug/L
Co 228.616†	38409.7	158.92	0.41%	[1000]	ug/L
Cr 267.716†	74345.5	161.70	0.22%	[1000]	ug/L
Cu 324.752†	302379.6	589.80	0.20%	[1000]	ug/L
Fe 238.204 Radial†	860.3	9.13	1.06%	[10000]	ug/L
K 766.490 Radial†	52122.6	54.20	0.10%	[10000]	ug/L

Mg 279.077 IEC†	249.4	3.39	1.36%	[10000]	ug/L
Mn 257.610†	759732.4	919.29	0.12%	[1000]	ug/L
Mo 202.031†	11251.7	48.40	0.43%	[1000]	ug/L
Na 589.592 Radial†	27316.7	180.92	0.66%	[10000]	ug/L
Ni 231.604†	31286.1	116.56	0.37%	[1000]	ug/L
P 214.914†	6715.7	26.19	0.39%	[5000]	ug/L
Pb 220.353†	6506.8	30.09	0.46%	[1000]	ug/L
S 181.975 Axial†	1117.8	2.14	0.19%	[2000]	ug/L
Sb 206.836†	2390.3	22.30	0.93%	[1000]	ug/L
Se 196.026†	1201.0	7.29	0.61%	[1000]	ug/L
Si 251.611†	131284.9	140.98	0.11%	[5000]	ug/L
Sn 189.927†	4412.9	21.08	0.48%	[1000]	ug/L
Sr 421.552†	124504.2	142.63	0.11%	[1000]	ug/L
Ti 334.940†	575758.8	441.87	0.08%	[1000]	ug/L
Tl 190.801†	2582.4	13.54	0.52%	[1000]	ug/L
U 409.014†	32663.9	147.89	0.45%	[1000]	ug/L
V 292.402†	124930.8	200.93	0.16%	[1000]	ug/L
Zn 213.857†	82140.4	94.36	0.11%	[1000]	ug/L
SiO2†	130983.0	452.91	0.35%	[10695]	ug/L

Sequence No.: 5
 Sample ID: S10
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 5
 Date Collected: 3/19/2010 07:37:45
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: S10

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib.	Analysis Time
1	Sc Radial	4263.0	4263.0	97.0 %		07:39:59
1	Y RADIAL	4575.6	4575.6	96.11 %		07:39:59
1	Al 396.153Radial†	49831.2	51453.0	[50000] ug/L		07:39:39
1	Ca 317.933Radial†	25954.1	26742.4	[50000] ug/L		07:39:39
1	Fe 238.204 Radial†	1687.7	1731.5	[20000] ug/L		07:39:59
1	Mg 279.077 IEC†	1178.7	1213.7	[50000] ug/L		07:39:59
1	Na 589.592 Radial†	55567.4	58164.0	[20000] ug/L		07:39:39
1	Sc 361.383	789692.1	789692.1	96.442 %		07:40:56
1	Y 371.029	653528.4	653528.4	94.489 %		07:40:56
2	Sc Radial	4290.8	4290.8	97.6 %		07:40:24
2	Y RADIAL	4619.8	4619.8	97.04 %		07:40:24
2	Al 396.153Radial†	48689.3	49950.4	[50000] ug/L		07:40:04
2	Ca 317.933Radial†	25266.7	25864.9	[50000] ug/L		07:40:04
2	Fe 238.204 Radial†	1692.1	1724.8	[20000] ug/L		07:40:24
2	Mg 279.077 IEC†	1181.2	1208.4	[50000] ug/L		07:40:24
2	Na 589.592 Radial†	54008.3	56195.6	[20000] ug/L		07:40:04
2	Sc 361.383	793240.2	793240.2	96.875 %		07:41:02
2	Y 371.029	656699.3	656699.3	94.947 %		07:41:02
3	Sc Radial	4280.8	4280.8	97.4 %		07:40:49
3	Y RADIAL	4602.7	4602.7	96.68 %		07:40:49
3	Al 396.153Radial†	49877.2	51287.3	[50000] ug/L		07:40:29
3	Ca 317.933Radial†	25897.8	26573.7	[50000] ug/L		07:40:29
3	Fe 238.204 Radial†	1689.6	1726.2	[20000] ug/L		07:40:49
3	Mg 279.077 IEC†	1178.0	1207.9	[50000] ug/L		07:40:49
3	Na 589.592 Radial†	55072.5	57418.3	[20000] ug/L		07:40:29
3	Sc 361.383	800906.3	800906.3	97.812 %		07:41:07
3	Y 371.029	662694.7	662694.7	95.814 %		07:41:07

Mean Data: S10

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc. Units
Sc 361.383	794612.9	5731.76	0.72%	97.043 %
Sc Radial	4278.2	14.08	0.33%	97.3 %
Y 371.029	657640.8	4655.12	0.71%	95.083 %
Y RADIAL	4599.4	22.30	0.48%	96.61 %
Al 396.153Radial†	50896.9	823.85	1.62%	[50000] ug/L
Ca 317.933Radial†	26393.7	465.66	1.76%	[50000] ug/L
Fe 238.204 Radial†	1727.5	3.53	0.20%	[20000] ug/L
Mg 279.077 IEC†	1210.0	3.21	0.27%	[50000] ug/L
Na 589.592 Radial†	57259.3	993.78	1.74%	[20000] ug/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	3	Lin Thru 0	0.0	192.6	0.00000	0.999974	
Al 396.153Radial	3	Lin Thru 0	0.0	1.018	0.00000	0.999996	
As 188.979	3	Lin Thru 0	0.0	1.821	0.00000	0.999992	
B 249.677	3	Lin Thru 0	0.0	35.65	0.00000	0.999990	
Ba 233.527	3	Lin Thru 0	0.0	106.8	0.00000	0.999980	
Be 313.107	3	Lin Thru 0	0.0	2348	0.00000	0.999990	
Ca 317.933Radial	3	Lin Thru 0	0.0	0.5285	0.00000	0.999985	
Cd 226.502	3	Lin Thru 0	0.0	68.92	0.00000	0.999977	
Co 228.616	3	Lin Thru 0	0.0	38.69	0.00000	0.999900	
Cr 267.716	3	Lin Thru 0	0.0	74.57	0.00000	0.999982	
Cu 324.752	3	Lin Thru 0	0.0	302.9	0.00000	0.999994	
Fe 238.204 Radia	2	Lin Thru 0	0.0	0.0863	0.00000	0.999999	
K 766.490 Radial	3	Lin Thru 0	0.0	5.249	0.00000	0.999907	

Mg 279.077 IEC	3	Lin Thru 0	0.0	0.0242	0.00000	0.999969
Mn 257.610	3	Lin Thru 0	0.0	760.6	0.00000	0.999994
Mo 202.031	3	Lin Thru 0	0.0	11.25	0.00000	0.999999
Na 589.592 Radia	2	Lin Thru 0	0.0	2.837	0.00000	0.999829
Ni 231.604	3	Lin Thru 0	0.0	31.49	0.00000	0.999920
P 214.914	3	Lin Thru 0	0.0	1.342	0.00000	0.999999
Pb 220.353	3	Lin Thru 0	0.0	6.509	0.00000	0.999995
S 181.975 Axial	3	Lin Thru 0	0.0	0.5586	0.00000	0.999997
Sb 206.836	3	Lin Thru 0	0.0	2.390	0.00000	1.000000
Se 196.026	3	Lin Thru 0	0.0	1.200	0.00000	0.999999
Si 251.611	3	Lin Thru 0	0.0	26.34	0.00000	0.999980
Sn 189.927	3	Lin Thru 0	0.0	4.407	0.00000	0.999996
Sr 421.552	3	Lin Thru 0	0.0	124.8	0.00000	0.999990
Ti 334.940	3	Lin Thru 0	0.0	575.0	0.00000	0.999996
Tl 190.801	3	Lin Thru 0	0.0	2.585	0.00000	0.999997
U 409.014	3	Lin Thru 0	0.0	32.96	0.00000	0.999836
V 292.402	3	Lin Thru 0	0.0	125.2	0.00000	0.999989
Zn 213.857	3	Lin Thru 0	0.0	82.53	0.00000	0.999957
SiO2	3	Lin Thru 0	0.0	12.25	0.00000	1.000000

Sequence No.: 6

Sample ID: ICV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 9

Date Collected: 3/19/2010 07:43:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc.	Analysis Time
1	Sc Radial	4236.5	4236.5	96.4 %			07:45:31
1	Y RADIAL	4746.7	4746.7	99.71 %			07:45:11
1	Al 396.153Radial†	5043.7	5310.7	5190.6 ug/L		5190.6 ppb	07:45:11
1	Ca 317.933Radial†	2646.9	2730.3	5166.3 ug/L		5166.3 ppb	07:45:31
1	Fe 238.204 Radial†	443.6	451.8	5249.8 ug/L		5249.8 ppb	07:45:31
1	K 766.490 Radial†	15378.7	13355.8	2541.1 ug/L		2541.1 ppb	07:45:11
1	Mg 279.077 IEC†	129.9	133.2	5494.7 ug/L		5494.7 ppb	07:45:31
1	Na 589.592 Radial†	5945.3	7043.0	2482.8 ug/L		2482.8 ppb	07:45:11
1	Sr 421.552†	65683.4	68121.9	546.01 ug/L		546.01 ppb	07:45:11
1	Sc 361.383	828020.8	828020.8	101.12 %			07:46:29
1	Y 371.029	691853.4	691853.4	100.03 %			07:46:29
1	Ag 328.068†	50281.0	49537.5	260.39 ug/L		260.39 ppb	07:46:29
1	As 188.979†	842.0	859.4	476.13 ug/L		476.13 ppb	07:46:49
1	B 249.677†	18333.9	18667.6	521.37 ug/L		521.37 ppb	07:46:29
1	Ba 233.527†	55293.2	54679.8	513.44 ug/L		513.44 ppb	07:46:29
1	Be 313.107†	620824.3	617660.4	264.14 ug/L		264.14 ppb	07:46:29
1	Cd 226.502†	34825.2	34609.1	502.04 ug/L		502.04 ppb	07:46:29
1	Co 228.616†	20188.0	20010.0	517.35 ug/L		517.35 ppb	07:46:29
1	Cr 267.716†	37007.0	36524.5	490.87 ug/L		490.87 ppb	07:46:29
1	Cu 324.752†	161407.2	154062.6	508.63 ug/L		508.63 ppb	07:46:29
1	Mn 257.610†	397858.6	393050.9	517.08 ug/L		517.08 ppb	07:46:29
1	Mo 202.031†	6082.7	6006.6	534.40 ug/L		534.40 ppb	07:46:49
1	Ni 231.604†	16297.5	16032.5	508.84 ug/L		508.84 ppb	07:46:29
1	P 214.914†	3585.3	3358.2	2402.7 ug/L		2402.7 ppb	07:46:49
1	Pb 220.353†	3230.6	3253.0	501.29 ug/L		501.29 ppb	07:46:49
1	S 181.975 Axial†	1435.1	1389.0	2485.7 ug/L		2485.7 ppb	07:46:49
1	Sb 206.836†	1237.1	1199.7	521.16 ug/L		521.16 ppb	07:46:49
1	Se 196.026†	3117.5	3099.8	2600.8 ug/L		2600.8 ppb	07:46:49
1	Si 251.611†	132565.1	130604.6	4951.6 ug/L		4951.6 ppb	07:46:29
1	Sn 189.927†	2396.2	2362.4	536.72 ug/L		536.72 ppb	07:46:49
1	Ti 334.940†	289993.6	287894.1	500.51 ug/L		500.51 ppb	07:46:29
1	Tl 190.801†	1336.3	1350.6	525.90 ug/L		525.90 ppb	07:46:49
1	U 409.014†	14608.3	16650.2	503.45 ug/L		503.45 ppb	07:46:29
1	V 292.402†	63227.7	63842.9	516.94 ug/L		516.94 ppb	07:46:29
1	Zn 213.857†	43406.0	42353.9	508.47 ug/L		508.47 ppb	07:46:29
1	SiO2†	131517.0	129557.0	10559 ug/L		10559 ppb	07:47:47
2	Sc Radial	4236.2	4236.2	96.4 %			07:45:57
2	Y RADIAL	4735.0	4735.0	99.46 %			07:45:37
2	Al 396.153Radial†	5034.3	5301.2	5181.0 ug/L		5181.0 ppb	07:45:37
2	Ca 317.933Radial†	2653.7	2737.5	5180.0 ug/L		5180.0 ppb	07:45:57
2	Fe 238.204 Radial†	444.4	452.6	5259.7 ug/L		5259.7 ppb	07:45:57
2	K 766.490 Radial†	15389.8	13368.3	2543.5 ug/L		2543.5 ppb	07:45:37
2	Mg 279.077 IEC†	128.0	131.2	5414.3 ug/L		5414.3 ppb	07:45:57
2	Na 589.592 Radial†	5861.5	6956.4	2452.3 ug/L		2452.3 ppb	07:45:37
2	Sr 421.552†	65138.0	67560.5	541.51 ug/L		541.51 ppb	07:45:37
2	Sc 361.383	820882.8	820882.8	100.25 %			07:46:55
2	Y 371.029	687024.5	687024.5	99.332 %			07:46:55
2	Ag 328.068†	49859.0	49548.8	260.46 ug/L		260.46 ppb	07:46:55
2	As 188.979†	857.3	882.0	488.48 ug/L		488.48 ppb	07:47:15
2	B 249.677†	18074.8	18566.8	518.55 ug/L		518.55 ppb	07:46:55
2	Ba 233.527†	54807.3	54670.6	513.35 ug/L		513.35 ppb	07:46:55
2	Be 313.107†	615521.6	617709.5	264.16 ug/L		264.16 ppb	07:46:55
2	Cd 226.502†	34435.0	34519.3	500.74 ug/L		500.74 ppb	07:46:55
2	Co 228.616†	19937.1	19933.4	515.39 ug/L		515.39 ppb	07:46:55
2	Cr 267.716†	36766.8	36603.1	491.93 ug/L		491.93 ppb	07:46:55
2	Cu 324.752†	159435.0	153483.3	506.73 ug/L		506.73 ppb	07:46:55
2	Mn 257.610†	393797.0	392420.7	516.26 ug/L		516.26 ppb	07:46:55
2	Mo 202.031†	6112.4	6088.6	541.69 ug/L		541.69 ppb	07:47:15
2	Ni 231.604†	16226.6	16101.8	511.04 ug/L		511.04 ppb	07:46:55

2	P 214.914†	3616.6	3420.3	2449.3 ug/L	2449.3 ppb	07:47:15
2	Pb 220.353†	3236.1	3286.3	506.43 ug/L	506.43 ppb	07:47:15
2	S 181.975 Axial†	1446.8	1413.0	2528.5 ug/L	2528.5 ppb	07:47:15
2	Sb 206.836†	1247.3	1220.5	530.13 ug/L	530.13 ppb	07:47:15
2	Se 196.026†	3136.4	3145.5	2638.9 ug/L	2638.9 ppb	07:47:15
2	Si 251.611†	131086.9	130270.1	4938.8 ug/L	4938.8 ppb	07:46:55
2	Sn 189.927†	2402.1	2388.9	542.72 ug/L	542.72 ppb	07:47:15
2	Ti 334.940†	287075.9	287477.4	499.80 ug/L	499.80 ppb	07:46:55
2	Tl 190.801†	1363.4	1389.1	540.79 ug/L	540.79 ppb	07:47:15
2	U 409.014†	14162.5	16331.2	493.76 ug/L	493.76 ppb	07:46:55
2	V 292.402†	62608.2	63768.7	516.43 ug/L	516.43 ppb	07:46:55
2	Zn 213.857†	42973.0	42295.1	507.75 ug/L	507.75 ppb	07:46:55
2	SiO2†	129984.9	129159.7	10526 ug/L	10526 ppb	07:47:52
3	Sc Radial	4249.4	4249.4	96.7 %		07:46:22
3	Y RADIAL	4742.6	4742.6	99.62 %		07:46:02
3	Al 396.153Radial†	5051.7	5303.0	5183.1 ug/L	5183.1 ppb	07:46:02
3	Ca 317.933Radial†	2658.2	2733.6	5172.6 ug/L	5172.6 ppb	07:46:22
3	Fe 238.204 Radial†	442.5	449.2	5220.7 ug/L	5220.7 ppb	07:46:22
3	K 766.490 Radial†	15649.2	13587.0	2585.2 ug/L	2585.2 ppb	07:46:02
3	Mg 279.077 IEC†	128.5	131.3	5417.7 ug/L	5417.7 ppb	07:46:22
3	Na 589.592 Radial†	5869.2	6945.6	2448.5 ug/L	2448.5 ppb	07:46:02
3	Sr 421.552†	65487.0	67711.5	542.72 ug/L	542.72 ppb	07:46:02
3	Sc 361.383	827095.9	827095.9	101.01 %		07:47:21
3	Y 371.029	692361.2	692361.2	100.10 %		07:47:21
3	Ag 328.068†	50259.5	49571.7	260.55 ug/L	260.55 ppb	07:47:21
3	As 188.979†	842.1	860.4	476.66 ug/L	476.66 ppb	07:47:41
3	B 249.677†	18172.4	18528.1	517.47 ug/L	517.47 ppb	07:47:21
3	Ba 233.527†	55205.3	54653.9	513.19 ug/L	513.19 ppb	07:47:21
3	Be 313.107†	620935.3	618456.9	264.48 ug/L	264.48 ppb	07:47:21
3	Cd 226.502†	34701.6	34525.3	500.83 ug/L	500.83 ppb	07:47:21
3	Co 228.616†	20116.9	19961.9	516.11 ug/L	516.11 ppb	07:47:21
3	Cr 267.716†	37016.0	36574.3	491.54 ug/L	491.54 ppb	07:47:21
3	Cu 324.752†	160873.9	153713.2	507.48 ug/L	507.48 ppb	07:47:21
3	Mn 257.610†	396517.7	392163.4	515.92 ug/L	515.92 ppb	07:47:21
3	Mo 202.031†	6064.4	5995.2	533.39 ug/L	533.39 ppb	07:47:41
3	Ni 231.604†	16302.2	16055.1	509.55 ug/L	509.55 ppb	07:47:21
3	P 214.914†	3576.3	3353.2	2399.2 ug/L	2399.2 ppb	07:47:41
3	Pb 220.353†	3197.5	3223.8	496.81 ug/L	496.81 ppb	07:47:41
3	S 181.975 Axial†	1440.1	1395.5	2497.3 ug/L	2497.3 ppb	07:47:41
3	Sb 206.836†	1240.5	1204.4	523.11 ug/L	523.11 ppb	07:47:41
3	Se 196.026†	3103.0	3088.9	2591.7 ug/L	2591.7 ppb	07:47:41
3	Si 251.611†	131993.1	130185.0	4935.6 ug/L	4935.6 ppb	07:47:21
3	Sn 189.927†	2394.1	2363.0	536.84 ug/L	536.84 ppb	07:47:41
3	Ti 334.940†	289182.3	287411.7	499.68 ug/L	499.68 ppb	07:47:21
3	Tl 190.801†	1341.9	1357.6	528.61 ug/L	528.61 ppb	07:47:41
3	U 409.014†	14513.2	16572.3	501.08 ug/L	501.08 ppb	07:47:21
3	V 292.402†	62962.4	63650.2	515.39 ug/L	515.39 ppb	07:47:21
3	Zn 213.857†	43202.6	42200.5	506.62 ug/L	506.62 ppb	07:47:21
3	SiO2†	131712.1	129895.6	10586 ug/L	10586 ppb	07:47:57

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	825333.2	100.79 %	0.474			0.47%
Sc Radial	4240.7	96.5 %	0.17			0.18%
Y 371.029	690413.1	99.822 %	0.4259			0.43%
Y RADIAL	4741.4	99.60 %	0.126			0.13%
Ag 328.068†	49552.7	260.47 ug/L	0.083	260.47 ppb	0.083	0.03%
QC value within limits for Ag 328.068 Recovery = 104.19%						
Al 396.153Radial†	5304.9	5184.9 ug/L	5.08	5184.9 ppb	5.08	0.10%
QC value within limits for Al 396.153Radial Recovery = 103.70%						
As 188.979†	867.3	480.42 ug/L	6.979	480.42 ppb	6.979	1.45%
QC value within limits for As 188.979 Recovery = 96.08%						
B 249.677†	18587.5	519.13 ug/L	2.017	519.13 ppb	2.017	0.39%
QC value within limits for B 249.677 Recovery = 103.83%						
Ba 233.527†	54668.1	513.32 ug/L	0.125	513.32 ppb	0.125	0.02%
QC value within limits for Ba 233.527 Recovery = 102.66%						
Be 313.107†	617942.3	264.26 ug/L	0.189	264.26 ppb	0.189	0.07%
QC value within limits for Be 313.107 Recovery = 105.70%						
Ca 317.933Radial†	2733.8	5173.0 ug/L	6.84	5173.0 ppb	6.84	0.13%

QC value within limits for Ca 317.933 Radial Recovery = 103.46%					
Cd 226.502†	34551.2	501.21 ug/L	0.728	501.21 ppb	0.728 0.15%
QC value within limits for Cd 226.502 Recovery = 100.24%					
Co 228.616†	19968.4	516.29 ug/L	0.993	516.29 ppb	0.993 0.19%
QC value within limits for Co 228.616 Recovery = 103.26%					
Cr 267.716†	36567.3	491.45 ug/L	0.535	491.45 ppb	0.535 0.11%
QC value within limits for Cr 267.716 Recovery = 98.29%					
Cu 324.752†	153753.0	507.61 ug/L	0.960	507.61 ppb	0.960 0.19%
QC value within limits for Cu 324.752 Recovery = 101.52%					
Fe 238.204 Radial†	451.2	5243.4 ug/L	20.29	5243.4 ppb	20.29 0.39%
QC value within limits for Fe 238.204 Radial Recovery = 104.87%					
K 766.490 Radial†	13437.0	2556.6 ug/L	24.79	2556.6 ppb	24.79 0.97%
QC value within limits for K 766.490 Radial Recovery = 102.26%					
Mg 279.077 IEC†	131.9	5442.2 ug/L	45.49	5442.2 ppb	45.49 0.84%
QC value within limits for Mg 279.077 IEC Recovery = 108.84%					
Mn 257.610†	392545.0	516.42 ug/L	0.600	516.42 ppb	0.600 0.12%
QC value within limits for Mn 257.610 Recovery = 103.28%					
Mo 202.031†	6030.1	536.49 ug/L	4.528	536.49 ppb	4.528 0.84%
QC value within limits for Mo 202.031 Recovery = 107.30%					
Na 589.592 Radial†	6981.7	2461.2 ug/L	18.82	2461.2 ppb	18.82 0.76%
QC value within limits for Na 589.592 Radial Recovery = 98.45%					
Ni 231.604†	16063.1	509.81 ug/L	1.124	509.81 ppb	1.124 0.22%
QC value within limits for Ni 231.604 Recovery = 101.96%					
P 214.914†	3377.2	2417.1 ug/L	27.99	2417.1 ppb	27.99 1.16%
QC value within limits for P 214.914 Recovery = 96.68%					
Pb 220.353†	3254.4	501.51 ug/L	4.813	501.51 ppb	4.813 0.96%
QC value within limits for Pb 220.353 Recovery = 100.30%					
S 181.975 Axial†	1399.2	2503.8 ug/L	22.17	2503.8 ppb	22.17 0.89%
QC value within limits for S 181.975 Axial Recovery = 100.15%					
Sb 206.836†	1208.2	524.80 ug/L	4.720	524.80 ppb	4.720 0.90%
QC value within limits for Sb 206.836 Recovery = 104.96%					
Se 196.026†	3111.4	2610.5 ug/L	25.06	2610.5 ppb	25.06 0.96%
QC value within limits for Se 196.026 Recovery = 104.42%					
Si 251.611†	130353.2	4942.0 ug/L	8.43	4942.0 ppb	8.43 0.17%
QC value within limits for Si 251.611 Recovery = 98.84%					
Sn 189.927†	2371.4	538.76 ug/L	3.429	538.76 ppb	3.429 0.64%
QC value within limits for Sn 189.927 Recovery = 107.75%					
Sr 421.552†	67798.0	543.41 ug/L	2.329	543.41 ppb	2.329 0.43%
QC value within limits for Sr 421.552 Recovery = 108.68%					
Ti 334.940†	287594.4	499.99 ug/L	0.450	499.99 ppb	0.450 0.09%
QC value within limits for Ti 334.940 Recovery = 100.00%					
Tl 190.801†	1365.7	531.77 ug/L	7.929	531.77 ppb	7.929 1.49%
QC value within limits for Tl 190.801 Recovery = 106.35%					
U 409.014†	16517.9	499.43 ug/L	5.048	499.43 ppb	5.048 1.01%
QC value within limits for U 409.014 Recovery = 99.89%					
V 292.402†	63753.9	516.25 ug/L	0.792	516.25 ppb	0.792 0.15%
QC value within limits for V 292.402 Recovery = 103.25%					
Zn 213.857†	42283.2	507.61 ug/L	0.936	507.61 ppb	0.936 0.18%
QC value within limits for Zn 213.857 Recovery = 101.52%					
SiO2†	129537.4	10557 ug/L	30.2	10557 ppb	30.2 0.29%
QC value within limits for SiO2 Recovery = 98.71%					

All analyte(s) passed QC.

Sequence No.: 7

Sample ID: ICB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 10

Date Collected: 3/19/2010 07:50:08

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICB

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4227.6	4227.6	96.2 %		07:52:21
1	Y RADIAL	4774.1	4774.1	100.3 %		07:52:01
1	Al 396.153Radial†	-68.9	6.4	6.3185 ug/L	6.3185 ppb	07:52:21
1	Ca 317.933Radial†	18.9	4.0	7.5299 ug/L	7.5299 ppb	07:52:21
1	Fe 238.204 Radial†	9.1	1.0	11.562 ug/L	11.562 ppb	07:52:21
1	K 766.490 Radial†	2602.7	107.0	20.388 ug/L	20.388 ppb	07:52:01
1	Mg 279.077 IEC†	1.1	-0.4	-16.653 ug/L	-16.653 ppb	07:52:21
1	Na 589.592 Radial†	-877.3	-37.0	-13.028 ug/L	-13.028 ppb	07:52:01
1	Sr 421.552†	-2.3	-23.2	-0.1857 ug/L	-0.1857 ppb	07:52:01
1	Sc 361.383	822500.8	822500.8	100.45 %		07:53:18
1	Y 371.029	694388.9	694388.9	100.40 %		07:53:18
1	Ag 328.068†	219.4	33.2	0.1721 ug/L	0.1721 ppb	07:53:18
1	As 188.979†	-14.3	12.6	6.8925 ug/L	6.8925 ppb	07:53:38
1	B 249.677†	-143.2	394.8	11.075 ug/L	11.075 ppb	07:53:38
1	Ba 233.527†	3.8	4.5	0.0412 ug/L	0.0412 ppb	07:53:38
1	Be 313.107†	-3620.9	126.3	0.0535 ug/L	0.0535 ppb	07:53:18
1	Cd 226.502†	-170.4	1.0	0.0130 ug/L	0.0130 ppb	07:53:38
1	Co 228.616†	-53.3	-6.9	-0.1775 ug/L	-0.1775 ppb	07:53:38
1	Cr 267.716†	81.7	9.8	0.1311 ug/L	0.1311 ppb	07:53:38
1	Cu 324.752†	5460.0	-116.4	-0.3851 ug/L	-0.3851 ppb	07:53:18
1	Mn 257.610†	435.0	44.0	0.0597 ug/L	0.0597 ppb	07:53:38
1	Mo 202.031†	12.1	3.5	0.3106 ug/L	0.3106 ppb	07:53:38
1	Ni 231.604†	74.1	-10.3	-0.3261 ug/L	-0.3261 ppb	07:53:38
1	P 214.914†	199.0	10.8	8.1501 ug/L	8.1501 ppb	07:53:38
1	Pb 220.353†	-64.9	-6.3	-0.9611 ug/L	-0.9611 ppb	07:53:38
1	S 181.975 Axial†	28.0	-2.3	-4.1877 ug/L	-4.1877 ppb	07:53:38
1	Sb 206.836†	25.3	1.5	0.6355 ug/L	0.6355 ppb	07:53:38
1	Se 196.026†	-18.2	-1.2	-0.9475 ug/L	-0.9475 ppb	07:53:38
1	Si 251.611†	523.3	32.7	1.2394 ug/L	1.2394 ppb	07:53:38
1	Sn 189.927†	9.4	2.2	0.5039 ug/L	0.5039 ppb	07:53:38
1	Ti 334.940†	-1203.2	-76.6	-0.1322 ug/L	-0.1322 ppb	07:53:18
1	Tl 190.801†	-32.0	-2.7	-1.0626 ug/L	-1.0626 ppb	07:53:38
1	U 409.014†	-2124.4	89.3	2.7075 ug/L	2.7075 ppb	07:53:18
1	V 292.402†	-1376.1	-52.5	-0.4113 ug/L	-0.4113 ppb	07:53:18
1	Zn 213.857†	569.1	-3.5	-0.0418 ug/L	-0.0418 ppb	07:53:38
1	SiO2†	542.5	40.7	3.3134 ug/L	3.3134 ppb	07:54:49
2	Sc Radial	4262.1	4262.1	97.0 %		07:52:47
2	Y RADIAL	4708.4	4708.4	98.90 %		07:52:27
2	Al 396.153Radial†	-75.6	0.2	0.1122 ug/L	0.1122 ppb	07:52:47
2	Ca 317.933Radial†	15.6	0.4	0.7040 ug/L	0.7040 ppb	07:52:47
2	Fe 238.204 Radial†	8.1	-0.1	-1.2667 ug/L	-1.2667 ppb	07:52:47
2	K 766.490 Radial†	2562.5	43.7	8.3262 ug/L	8.3262 ppb	07:52:27
2	Mg 279.077 IEC†	0.5	-1.0	-43.214 ug/L	-43.214 ppb	07:52:47
2	Na 589.592 Radial†	-902.5	-55.5	-19.565 ug/L	-19.565 ppb	07:52:27
2	Sr 421.552†	-0.1	-20.9	-0.1676 ug/L	-0.1676 ppb	07:52:27
2	Sc 361.383	809397.3	809397.3	98.849 %		07:53:44
2	Y 371.029	684094.8	684094.8	98.908 %		07:53:44
2	Ag 328.068†	108.4	-75.5	-0.3948 ug/L	-0.3948 ppb	07:53:44
2	As 188.979†	-26.5	-0.0	-0.0164 ug/L	-0.0164 ppb	07:54:04
2	B 249.677†	-133.5	402.3	11.288 ug/L	11.288 ppb	07:54:04
2	Ba 233.527†	-10.0	-9.4	-0.0882 ug/L	-0.0882 ppb	07:54:04
2	Be 313.107†	-3759.4	-72.2	-0.0306 ug/L	-0.0306 ppb	07:53:44
2	Cd 226.502†	-175.0	-6.4	-0.0927 ug/L	-0.0927 ppb	07:54:04
2	Co 228.616†	-54.4	-8.9	-0.2262 ug/L	-0.2262 ppb	07:54:04
2	Cr 267.716†	75.5	4.9	0.0640 ug/L	0.0640 ppb	07:54:04
2	Cu 324.752†	5612.9	126.3	0.4151 ug/L	0.4151 ppb	07:53:44
2	Mn 257.610†	405.8	21.5	0.0299 ug/L	0.0299 ppb	07:54:04
2	Mo 202.031†	22.9	14.6	1.3019 ug/L	1.3019 ppb	07:54:04
2	Ni 231.604†	81.9	-1.2	-0.0393 ug/L	-0.0393 ppb	07:54:04

2	P 214.914†	176.7	-8.5	-6.4383 ug/L	-6.4383 ppb	07:54:04
2	Pb 220.353†	-50.1	7.6	1.1742 ug/L	1.1742 ppb	07:54:04
2	S 181.975 Axial†	28.6	-1.2	-2.1912 ug/L	-2.1912 ppb	07:54:04
2	Sb 206.836†	26.4	3.0	1.2919 ug/L	1.2919 ppb	07:54:04
2	Se 196.026†	-26.5	-9.8	-8.1711 ug/L	-8.1711 ppb	07:54:04
2	Si 251.611†	511.4	29.2	1.0927 ug/L	1.0927 ppb	07:54:04
2	Sn 189.927†	7.7	0.6	0.1470 ug/L	0.1470 ppb	07:54:04
2	Ti 334.940†	-1067.3	41.5	0.0743 ug/L	0.0743 ppb	07:53:44
2	Tl 190.801†	-29.0	-0.3	-0.1073 ug/L	-0.1073 ppb	07:54:04
2	U 409.014†	-2072.2	107.9	3.2725 ug/L	3.2725 ppb	07:53:44
2	V 292.402†	-1292.4	10.0	0.1038 ug/L	0.1038 ppb	07:53:44
2	Zn 213.857†	554.3	-9.3	-0.1129 ug/L	-0.1129 ppb	07:54:04
2	SiO2†	534.3	41.2	3.3239 ug/L	3.3239 ppb	07:55:09
3	Sc Radial	4234.0	4234.0	96.3 %		07:53:12
3	Y RADIAL	4724.6	4724.6	99.24 %		07:52:52
3	Al 396.153Radial†	-81.6	-6.6	-6.5359 ug/L	-6.5359 ppb	07:53:12
3	Ca 317.933Radial†	16.3	1.3	2.3818 ug/L	2.3818 ppb	07:53:12
3	Fe 238.204 Radial†	9.4	1.3	15.504 ug/L	15.504 ppb	07:53:12
3	K 766.490 Radial†	2538.1	35.9	6.8490 ug/L	6.8490 ppb	07:52:52
3	Mg 279.077 IEC†	4.4	3.0	123.58 ug/L	123.58 ppb	07:53:12
3	Na 589.592 Radial†	-910.3	-69.8	-24.604 ug/L	-24.604 ppb	07:52:52
3	Sr 421.552†	52.7	33.9	0.2718 ug/L	0.2718 ppb	07:52:52
3	Sc 361.383	824073.6	824073.6	100.64 %		07:54:09
3	Y 371.029	697428.4	697428.4	100.84 %		07:54:09
3	Ag 328.068†	260.6	73.8	0.3839 ug/L	0.3839 ppb	07:54:09
3	As 188.979†	-24.2	2.7	1.4956 ug/L	1.4956 ppb	07:54:29
3	B 249.677†	-133.9	404.3	11.340 ug/L	11.340 ppb	07:54:29
3	Ba 233.527†	24.9	25.4	0.2395 ug/L	0.2395 ppb	07:54:29
3	Be 313.107†	-3640.4	113.8	0.0487 ug/L	0.0487 ppb	07:54:09
3	Cd 226.502†	-164.0	7.7	0.1121 ug/L	0.1121 ppb	07:54:29
3	Co 228.616†	-49.5	-3.0	-0.0776 ug/L	-0.0776 ppb	07:54:29
3	Cr 267.716†	78.7	6.7	0.0889 ug/L	0.0889 ppb	07:54:29
3	Cu 324.752†	5545.9	-41.4	-0.1401 ug/L	-0.1401 ppb	07:54:09
3	Mn 257.610†	423.7	31.9	0.0384 ug/L	0.0384 ppb	07:54:29
3	Mo 202.031†	12.7	4.1	0.3639 ug/L	0.3639 ppb	07:54:29
3	Ni 231.604†	92.7	8.1	0.2558 ug/L	0.2558 ppb	07:54:29
3	P 214.914†	185.9	-2.6	-1.9063 ug/L	-1.9063 ppb	07:54:29
3	Pb 220.353†	-55.4	3.3	0.4986 ug/L	0.4986 ppb	07:54:29
3	S 181.975 Axial†	25.6	-4.7	-8.4722 ug/L	-8.4722 ppb	07:54:29
3	Sb 206.836†	24.2	0.4	0.1882 ug/L	0.1882 ppb	07:54:29
3	Se 196.026†	-16.5	0.5	0.4855 ug/L	0.4855 ppb	07:54:29
3	Si 251.611†	522.6	31.1	1.1761 ug/L	1.1761 ppb	07:54:29
3	Sn 189.927†	14.3	7.0	1.5931 ug/L	1.5931 ppb	07:54:29
3	Ti 334.940†	-1072.1	56.0	0.0843 ug/L	0.0843 ppb	07:54:09
3	Tl 190.801†	-26.9	2.3	0.9032 ug/L	0.9032 ppb	07:54:29
3	U 409.014†	-1972.4	244.3	7.4112 ug/L	7.4112 ppb	07:54:09
3	V 292.402†	-1263.2	62.3	0.5170 ug/L	0.5170 ppb	07:54:09
3	Zn 213.857†	568.9	-4.8	-0.0621 ug/L	-0.0621 ppb	07:54:29
3	SiO2†	526.0	23.4	1.8968 ug/L	1.8968 ppb	07:55:29

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	818657.3	99.980 %	0.9841			0.98%
Sc Radial	4241.2	96.5 %	0.42			0.43%
Y 371.029	691970.7	100.05 %	1.010			1.01%
Y RADIAL	4735.7	99.48 %	0.719			0.72%
Ag 328.068†	10.5	0.0537 ug/L	0.40263	0.0537 ppb	0.40263	749.28%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	-0.0	-0.0351 ug/L	6.42850	-0.0351 ppb	6.42850	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	5.1	2.7906 ug/L	3.63190	2.7906 ppb	3.63190	130.15%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	400.5	11.235 ug/L	0.1403	11.235 ppb	0.1403	1.25%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	6.8	0.0642 ug/L	0.16504	0.0642 ppb	0.16504	257.23%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	56.0	0.0239 ug/L	0.04720	0.0239 ppb	0.04720	197.83%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	1.9	3.5386 ug/L	3.55694	3.5386 ppb	3.55694	100.52%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	0.7 0.0108 ug/L	0.10245 0.0108 ppb	0.10245 947.92%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	-6.3 -0.1604 ug/L	0.07575 -0.1604 ppb	0.07575 47.21%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	7.1 0.0947 ug/L	0.03391 0.0947 ppb	0.03391 35.82%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	-10.5 -0.0367 ug/L	0.41001 -0.0367 ppb	0.41001 >999.9%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	0.7 8.5999 ug/L	8.76910 8.5999 ppb	8.76910 101.97%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	62.2 11.854 ug/L	7.4269 11.854 ppb	7.4269 62.65%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.5 21.237 ug/L	89.6187 21.237 ppb	89.6187 422.00%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	32.5 0.0427 ug/L	0.01531 0.0427 ppb	0.01531 35.88%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	7.4 0.6588 ug/L	0.55759 0.6588 ppb	0.55759 84.64%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-54.1 -19.066 ug/L	5.8042 -19.066 ppb	5.8042 30.44%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	-1.2 -0.0366 ug/L	0.29096 -0.0366 ppb	0.29096 795.90%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-0.1 -0.0648 ug/L	7.46648 -0.0648 ppb	7.46648 >999.9%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	1.5 0.2372 ug/L	1.09140 0.2372 ppb	1.09140 460.05%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-2.8 -4.9504 ug/L	3.20920 -4.9504 ppb	3.20920 64.83%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	1.6 0.7052 ug/L	0.55515 0.7052 ppb	0.55515 78.72%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	-3.5 -2.8777 ug/L	4.63988 -2.8777 ppb	4.63988 161.23%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	31.0 1.1694 ug/L	0.07358 1.1694 ppb	0.07358 6.29%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	3.3 0.7480 ug/L	0.75332 0.7480 ppb	0.75332 100.71%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	-3.4 -0.0272 ug/L	0.25907 -0.0272 ppb	0.25907 952.37%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	6.9 0.0088 ug/L	0.12217 0.0088 ppb	0.12217 >999.9%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	-0.2 -0.0889 ug/L	0.98302 -0.0889 ppb	0.98302 >999.9%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	147.2 4.4637 ug/L	2.56816 4.4637 ppb	2.56816 57.53%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	6.6 0.0698 ug/L	0.46509 0.0698 ppb	0.46509 666.11%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	-5.9 -0.0723 ug/L	0.03665 -0.0723 ppb	0.03665 50.72%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	35.1 2.8447 ug/L	0.82097 2.8447 ppb	0.82097 28.86%
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: 3/19/2010 07:57:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4245.6	4245.6	96.6 %		07:59:54
1	Y RADIAL	4767.8	4767.8	100.2 %		07:59:34
1	Al 396.153Radial†	133.0	215.8	211.49 ug/L	211.49 ppb	07:59:54
1	Ca 317.933Radial†	126.9	115.7	218.92 ug/L	218.92 ppb	07:59:54
1	Fe 238.204 Radial†	17.7	9.9	114.61 ug/L	114.61 ppb	07:59:54
1	K 766.490 Radial†	3386.5	907.0	172.60 ug/L	172.60 ppb	07:59:34
1	Mg 279.077 IEC†	8.9	7.7	318.80 ug/L	318.80 ppb	07:59:54
1	Na 589.592 Radial†	-60.9	812.1	286.28 ug/L	286.28 ppb	07:59:34
1	Sr 421.552†	640.5	642.3	5.1465 ug/L	5.1465 ppb	07:59:34
1	Sc 361.383	812136.9	812136.9	99.183 %		08:00:50
1	Y 371.029	686807.1	686807.1	99.300 %		08:00:50
1	Ag 328.068†	1209.8	1034.6	5.3773 ug/L	5.3773 ppb	08:00:50
1	As 188.979†	35.4	62.5	34.339 ug/L	34.339 ppb	08:01:10
1	B 249.677†	1543.2	2093.3	58.692 ug/L	58.692 ppb	08:00:50
1	Ba 233.527†	549.9	555.1	5.2128 ug/L	5.2128 ppb	08:01:10
1	Be 313.107†	8135.1	11933.1	5.0926 ug/L	5.0926 ppb	08:00:50
1	Cd 226.502†	189.2	361.4	5.2462 ug/L	5.2462 ppb	08:01:10
1	Co 228.616†	146.1	193.5	5.0142 ug/L	5.0142 ppb	08:01:10
1	Cr 267.716†	456.1	388.3	5.2039 ug/L	5.2039 ppb	08:01:10
1	Cu 324.752†	8656.8	3176.1	10.462 ug/L	10.462 ppb	08:00:50
1	Mn 257.610†	8403.4	8083.6	10.627 ug/L	10.627 ppb	08:00:50
1	Mo 202.031†	123.8	116.3	10.352 ug/L	10.352 ppb	08:01:10
1	Ni 231.604†	241.6	159.5	5.0629 ug/L	5.0629 ppb	08:01:10
1	P 214.914†	390.7	206.6	151.89 ug/L	151.89 ppb	08:01:10
1	Pb 220.353†	30.8	89.3	13.777 ug/L	13.777 ppb	08:01:10
1	S 181.975 Axial†	80.2	50.7	90.708 ug/L	90.708 ppb	08:01:10
1	Sb 206.836†	48.7	25.4	10.975 ug/L	10.975 ppb	08:01:10
1	Se 196.026†	23.6	40.7	34.377 ug/L	34.377 ppb	08:01:10
1	Si 251.611†	3086.7	2623.9	99.485 ug/L	99.485 ppb	08:01:10
1	Sn 189.927†	45.2	38.4	8.7521 ug/L	8.7521 ppb	08:01:10
1	Ti 334.940†	1751.7	2887.3	4.9985 ug/L	4.9985 ppb	08:00:50
1	Tl 190.801†	25.5	54.8	21.246 ug/L	21.246 ppb	08:01:10
1	U 409.014†	-392.1	1808.8	54.852 ug/L	54.852 ppb	08:00:50
1	V 292.402†	-753.3	557.9	4.6884 ug/L	4.6884 ppb	08:00:50
1	Zn 213.857†	1676.7	1120.5	13.513 ug/L	13.513 ppb	08:01:10
1	SiO2†	3159.0	2685.6	218.90 ug/L	218.90 ppb	08:02:07
2	Sc Radial	4256.7	4256.7	96.9 %		08:00:19
2	Y RADIAL	4740.6	4740.6	99.58 %		07:59:59
2	Al 396.153Radial†	133.7	216.1	211.76 ug/L	211.76 ppb	08:00:19
2	Ca 317.933Radial†	133.1	121.7	230.30 ug/L	230.30 ppb	08:00:19
2	Fe 238.204 Radial†	19.0	11.2	129.88 ug/L	129.88 ppb	08:00:19
2	K 766.490 Radial†	3378.3	889.3	169.24 ug/L	169.24 ppb	07:59:59
2	Mg 279.077 IEC†	10.6	9.4	386.96 ug/L	386.96 ppb	08:00:19
2	Na 589.592 Radial†	-44.7	829.0	292.24 ug/L	292.24 ppb	07:59:59
2	Sr 421.552†	676.8	678.0	5.4327 ug/L	5.4327 ppb	07:59:59
2	Sc 361.383	801259.4	801259.4	97.855 %		08:01:16
2	Y 371.029	678307.1	678307.1	98.071 %		08:01:16
2	Ag 328.068†	1161.0	1001.3	5.2110 ug/L	5.2110 ppb	08:01:16
2	As 188.979†	31.1	58.6	32.207 ug/L	32.207 ppb	08:01:36
2	B 249.677†	1398.3	1966.3	55.127 ug/L	55.127 ppb	08:01:16
2	Ba 233.527†	552.1	564.9	5.3055 ug/L	5.3055 ppb	08:01:36
2	Be 313.107†	7983.7	11889.7	5.0737 ug/L	5.0737 ppb	08:01:16
2	Cd 226.502†	167.9	342.2	4.9656 ug/L	4.9656 ppb	08:01:36
2	Co 228.616†	157.6	207.3	5.3712 ug/L	5.3712 ppb	08:01:36
2	Cr 267.716†	439.2	377.4	5.0596 ug/L	5.0596 ppb	08:01:36
2	Cu 324.752†	8568.0	3203.8	10.554 ug/L	10.554 ppb	08:01:16
2	Mn 257.610†	8238.3	8029.8	10.555 ug/L	10.555 ppb	08:01:16
2	Mo 202.031†	129.4	123.7	11.006 ug/L	11.006 ppb	08:01:36
2	Ni 231.604†	255.4	176.9	5.6155 ug/L	5.6155 ppb	08:01:36

2	P 214.914†	384.2	205.3	150.90 ug/L	150.90 ppb	08:01:36
2	Pb 220.353†	12.7	71.3	11.005 ug/L	11.005 ppb	08:01:36
2	S 181.975 Axial†	79.4	50.9	91.168 ug/L	91.168 ppb	08:01:36
2	Sb 206.836†	45.8	23.1	10.044 ug/L	10.044 ppb	08:01:36
2	Se 196.026†	19.7	37.1	31.393 ug/L	31.393 ppb	08:01:36
2	Si 251.611†	3082.1	2661.5	100.90 ug/L	100.90 ppb	08:01:36
2	Sn 189.927†	45.7	39.6	9.0109 ug/L	9.0109 ppb	08:01:36
2	Ti 334.940†	1629.0	2785.9	4.8185 ug/L	4.8185 ppb	08:01:16
2	Tl 190.801†	25.8	55.4	21.494 ug/L	21.494 ppb	08:01:36
2	U 409.014†	-410.1	1785.1	54.130 ug/L	54.130 ppb	08:01:16
2	V 292.402†	-698.7	603.5	5.0593 ug/L	5.0593 ppb	08:01:16
2	Zn 213.857†	1690.2	1157.1	13.951 ug/L	13.951 ppb	08:01:36
2	SiO2†	3155.7	2725.5	222.13 ug/L	222.13 ppb	08:02:12
3	Sc Radial	4251.9	4251.9	96.7 %		08:00:44
3	Y RADIAL	4745.3	4745.3	99.68 %		08:00:24
3	Al 396.153Radial†	131.9	214.4	210.14 ug/L	210.14 ppb	08:00:44
3	Ca 317.933Radial†	128.1	116.7	220.87 ug/L	220.87 ppb	08:00:44
3	Fe 238.204 Radial†	17.0	9.1	105.35 ug/L	105.35 ppb	08:00:44
3	K 766.490 Radial†	3366.8	881.4	167.74 ug/L	167.74 ppb	08:00:24
3	Mg 279.077 IEC†	9.2	7.9	327.36 ug/L	327.36 ppb	08:00:44
3	Na 589.592 Radial†	-82.1	790.3	278.59 ug/L	278.59 ppb	08:00:24
3	Sr 421.552†	676.9	678.9	5.4400 ug/L	5.4400 ppb	08:00:24
3	Sc 361.383	809668.4	809668.4	98.882 %		08:01:41
3	Y 371.029	684999.1	684999.1	99.039 %		08:01:41
3	Ag 328.068†	1111.9	939.3	4.8848 ug/L	4.8848 ppb	08:01:41
3	As 188.979†	39.5	66.8	36.695 ug/L	36.695 ppb	08:02:01
3	B 249.677†	1432.9	1986.5	55.697 ug/L	55.697 ppb	08:01:41
3	Ba 233.527†	543.7	550.5	5.1700 ug/L	5.1700 ppb	08:02:01
3	Be 313.107†	8221.7	12045.7	5.1405 ug/L	5.1405 ppb	08:01:41
3	Cd 226.502†	183.8	356.5	5.1759 ug/L	5.1759 ppb	08:02:01
3	Co 228.616†	148.7	196.6	5.0937 ug/L	5.0937 ppb	08:02:01
3	Cr 267.716†	443.8	377.3	5.0573 ug/L	5.0573 ppb	08:02:01
3	Cu 324.752†	8543.8	3088.5	10.174 ug/L	10.174 ppb	08:01:41
3	Mn 257.610†	8388.1	8093.9	10.639 ug/L	10.639 ppb	08:01:41
3	Mo 202.031†	121.9	114.7	10.207 ug/L	10.207 ppb	08:02:01
3	Ni 231.604†	260.7	179.6	5.7006 ug/L	5.7006 ppb	08:02:01
3	P 214.914†	386.5	203.6	149.69 ug/L	149.69 ppb	08:02:01
3	Pb 220.353†	18.8	77.4	11.941 ug/L	11.941 ppb	08:02:01
3	S 181.975 Axial†	81.1	51.8	92.740 ug/L	92.740 ppb	08:02:01
3	Sb 206.836†	47.2	24.0	10.393 ug/L	10.393 ppb	08:02:01
3	Se 196.026†	12.7	29.8	25.236 ug/L	25.236 ppb	08:02:01
3	Si 251.611†	3109.9	2656.9	100.74 ug/L	100.74 ppb	08:02:01
3	Sn 189.927†	47.7	41.0	9.3474 ug/L	9.3474 ppb	08:02:01
3	Ti 334.940†	1745.7	2886.7	4.9992 ug/L	4.9992 ppb	08:01:41
3	Tl 190.801†	26.8	56.2	21.792 ug/L	21.792 ppb	08:02:01
3	U 409.014†	-546.4	1651.6	50.085 ug/L	50.085 ppb	08:01:41
3	V 292.402†	-711.5	597.9	4.9984 ug/L	4.9984 ppb	08:01:41
3	Zn 213.857†	1689.0	1138.0	13.723 ug/L	13.723 ppb	08:02:01
3	SiO2†	3182.7	2719.4	221.65 ug/L	221.65 ppb	08:02:17

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	807688.2	98.640 %		0.6965			0.71%
Sc Radial	4251.4	96.7 %		0.13			0.13%
Y 371.029	683371.1	98.803 %		0.6474			0.66%
Y RADIAL	4751.3	99.80 %		0.306			0.31%
Ag 328.068†	991.8	5.1577 ug/L		0.25053	5.1577 ppb	0.25053	4.86%
QC value within limits for Ag 328.068 Recovery = 103.15%							
Al 396.153Radial†	215.5	211.13 ug/L		0.870	211.13 ppb	0.870	0.41%
QC value within limits for Al 396.153Radial Recovery = 105.57%							
As 188.979†	62.6	34.414 ug/L		2.2453	34.414 ppb	2.2453	6.52%
QC value within limits for As 188.979 Recovery = 114.71%							
B 249.677†	2015.4	56.505 ug/L		1.9154	56.505 ppb	1.9154	3.39%
QC value within limits for B 249.677 Recovery = 113.01%							
Ba 233.527†	556.8	5.2294 ug/L		0.06925	5.2294 ppb	0.06925	1.32%
QC value within limits for Ba 233.527 Recovery = 104.59%							
Be 313.107†	11956.2	5.1023 ug/L		0.03444	5.1023 ppb	0.03444	0.68%
QC value within limits for Be 313.107 Recovery = 102.05%							
Ca 317.933Radial†	118.0	223.36 ug/L		6.081	223.36 ppb	6.081	2.72%

QC value within limits for Ca 317.933 Radial Recovery = 111.68%

Cd 226.502†	353.4	5.1292 ug/L	0.14600	5.1292 ppb	0.14600	2.85%
QC value within limits for Cd 226.502 Recovery = 102.58%						
Co 228.616†	199.1	5.1597 ug/L	0.18742	5.1597 ppb	0.18742	3.63%
QC value within limits for Co 228.616 Recovery = 103.19%						
Cr 267.716†	381.0	5.1070 ug/L	0.08399	5.1070 ppb	0.08399	1.64%
QC value within limits for Cr 267.716 Recovery = 102.14%						
Cu 324.752†	3156.1	10.397 ug/L	0.1981	10.397 ppb	0.1981	1.91%
QC value within limits for Cu 324.752 Recovery = 103.97%						
Fe 238.204 Radial†	10.1	116.61 ug/L	12.388	116.61 ppb	12.388	10.62%
QC value within limits for Fe 238.204 Radial Recovery = 116.61%						
K 766.490 Radial†	892.6	169.86 ug/L	2.490	169.86 ppb	2.490	1.47%
QC value within limits for K 766.490 Radial Recovery = 113.24%						
Mg 279.077 IEC†	8.3	344.37 ug/L	37.126	344.37 ppb	37.126	10.78%
QC value within limits for Mg 279.077 IEC Recovery = 114.79%						
Mn 257.610†	8069.1	10.607 ug/L	0.0455	10.607 ppb	0.0455	0.43%
QC value within limits for Mn 257.610 Recovery = 106.07%						
Mo 202.031†	118.2	10.522 ug/L	0.4257	10.522 ppb	0.4257	4.05%
QC value within limits for Mo 202.031 Recovery = 105.22%						
Na 589.592 Radial†	810.5	285.70 ug/L	6.845	285.70 ppb	6.845	2.40%
QC value within limits for Na 589.592 Radial Recovery = 95.23%						
Ni 231.604†	172.0	5.4597 ug/L	0.34627	5.4597 ppb	0.34627	6.34%
QC value within limits for Ni 231.604 Recovery = 109.19%						
P 214.914†	205.2	150.83 ug/L	1.104	150.83 ppb	1.104	0.73%
QC value within limits for P 214.914 Recovery = 100.55%						
Pb 220.353†	79.3	12.241 ug/L	1.4102	12.241 ppb	1.4102	11.52%
QC value within limits for Pb 220.353 Recovery = 122.41%						
S 181.975 Axial†	51.2	91.538 ug/L	1.0656	91.538 ppb	1.0656	1.16%
QC value within limits for S 181.975 Axial Recovery = 91.54%						
Sb 206.836†	24.2	10.471 ug/L	0.4701	10.471 ppb	0.4701	4.49%
QC value within limits for Sb 206.836 Recovery = 104.71%						
Se 196.026†	35.9	30.335 ug/L	4.6611	30.335 ppb	4.6611	15.37%
QC value within limits for Se 196.026 Recovery = 101.12%						
Si 251.611†	2647.5	100.38 ug/L	0.775	100.38 ppb	0.775	0.77%
QC value within limits for Si 251.611 Recovery = 100.38%						
Sn 189.927†	39.7	9.0368 ug/L	0.29853	9.0368 ppb	0.29853	3.30%
QC value within limits for Sn 189.927 Recovery = 90.37%						
Sr 421.552†	666.4	5.3397 ug/L	0.16737	5.3397 ppb	0.16737	3.13%
QC value within limits for Sr 421.552 Recovery = 106.79%						
Ti 334.940†	2853.3	4.9388 ug/L	0.10410	4.9388 ppb	0.10410	2.11%
QC value within limits for Ti 334.940 Recovery = 98.78%						
Tl 190.801†	55.4	21.511 ug/L	0.2730	21.511 ppb	0.2730	1.27%
QC value within limits for Tl 190.801 Recovery = 107.55%						
U 409.014†	1748.5	53.022 ug/L	2.5696	53.022 ppb	2.5696	4.85%
QC value within limits for U 409.014 Recovery = 106.04%						
V 292.402†	586.4	4.9153 ug/L	0.19891	4.9153 ppb	0.19891	4.05%
QC value within limits for V 292.402 Recovery = 98.31%						
Zn 213.857†	1138.5	13.729 ug/L	0.2193	13.729 ppb	0.2193	1.60%
QC value greater than the upper limit for Zn 213.857 Recovery = 137.29%						
SiO2†	2710.2	220.90 ug/L	1.746	220.90 ppb	1.746	0.79%
QC value within limits for SiO2 Recovery = 103.71%						

QC Failed. Continue with analysis.

Sequence No.: 9

Sample ID: ICSA

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 13

Date Collected: 3/19/2010 08:04:28

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	3920.8	3920.8	89.2 %		08:06:41
1	Y RADIAL	4255.0	4255.0	89.38 %		08:06:41
1	Al 396.153Radial†	468586.1	525352.2	516040 ug/L	516040 ppb	08:06:21
1	Ca 317.933Radial†	224935.9	252132.2	477090 ug/L	477090 ppb	08:06:21
1	Fe 238.204 Radial†	14279.3	15998.3	185370 ug/L	185370 ppb	08:06:41
1	K 766.490 Radial†	2233.0	-95.6	-177.79 ug/L	-177.79 ppb	08:06:21
1	Mg 279.077 IEC†	10594.3	11874.5	489650 ug/L	489650 ppb	08:06:41
1	Na 589.592 Radial†	-736.1	50.0	17.626 ug/L	17.626 ppb	08:06:41
1	Sr 421.552†	455.0	489.2	0.3587 ug/L	0.3587 ppb	08:06:41
1	Sc 361.383	711859.2	711859.2	86.937 %		08:07:38
1	Y 371.029	589005.7	589005.7	85.160 %		08:07:38
1	Ag 328.068†	-8544.0	-10013.0	-1.1206 ug/L	-1.1206 ppb	08:07:38
1	As 188.979†	-91.2	-78.1	0.3558 ug/L	0.3558 ppb	08:07:58
1	B 249.677†	234.3	806.9	-7.4693 ug/L	-7.4693 ppb	08:07:38
1	Ba 233.527†	-483.4	-555.4	0.4708 ug/L	0.4708 ppb	08:07:58
1	Be 313.107†	-3961.7	-826.0	-0.4074 ug/L	-0.4074 ppb	08:07:38
1	Cd 226.502†	1036.4	1362.8	0.6368 ug/L	0.6368 ppb	08:07:58
1	Co 228.616†	-1.8	44.2	-1.5292 ug/L	-1.5292 ppb	08:07:58
1	Cr 267.716†	-1170.5	-1417.9	0.6295 ug/L	0.6295 ppb	08:07:58
1	Cu 324.752†	2762.6	-2374.2	1.9508 ug/L	1.9508 ppb	08:07:58
1	Mn 257.610†	-266.0	-695.1	-2.6341 ug/L	-2.6341 ppb	08:07:38
1	Mo 202.031†	-207.6	-247.3	-1.9158 ug/L	-1.9158 ppb	08:07:58
1	Ni 231.604†	165.6	106.5	3.3806 ug/L	3.3806 ppb	08:07:58
1	P 214.914†	163.7	1.0	-19.106 ug/L	-19.106 ppb	08:07:58
1	Pb 220.353†	-643.0	-681.3	-10.248 ug/L	-10.248 ppb	08:07:58
1	S 181.975 Axial†	34.7	9.8	-79.226 ug/L	-79.226 ppb	08:07:58
1	Sb 206.836†	61.2	46.7	1.8899 ug/L	1.8899 ppb	08:07:58
1	Se 196.026†	-737.5	-831.3	4.6258 ug/L	4.6258 ppb	08:07:58
1	Si 251.611†	353.1	-82.0	-2.8425 ug/L	-2.8425 ppb	08:07:58
1	Sn 189.927†	-323.4	-379.2	-11.932 ug/L	-11.932 ppb	08:07:58
1	Ti 334.940†	-13245.3	-14114.4	-0.5760 ug/L	-0.5760 ppb	08:07:38
1	Tl 190.801†	-56.4	-35.8	-14.081 ug/L	-14.081 ppb	08:07:58
1	U 409.014†	-766.4	1322.6	19.037 ug/L	19.037 ppb	08:07:38
1	V 292.402†	470.2	1858.3	-2.8990 ug/L	-2.8990 ppb	08:07:58
1	Zn 213.857†	2564.8	2380.1	1.0881 ug/L	1.0881 ppb	08:07:58
1	SiO2†	380.9	-61.2	-4.3969 ug/L	-4.3969 ppb	08:08:55
2	Sc Radial	3895.3	3895.3	88.6 %		08:07:06
2	Y RADIAL	4206.8	4206.8	88.37 %		08:07:06
2	Al 396.153Radial†	461570.8	520869.5	511640 ug/L	511640 ppb	08:06:46
2	Ca 317.933Radial†	221149.1	249507.4	472120 ug/L	472120 ppb	08:06:46
2	Fe 238.204 Radial†	14177.3	15987.8	185250 ug/L	185250 ppb	08:07:06
2	K 766.490 Radial†	2093.1	-237.1	-203.08 ug/L	-203.08 ppb	08:06:46
2	Mg 279.077 IEC†	10491.8	11836.4	488080 ug/L	488080 ppb	08:07:06
2	Na 589.592 Radial†	-755.5	22.6	7.9842 ug/L	7.9842 ppb	08:07:06
2	Sr 421.552†	436.5	471.7	0.2555 ug/L	0.2555 ppb	08:07:06
2	Sc 361.383	718309.4	718309.4	87.724 %		08:08:04
2	Y 371.029	594864.3	594864.3	86.007 %		08:08:04
2	Ag 328.068†	-8802.7	-10219.6	-2.1639 ug/L	-2.1639 ppb	08:08:04
2	As 188.979†	-71.1	-54.2	13.461 ug/L	13.461 ppb	08:08:24
2	B 249.677†	320.1	902.3	-4.7766 ug/L	-4.7766 ppb	08:08:04
2	Ba 233.527†	-494.1	-562.5	0.3993 ug/L	0.3993 ppb	08:08:24
2	Be 313.107†	-3916.5	-733.5	-0.3687 ug/L	-0.3687 ppb	08:08:04
2	Cd 226.502†	1052.8	1370.8	0.7640 ug/L	0.7640 ppb	08:08:24
2	Co 228.616†	24.8	74.5	-0.7426 ug/L	-0.7426 ppb	08:08:24
2	Cr 267.716†	-1176.9	-1413.1	0.6812 ug/L	0.6812 ppb	08:08:24
2	Cu 324.752†	2830.9	-2325.0	2.1075 ug/L	2.1075 ppb	08:08:24
2	Mn 257.610†	-401.1	-846.3	-2.7806 ug/L	-2.7806 ppb	08:08:04
2	Mo 202.031†	-202.8	-239.7	-1.3101 ug/L	-1.3101 ppb	08:08:24
2	Ni 231.604†	157.8	95.8	3.0425 ug/L	3.0425 ppb	08:08:24

2	P 214.914†	142.0	-25.4	-39.810 ug/L	-39.810 ppb	08:08:24
2	Pb 220.353†	-626.2	-655.5	-7.3083 ug/L	-7.3083 ppb	08:08:24
2	S 181.975 Axial†	33.1	7.6	-82.324 ug/L	-82.324 ppb	08:08:24
2	Sb 206.836†	57.9	42.3	0.2175 ug/L	0.2175 ppb	08:08:24
2	Se 196.026†	-747.2	-834.8	-0.0402 ug/L	-0.0402 ppb	08:08:24
2	Si 251.611†	394.3	-38.6	-1.2048 ug/L	-1.2048 ppb	08:08:24
2	Sn 189.927†	-320.8	-372.8	-11.367 ug/L	-11.367 ppb	08:08:24
2	Ti 334.940†	-13503.6	-14272.0	-1.3874 ug/L	-1.3874 ppb	08:08:04
2	Tl 190.801†	-66.2	-46.4	-18.205 ug/L	-18.205 ppb	08:08:24
2	U 409.014†	-803.9	1287.9	17.995 ug/L	17.995 ppb	08:08:04
2	V 292.402†	431.2	1808.9	-3.2983 ug/L	-3.2983 ppb	08:08:24
2	Zn 213.857†	2544.3	2330.3	0.5041 ug/L	0.5041 ppb	08:08:24
2	SiO2†	365.5	-82.7	-6.1658 ug/L	-6.1658 ppb	08:09:00
3	Sc Radial	3942.4	3942.4	89.7 %		08:07:32
3	Y RADIAL	4260.7	4260.7	89.50 %		08:07:32
3	Al 396.153Radial†	465460.7	518986.8	509790 ug/L	509790 ppb	08:07:12
3	Ca 317.933Radial†	222404.3	247926.9	469130 ug/L	469130 ppb	08:07:12
3	Fe 238.204 Radial†	14272.6	15903.0	184260 ug/L	184260 ppb	08:07:32
3	K 766.490 Radial†	2182.7	-165.4	-188.41 ug/L	-188.41 ppb	08:07:12
3	Mg 279.077 IEC†	10595.7	11810.8	487020 ug/L	487020 ppb	08:07:32
3	Na 589.592 Radial†	-778.4	7.4	2.5977 ug/L	2.5977 ppb	08:07:32
3	Sr 421.552†	437.6	467.0	0.2402 ug/L	0.2402 ppb	08:07:32
3	Sc 361.383	710682.9	710682.9	86.793 %		08:08:29
3	Y 371.029	587564.2	587564.2	84.951 %		08:08:29
3	Ag 328.068†	-8544.3	-10029.6	-1.4420 ug/L	-1.4420 ppb	08:08:29
3	As 188.979†	-70.5	-54.5	13.089 ug/L	13.089 ppb	08:08:49
3	B 249.677†	259.8	836.6	-6.4560 ug/L	-6.4560 ppb	08:08:29
3	Ba 233.527†	-457.9	-526.8	0.7037 ug/L	0.7037 ppb	08:08:49
3	Be 313.107†	-3965.0	-837.3	-0.4118 ug/L	-0.4118 ppb	08:08:29
3	Cd 226.502†	1043.0	1372.4	0.8901 ug/L	0.8901 ppb	08:08:49
3	Co 228.616†	-1.0	45.0	-1.4890 ug/L	-1.4890 ppb	08:08:49
3	Cr 267.716†	-1159.4	-1407.3	0.6536 ug/L	0.6536 ppb	08:08:49
3	Cu 324.752†	2863.3	-2253.0	2.2920 ug/L	2.2920 ppb	08:08:49
3	Mn 257.610†	-330.0	-769.3	-2.7332 ug/L	-2.7332 ppb	08:08:29
3	Mo 202.031†	-196.9	-235.4	-1.0397 ug/L	-1.0397 ppb	08:08:49
3	Ni 231.604†	178.7	121.9	3.8690 ug/L	3.8690 ppb	08:08:49
3	P 214.914†	162.7	0.1	-20.545 ug/L	-20.545 ppb	08:08:49
3	Pb 220.353†	-656.2	-697.7	-14.099 ug/L	-14.099 ppb	08:08:49
3	S 181.975 Axial†	42.3	18.6	-62.284 ug/L	-62.284 ppb	08:08:49
3	Sb 206.836†	52.8	37.1	-1.9255 ug/L	-1.9255 ppb	08:08:49
3	Se 196.026†	-745.0	-841.4	-8.9102 ug/L	-8.9102 ppb	08:08:49
3	Si 251.611†	372.9	-58.6	-1.9659 ug/L	-1.9659 ppb	08:08:49
3	Sn 189.927†	-328.8	-386.0	-14.835 ug/L	-14.835 ppb	08:08:49
3	Ti 334.940†	-13136.3	-14014.0	-1.2548 ug/L	-1.2548 ppb	08:08:29
3	Tl 190.801†	-69.7	-51.2	-20.066 ug/L	-20.066 ppb	08:08:49
3	U 409.014†	-736.8	1355.3	20.153 ug/L	20.153 ppb	08:08:29
3	V 292.402†	426.1	1808.4	-3.1711 ug/L	-3.1711 ppb	08:08:49
3	Zn 213.857†	2566.5	2386.9	1.3317 ug/L	1.3317 ppb	08:08:49
3	SiO2†	334.0	-114.6	-8.7798 ug/L	-8.7798 ppb	08:09:05

Mean Data: ICSEA

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	713617.2	87.151 %		0.5014			0.58%
Sc Radial	3919.5	89.2 %		0.54			0.60%
Y 371.029	590478.1	85.373 %		0.5590			0.65%
Y RADIAL	4240.8	89.08 %		0.622			0.70%
Ag 328.068†	-10087.4	-1.5755 ug/L		0.53429	-1.5755 ppb	0.53429	33.91%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	521736.2	512490 ug/L		3212.1	512490 ppb	3212.1	0.63%
QC value within limits for Al 396.153Radial Recovery = 102.50%							
As 188.979†	-62.3	8.9685 ug/L		7.46115	8.9685 ppb	7.46115	83.19%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	848.6	-6.2340 ug/L		1.36000	-6.2340 ppb	1.36000	21.82%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	-548.2	0.5246 ug/L		0.15915	0.5246 ppb	0.15915	30.34%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	-798.9	-0.3960 ug/L		0.02374	-0.3960 ppb	0.02374	5.99%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	249855.5	472780 ug/L		4019.3	472780 ppb	4019.3	0.85%

QC value within limits for Ca 317.933 Radial Recovery = 94.56%

Cd 226.502†	1368.7	0.7636 ug/L	0.12665	0.7636 ppb	0.12665	16.59%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	54.6	-1.2536 ug/L	0.44296	-1.2536 ppb	0.44296	35.33%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1412.8	0.6548 ug/L	0.02586	0.6548 ppb	0.02586	3.95%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-2317.4	2.1168 ug/L	0.17081	2.1168 ppb	0.17081	8.07%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	15963.0	184960 ug/L	605.0	184960 ppb	605.0	0.33%
QC value within limits for Fe 238.204 Radial Recovery = 92.48%						
K 766.490 Radial†	-166.0	-189.76 ug/L	12.700	-189.76 ppb	12.700	6.69%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	11840.6	488250 ug/L	1320.7	488250 ppb	1320.7	0.27%
QC value within limits for Mg 279.077 IEC Recovery = 97.65%						
Mn 257.610†	-770.2	-2.7160 ug/L	0.07477	-2.7160 ppb	0.07477	2.75%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-240.8	-1.4219 ug/L	0.44861	-1.4219 ppb	0.44861	31.55%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	26.7	9.4025 ug/L	7.61365	9.4025 ppb	7.61365	80.97%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	108.1	3.4307 ug/L	0.41549	3.4307 ppb	0.41549	12.11%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-8.1	-26.487 ug/L	11.5606	-26.487 ppb	11.5606	43.65%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-678.2	-10.552 ug/L	3.4057	-10.552 ppb	3.4057	32.28%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	12.0	-74.612 ug/L	10.7874	-74.612 ppb	10.7874	14.46%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	42.0	0.0607 ug/L	1.91250	0.0607 ppb	1.91250	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-835.9	-1.4415 ug/L	6.87597	-1.4415 ppb	6.87597	476.99%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-59.7	-2.0044 ug/L	0.81955	-2.0044 ppb	0.81955	40.89%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-379.4	-12.711 ug/L	1.8610	-12.711 ppb	1.8610	14.64%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	475.9	0.2848 ug/L	0.06445	0.2848 ppb	0.06445	22.63%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-14133.4	-1.0727 ug/L	0.43523	-1.0727 ppb	0.43523	40.57%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-44.5	-17.450 ug/L	3.0630	-17.450 ppb	3.0630	17.55%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	1321.9	19.062 ug/L	1.0788	19.062 ppb	1.0788	5.66%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	1825.2	-3.1228 ug/L	0.20398	-3.1228 ppb	0.20398	6.53%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	2365.8	0.9747 ug/L	0.42531	0.9747 ppb	0.42531	43.64%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	-86.1	-6.4475 ug/L	2.20499	-6.4475 ppb	2.20499	34.20%
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: 3/19/2010 08:11:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: ICSAB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3929.4	3929.4	89.4 %		08:13:28
1	Y RADIAL	4274.8	4274.8	89.80 %		08:13:28
1	Al 396.153Radial†	461471.5	516235.9	507060 ug/L	507060 ppb	08:13:08
1	Ca 317.933Radial†	222675.9	249048.2	471250 ug/L	471250 ppb	08:13:08
1	Fe 238.204 Radial†	14573.7	16292.3	188790 ug/L	188790 ppb	08:13:28
1	K 766.490 Radial†	27582.5	28252.3	5222.4 ug/L	5222.4 ppb	08:13:08
1	Mg 279.077 IEC†	10715.6	11983.9	494160 ug/L	494160 ppb	08:13:28
1	Na 589.592 Radial†	12902.7	15306.9	5396.0 ug/L	5396.0 ppb	08:13:08
1	Sr 421.552†	56906.9	63629.8	506.52 ug/L	506.52 ppb	08:13:08
1	Sc 361.383	720288.2	720288.2	87.966 %		08:14:26
1	Y 371.029	594435.6	594435.6	85.945 %		08:14:26
1	Ag 328.068†	37624.4	42586.3	274.73 ug/L	274.73 ppb	08:14:26
1	As 188.979†	754.1	884.0	532.66 ug/L	532.66 ppb	08:14:46
1	B 249.677†	16639.1	19452.7	513.79 ug/L	513.79 ppb	08:14:26
1	Ba 233.527†	45572.8	51808.0	492.14 ug/L	492.14 ppb	08:14:26
1	Be 313.107†	509360.8	582773.2	249.25 ug/L	249.25 ppb	08:14:26
1	Cd 226.502†	29115.2	33268.9	463.61 ug/L	463.61 ppb	08:14:46
1	Co 228.616†	15201.6	17327.4	445.24 ug/L	445.24 ppb	08:14:46
1	Cr 267.716†	30631.0	34749.9	486.52 ug/L	486.52 ppb	08:14:26
1	Cu 324.752†	148588.6	163363.8	549.04 ug/L	549.04 ppb	08:14:26
1	Mn 257.610†	320306.8	363736.2	476.68 ug/L	476.68 ppb	08:14:26
1	Mo 202.031†	4633.3	5258.6	487.71 ug/L	487.71 ppb	08:14:46
1	Ni 231.604†	12601.2	14241.0	451.98 ug/L	451.98 ppb	08:14:46
1	P 214.914†	3139.5	3381.7	2390.1 ug/L	2390.1 ppb	08:14:46
1	Pb 220.353†	1997.6	2329.2	450.62 ug/L	450.62 ppb	08:14:46
1	S 181.975 Axial†	1333.5	1485.8	2564.9 ug/L	2564.9 ppb	08:14:46
1	Sb 206.836†	1162.5	1297.9	543.31 ug/L	543.31 ppb	08:14:46
1	Se 196.026†	1939.8	2222.1	2556.9 ug/L	2556.9 ppb	08:14:46
1	Si 251.611†	121964.3	138161.0	5239.2 ug/L	5239.2 ppb	08:14:26
1	Sn 189.927†	1579.3	1788.2	478.67 ug/L	478.67 ppb	08:14:46
1	Ti 334.940†	244598.2	279180.8	507.93 ug/L	507.93 ppb	08:14:26
1	Tl 190.801†	961.9	1122.5	437.65 ug/L	437.65 ppb	08:14:46
1	U 409.014†	13648.4	17719.7	515.02 ug/L	515.02 ppb	08:14:26
1	V 292.402†	56031.7	65014.4	508.15 ug/L	508.15 ppb	08:14:26
1	Zn 213.857†	38636.8	43352.3	493.43 ug/L	493.43 ppb	08:14:26
1	SiO2†	120760.5	136781.4	11150 ug/L	11150 ppb	08:15:44
2	Sc Radial	3946.5	3946.5	89.8 %		08:13:54
2	Y RADIAL	4277.8	4277.8	89.86 %		08:13:54
2	Al 396.153Radial†	472937.5	526772.2	517410 ug/L	517410 ppb	08:13:34
2	Ca 317.933Radial†	228578.7	254544.5	481650 ug/L	481650 ppb	08:13:34
2	Fe 238.204 Radial†	14556.7	16202.9	187750 ug/L	187750 ppb	08:13:54
2	K 766.490 Radial†	28173.1	28776.6	5318.7 ug/L	5318.7 ppb	08:13:34
2	Mg 279.077 IEC†	10699.3	11913.9	491280 ug/L	491280 ppb	08:13:54
2	Na 589.592 Radial†	13381.9	15778.1	5562.1 ug/L	5562.1 ppb	08:13:34
2	Sr 421.552†	58340.8	64951.3	517.04 ug/L	517.04 ppb	08:13:34
2	Sc 361.383	719730.9	719730.9	87.898 %		08:14:52
2	Y 371.029	594594.5	594594.5	85.968 %		08:14:52
2	Ag 328.068†	37665.4	42666.1	274.69 ug/L	274.69 ppb	08:14:52
2	As 188.979†	733.5	861.3	519.90 ug/L	519.90 ppb	08:15:12
2	B 249.677†	16494.5	19302.8	509.76 ug/L	509.76 ppb	08:14:52
2	Ba 233.527†	45632.5	51915.9	493.12 ug/L	493.12 ppb	08:14:52
2	Be 313.107†	509580.7	583471.7	249.55 ug/L	249.55 ppb	08:14:52
2	Cd 226.502†	29008.1	33172.6	462.32 ug/L	462.32 ppb	08:15:12
2	Co 228.616†	15102.4	17227.9	442.69 ug/L	442.69 ppb	08:15:12
2	Cr 267.716†	30639.4	34786.4	486.90 ug/L	486.90 ppb	08:14:52
2	Cu 324.752†	148069.9	162904.5	547.47 ug/L	547.47 ppb	08:14:52
2	Mn 257.610†	319951.8	363614.3	476.54 ug/L	476.54 ppb	08:14:52
2	Mo 202.031†	4644.0	5274.9	489.20 ug/L	489.20 ppb	08:15:12
2	Ni 231.604†	12562.9	14208.5	450.95 ug/L	450.95 ppb	08:15:12

2	P 214.914†	3115.9	3357.6	2375.9 ug/L	2375.9 ppb	08:15:12
2	Pb 220.353†	1987.6	2319.6	451.73 ug/L	451.73 ppb	08:15:12
2	S 181.975 Axial†	1323.2	1475.2	2544.0 ug/L	2544.0 ppb	08:15:12
2	Sb 206.836†	1137.8	1270.8	531.74 ug/L	531.74 ppb	08:15:12
2	Se 196.026†	1929.4	2212.0	2548.8 ug/L	2548.8 ppb	08:15:12
2	Si 251.611†	121859.8	138149.5	5238.8 ug/L	5238.8 ppb	08:14:52
2	Sn 189.927†	1577.9	1788.0	480.53 ug/L	480.53 ppb	08:15:12
2	Ti 334.940†	244000.0	278715.6	508.76 ug/L	508.76 ppb	08:14:52
2	Tl 190.801†	973.5	1136.6	443.10 ug/L	443.10 ppb	08:15:12
2	U 409.014†	13501.3	17564.4	510.42 ug/L	510.42 ppb	08:14:52
2	V 292.402†	56069.0	65106.1	508.99 ug/L	508.99 ppb	08:14:52
2	Zn 213.857†	38575.9	43317.0	493.16 ug/L	493.16 ppb	08:14:52
2	SiO2†	121690.4	137945.6	11245 ug/L	11245 ppb	08:15:49
3	Sc Radial	3955.1	3955.1	90.0 %		08:14:19
3	Y RADIAL	4282.0	4282.0	89.95 %		08:14:19
3	Al 396.153Radial†	473789.5	526577.2	517220 ug/L	517220 ppb	08:13:59
3	Ca 317.933Radial†	228286.7	253668.2	479990 ug/L	479990 ppb	08:13:59
3	Fe 238.204 Radial†	14574.2	16187.1	187570 ug/L	187570 ppb	08:14:19
3	K 766.490 Radial†	28154.5	28687.9	5302.4 ug/L	5302.4 ppb	08:13:59
3	Mg 279.077 IEC†	10706.9	11896.6	490560 ug/L	490560 ppb	08:14:19
3	Na 589.592 Radial†	13327.1	15684.9	5529.2 ug/L	5529.2 ppb	08:13:59
3	Sr 421.552†	58635.9	65138.4	518.55 ug/L	518.55 ppb	08:13:59
3	Sc 361.383	717692.3	717692.3	87.649 %		08:15:18
3	Y 371.029	592016.4	592016.4	85.595 %		08:15:18
3	Ag 328.068†	37419.2	42507.0	273.82 ug/L	273.82 ppb	08:15:18
3	As 188.979†	734.9	865.3	522.04 ug/L	522.04 ppb	08:15:38
3	B 249.677†	16478.1	19337.4	510.75 ug/L	510.75 ppb	08:15:18
3	Ba 233.527†	45400.4	51798.6	492.01 ug/L	492.01 ppb	08:15:18
3	Be 313.107†	505147.9	580061.1	248.09 ug/L	248.09 ppb	08:15:18
3	Cd 226.502†	29070.9	33338.0	464.74 ug/L	464.74 ppb	08:15:38
3	Co 228.616†	15202.6	17391.1	446.92 ug/L	446.92 ppb	08:15:38
3	Cr 267.716†	30397.7	34609.6	484.51 ug/L	484.51 ppb	08:15:18
3	Cu 324.752†	147241.9	162438.3	545.92 ug/L	545.92 ppb	08:15:18
3	Mn 257.610†	318560.0	363060.3	475.82 ug/L	475.82 ppb	08:15:18
3	Mo 202.031†	4659.6	5307.7	492.08 ug/L	492.08 ppb	08:15:38
3	Ni 231.604†	12615.1	14308.6	454.13 ug/L	454.13 ppb	08:15:38
3	P 214.914†	3126.1	3379.3	2392.5 ug/L	2392.5 ppb	08:15:38
3	Pb 220.353†	1981.7	2319.2	451.65 ug/L	451.65 ppb	08:15:38
3	S 181.975 Axial†	1326.1	1482.7	2557.5 ug/L	2557.5 ppb	08:15:38
3	Sb 206.836†	1177.2	1319.5	552.20 ug/L	552.20 ppb	08:15:38
3	Se 196.026†	1947.1	2238.4	2570.2 ug/L	2570.2 ppb	08:15:38
3	Si 251.611†	121149.0	137732.4	5222.9 ug/L	5222.9 ppb	08:15:18
3	Sn 189.927†	1579.5	1795.0	481.83 ug/L	481.83 ppb	08:15:38
3	Ti 334.940†	242971.7	278330.9	507.93 ug/L	507.93 ppb	08:15:18
3	Tl 190.801†	945.2	1107.5	431.81 ug/L	431.81 ppb	08:15:38
3	U 409.014†	13527.8	17638.3	512.69 ug/L	512.69 ppb	08:15:18
3	V 292.402†	55602.3	64754.9	506.25 ug/L	506.25 ppb	08:15:18
3	Zn 213.857†	38305.4	43133.0	490.94 ug/L	490.94 ppb	08:15:18
3	SiO2†	121243.0	137828.4	11236 ug/L	11236 ppb	08:15:54

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	719237.2	87.838 %	0.1669			0.19%
Sc Radial	3943.7	89.7 %	0.30			0.33%
Y 371.029	593682.2	85.836 %	0.2089			0.24%
Y RADIAL	4278.2	89.87 %	0.076			0.08%
Ag 328.068†	42586.5	274.42 ug/L	0.516	274.42 ppb	0.516	0.19%
QC value within limits for Ag 328.068 Recovery = 109.77%						
Al 396.153Radial†	523195.1	513900 ug/L	5920.7	513900 ppb	5920.7	1.15%
QC value within limits for Al 396.153Radial Recovery = 102.78%						
As 188.979†	870.2	524.87 ug/L	6.835	524.87 ppb	6.835	1.30%
QC value within limits for As 188.979 Recovery = 104.97%						
B 249.677†	19364.3	511.43 ug/L	2.100	511.43 ppb	2.100	0.41%
QC value within limits for B 249.677 Recovery = 102.29%						
Ba 233.527†	51840.8	492.43 ug/L	0.607	492.43 ppb	0.607	0.12%
QC value within limits for Ba 233.527 Recovery = 98.49%						
Be 313.107†	582102.0	248.96 ug/L	0.768	248.96 ppb	0.768	0.31%
QC value within limits for Be 313.107 Recovery = 99.59%						
Ca 317.933Radial†	252420.3	477630 ug/L	5587.7	477630 ppb	5587.7	1.17%

QC value within limits for Ca 317.933Radial Recovery = 95.53%					
Cd 226.502†	33259.8	463.56 ug/L	1.211	463.56 ppb	1.211 0.26%
QC value within limits for Cd 226.502 Recovery = 92.71%					
Co 228.616†	17315.5	444.95 ug/L	2.129	444.95 ppb	2.129 0.48%
QC value within limits for Co 228.616 Recovery = 88.99%					
Cr 267.716†	34715.3	485.98 ug/L	1.287	485.98 ppb	1.287 0.26%
QC value within limits for Cr 267.716 Recovery = 97.20%					
Cu 324.752†	162902.2	547.48 ug/L	1.559	547.48 ppb	1.559 0.28%
QC value within limits for Cu 324.752 Recovery = 109.50%					
Fe 238.204 Radial†	16227.4	188040 ug/L	657.2	188040 ppb	657.2 0.35%
QC value within limits for Fe 238.204 Radial Recovery = 94.02%					
K 766.490 Radial†	28572.3	5281.2 ug/L	51.56	5281.2 ppb	51.56 0.98%
QC value within limits for K 766.490 Radial Recovery = 105.62%					
Mg 279.077 IEC†	11931.5	492000 ug/L	1907.0	492000 ppb	1907.0 0.39%
QC value within limits for Mg 279.077 IEC Recovery = 98.40%					
Mn 257.610†	363470.3	476.34 ug/L	0.461	476.34 ppb	0.461 0.10%
QC value within limits for Mn 257.610 Recovery = 95.27%					
Mo 202.031†	5280.4	489.66 ug/L	2.224	489.66 ppb	2.224 0.45%
QC value within limits for Mo 202.031 Recovery = 97.93%					
Na 589.592 Radial†	15589.9	5495.8 ug/L	87.97	5495.8 ppb	87.97 1.60%
QC value within limits for Na 589.592 Radial Recovery = 109.92%					
Ni 231.604†	14252.7	452.36 ug/L	1.621	452.36 ppb	1.621 0.36%
QC value within limits for Ni 231.604 Recovery = 90.47%					
P 214.914†	3372.9	2386.2 ug/L	8.95	2386.2 ppb	8.95 0.38%
QC value within limits for P 214.914 Recovery = 95.45%					
Pb 220.353†	2322.7	451.34 ug/L	0.618	451.34 ppb	0.618 0.14%
QC value within limits for Pb 220.353 Recovery = 90.27%					
S 181.975 Axial†	1481.2	2555.4 ug/L	10.60	2555.4 ppb	10.60 0.41%
QC value within limits for S 181.975 Axial Recovery = 102.22%					
Sb 206.836†	1296.0	542.42 ug/L	10.256	542.42 ppb	10.256 1.89%
QC value within limits for Sb 206.836 Recovery = 108.48%					
Se 196.026†	2224.2	2558.7 ug/L	10.81	2558.7 ppb	10.81 0.42%
QC value within limits for Se 196.026 Recovery = 102.35%					
Si 251.611†	138014.3	5233.7 ug/L	9.30	5233.7 ppb	9.30 0.18%
QC value within limits for Si 251.611 Recovery = 104.67%					
Sn 189.927†	1790.4	480.34 ug/L	1.588	480.34 ppb	1.588 0.33%
QC value within limits for Sn 189.927 Recovery = 96.07%					
Sr 421.552†	64573.1	514.03 ug/L	6.551	514.03 ppb	6.551 1.27%
QC value within limits for Sr 421.552 Recovery = 102.81%					
Ti 334.940†	278742.4	508.21 ug/L	0.478	508.21 ppb	0.478 0.09%
QC value within limits for Ti 334.940 Recovery = 101.64%					
Tl 190.801†	1122.2	437.52 ug/L	5.646	437.52 ppb	5.646 1.29%
QC value within limits for Tl 190.801 Recovery = 87.50%					
U 409.014†	17640.8	512.71 ug/L	2.298	512.71 ppb	2.298 0.45%
QC value within limits for U 409.014 Recovery = 102.54%					
V 292.402†	64958.4	507.80 ug/L	1.406	507.80 ppb	1.406 0.28%
QC value within limits for V 292.402 Recovery = 101.56%					
Zn 213.857†	43267.4	492.51 ug/L	1.364	492.51 ppb	1.364 0.28%
QC value within limits for Zn 213.857 Recovery = 98.50%					
SiO2†	137518.5	11210 ug/L	52.3	11210 ppb	52.3 0.47%
QC value within limits for SiO2 Recovery = 104.82%					
All analyte(s) passed QC.					

Sequence No.: 11
 Sample ID: LR1
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 15
 Date Collected: 3/19/2010 08:18:04
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	3858.3	3858.3	87.8 %		08:20:17
1	Y RADIAL	4204.0	4204.0	88.31 %		08:20:17
1	Al 396.153Radial†	464225.3	528893.5	519520 ug/L	519520 ppb	08:19:57
1	Ca 317.933Radial†	223881.2	255015.3	482540 ug/L	482540 ppb	08:19:57
1	Fe 238.204 Radial†	33047.8	37637.5	436100 ug/L	436100 ppb	08:20:17
1	K 766.490 Radial†	2465.2	209.4	-328.44 ug/L	-328.44 ppb	08:19:57
1	Mg 279.077 IEC†	10432.1	11882.0	489700 ug/L	489700 ppb	08:20:17
1	Na 589.592 Radial†	1320643.5	1505266.9	530640 ug/L	530640 ppb	08:19:57
1	Sr 421.552†	1394.9	1568.2	8.9670 ug/L	8.9670 ppb	08:20:17
1	Sc 361.383	692124.4	692124.4	84.527 %		08:21:15
1	Y 371.029	573747.0	573747.0	82.954 %		08:21:15
1	Ag 328.068†	-19613.3	-23388.8	-5.2352 ug/L	-5.2352 ppb	08:21:15
1	As 188.979†	-142.9	-142.3	23.974 ug/L	23.974 ppb	08:21:35
1	B 249.677†	872.5	1569.6	-26.808 ug/L	-26.808 ppb	08:21:15
1	Ba 233.527†	-1321.0	-1562.1	-1.3183 ug/L	-1.3183 ppb	08:21:35
1	Be 313.107†	-9468.2	-7470.4	-3.2304 ug/L	-3.2304 ppb	08:21:15
1	Cd 226.502†	2655.0	3311.7	5.9163 ug/L	5.9163 ppb	08:21:35
1	Co 228.616†	194.4	276.1	0.7761 ug/L	0.7761 ppb	08:21:35
1	Cr 267.716†	-1023.6	-1282.5	23.115 ug/L	23.115 ppb	08:21:35
1	Cu 324.752†	582.4	-4862.9	-1.2373 ug/L	-1.2373 ppb	08:21:15
1	Mn 257.610†	-20079.9	-24144.8	-8.7155 ug/L	-8.7155 ppb	08:21:15
1	Mo 202.031†	-437.4	-526.0	-7.1607 ug/L	-7.1607 ppb	08:21:35
1	Ni 231.604†	224.5	181.6	5.7615 ug/L	5.7615 ppb	08:21:35
1	P 214.914†	473.6	373.1	58.508 ug/L	58.508 ppb	08:21:35
1	Pb 220.353†	-449.8	-473.9	-13.265 ug/L	-13.265 ppb	08:21:35
1	S 181.975 Axial†	45.7	23.9	-54.613 ug/L	-54.613 ppb	08:21:35
1	Sb 206.836†	49.4	34.7	-6.5923 ug/L	-6.5923 ppb	08:21:35
1	Se 196.026†	-1806.4	-2120.1	-347.16 ug/L	-347.16 ppb	08:21:35
1	Si 251.611†	-299.5	-842.5	-31.407 ug/L	-31.407 ppb	08:21:35
1	Sn 189.927†	-339.4	-408.7	-32.054 ug/L	-32.054 ppb	08:21:35
1	Ti 334.940†	-11536.9	-12527.6	-3.6494 ug/L	-3.6494 ppb	08:21:15
1	Tl 190.801†	-84.5	-70.9	-27.844 ug/L	-27.844 ppb	08:21:35
1	U 409.014†	414094.0	492102.3	14880 ug/L	14880 ppb	08:21:15
1	V 292.402†	1055.9	2566.7	-5.6116 ug/L	-5.6116 ppb	08:21:35
1	Zn 213.857†	4619.7	4895.3	-5.9615 ug/L	-5.9615 ppb	08:21:35
1	SiO2†	-253.8	-799.6	-63.985 ug/L	-63.985 ppb	08:22:32
2	Sc Radial	3862.7	3862.7	87.9 %		08:20:43
2	Y RADIAL	4199.0	4199.0	88.20 %		08:20:43
2	Al 396.153Radial†	461838.3	525564.2	516250 ug/L	516250 ppb	08:20:23
2	Ca 317.933Radial†	223024.1	253744.3	480140 ug/L	480140 ppb	08:20:23
2	Fe 238.204 Radial†	33136.1	37694.2	436750 ug/L	436750 ppb	08:20:43
2	K 766.490 Radial†	2317.4	38.0	-359.39 ug/L	-359.39 ppb	08:20:23
2	Mg 279.077 IEC†	10466.5	11907.4	490740 ug/L	490740 ppb	08:20:43
2	Na 589.592 Radial†	1316291.1	1498569.5	528280 ug/L	528280 ppb	08:20:23
2	Sr 421.552†	1406.5	1579.6	9.0762 ug/L	9.0762 ppb	08:20:43
2	Sc 361.383	730532.2	730532.2	89.217 %		08:21:41
2	Y 371.029	605265.0	605265.0	87.511 %		08:21:41
2	Ag 328.068†	-19445.3	-21980.6	2.9810 ug/L	2.9810 ppb	08:21:41
2	As 188.979†	-136.7	-126.4	32.829 ug/L	32.829 ppb	08:22:01
2	B 249.677†	952.3	1604.8	-25.925 ug/L	-25.925 ppb	08:21:41
2	Ba 233.527†	-1364.7	-1528.9	-0.9888 ug/L	-0.9888 ppb	08:22:01
2	Be 313.107†	-9512.7	-6931.4	-3.0000 ug/L	-3.0000 ppb	08:21:41
2	Cd 226.502†	2640.5	3130.3	3.0561 ug/L	3.0561 ppb	08:22:01
2	Co 228.616†	193.3	262.9	0.4413 ug/L	0.4413 ppb	08:22:01
2	Cr 267.716†	-1053.2	-1252.0	23.918 ug/L	23.918 ppb	08:22:01
2	Cu 324.752†	530.5	-4957.4	-1.0589 ug/L	-1.0589 ppb	08:21:41
2	Mn 257.610†	-20279.0	-23119.0	-7.3448 ug/L	-7.3448 ppb	08:21:41
2	Mo 202.031†	-388.0	-443.4	0.2051 ug/L	0.2051 ppb	08:22:01
2	Ni 231.604†	244.4	189.9	6.0255 ug/L	6.0255 ppb	08:22:01

2	P 214.914†	460.8	329.2	24.570 ug/L	24.570 ppb	08:22:01
2	Pb 220.353†	-451.1	-447.3	-10.020 ug/L	-10.020 ppb	08:22:01
2	S 181.975 Axial†	65.6	43.3	-19.239 ug/L	-19.239 ppb	08:22:01
2	Sb 206.836†	71.3	56.2	2.7172 ug/L	2.7172 ppb	08:22:01
2	Se 196.026†	-1799.4	-2000.0	-246.22 ug/L	-246.22 ppb	08:22:01
2	Si 251.611†	-238.1	-755.1	-28.180 ug/L	-28.180 ppb	08:22:01
2	Sn 189.927†	-334.8	-382.4	-26.547 ug/L	-26.547 ppb	08:22:01
2	Ti 334.940†	-11966.2	-12291.2	-3.2854 ug/L	-3.2854 ppb	08:21:41
2	Tl 190.801†	-81.0	-61.7	-24.259 ug/L	-24.259 ppb	08:22:01
2	U 409.014†	412871.2	464975.3	14057 ug/L	14057 ppb	08:21:41
2	V 292.402†	1032.4	2474.6	-7.8937 ug/L	-7.8937 ppb	08:22:01
2	Zn 213.857†	4602.5	4588.7	-9.7762 ug/L	-9.7762 ppb	08:22:01
2	SiO2†	-292.8	-827.5	-66.459 ug/L	-66.459 ppb	08:22:37
3	Sc Radial	3792.3	3792.3	86.3 %		08:21:08
3	Y RADIAL	4133.1	4133.1	86.82 %		08:21:08
3	Al 396.153Radial†	464025.1	537857.3	528320 ug/L	528320 ppb	08:20:48
3	Ca 317.933Radial†	223657.0	259190.2	490440 ug/L	490440 ppb	08:20:48
3	Fe 238.204 Radial†	32562.1	37729.2	437160 ug/L	437160 ppb	08:21:08
3	K 766.490 Radial†	2391.3	172.7	-341.14 ug/L	-341.14 ppb	08:20:48
3	Mg 279.077 IEC†	10258.7	11887.7	489930 ug/L	489930 ppb	08:21:08
3	Na 589.592 Radial†	1317202.9	1527439.6	538460 ug/L	538460 ppb	08:20:48
3	Sr 421.552†	1379.4	1577.8	8.9853 ug/L	8.9853 ppb	08:21:08
3	Sc 361.383	694267.4	694267.4	84.788 %		08:22:07
3	Y 371.029	575265.2	575265.2	83.173 %		08:22:07
3	Ag 328.068†	-19833.7	-23577.2	-6.0148 ug/L	-6.0148 ppb	08:22:07
3	As 188.979†	-136.5	-134.2	28.664 ug/L	28.664 ppb	08:22:27
3	B 249.677†	971.8	1683.5	-23.784 ug/L	-23.784 ppb	08:22:07
3	Ba 233.527†	-1352.4	-1594.4	-1.5876 ug/L	-1.5876 ppb	08:22:27
3	Be 313.107†	-9518.2	-7494.8	-3.2398 ug/L	-3.2398 ppb	08:22:07
3	Cd 226.502†	2641.5	3286.0	5.4396 ug/L	5.4396 ppb	08:22:27
3	Co 228.616†	198.7	280.6	0.8817 ug/L	0.8817 ppb	08:22:27
3	Cr 267.716†	-1048.2	-1307.7	22.878 ug/L	22.878 ppb	08:22:27
3	Cu 324.752†	478.2	-4988.0	-1.6100 ug/L	-1.6100 ppb	08:22:07
3	Mn 257.610†	-20061.9	-24050.2	-8.4958 ug/L	-8.4958 ppb	08:22:07
3	Mo 202.031†	-407.4	-489.1	-3.7020 ug/L	-3.7020 ppb	08:22:27
3	Ni 231.604†	237.1	195.5	6.2055 ug/L	6.2055 ppb	08:22:27
3	P 214.914†	471.4	368.6	56.630 ug/L	56.630 ppb	08:22:27
3	Pb 220.353†	-461.8	-486.3	-13.261 ug/L	-13.261 ppb	08:22:27
3	S 181.975 Axial†	57.5	37.6	-31.678 ug/L	-31.678 ppb	08:22:27
3	Sb 206.836†	68.6	57.3	2.6559 ug/L	2.6559 ppb	08:22:27
3	Se 196.026†	-1780.3	-2082.7	-310.14 ug/L	-310.14 ppb	08:22:27
3	Si 251.611†	-272.2	-809.2	-30.184 ug/L	-30.184 ppb	08:22:27
3	Sn 189.927†	-340.5	-408.7	-30.723 ug/L	-30.723 ppb	08:22:27
3	Ti 334.940†	-11350.1	-12265.2	-2.1655 ug/L	-2.1655 ppb	08:22:07
3	Tl 190.801†	-95.1	-83.0	-32.522 ug/L	-32.522 ppb	08:22:27
3	U 409.014†	416181.0	493051.5	14909 ug/L	14909 ppb	08:22:07
3	V 292.402†	1073.7	2583.8	-5.5239 ug/L	-5.5239 ppb	08:22:27
3	Zn 213.857†	4591.0	4844.6	-6.7377 ug/L	-6.7377 ppb	08:22:27
3	SiO2†	-295.7	-848.1	-68.030 ug/L	-68.030 ppb	08:22:42

Mean Data: LR1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	705641.3	86.177 %	2.6358			3.06%
Sc Radial	3837.8	87.3 %	0.90			1.03%
Y 371.029	584759.1	84.546 %	2.5699			3.04%
Y RADIAL	4178.7	87.78 %	0.831			0.95%
Ag 328.068†	-22982.2	-2.7564 ug/L	4.98395	-2.7564 ppb	4.98395	180.82%
Al 396.153Radial†	530771.7	521360 ug/L	6245.4	521360 ppb	6245.4	1.20%
QC value within limits for Al 396.153Radial Recovery = 104.27%						
As 188.979†	-134.3	28.489 ug/L	4.4300	28.489 ppb	4.4300	15.55%
B 249.677†	1619.3	-25.506 ug/L	1.5552	-25.506 ppb	1.5552	6.10%
Ba 233.527†	-1561.8	-1.2983 ug/L	0.29988	-1.2983 ppb	0.29988	23.10%
Be 313.107†	-7298.9	-3.1567 ug/L	0.13583	-3.1567 ppb	0.13583	4.30%
Ca 317.933Radial†	255983.3	484370 ug/L	5391.1	484370 ppb	5391.1	1.11%
QC value within limits for Ca 317.933Radial Recovery = 96.87%						
Cd 226.502†	3242.6	4.8040 ug/L	1.53236	4.8040 ppb	1.53236	31.90%
Co 228.616†	273.2	0.6997 ug/L	0.22995	0.6997 ppb	0.22995	32.86%
Cr 267.716†	-1280.7	23.303 ug/L	0.5453	23.303 ppb	0.5453	2.34%
Cu 324.752†	-4936.1	-1.3021 ug/L	0.28121	-1.3021 ppb	0.28121	21.60%

Fe 238.204 Radial†	37687.0	436670 ug/L	536.3	436670 ppb	536.3	0.12%
QC value less than the lower limit for Fe 238.204 Radial Recovery = 87.33%						
K 766.490 Radial†	140.0	-342.99 ug/L	15.557	-342.99 ppb	15.557	4.54%
Mg 279.077 IEC†	11892.4	490120 ug/L	550.1	490120 ppb	550.1	0.11%
QC value within limits for Mg 279.077 IEC Recovery = 98.02%						
Mn 257.610†	-23771.3	-8.1853 ug/L	0.73620	-8.1853 ppb	0.73620	8.99%
Mo 202.031†	-486.1	-3.5526 ug/L	3.68516	-3.5526 ppb	3.68516	103.73%
Na 589.592 Radial†	1510425.3	532460 ug/L	5326.8	532460 ppb	5326.8	1.00%
QC value within limits for Na 589.592 Radial Recovery = 106.49%						
Ni 231.604†	189.0	5.9975 ug/L	0.22333	5.9975 ppb	0.22333	3.72%
P 214.914†	357.0	46.570 ug/L	19.0751	46.570 ppb	19.0751	40.96%
Pb 220.353†	-469.2	-12.182 ug/L	1.8719	-12.182 ppb	1.8719	15.37%
S 181.975 Axial†	34.9	-35.177 ug/L	17.9448	-35.177 ppb	17.9448	51.01%
Sb 206.836†	49.4	-0.4064 ug/L	5.35721	-0.4064 ppb	5.35721	>999.9%
Se 196.026†	-2067.6	-301.17 ug/L	51.066	-301.17 ppb	51.066	16.96%
Si 251.611†	-802.2	-29.924 ug/L	1.6288	-29.924 ppb	1.6288	5.44%
Sn 189.927†	-399.9	-29.775 ug/L	2.8732	-29.775 ppb	2.8732	9.65%
Sr 421.552†	1575.2	9.0095 ug/L	0.05848	9.0095 ppb	0.05848	0.65%
Ti 334.940†	-12361.3	-3.0334 ug/L	0.77339	-3.0334 ppb	0.77339	25.50%
Tl 190.801†	-71.9	-28.208 ug/L	4.1435	-28.208 ppb	4.1435	14.69%
U 409.014†	483376.4	14615 ug/L	483.7	14615 ppb	483.7	3.31%
QC value within limits for U 409.014 Recovery = 97.43%						
V 292.402†	2541.7	-6.3431 ug/L	1.34363	-6.3431 ppb	1.34363	21.18%
Zn 213.857†	4776.2	-7.4918 ug/L	2.01607	-7.4918 ppb	2.01607	26.91%
SiO2†	-825.1	-66.158 ug/L	2.0394	-66.158 ppb	2.0394	3.08%

QC Failed. Continue with analysis.

Sequence No.: 12
 Sample ID: LR2
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 16
 Date Collected: 3/19/2010 08:24:52
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: LR2

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4137.8	4137.8	94.1 %		08:27:10
1	Y RADIAL	4644.1	4644.1	97.55 %		08:26:50
1	Al 396.153Radial†	390.0	492.3	15.191 ug/L	15.191 ppb	08:26:50
1	Ca 317.933Radial†	33.8	20.2	38.282 ug/L	38.282 ppb	08:27:10
1	Fe 238.204 Radial†	-17.3	-26.9	-23.574 ug/L	-23.574 ppb	08:27:10
1	K 766.490 Radial†	1547401.2	1641029.2	312650 ug/L	312650 ppb	08:26:45
1	Mg 279.077 IEC†	-3.3	-5.0	-105.68 ug/L	-105.68 ppb	08:27:10
1	Na 589.592 Radial†	-347.1	506.4	178.52 ug/L	178.52 ppb	08:26:50
1	Sr 421.552†	1216543.4	1292174.6	10358 ug/L	10358 ppb	08:26:45
1	Sc 361.383	804970.1	804970.1	98.308 %		08:28:28
1	Y 371.029	666238.5	666238.5	96.326 %		08:28:28
1	Ag 328.068†	-6177.1	-6468.5	7.0301 ug/L	7.0301 ppb	08:28:33
1	As 188.979†	17708.3	18039.8	9966.6 ug/L	9966.6 ppb	08:28:33
1	B 249.677†	175916.7	179481.8	5007.7 ug/L	5007.7 ppb	08:28:28
1	Ba 233.527†	1479029.4	1504486.3	14114 ug/L	14114 ppb	08:28:28
1	Be 313.107†	6728544.3	6848082.8	2938.4 ug/L	2938.4 ppb	08:28:21
1	Cd 226.502†	658581.0	670086.7	9729.0 ug/L	9729.0 ppb	08:28:28
1	Co 228.616†	365808.7	372151.0	9616.9 ug/L	9616.9 ppb	08:28:28
1	Cr 267.716†	1773359.1	1803809.5	24204 ug/L	24204 ppb	08:28:28
1	Cu 324.752†	6042194.5	6140637.0	20273 ug/L	20273 ppb	08:28:21
1	Mn 257.610†	7074413.2	7195784.5	9461.1 ug/L	9461.1 ppb	08:28:21
1	Mo 202.031†	106826.9	108657.0	9658.6 ug/L	9658.6 ppb	08:28:33
1	Ni 231.604†	306782.5	311978.6	9901.8 ug/L	9901.8 ppb	08:28:28
1	P 214.914†	23485.0	23701.9	13724 ug/L	13724 ppb	08:28:33
1	Pb 220.353†	155065.2	157792.4	24255 ug/L	24255 ppb	08:28:28
1	S 181.975 Axial†	28593.5	29055.4	52015 ug/L	52015 ppb	08:28:33
1	Sb 206.836†	24495.7	24893.6	10774 ug/L	10774 ppb	08:28:33
1	Se 196.026†	12052.6	12277.0	10257 ug/L	10257 ppb	08:28:33
1	Si 251.611†	1232990.0	1253723.3	47476 ug/L	47476 ppb	08:28:28
1	Sn 189.927†	43906.6	44655.1	10133 ug/L	10133 ppb	08:28:33
1	Ti 334.940†	5587153.3	5684437.1	9876.8 ug/L	9876.8 ppb	08:28:21
1	Tl 190.801†	24418.9	24868.3	9687.0 ug/L	9687.0 ppb	08:28:33
1	U 409.014†	-1200.6	983.0	-24.275 ug/L	-24.275 ppb	08:28:28
1	V 292.402†	1238824.8	1261464.1	10190 ug/L	10190 ppb	08:28:28
1	Zn 213.857†	1148798.8	1168001.2	14062 ug/L	14062 ppb	08:28:28
1	SiO2†	1231318.9	1252012.3	101920 ug/L	101920 ppb	08:29:19
2	Sc Radial	4145.5	4145.5	94.3 %		08:27:41
2	Y RADIAL	4527.2	4527.2	95.10 %		08:27:21
2	Al 396.153Radial†	369.2	469.5	-8.7245 ug/L	-8.7245 ppb	08:27:21
2	Ca 317.933Radial†	32.2	18.5	34.943 ug/L	34.943 ppb	08:27:41
2	Fe 238.204 Radial†	-18.2	-27.8	-32.856 ug/L	-32.856 ppb	08:27:41
2	K 766.490 Radial†	1542370.3	1632628.8	311050 ug/L	311050 ppb	08:27:16
2	Mg 279.077 IEC†	-5.6	-7.4	-205.17 ug/L	-205.17 ppb	08:27:41
2	Na 589.592 Radial†	-354.2	499.6	176.11 ug/L	176.11 ppb	08:27:21
2	Sr 421.552†	1209601.5	1282403.8	10279 ug/L	10279 ppb	08:27:16
2	Sc 361.383	811868.5	811868.5	99.150 %		08:28:48
2	Y 371.029	670978.1	670978.1	97.012 %		08:28:48
2	Ag 328.068†	-6279.8	-6518.8	6.8157 ug/L	6.8157 ppb	08:28:53
2	As 188.979†	17949.0	18129.6	10015 ug/L	10015 ppb	08:28:53
2	B 249.677†	177983.5	180045.9	5023.5 ug/L	5023.5 ppb	08:28:48
2	Ba 233.527†	1494980.9	1507790.9	14145 ug/L	14145 ppb	08:28:48
2	Be 313.107†	6732933.5	6794353.7	2915.3 ug/L	2915.3 ppb	08:28:41
2	Cd 226.502†	666918.4	672803.4	9768.4 ug/L	9768.4 ppb	08:28:48
2	Co 228.616†	370193.2	373411.3	9649.8 ug/L	9649.8 ppb	08:28:48
2	Cr 267.716†	1791743.9	1807024.5	24247 ug/L	24247 ppb	08:28:48
2	Cu 324.752†	6030940.7	6077063.1	20063 ug/L	20063 ppb	08:28:41
2	Mn 257.610†	7074899.8	7135130.0	9381.4 ug/L	9381.4 ppb	08:28:41
2	Mo 202.031†	108087.3	109004.9	9689.6 ug/L	9689.6 ppb	08:28:53
2	Ni 231.604†	310630.5	313208.0	9940.8 ug/L	9940.8 ppb	08:28:48

2	P 214.914†	23794.6	23811.2	13848 ug/L	13848 ppb	08:28:53
2	Pb 220.353†	156895.5	158298.2	24333 ug/L	24333 ppb	08:28:48
2	S 181.975 Axial†	29039.9	29258.5	52379 ug/L	52379 ppb	08:28:53
2	Sb 206.836†	24818.6	25007.5	10823 ug/L	10823 ppb	08:28:53
2	Se 196.026†	12224.9	12346.6	10315 ug/L	10315 ppb	08:28:53
2	Si 251.611†	1246148.3	1256337.3	47575 ug/L	47575 ppb	08:28:48
2	Sn 189.927†	44475.4	44849.3	10178 ug/L	10178 ppb	08:28:53
2	Ti 334.940†	5582866.5	5631822.9	9785.3 ug/L	9785.3 ppb	08:28:41
2	Tl 190.801†	24653.6	24894.0	9695.6 ug/L	9695.6 ppb	08:28:53
2	U 409.014†	-1298.1	895.0	-27.040 ug/L	-27.040 ppb	08:28:48
2	V 292.402†	1250891.0	1262926.4	10202 ug/L	10202 ppb	08:28:48
2	Zn 213.857†	1161089.0	1170467.4	14092 ug/L	14092 ppb	08:28:48
2	SiO2†	1234688.1	1244767.8	101320 ug/L	101320 ppb	08:29:25
3	Sc Radial	4156.1	4156.1	94.6 %		08:28:11
3	Y RADIAL	4593.1	4593.1	96.48 %		08:27:51
3	Al 396.153Radial†	406.4	507.9	24.084 ug/L	24.084 ppb	08:27:51
3	Ca 317.933Radial†	32.6	18.8	35.616 ug/L	35.616 ppb	08:28:11
3	Fe 238.204 Radial†	-11.3	-20.4	53.420 ug/L	53.420 ppb	08:28:11
3	K 766.490 Radial†	1534339.9	1619978.5	308640 ug/L	308640 ppb	08:27:46
3	Mg 279.077 IEC†	-5.4	-7.2	-196.31 ug/L	-196.31 ppb	08:28:11
3	Na 589.592 Radial†	-370.0	483.8	170.55 ug/L	170.55 ppb	08:27:51
3	Sr 421.552†	1205944.7	1275275.8	10222 ug/L	10222 ppb	08:27:46
3	Sc 361.383	799541.9	799541.9	97.645 %		08:29:08
3	Y 371.029	660328.4	660328.4	95.472 %		08:29:08
3	Ag 328.068†	-6237.4	-6572.9	6.6426 ug/L	6.6426 ppb	08:29:13
3	As 188.979†	17849.2	18306.5	10114 ug/L	10114 ppb	08:29:13
3	B 249.677†	175494.5	180264.3	5029.5 ug/L	5029.5 ppb	08:29:08
3	Ba 233.527†	1476470.2	1512079.6	14185 ug/L	14185 ppb	08:29:08
3	Be 313.107†	6787317.6	6954741.4	2984.1 ug/L	2984.1 ppb	08:29:01
3	Cd 226.502†	659516.8	675593.3	9808.9 ug/L	9808.9 ppb	08:29:08
3	Co 228.616†	365913.6	374784.7	9685.0 ug/L	9685.0 ppb	08:29:08
3	Cr 267.716†	1770674.5	1813307.1	24331 ug/L	24331 ppb	08:29:08
3	Cu 324.752†	6079322.5	6220388.3	20537 ug/L	20537 ppb	08:29:01
3	Mn 257.610†	7133186.6	7304831.8	9604.5 ug/L	9604.5 ppb	08:29:01
3	Mo 202.031†	107562.7	110148.3	9791.2 ug/L	9791.2 ppb	08:29:13
3	Ni 231.604†	306847.3	314163.7	9971.1 ug/L	9971.1 ppb	08:29:08
3	P 214.914†	23753.0	24138.6	13999 ug/L	13999 ppb	08:29:13
3	Pb 220.353†	155100.2	158899.1	24425 ug/L	24425 ppb	08:29:08
3	S 181.975 Axial†	28855.2	29520.9	52849 ug/L	52849 ppb	08:29:13
3	Sb 206.836†	24631.3	25201.6	10908 ug/L	10908 ppb	08:29:13
3	Se 196.026†	12064.9	12372.8	10337 ug/L	10337 ppb	08:29:13
3	Si 251.611†	1229504.0	1258668.3	47662 ug/L	47662 ppb	08:29:08
3	Sn 189.927†	44342.4	45404.7	10304 ug/L	10304 ppb	08:29:13
3	Ti 334.940†	5623242.8	5759982.3	10008 ug/L	10008 ppb	08:29:01
3	Tl 190.801†	24541.9	25162.9	9802.4 ug/L	9802.4 ppb	08:29:13
3	U 409.014†	-1135.1	1041.7	-22.786 ug/L	-22.786 ppb	08:29:08
3	V 292.402†	1234480.5	1265570.5	10225 ug/L	10225 ppb	08:29:08
3	Zn 213.857†	1148149.8	1175270.1	14149 ug/L	14149 ppb	08:29:08
3	SiO2†	1217210.0	1246066.7	101430 ug/L	101430 ppb	08:29:31

Mean Data: LR2

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	805460.2	98.368 %	0.7545			0.77%
Sc Radial	4146.4	94.3 %	0.21			0.22%
Y 371.029	665848.3	96.270 %	0.7714			0.80%
Y RADIAL	4588.1	96.38 %	1.231			1.28%
Ag 328.068†	-6520.1	6.8295 ug/L	0.19414	6.8295 ppb	0.19414	2.84%
Al 396.153Radial†	489.9	10.184 ug/L	16.9680	10.184 ppb	16.9680	166.62%
As 188.979†	18158.6	10032 ug/L	75.0	10032 ppb	75.0	0.75%
QC value within limits for As 188.979 Recovery = 100.32%						
B 249.677†	179930.7	5020.2 ug/L	11.23	5020.2 ppb	11.23	0.22%
QC value within limits for B 249.677 Recovery = 100.40%						
Ba 233.527†	1508118.9	14148 ug/L	35.7	14148 ppb	35.7	0.25%
QC value within limits for Ba 233.527 Recovery = 94.32%						
Be 313.107†	6865726.0	2945.9 ug/L	35.01	2945.9 ppb	35.01	1.19%
QC value within limits for Be 313.107 Recovery = 98.20%						
Ca 317.933Radial†	19.2	36.280 ug/L	1.7659	36.280 ppb	1.7659	4.87%
Cd 226.502†	672827.8	9768.8 ug/L	39.97	9768.8 ppb	39.97	0.41%
QC value within limits for Cd 226.502 Recovery = 97.69%						

Co 228.616†	373449.0	9650.6 ug/L	34.05	9650.6 ppb	34.05	0.35%
QC value within limits for Co 228.616 Recovery = 96.51%						
Cr 267.716†	1808047.0	24260 ug/L	64.8	24260 ppb	64.8	0.27%
QC value within limits for Cr 267.716 Recovery = 97.04%						
Cu 324.752†	6146029.5	20291 ug/L	237.1	20291 ppb	237.1	1.17%
QC value within limits for Cu 324.752 Recovery = 101.46%						
Fe 238.204 Radial†	-25.0	-1.0033 ug/L	47.36013	-1.0033 ppb	47.36013	>999.9%
K 766.490 Radial†	1631212.1	310780 ug/L	2019.1	310780 ppb	2019.1	0.65%
QC value within limits for K 766.490 Radial Recovery = 103.59%						
Mg 279.077 IEC†	-6.6	-169.05 ug/L	55.058	-169.05 ppb	55.058	32.57%
Mn 257.610†	7211915.4	9482.4 ug/L	113.07	9482.4 ppb	113.07	1.19%
QC value within limits for Mn 257.610 Recovery = 94.82%						
Mo 202.031†	109270.1	9713.1 ug/L	69.35	9713.1 ppb	69.35	0.71%
QC value within limits for Mo 202.031 Recovery = 97.13%						
Na 589.592 Radial†	496.6	175.06 ug/L	4.087	175.06 ppb	4.087	2.33%
Ni 231.604†	313116.8	9937.9 ug/L	34.77	9937.9 ppb	34.77	0.35%
QC value within limits for Ni 231.604 Recovery = 99.38%						
P 214.914†	23883.9	13857 ug/L	137.5	13857 ppb	137.5	0.99%
QC value within limits for P 214.914 Recovery = 92.38%						
Pb 220.353†	158329.9	24337 ug/L	85.2	24337 ppb	85.2	0.35%
QC value within limits for Pb 220.353 Recovery = 97.35%						
S 181.975 Axial†	29278.3	52414 ug/L	417.8	52414 ppb	417.8	0.80%
QC value within limits for S 181.975 Axial Recovery = 104.83%						
Sb 206.836†	25034.3	10835 ug/L	67.7	10835 ppb	67.7	0.63%
QC value within limits for Sb 206.836 Recovery = 108.35%						
Se 196.026†	12332.1	10303 ug/L	41.5	10303 ppb	41.5	0.40%
QC value within limits for Se 196.026 Recovery = 103.03%						
Si 251.611†	1256243.0	47571 ug/L	93.1	47571 ppb	93.1	0.20%
QC value within limits for Si 251.611 Recovery = 95.14%						
Sn 189.927†	44969.7	10205 ug/L	88.3	10205 ppb	88.3	0.87%
QC value within limits for Sn 189.927 Recovery = 102.05%						
Sr 421.552†	1283284.7	10286 ug/L	68.0	10286 ppb	68.0	0.66%
QC value within limits for Sr 421.552 Recovery = 102.86%						
Ti 334.940†	5692080.8	9890.1 ug/L	112.01	9890.1 ppb	112.01	1.13%
QC value within limits for Ti 334.940 Recovery = 98.90%						
Tl 190.801†	24975.1	9728.3 ug/L	64.27	9728.3 ppb	64.27	0.66%
QC value within limits for Tl 190.801 Recovery = 97.28%						
U 409.014†	973.2	-24.700 ug/L	2.1584	-24.700 ppb	2.1584	8.74%
V 292.402†	1263320.3	10206 ug/L	17.5	10206 ppb	17.5	0.17%
QC value within limits for V 292.402 Recovery = 102.06%						
Zn 213.857†	1171246.2	14101 ug/L	44.3	14101 ppb	44.3	0.31%
QC value within limits for Zn 213.857 Recovery = 94.01%						
SiO2†	1247615.6	101560 ug/L	316.3	101560 ppb	316.3	0.31%
QC value within limits for SiO2 Recovery = 94.91%						

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/19/2010 08:47:07

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb
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Method Loaded

Method Name: General Eng.2AX

Method Last Saved: 3/19/2010 07:15:37

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: 3/19/2010 08:47:08

Analyst:

Data Type: Original

Initial Sample Wt:

Initial Sample Vol:

Dilution:

Sample Prep Vol:
=====

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4305.8	4305.8	98.0 %			08:49:20
1	Y RADIAL	4716.7	4716.7	99.08 %			08:49:00
1	Al 396.153Radial†	4931.5	5111.8	4997.3 ug/L		4997.3 ppb	08:49:00

1	Ca 317.933Radial†	2710.1	2750.6	5204.7 ug/L	5204.7 ppb	08:49:20
1	Fe 238.204 Radial†	455.7	456.7	5306.4 ug/L	5306.4 ppb	08:49:20
1	K 766.490 Radial†	29165.1	27171.3	5170.4 ug/L	5170.4 ppb	08:49:00
1	Mg 279.077 IEC†	127.8	129.0	5319.9 ug/L	5319.9 ppb	08:49:20
1	Na 589.592 Radial†	27601.2	29048.8	10240 ug/L	10240 ppb	08:49:00
1	Sr 421.552†	62875.2	64158.5	514.24 ug/L	514.24 ppb	08:49:00
1	Sc 361.383	842688.6	842688.6	102.91 %		08:50:18
1	Y 371.029	702082.9	702082.9	101.51 %		08:50:18
1	Ag 328.068†	97152.7	94216.3	492.30 ug/L	492.30 ppb	08:50:23
1	As 188.979†	915.3	916.2	507.22 ug/L	507.22 ppb	08:50:43
1	B 249.677†	17731.7	17766.9	496.15 ug/L	496.15 ppb	08:50:23
1	Ba 233.527†	53823.5	52300.0	491.10 ug/L	491.10 ppb	08:50:23
1	Be 313.107†	1211376.0	1180802.4	503.88 ug/L	503.88 ppb	08:50:18
1	Cd 226.502†	34646.6	33836.1	490.81 ug/L	490.81 ppb	08:50:23
1	Co 228.616†	19740.5	19227.7	497.07 ug/L	497.07 ppb	08:50:23
1	Cr 267.716†	37683.1	36544.5	491.12 ug/L	491.12 ppb	08:50:23
1	Cu 324.752†	156492.6	146509.0	483.70 ug/L	483.70 ppb	08:50:23
1	Mn 257.610†	390297.8	378856.0	498.43 ug/L	498.43 ppb	08:50:18
1	Mo 202.031†	5708.4	5538.2	492.77 ug/L	492.77 ppb	08:50:43
1	Ni 231.604†	16164.2	15622.4	495.83 ug/L	495.83 ppb	08:50:23
1	P 214.914†	3592.6	3303.6	2366.4 ug/L	2366.4 ppb	08:50:43
1	Pb 220.353†	3247.3	3213.6	495.10 ug/L	495.10 ppb	08:50:43
1	S 181.975 Axial†	591.1	544.2	973.26 ug/L	973.26 ppb	08:50:43
1	Sb 206.836†	1250.0	1190.9	516.03 ug/L	516.03 ppb	08:50:43
1	Se 196.026†	596.8	596.8	515.55 ug/L	515.55 ppb	08:50:43
1	Si 251.611†	66710.0	64332.6	2436.2 ug/L	2436.2 ppb	08:50:23
1	Sn 189.927†	2261.3	2190.1	497.61 ug/L	497.61 ppb	08:50:43
1	Ti 334.940†	283251.6	276351.5	480.46 ug/L	480.46 ppb	08:50:23
1	Tl 190.801†	1282.3	1275.1	496.57 ug/L	496.57 ppb	08:50:43
1	U 409.014†	14644.3	16433.8	496.87 ug/L	496.87 ppb	08:50:23
1	V 292.402†	61720.7	61290.3	495.97 ug/L	495.97 ppb	08:50:23
1	Zn 213.857†	42521.3	40747.1	489.11 ug/L	489.11 ppb	08:50:23
1	SiO2†	66780.4	64389.9	5241.6 ug/L	5241.6 ppb	08:51:50
2	Sc Radial	4310.3	4310.3	98.1 %		08:49:46
2	Y RADIAL	4803.0	4803.0	100.9 %		08:49:26
2	Al 396.153Radial†	5008.9	5185.5	5069.2 ug/L	5069.2 ppb	08:49:26
2	Ca 317.933Radial†	2706.8	2744.3	5192.8 ug/L	5192.8 ppb	08:49:46
2	Fe 238.204 Radial†	454.3	454.8	5284.6 ug/L	5284.6 ppb	08:49:46
2	K 766.490 Radial†	29710.5	27696.0	5270.2 ug/L	5270.2 ppb	08:49:26
2	Mg 279.077 IEC†	130.0	131.0	5404.3 ug/L	5404.3 ppb	08:49:46
2	Na 589.592 Radial†	28243.8	29674.3	10461 ug/L	10461 ppb	08:49:26
2	Sr 421.552†	64090.9	65330.4	523.63 ug/L	523.63 ppb	08:49:26
2	Sc 361.383	835415.1	835415.1	102.03 %		08:50:49
2	Y 371.029	696746.4	696746.4	100.74 %		08:50:49
2	Ag 328.068†	98655.9	96511.5	504.24 ug/L	504.24 ppb	08:50:54
2	As 188.979†	915.8	924.4	511.79 ug/L	511.79 ppb	08:51:14
2	B 249.677†	18161.0	18337.7	512.14 ug/L	512.14 ppb	08:50:54
2	Ba 233.527†	54512.5	53430.6	501.72 ug/L	501.72 ppb	08:50:54
2	Be 313.107†	1202410.4	1182263.0	504.53 ug/L	504.53 ppb	08:50:49
2	Cd 226.502†	35172.4	34644.5	502.56 ug/L	502.56 ppb	08:50:54
2	Co 228.616†	20017.6	19666.3	508.40 ug/L	508.40 ppb	08:50:54
2	Cr 267.716†	38195.4	37365.3	502.14 ug/L	502.14 ppb	08:50:54
2	Cu 324.752†	159175.9	150462.8	496.75 ug/L	496.75 ppb	08:50:54
2	Mn 257.610†	387381.3	379299.3	499.01 ug/L	499.01 ppb	08:50:49
2	Mo 202.031†	5767.0	5643.9	502.17 ug/L	502.17 ppb	08:51:14
2	Ni 231.604†	16383.4	15974.0	506.99 ug/L	506.99 ppb	08:50:54
2	P 214.914†	3601.9	3343.1	2393.4 ug/L	2393.4 ppb	08:51:14
2	Pb 220.353†	3277.1	3270.3	503.85 ug/L	503.85 ppb	08:51:14
2	S 181.975 Axial†	602.5	560.3	1002.1 ug/L	1002.1 ppb	08:51:14
2	Sb 206.836†	1254.1	1205.5	522.43 ug/L	522.43 ppb	08:51:14
2	Se 196.026†	611.7	616.6	531.97 ug/L	531.97 ppb	08:51:14
2	Si 251.611†	67838.4	66003.0	2499.5 ug/L	2499.5 ppb	08:50:54
2	Sn 189.927†	2268.7	2216.5	503.59 ug/L	503.59 ppb	08:51:14
2	Ti 334.940†	287345.1	282760.0	491.58 ug/L	491.58 ppb	08:50:54
2	Tl 190.801†	1298.2	1301.6	506.83 ug/L	506.83 ppb	08:51:14
2	U 409.014†	15075.3	16980.2	513.43 ug/L	513.43 ppb	08:50:54
2	V 292.402†	62616.3	62690.3	507.30 ug/L	507.30 ppb	08:50:54
2	Zn 213.857†	43043.2	41618.3	499.58 ug/L	499.58 ppb	08:50:54
2	SiO2†	67536.8	65696.3	5347.9 ug/L	5347.9 ppb	08:51:56
3	Sc Radial	4320.9	4320.9	98.3 %		08:50:11
3	Y RADIAL	4722.3	4722.3	99.20 %		08:49:51

3	Al 396.153Radial†	4930.1	5092.8	4978.3 ug/L	4978.3 ppb	08:49:51
3	Ca 317.933Radial†	2709.3	2740.1	5184.9 ug/L	5184.9 ppb	08:50:11
3	Fe 238.204 Radial†	457.4	456.8	5308.2 ug/L	5308.2 ppb	08:50:11
3	K 766.490 Radial†	29302.8	27207.3	5177.2 ug/L	5177.2 ppb	08:49:51
3	Mg 279.077 IEC†	130.2	130.9	5398.3 ug/L	5398.3 ppb	08:50:11
3	Na 589.592 Radial†	27688.5	29039.1	10237 ug/L	10237 ppb	08:49:51
3	Sr 421.552†	62909.5	63969.0	512.72 ug/L	512.72 ppb	08:49:51
3	Sc 361.383	833064.0	833064.0	101.74 %		08:51:20
3	Y 371.029	694093.3	694093.3	100.35 %		08:51:20
3	Ag 328.068†	96658.0	94820.7	495.44 ug/L	495.44 ppb	08:51:25
3	As 188.979†	909.2	920.4	509.56 ug/L	509.56 ppb	08:51:45
3	B 249.677†	17772.0	18005.6	502.84 ug/L	502.84 ppb	08:51:25
3	Ba 233.527†	53540.6	52626.1	494.16 ug/L	494.16 ppb	08:51:25
3	Be 313.107†	1198980.6	1182217.9	504.49 ug/L	504.49 ppb	08:51:20
3	Cd 226.502†	34489.0	34070.1	494.21 ug/L	494.21 ppb	08:51:25
3	Co 228.616†	19647.2	19357.6	500.44 ug/L	500.44 ppb	08:51:25
3	Cr 267.716†	37544.8	36831.6	494.97 ug/L	494.97 ppb	08:51:25
3	Cu 324.752†	155601.0	147389.4	486.61 ug/L	486.61 ppb	08:51:25
3	Mn 257.610†	386953.3	379950.2	499.87 ug/L	499.87 ppb	08:51:20
3	Mo 202.031†	5728.1	5621.6	500.19 ug/L	500.19 ppb	08:51:45
3	Ni 231.604†	16137.8	15777.9	500.76 ug/L	500.76 ppb	08:51:25
3	P 214.914†	3584.6	3336.0	2390.0 ug/L	2390.0 ppb	08:51:45
3	Pb 220.353†	3264.9	3267.4	503.37 ug/L	503.37 ppb	08:51:45
3	S 181.975 Axial†	592.3	552.0	987.22 ug/L	987.22 ppb	08:51:45
3	Sb 206.836†	1243.0	1198.1	519.27 ug/L	519.27 ppb	08:51:45
3	Se 196.026†	592.4	599.2	517.57 ug/L	517.57 ppb	08:51:45
3	Si 251.611†	66318.2	64696.5	2449.9 ug/L	2449.9 ppb	08:51:25
3	Sn 189.927†	2253.3	2207.6	501.58 ug/L	501.58 ppb	08:51:45
3	Ti 334.940†	281695.2	278001.5	483.32 ug/L	483.32 ppb	08:51:25
3	Tl 190.801†	1289.9	1297.0	505.05 ug/L	505.05 ppb	08:51:45
3	U 409.014†	14513.9	16470.0	497.96 ug/L	497.96 ppb	08:51:25
3	V 292.402†	61261.2	61531.5	498.00 ug/L	498.00 ppb	08:51:25
3	Zn 213.857†	42320.7	41027.2	492.47 ug/L	492.47 ppb	08:51:25
3	SiO2†	66750.8	65110.6	5300.2 ug/L	5300.2 ppb	08:52:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	837055.9	102.23 %	0.613			0.60%
Sc Radial	4312.3	98.1 %	0.18			0.18%
Y 371.029	697640.9	100.87 %	0.588			0.58%
Y RADIAL	4747.3	99.72 %	1.014			1.02%
Ag 328.068†	95182.9	497.33 ug/L	6.190	497.33 ppb	6.190	1.24%
QC value within limits for Ag 328.068 Recovery = 99.47%						
Al 396.153Radial†	5130.0	5014.9 ug/L	47.95	5014.9 ppb	47.95	0.96%
QC value within limits for Al 396.153Radial Recovery = 100.30%						
As 188.979†	920.3	509.52 ug/L	2.282	509.52 ppb	2.282	0.45%
QC value within limits for As 188.979 Recovery = 101.90%						
B 249.677†	18036.7	503.71 ug/L	8.027	503.71 ppb	8.027	1.59%
QC value within limits for B 249.677 Recovery = 100.74%						
Ba 233.527†	52785.6	495.66 ug/L	5.463	495.66 ppb	5.463	1.10%
QC value within limits for Ba 233.527 Recovery = 99.13%						
Be 313.107†	1181761.1	504.30 ug/L	0.363	504.30 ppb	0.363	0.07%
QC value within limits for Be 313.107 Recovery = 100.86%						
Ca 317.933Radial†	2745.0	5194.1 ug/L	9.96	5194.1 ppb	9.96	0.19%
QC value within limits for Ca 317.933Radial Recovery = 103.88%						
Cd 226.502†	34183.6	495.86 ug/L	6.043	495.86 ppb	6.043	1.22%
QC value within limits for Cd 226.502 Recovery = 99.17%						
Co 228.616†	19417.2	501.97 ug/L	5.822	501.97 ppb	5.822	1.16%
QC value within limits for Co 228.616 Recovery = 100.39%						
Cr 267.716†	36913.8	496.08 ug/L	5.590	496.08 ppb	5.590	1.13%
QC value within limits for Cr 267.716 Recovery = 99.22%						
Cu 324.752†	148120.4	489.02 ug/L	6.848	489.02 ppb	6.848	1.40%
QC value within limits for Cu 324.752 Recovery = 97.80%						
Fe 238.204 Radial†	456.1	5299.7 ug/L	13.14	5299.7 ppb	13.14	0.25%
QC value within limits for Fe 238.204 Radial Recovery = 105.99%						
K 766.490 Radial†	27358.2	5205.9 ug/L	55.79	5205.9 ppb	55.79	1.07%
QC value within limits for K 766.490 Radial Recovery = 104.12%						
Mg 279.077 IEC†	130.3	5374.1 ug/L	47.09	5374.1 ppb	47.09	0.88%
QC value within limits for Mg 279.077 IEC Recovery = 107.48%						

Mn 257.610†	379368.5	499.10 ug/L	0.722	499.10 ppb	0.722	0.14%
QC value within limits for Mn 257.610 Recovery = 99.82%						
Mo 202.031†	5601.2	498.37 ug/L	4.955	498.37 ppb	4.955	0.99%
QC value within limits for Mo 202.031 Recovery = 99.67%						
Na 589.592 Radial†	29254.1	10313 ug/L	128.3	10313 ppb	128.3	1.24%
QC value within limits for Na 589.592 Radial Recovery = 103.13%						
Ni 231.604†	15791.4	501.19 ug/L	5.592	501.19 ppb	5.592	1.12%
QC value within limits for Ni 231.604 Recovery = 100.24%						
P 214.914†	3327.6	2383.3 ug/L	14.70	2383.3 ppb	14.70	0.62%
QC value within limits for P 214.914 Recovery = 95.33%						
Pb 220.353†	3250.5	500.77 ug/L	4.917	500.77 ppb	4.917	0.98%
QC value within limits for Pb 220.353 Recovery = 100.15%						
S 181.975 Axial†	552.2	987.54 ug/L	14.439	987.54 ppb	14.439	1.46%
QC value within limits for S 181.975 Axial Recovery = 98.75%						
Sb 206.836†	1198.2	519.24 ug/L	3.201	519.24 ppb	3.201	0.62%
QC value within limits for Sb 206.836 Recovery = 103.85%						
Se 196.026†	604.2	521.70 ug/L	8.953	521.70 ppb	8.953	1.72%
QC value within limits for Se 196.026 Recovery = 104.34%						
Si 251.611†	65010.7	2461.9 ug/L	33.30	2461.9 ppb	33.30	1.35%
QC value within limits for Si 251.611 Recovery = 98.47%						
Sn 189.927†	2204.7	500.93 ug/L	3.046	500.93 ppb	3.046	0.61%
QC value within limits for Sn 189.927 Recovery = 100.19%						
Sr 421.552†	64486.0	516.86 ug/L	5.911	516.86 ppb	5.911	1.14%
QC value within limits for Sr 421.552 Recovery = 103.37%						
Ti 334.940†	279037.7	485.12 ug/L	5.777	485.12 ppb	5.777	1.19%
QC value within limits for Ti 334.940 Recovery = 97.02%						
Tl 190.801†	1291.2	502.82 ug/L	5.485	502.82 ppb	5.485	1.09%
QC value within limits for Tl 190.801 Recovery = 100.56%						
U 409.014†	16628.0	502.75 ug/L	9.259	502.75 ppb	9.259	1.84%
QC value within limits for U 409.014 Recovery = 100.55%						
V 292.402†	61837.4	500.42 ug/L	6.043	500.42 ppb	6.043	1.21%
QC value within limits for V 292.402 Recovery = 100.08%						
Zn 213.857†	41130.9	493.72 ug/L	5.346	493.72 ppb	5.346	1.08%
QC value within limits for Zn 213.857 Recovery = 98.74%						
SiO2†	65065.6	5296.6 ug/L	53.27	5296.6 ppb	53.27	1.01%
QC value within limits for SiO2 Recovery = 99.05%						

All analyte(s) passed QC.

Sequence No.: 2

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 08:54:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4278.0	4278.0	97.3 %		08:56:23
1	Y RADIAL	4838.9	4838.9	101.6 %		08:56:03
1	Al 396.153Radial†	-75.6	0.4	0.3184 ug/L	0.3184 ppb	08:56:23
1	Ca 317.933Radial†	23.5	8.5	16.044 ug/L	16.044 ppb	08:56:23
1	Fe 238.204 Radial†	8.5	0.3	3.4993 ug/L	3.4993 ppb	08:56:23
1	K 766.490 Radial†	2965.1	447.5	85.252 ug/L	85.252 ppb	08:56:03
1	Mg 279.077 IEC†	0.2	-1.3	-54.781 ug/L	-54.781 ppb	08:56:23
1	Na 589.592 Radial†	-832.8	19.5	6.8849 ug/L	6.8849 ppb	08:56:03
1	Sr 421.552†	5.5	-15.1	-0.1214 ug/L	-0.1214 ppb	08:56:03
1	Sc 361.383	825108.5	825108.5	100.77 %		08:57:20
1	Y 371.029	697408.9	697408.9	100.83 %		08:57:20
1	Ag 328.068†	183.8	-2.8	-0.0178 ug/L	-0.0178 ppb	08:57:20
1	As 188.979†	-22.6	4.4	2.4163 ug/L	2.4163 ppb	08:57:40
1	B 249.677†	152.9	689.1	19.332 ug/L	19.332 ppb	08:57:40
1	Ba 233.527†	8.3	9.0	0.0838 ug/L	0.0838 ppb	08:57:40
1	Be 313.107†	-3650.8	108.0	0.0460 ug/L	0.0460 ppb	08:57:20
1	Cd 226.502†	-153.3	18.5	0.2683 ug/L	0.2683 ppb	08:57:40
1	Co 228.616†	-54.3	-7.7	-0.1957 ug/L	-0.1957 ppb	08:57:40
1	Cr 267.716†	76.4	4.3	0.0557 ug/L	0.0557 ppb	08:57:40
1	Cu 324.752†	5642.6	47.6	0.1550 ug/L	0.1550 ppb	08:57:20
1	Mn 257.610†	411.6	19.4	0.0280 ug/L	0.0280 ppb	08:57:40
1	Mo 202.031†	21.9	13.2	1.1724 ug/L	1.1724 ppb	08:57:40
1	Ni 231.604†	74.1	-10.5	-0.3340 ug/L	-0.3340 ppb	08:57:40
1	P 214.914†	178.9	-9.7	-7.2705 ug/L	-7.2705 ppb	08:57:40
1	Pb 220.353†	-46.9	11.7	1.8038 ug/L	1.8038 ppb	08:57:40
1	S 181.975 Axial†	20.4	-10.0	-17.833 ug/L	-17.833 ppb	08:57:40
1	Sb 206.836†	27.2	3.4	1.4349 ug/L	1.4349 ppb	08:57:40
1	Se 196.026†	-14.3	2.8	2.3246 ug/L	2.3246 ppb	08:57:40
1	Si 251.611†	553.7	61.4	2.3149 ug/L	2.3149 ppb	08:57:40
1	Sn 189.927†	9.9	2.6	0.6033 ug/L	0.6033 ppb	08:57:40
1	Ti 334.940†	-1116.7	13.0	0.0274 ug/L	0.0274 ppb	08:57:20
1	Tl 190.801†	-32.2	-2.9	-1.1249 ug/L	-1.1249 ppb	08:57:40
1	U 409.014†	-2076.1	144.0	4.3671 ug/L	4.3671 ppb	08:57:20
1	V 292.402†	-1348.4	-20.7	-0.1418 ug/L	-0.1418 ppb	08:57:20
1	Zn 213.857†	714.3	138.7	1.6825 ug/L	1.6825 ppb	08:57:40
1	SiO2†	559.1	55.5	4.4993 ug/L	4.4993 ppb	08:58:51
2	Sc Radial	4424.5	4424.5	101 %		08:56:48
2	Y RADIAL	4835.4	4835.4	101.6 %		08:56:28
2	Al 396.153Radial†	-71.2	7.3	7.2099 ug/L	7.2099 ppb	08:56:48
2	Ca 317.933Radial†	25.5	9.7	18.317 ug/L	18.317 ppb	08:56:48
2	Fe 238.204 Radial†	8.6	0.1	0.7604 ug/L	0.7604 ppb	08:56:48
2	K 766.490 Radial†	2915.1	296.9	56.563 ug/L	56.563 ppb	08:56:28
2	Mg 279.077 IEC†	3.1	1.5	63.159 ug/L	63.159 ppb	08:56:48
2	Na 589.592 Radial†	-851.2	29.6	10.439 ug/L	10.439 ppb	08:56:28
2	Sr 421.552†	16.7	-4.2	-0.0342 ug/L	-0.0342 ppb	08:56:28
2	Sc 361.383	825546.1	825546.1	100.82 %		08:57:45
2	Y 371.029	698004.5	698004.5	100.92 %		08:57:45
2	Ag 328.068†	154.1	-32.2	-0.1736 ug/L	-0.1736 ppb	08:57:45
2	As 188.979†	-11.3	15.6	8.5484 ug/L	8.5484 ppb	08:58:05
2	B 249.677†	122.5	658.9	18.485 ug/L	18.485 ppb	08:58:05
2	Ba 233.527†	17.0	17.6	0.1635 ug/L	0.1635 ppb	08:58:05
2	Be 313.107†	-3632.3	128.3	0.0547 ug/L	0.0547 ppb	08:57:45
2	Cd 226.502†	-153.8	18.0	0.2625 ug/L	0.2625 ppb	08:58:05
2	Co 228.616†	-45.7	0.9	0.0233 ug/L	0.0233 ppb	08:58:05
2	Cr 267.716†	76.5	4.4	0.0564 ug/L	0.0564 ppb	08:58:05
2	Cu 324.752†	5580.6	-16.8	-0.0581 ug/L	-0.0581 ppb	08:57:45
2	Mn 257.610†	421.9	29.4	0.0362 ug/L	0.0362 ppb	08:58:05
2	Mo 202.031†	10.0	1.3	0.1193 ug/L	0.1193 ppb	08:58:05
2	Ni 231.604†	82.3	-2.4	-0.0773 ug/L	-0.0773 ppb	08:58:05

2	P 214.914†	185.7	-3.1	-2.2742 ug/L	-2.2742 ppb	08:58:05
2	Pb 220.353†	-49.8	8.9	1.3690 ug/L	1.3690 ppb	08:58:05
2	S 181.975 Axial†	27.7	-2.8	-4.9384 ug/L	-4.9384 ppb	08:58:05
2	Sb 206.836†	29.2	5.3	2.2297 ug/L	2.2297 ppb	08:58:05
2	Se 196.026†	-19.2	-2.0	-1.6916 ug/L	-1.6916 ppb	08:58:05
2	Si 251.611†	540.1	47.5	1.8023 ug/L	1.8023 ppb	08:58:05
2	Sn 189.927†	16.4	9.1	2.0790 ug/L	2.0790 ppb	08:58:05
2	Ti 334.940†	-1116.9	13.4	0.0185 ug/L	0.0185 ppb	08:57:45
2	Tl 190.801†	-24.0	5.3	2.0373 ug/L	2.0373 ppb	08:58:05
2	U 409.014†	-2063.9	157.2	4.7674 ug/L	4.7674 ppb	08:57:45
2	V 292.402†	-1400.4	-71.6	-0.5599 ug/L	-0.5599 ppb	08:57:45
2	Zn 213.857†	717.9	141.9	1.7202 ug/L	1.7202 ppb	08:58:05
2	SiO2†	559.9	56.0	4.5655 ug/L	4.5655 ppb	08:59:11
3	Sc Radial	4211.4	4211.4	95.8 %		08:57:13
3	Y RADIAL	4686.7	4686.7	98.45 %		08:56:53
3	Al 396.153Radial†	-80.5	-5.9	-5.8397 ug/L	-5.8397 ppb	08:57:13
3	Ca 317.933Radial†	17.0	2.1	3.9096 ug/L	3.9096 ppb	08:57:13
3	Fe 238.204 Radial†	8.0	-0.1	-1.4023 ug/L	-1.4023 ppb	08:57:13
3	K 766.490 Radial†	2980.9	512.2	97.574 ug/L	97.574 ppb	08:56:53
3	Mg 279.077 IEC†	0.9	-0.6	-23.241 ug/L	-23.241 ppb	08:57:13
3	Na 589.592 Radial†	-766.9	74.7	26.347 ug/L	26.347 ppb	08:56:53
3	Sr 421.552†	23.5	3.7	0.0298 ug/L	0.0298 ppb	08:56:53
3	Sc 361.383	820504.7	820504.7	100.21 %		08:58:10
3	Y 371.029	693341.7	693341.7	100.25 %		08:58:10
3	Ag 328.068†	152.8	-32.7	-0.1715 ug/L	-0.1715 ppb	08:58:10
3	As 188.979†	-18.3	8.5	4.6781 ug/L	4.6781 ppb	08:58:30
3	B 249.677†	121.5	658.6	18.475 ug/L	18.475 ppb	08:58:30
3	Ba 233.527†	8.5	9.2	0.0850 ug/L	0.0850 ppb	08:58:30
3	Be 313.107†	-3659.6	78.9	0.0335 ug/L	0.0335 ppb	08:58:10
3	Cd 226.502†	-158.0	13.0	0.1883 ug/L	0.1883 ppb	08:58:30
3	Co 228.616†	-37.5	8.8	0.2269 ug/L	0.2269 ppb	08:58:30
3	Cr 267.716†	79.8	8.1	0.1083 ug/L	0.1083 ppb	08:58:30
3	Cu 324.752†	5690.0	126.4	0.4174 ug/L	0.4174 ppb	08:58:10
3	Mn 257.610†	401.9	12.0	0.0166 ug/L	0.0166 ppb	08:58:30
3	Mo 202.031†	9.7	1.2	0.1027 ug/L	0.1027 ppb	08:58:30
3	Ni 231.604†	74.0	-10.2	-0.3245 ug/L	-0.3245 ppb	08:58:30
3	P 214.914†	199.3	11.7	8.5967 ug/L	8.5967 ppb	08:58:30
3	Pb 220.353†	-37.5	20.9	3.2128 ug/L	3.2128 ppb	08:58:30
3	S 181.975 Axial†	33.5	3.2	5.7488 ug/L	5.7488 ppb	08:58:30
3	Sb 206.836†	23.2	-0.5	-0.2012 ug/L	-0.2012 ppb	08:58:30
3	Se 196.026†	-15.7	1.3	1.0768 ug/L	1.0768 ppb	08:58:30
3	Si 251.611†	542.7	53.5	2.0283 ug/L	2.0283 ppb	08:58:30
3	Sn 189.927†	7.9	0.8	0.1757 ug/L	0.1757 ppb	08:58:30
3	Ti 334.940†	-1147.9	-24.4	-0.0399 ug/L	-0.0399 ppb	08:58:10
3	Tl 190.801†	-29.0	0.2	0.0650 ug/L	0.0650 ppb	08:58:30
3	U 409.014†	-2219.3	-10.6	-0.3213 ug/L	-0.3213 ppb	08:58:10
3	V 292.402†	-1372.5	-52.2	-0.4166 ug/L	-0.4166 ppb	08:58:10
3	Zn 213.857†	704.0	132.5	1.6069 ug/L	1.6069 ppb	08:58:30
3	SiO2†	572.1	71.6	5.8426 ug/L	5.8426 ppb	08:59:31

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	823719.8	100.60 %		0.341			0.34%
Sc Radial	4304.6	97.9 %		2.48			2.53%
Y 371.029	696251.7	100.67 %		0.367			0.36%
Y RADIAL	4787.0	100.6 %		1.83			1.82%
Ag 328.068†	-22.6	-0.1210 ug/L		0.08936	-0.1210 ppb	0.08936	73.87%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5629 ug/L		6.52825	0.5629 ppb	6.52825	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	9.5	5.2142 ug/L		3.10101	5.2142 ppb	3.10101	59.47%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	668.9	18.764 ug/L		0.4917	18.764 ppb	0.4917	2.62%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.9	0.1107 ug/L		0.04564	0.1107 ppb	0.04564	41.21%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	105.1	0.0447 ug/L		0.01065	0.0447 ppb	0.01065	23.81%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.7	12.757 ug/L		7.7459	12.757 ppb	7.7459	60.72%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated							
Cd 226.502†	16.5	0.2397 ug/L	0.04458	0.2397 ppb	0.04458	18.60%	
QC value within limits for Cd 226.502 Recovery = Not calculated							
Co 228.616†	0.7	0.0182 ug/L	0.21136	0.0182 ppb	0.21136	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	5.6	0.0734 ug/L	0.03018	0.0734 ppb	0.03018	41.09%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 324.752†	52.4	0.1714 ug/L	0.23815	0.1714 ppb	0.23815	138.91%	
QC value within limits for Cu 324.752 Recovery = Not calculated							
Fe 238.204 Radial†	0.1	0.9525 ug/L	2.45646	0.9525 ppb	2.45646	257.90%	
QC value within limits for Fe 238.204 Radial Recovery = Not calculated							
K 766.490 Radial†	418.9	79.796 ug/L	21.0429	79.796 ppb	21.0429	26.37%	
QC value within limits for K 766.490 Radial Recovery = Not calculated							
Mg 279.077 IEC†	-0.1	-4.9541 ug/L	61.05970	-4.9541 ppb	61.05970	>999.9%	
QC value within limits for Mg 279.077 IEC Recovery = Not calculated							
Mn 257.610†	20.3	0.0269 ug/L	0.00982	0.0269 ppb	0.00982	36.45%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	5.2	0.4648 ug/L	0.61286	0.4648 ppb	0.61286	131.86%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Na 589.592 Radial†	41.3	14.557 ug/L	10.3641	14.557 ppb	10.3641	71.20%	
QC value within limits for Na 589.592 Radial Recovery = Not calculated							
Ni 231.604†	-7.7	-0.2453 ug/L	0.14554	-0.2453 ppb	0.14554	59.34%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
P 214.914†	-0.4	-0.3160 ug/L	8.11280	-0.3160 ppb	8.11280	>999.9%	
QC value within limits for P 214.914 Recovery = Not calculated							
Pb 220.353†	13.8	2.1285 ug/L	0.96384	2.1285 ppb	0.96384	45.28%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
S 181.975 Axial†	-3.2	-5.6743 ug/L	11.80827	-5.6743 ppb	11.80827	208.10%	
QC value within limits for S 181.975 Axial Recovery = Not calculated							
Sb 206.836†	2.7	1.1544 ug/L	1.23947	1.1544 ppb	1.23947	107.37%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.7	0.5699 ug/L	2.05554	0.5699 ppb	2.05554	360.68%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	54.1	2.0485 ug/L	0.25687	2.0485 ppb	0.25687	12.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	4.2	0.9526 ug/L	0.99861	0.9526 ppb	0.99861	104.83%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Sr 421.552†	-5.2	-0.0419 ug/L	0.07592	-0.0419 ppb	0.07592	181.15%	
QC value within limits for Sr 421.552 Recovery = Not calculated							
Ti 334.940†	0.7	0.0020 ug/L	0.03653	0.0020 ppb	0.03653	>999.9%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	0.8	0.3258 ug/L	1.59716	0.3258 ppb	1.59716	490.27%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
U 409.014†	96.8	2.9377 ug/L	2.82949	2.9377 ppb	2.82949	96.32%	
QC value within limits for U 409.014 Recovery = Not calculated							
V 292.402†	-48.2	-0.3728 ug/L	0.21249	-0.3728 ppb	0.21249	57.01%	
QC value within limits for V 292.402 Recovery = Not calculated							
Zn 213.857†	137.7	1.6699 ug/L	0.05769	1.6699 ppb	0.05769	3.45%	
QC value within limits for Zn 213.857 Recovery = Not calculated							
SiO2†	61.0	4.9691 ug/L	0.75715	4.9691 ppb	0.75715	15.24%	
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: 37

Date Collected: 3/19/2010 09:01:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: LR1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4168.4	4168.4	94.8 %		09:03:54
1	Y RADIAL	4671.2	4671.2	98.12 %		09:03:34
1	Al 396.153Radial†	-95.9	-23.0	-21.536 ug/L	-21.536 ppb	09:03:54
1	Ca 317.933Radial†	10.9	-4.2	-7.9891 ug/L	-7.9891 ppb	09:03:54
1	Fe 238.204 Radial†	31552.6	33259.8	385370 ug/L	385370 ppb	09:03:34
1	K 766.490 Radial†	2463.6	-1.2	-0.1828 ug/L	-0.1828 ppb	09:03:34
1	Mg 279.077 IEC†	8.2	7.1	-111.04 ug/L	-111.04 ppb	09:03:54
1	Na 589.592 Radial†	-839.1	-9.6	-3.3743 ug/L	-3.3743 ppb	09:03:34
1	Sr 421.552†	108.5	93.6	0.7503 ug/L	0.7503 ppb	09:03:34
1	Sc 361.383	804663.0	804663.0	98.270 %		09:04:52
1	Y 371.029	675570.8	675570.8	97.676 %		09:04:52
1	Ag 328.068†	-22147.7	-22722.6	1.3619 ug/L	1.3619 ppb	09:04:52
1	As 188.979†	-157.8	-133.8	16.851 ug/L	16.851 ppb	09:05:12
1	B 249.677†	1573.3	2138.4	-2.6414 ug/L	-2.6414 ppb	09:04:52
1	Ba 233.527†	-1501.1	-1526.9	-2.4607 ug/L	-2.4607 ppb	09:04:52
1	Be 313.107†	-3547.0	121.6	0.0516 ug/L	0.0516 ppb	09:04:52
1	Cd 226.502†	2545.1	2760.5	0.2621 ug/L	0.2621 ppb	09:04:52
1	Co 228.616†	597.4	654.1	11.286 ug/L	11.286 ppb	09:05:12
1	Cr 267.716†	-466.6	-546.3	33.551 ug/L	33.551 ppb	09:05:12
1	Cu 324.752†	-1345.0	-6920.6	-2.4866 ug/L	-2.4866 ppb	09:04:52
1	Mn 257.610†	-31215.4	-32153.8	-4.2266 ug/L	-4.2266 ppb	09:04:52
1	Mo 202.031†	-238.6	-251.3	7.5762 ug/L	7.5762 ppb	09:04:52
1	Ni 231.604†	179.0	98.1	3.1049 ug/L	3.1049 ppb	09:05:12
1	P 214.914†	594.2	417.4	5.0000 ug/L	5.0000 ppb	09:05:12
1	Pb 220.353†	167.3	228.6	-19.764 ug/L	-19.764 ppb	09:05:12
1	S 181.975 Axial†	39.8	10.3	18.462 ug/L	18.462 ppb	09:05:12
1	Sb 206.836†	21.4	-1.9	-5.4959 ug/L	-5.4959 ppb	09:05:12
1	Se 196.026†	-1587.1	-1598.1	-223.50 ug/L	-223.50 ppb	09:05:12
1	Si 251.611†	-466.5	-962.8	-36.277 ug/L	-36.277 ppb	09:04:52
1	Sn 189.927†	-22.6	-30.2	-28.971 ug/L	-28.971 ppb	09:05:12
1	Ti 334.940†	-1147.3	-46.2	-0.1313 ug/L	-0.1313 ppb	09:04:52
1	Tl 190.801†	-24.1	4.6	1.3905 ug/L	1.3905 ppb	09:05:12
1	U 409.014†	-57.2	2146.0	21.189 ug/L	21.189 ppb	09:04:52
1	V 292.402†	5156.9	6565.1	-3.8861 ug/L	-3.8861 ppb	09:04:52
1	Zn 213.857†	3563.3	3056.0	-20.632 ug/L	-20.632 ppb	09:05:12
1	SiO2†	-531.6	-1040.3	-84.290 ug/L	-84.290 ppb	09:06:09
2	Sc Radial	4220.4	4220.4	96.0 %		09:04:19
2	Y RADIAL	4695.8	4695.8	98.64 %		09:03:59
2	Al 396.153Radial†	-97.7	-23.6	-22.030 ug/L	-22.030 ppb	09:04:19
2	Ca 317.933Radial†	15.8	0.8	1.4196 ug/L	1.4196 ppb	09:04:19
2	Fe 238.204 Radial†	31639.3	32940.5	381670 ug/L	381670 ppb	09:03:59
2	K 766.490 Radial†	2419.9	-78.7	-14.957 ug/L	-14.957 ppb	09:03:59
2	Mg 279.077 IEC†	9.6	8.5	-49.042 ug/L	-49.042 ppb	09:04:19
2	Na 589.592 Radial†	-819.9	21.3	7.4941 ug/L	7.4941 ppb	09:03:59
2	Sr 421.552†	73.1	55.3	0.4436 ug/L	0.4436 ppb	09:03:59
2	Sc 361.383	814772.9	814772.9	99.505 %		09:05:18
2	Y 371.029	684115.4	684115.4	98.911 %		09:05:18
2	Ag 328.068†	-22528.6	-22825.8	-0.3166 ug/L	-0.3166 ppb	09:05:18
2	As 188.979†	-170.1	-144.2	10.308 ug/L	10.308 ppb	09:05:38
2	B 249.677†	1557.8	2102.9	-3.0390 ug/L	-3.0390 ppb	09:05:18
2	Ba 233.527†	-1537.5	-1544.4	-2.7386 ug/L	-2.7386 ppb	09:05:18
2	Be 313.107†	-3576.5	136.7	0.0579 ug/L	0.0579 ppb	09:05:18
2	Cd 226.502†	2505.0	2688.1	-0.4074 ug/L	-0.4074 ppb	09:05:18
2	Co 228.616†	636.8	686.2	12.164 ug/L	12.164 ppb	09:05:38
2	Cr 267.716†	-490.7	-564.7	32.914 ug/L	32.914 ppb	09:05:38
2	Cu 324.752†	-1389.0	-6947.9	-2.7705 ug/L	-2.7705 ppb	09:05:18
2	Mn 257.610†	-31480.4	-32026.0	-4.4264 ug/L	-4.4264 ppb	09:05:18
2	Mo 202.031†	-265.9	-275.8	5.1133 ug/L	5.1133 ppb	09:05:18
2	Ni 231.604†	160.0	76.7	2.4260 ug/L	2.4260 ppb	09:05:38

2	P 214.914†	604.0	419.7	9.7533 ug/L	9.7533 ppb	09:05:38
2	Pb 220.353†	148.9	207.9	-22.419 ug/L	-22.419 ppb	09:05:38
2	S 181.975 Axial†	36.7	6.7	12.001 ug/L	12.001 ppb	09:05:38
2	Sb 206.836†	26.7	3.2	-3.3702 ug/L	-3.3702 ppb	09:05:38
2	Se 196.026†	-1602.6	-1593.6	-230.43 ug/L	-230.43 ppb	09:05:38
2	Si 251.611†	-451.6	-942.0	-35.459 ug/L	-35.459 ppb	09:05:18
2	Sn 189.927†	-21.3	-28.6	-28.391 ug/L	-28.391 ppb	09:05:38
2	Ti 334.940†	-1185.9	-70.6	-0.1755 ug/L	-0.1755 ppb	09:05:18
2	Tl 190.801†	-35.9	-7.0	-3.0798 ug/L	-3.0798 ppb	09:05:38
2	U 409.014†	-170.3	2033.0	18.184 ug/L	18.184 ppb	09:05:18
2	V 292.402†	5184.7	6527.9	-3.6800 ug/L	-3.6800 ppb	09:05:18
2	Zn 213.857†	3582.0	3029.7	-20.392 ug/L	-20.392 ppb	09:05:38
2	SiO2†	-332.9	-833.9	-67.390 ug/L	-67.390 ppb	09:06:14
3	Sc Radial	4150.7	4150.7	94.4 %		09:04:44
3	Y RADIAL	4717.7	4717.7	99.10 %		09:04:24
3	Al 396.153Radial†	-105.7	-33.8	-31.932 ug/L	-31.932 ppb	09:04:44
3	Ca 317.933Radial†	13.3	-1.6	-3.0737 ug/L	-3.0737 ppb	09:04:44
3	Fe 238.204 Radial†	31506.1	33352.3	386440 ug/L	386440 ppb	09:04:24
3	K 766.490 Radial†	2562.8	114.9	21.945 ug/L	21.945 ppb	09:04:24
3	Mg 279.077 IEC†	10.3	9.3	-19.131 ug/L	-19.131 ppb	09:04:44
3	Na 589.592 Radial†	-841.1	-15.4	-5.4450 ug/L	-5.4450 ppb	09:04:24
3	Sr 421.552†	63.7	46.6	0.3735 ug/L	0.3735 ppb	09:04:24
3	Sc 361.383	818472.2	818472.2	99.957 %		09:05:44
3	Y 371.029	686196.9	686196.9	99.212 %		09:05:44
3	Ag 328.068†	-22590.8	-22785.7	1.3597 ug/L	1.3597 ppb	09:05:44
3	As 188.979†	-159.6	-132.8	17.658 ug/L	17.658 ppb	09:06:04
3	B 249.677†	1700.5	2238.6	-0.0015 ug/L	-0.0015 ppb	09:05:44
3	Ba 233.527†	-1597.3	-1597.3	-3.0907 ug/L	-3.0907 ppb	09:05:44
3	Be 313.107†	-3601.1	128.4	0.0547 ug/L	0.0547 ppb	09:05:44
3	Cd 226.502†	2563.1	2734.9	-0.2206 ug/L	-0.2206 ppb	09:05:44
3	Co 228.616†	596.2	642.6	10.963 ug/L	10.963 ppb	09:06:04
3	Cr 267.716†	-477.4	-549.1	33.624 ug/L	33.624 ppb	09:06:04
3	Cu 324.752†	-1475.3	-7027.9	-2.7850 ug/L	-2.7850 ppb	09:05:44
3	Mn 257.610†	-31871.3	-32274.1	-4.2829 ug/L	-4.2829 ppb	09:05:44
3	Mo 202.031†	-289.1	-297.8	3.5310 ug/L	3.5310 ppb	09:05:44
3	Ni 231.604†	163.4	79.4	2.5118 ug/L	2.5118 ppb	09:06:04
3	P 214.914†	601.0	414.0	1.6780 ug/L	1.6780 ppb	09:06:04
3	Pb 220.353†	165.2	223.6	-20.698 ug/L	-20.698 ppb	09:06:04
3	S 181.975 Axial†	38.6	8.5	15.150 ug/L	15.150 ppb	09:06:04
3	Sb 206.836†	22.5	-1.2	-5.3079 ug/L	-5.3079 ppb	09:06:04
3	Se 196.026†	-1604.4	-1588.1	-212.13 ug/L	-212.13 ppb	09:06:04
3	Si 251.611†	-406.7	-895.1	-33.654 ug/L	-33.654 ppb	09:05:44
3	Sn 189.927†	-25.3	-32.4	-29.546 ug/L	-29.546 ppb	09:06:04
3	Ti 334.940†	-1114.8	5.9	-0.0482 ug/L	-0.0482 ppb	09:05:44
3	Tl 190.801†	-40.4	-11.4	-4.7656 ug/L	-4.7656 ppb	09:06:04
3	U 409.014†	-3.7	2200.5	22.719 ug/L	22.719 ppb	09:05:44
3	V 292.402†	5104.1	6423.7	-5.2245 ug/L	-5.2245 ppb	09:05:44
3	Zn 213.857†	3569.3	3000.7	-21.457 ug/L	-21.457 ppb	09:06:04
3	SiO2†	-395.4	-894.9	-72.310 ug/L	-72.310 ppb	09:06:19

Mean Data: LRI

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample	Std.Dev.	RSD
Sc 361.383	812636.0	99.244 %		0.8730				0.88%
Sc Radial	4179.8	95.1 %		0.82				0.87%
Y 371.029	681961.1	98.600 %		0.8142				0.83%
Y RADIAL	4694.9	98.62 %		0.488				0.49%
Ag 328.068†	-22778.0	0.8017 ug/L		0.96844	0.8017 ppb		0.96844	120.80%
Al 396.153Radial†	-26.8	-25.166 ug/L		5.8648	-25.166 ppb		5.8648	23.30%
As 188.979†	-136.9	14.939 ug/L		4.0310	14.939 ppb		4.0310	26.98%
B 249.677†	2160.0	-1.8940 ug/L		1.65089	-1.8940 ppb		1.65089	87.17%
Ba 233.527†	-1556.2	-2.7633 ug/L		0.31570	-2.7633 ppb		0.31570	11.42%
Be 313.107†	128.9	0.0547 ug/L		0.00317	0.0547 ppb		0.00317	5.79%
Ca 317.933Radial†	-1.7	-3.2144 ug/L		4.70597	-3.2144 ppb		4.70597	146.40%
Cd 226.502†	2727.8	-0.1220 ug/L		0.34551	-0.1220 ppb		0.34551	283.27%
Co 228.616†	661.0	11.471 ug/L		0.6212	11.471 ppb		0.6212	5.42%
Cr 267.716†	-553.4	33.363 ug/L		0.3909	33.363 ppb		0.3909	1.17%
Cu 324.752†	-6965.5	-2.6807 ug/L		0.16824	-2.6807 ppb		0.16824	6.28%
Fe 238.204 Radial†	33184.2	384500 ug/L		2503.3	384500 ppb		2503.3	0.65%
K 766.490 Radial†	11.7	2.2685 ug/L		18.57239	2.2685 ppb		18.57239	818.72%

Mg 279.077 IEC†	8.3	-59.738 ug/L	46.8800	-59.738 ppb	46.8800	78.48%
Mn 257.610†	-32151.3	-4.3119 ug/L	0.10299	-4.3119 ppb	0.10299	2.39%
Mo 202.031†	-275.0	5.4068 ug/L	2.03849	5.4068 ppb	2.03849	37.70%
Na 589.592 Radial†	-1.3	-0.4417 ug/L	6.95019	-0.4417 ppb	6.95019	>999.9%
Ni 231.604†	84.7	2.6809 ug/L	0.36971	2.6809 ppb	0.36971	13.79%
P 214.914†	417.1	5.4771 ug/L	4.05878	5.4771 ppb	4.05878	74.10%
Pb 220.353†	220.0	-20.960 ug/L	1.3465	-20.960 ppb	1.3465	6.42%
S 181.975 Axial†	8.5	15.204 ug/L	3.2307	15.204 ppb	3.2307	21.25%
Sb 206.836†	0.0	-4.7247 ug/L	1.17674	-4.7247 ppb	1.17674	24.91%
Se 196.026†	-1593.3	-222.02 ug/L	9.239	-222.02 ppb	9.239	4.16%
Si 251.611†	-933.3	-35.130 ug/L	1.3424	-35.130 ppb	1.3424	3.82%
Sn 189.927†	-30.4	-28.970 ug/L	0.5777	-28.970 ppb	0.5777	1.99%
Sr 421.552†	65.2	0.5225 ug/L	0.20038	0.5225 ppb	0.20038	38.35%
Ti 334.940†	-37.0	-0.1184 ug/L	0.06463	-0.1184 ppb	0.06463	54.61%
Tl 190.801†	-4.6	-2.1516 ug/L	3.18128	-2.1516 ppb	3.18128	147.86%
U 409.014†	2126.5	20.697 ug/L	2.3074	20.697 ppb	2.3074	11.15%
V 292.402†	6505.6	-4.2635 ug/L	0.83854	-4.2635 ppb	0.83854	19.67%
Zn 213.857†	3028.8	-20.827 ug/L	0.5589	-20.827 ppb	0.5589	2.68%
SiO2†	-923.0	-74.663 ug/L	8.6924	-74.663 ppb	8.6924	11.64%

Sequence No.: 4

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 09:08:31

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Rep#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4270.1	4270.1	97.2 %		09:10:44
1	Y RADIAL	4722.2	4722.2	99.19 %		09:10:24
1	Al 396.153Radial†	5015.6	5240.5	5123.3 ug/L	5123.3 ppb	09:10:24
1	Ca 317.933Radial†	2685.2	2748.1	5200.0 ug/L	5200.0 ppb	09:10:44
1	Fe 238.204 Radial†	444.5	449.0	5218.2 ug/L	5218.2 ppb	09:10:44
1	K 766.490 Radial†	29180.3	27435.6	5220.8 ug/L	5220.8 ppb	09:10:24
1	Mg 279.077 IEC†	125.9	128.1	5282.8 ug/L	5282.8 ppb	09:10:44
1	Na 589.592 Radial†	26587.3	28240.6	9955.4 ug/L	9955.4 ppb	09:10:24
1	Sr 421.552†	62098.4	63895.1	512.13 ug/L	512.13 ppb	09:10:24
1	Sc 361.383	835263.3	835263.3	102.01 %		09:11:41
1	Y 371.029	695826.9	695826.9	100.60 %		09:11:41
1	Ag 328.068†	98312.6	96192.6	502.56 ug/L	502.56 ppb	09:11:46
1	As 188.979†	917.6	926.3	512.83 ug/L	512.83 ppb	09:12:06
1	B 249.677†	17862.9	18048.7	504.04 ug/L	504.04 ppb	09:11:46
1	Ba 233.527†	54434.3	53363.7	501.08 ug/L	501.08 ppb	09:11:46
1	Be 313.107†	1200300.9	1180409.2	503.74 ug/L	503.74 ppb	09:11:41
1	Cd 226.502†	35059.9	34540.6	501.05 ug/L	501.05 ppb	09:11:46
1	Co 228.616†	20023.4	19675.5	508.65 ug/L	508.65 ppb	09:11:46
1	Cr 267.716†	38027.8	37207.9	500.02 ug/L	500.02 ppb	09:11:46
1	Cu 324.752†	158463.8	149793.1	494.54 ug/L	494.54 ppb	09:11:46
1	Mn 257.610†	382150.2	374240.2	492.36 ug/L	492.36 ppb	09:11:46
1	Mo 202.031†	5765.9	5643.9	502.16 ug/L	502.16 ppb	09:12:06
1	Ni 231.604†	16343.9	15938.2	505.85 ug/L	505.85 ppb	09:11:46
1	P 214.914†	3636.1	3377.2	2419.3 ug/L	2419.3 ppb	09:12:06
1	Pb 220.353†	3269.8	3263.8	502.86 ug/L	502.86 ppb	09:12:06
1	S 181.975 Axial†	600.7	558.7	999.26 ug/L	999.26 ppb	09:12:06
1	Sb 206.836†	1248.4	1200.2	520.17 ug/L	520.17 ppb	09:12:06
1	Se 196.026†	601.5	606.7	523.56 ug/L	523.56 ppb	09:12:06
1	Si 251.611†	67607.5	65788.7	2491.4 ug/L	2491.4 ppb	09:11:46
1	Sn 189.927†	2258.0	2206.4	501.31 ug/L	501.31 ppb	09:12:06
1	Ti 334.940†	286341.1	281827.0	489.97 ug/L	489.97 ppb	09:11:46
1	Tl 190.801†	1304.7	1308.1	509.32 ug/L	509.32 ppb	09:12:06
1	U 409.014†	14816.5	16729.1	505.82 ug/L	505.82 ppb	09:11:46
1	V 292.402†	62225.1	62317.9	504.32 ug/L	504.32 ppb	09:11:46
1	Zn 213.857†	42974.6	41558.7	498.88 ug/L	498.88 ppb	09:11:46
1	SiO2†	67784.3	65950.9	5368.7 ug/L	5368.7 ppb	09:13:13
2	Sc Radial	4267.1	4267.1	97.1 %		09:11:09
2	Y RADIAL	4754.5	4754.5	99.87 %		09:10:49
2	Al 396.153Radial†	5038.4	5267.6	5150.2 ug/L	5150.2 ppb	09:10:49
2	Ca 317.933Radial†	2668.0	2732.4	5170.2 ug/L	5170.2 ppb	09:11:09
2	Fe 238.204 Radial†	442.2	447.0	5194.2 ug/L	5194.2 ppb	09:11:09
2	K 766.490 Radial†	29100.8	27375.1	5209.4 ug/L	5209.4 ppb	09:10:49
2	Mg 279.077 IEC†	129.6	131.9	5441.6 ug/L	5441.6 ppb	09:11:09
2	Na 589.592 Radial†	26364.9	28031.0	9881.5 ug/L	9881.5 ppb	09:10:49
2	Sr 421.552†	62039.1	63879.7	512.00 ug/L	512.00 ppb	09:10:49
2	Sc 361.383	836951.4	836951.4	102.21 %		09:12:12
2	Y 371.029	697139.4	697139.4	100.79 %		09:12:12
2	Ag 328.068†	97894.3	95589.0	499.41 ug/L	499.41 ppb	09:12:17
2	As 188.979†	901.5	908.8	503.18 ug/L	503.18 ppb	09:12:37
2	B 249.677†	17816.6	17968.1	501.79 ug/L	501.79 ppb	09:12:17
2	Ba 233.527†	54115.2	52943.9	497.14 ug/L	497.14 ppb	09:12:17
2	Be 313.107†	1204879.6	1182515.5	504.63 ug/L	504.63 ppb	09:12:12
2	Cd 226.502†	34879.3	34294.5	497.48 ug/L	497.48 ppb	09:12:17
2	Co 228.616†	19921.4	19536.2	505.04 ug/L	505.04 ppb	09:12:17
2	Cr 267.716†	37895.4	37003.2	497.27 ug/L	497.27 ppb	09:12:17
2	Cu 324.752†	157529.2	148565.4	490.48 ug/L	490.48 ppb	09:12:17
2	Mn 257.610†	380465.2	371836.1	489.19 ug/L	489.19 ppb	09:12:17
2	Mo 202.031†	5705.9	5573.8	495.93 ug/L	495.93 ppb	09:12:37
2	Ni 231.604†	16330.3	15892.5	504.40 ug/L	504.40 ppb	09:12:17

2	P 214.914†	3580.1	3315.3	2373.9 ug/L	2373.9 ppb	09:12:37
2	Pb 220.353†	3237.2	3225.4	496.97 ug/L	496.97 ppb	09:12:37
2	S 181.975 Axial†	591.9	548.9	981.65 ug/L	981.65 ppb	09:12:37
2	Sb 206.836†	1238.0	1187.5	514.66 ug/L	514.66 ppb	09:12:37
2	Se 196.026†	596.5	600.5	518.35 ug/L	518.35 ppb	09:12:37
2	Si 251.611†	67153.8	65211.2	2469.5 ug/L	2469.5 ppb	09:12:17
2	Sn 189.927†	2240.3	2184.6	496.37 ug/L	496.37 ppb	09:12:37
2	Ti 334.940†	284868.9	279820.4	486.47 ug/L	486.47 ppb	09:12:17
2	Tl 190.801†	1280.9	1282.3	499.31 ug/L	499.31 ppb	09:12:37
2	U 409.014†	14705.3	16591.0	501.64 ug/L	501.64 ppb	09:12:17
2	V 292.402†	62071.6	62044.7	502.05 ug/L	502.05 ppb	09:12:17
2	Zn 213.857†	42755.3	41259.3	495.27 ug/L	495.27 ppb	09:12:17
2	SiO2†	68107.0	66132.6	5383.7 ug/L	5383.7 ppb	09:13:18
3	Sc Radial	4261.7	4261.7	97.0 %		09:11:34
3	Y RADIAL	4762.6	4762.6	100.0 %		09:11:14
3	Al 396.153Radial†	5041.6	5277.5	5159.8 ug/L	5159.8 ppb	09:11:14
3	Ca 317.933Radial†	2678.0	2746.1	5196.2 ug/L	5196.2 ppb	09:11:34
3	Fe 238.204 Radial†	449.7	455.3	5290.6 ug/L	5290.6 ppb	09:11:34
3	K 766.490 Radial†	29132.2	27445.0	5222.7 ug/L	5222.7 ppb	09:11:14
3	Mg 279.077 IEC†	130.7	133.3	5498.4 ug/L	5498.4 ppb	09:11:34
3	Na 589.592 Radial†	26247.0	27943.4	9850.6 ug/L	9850.6 ppb	09:11:14
3	Sr 421.552†	62138.9	64062.5	513.47 ug/L	513.47 ppb	09:11:14
3	Sc 361.383	831297.4	831297.4	101.52 %		09:12:42
3	Y 371.029	692170.0	692170.0	100.08 %		09:12:42
3	Ag 328.068†	98276.5	96616.8	504.80 ug/L	504.80 ppb	09:12:48
3	As 188.979†	900.4	913.7	505.94 ug/L	505.94 ppb	09:13:08
3	B 249.677†	17875.0	18144.2	506.70 ug/L	506.70 ppb	09:12:48
3	Ba 233.527†	54411.2	53595.5	503.26 ug/L	503.26 ppb	09:12:48
3	Be 313.107†	1194741.7	1180547.0	503.80 ug/L	503.80 ppb	09:12:42
3	Cd 226.502†	35068.4	34712.9	503.55 ug/L	503.55 ppb	09:12:48
3	Co 228.616†	19944.2	19691.1	509.03 ug/L	509.03 ppb	09:12:48
3	Cr 267.716†	38090.4	37447.4	503.24 ug/L	503.24 ppb	09:12:48
3	Cu 324.752†	158408.5	150479.8	496.81 ug/L	496.81 ppb	09:12:48
3	Mn 257.610†	381751.2	375634.4	494.19 ug/L	494.19 ppb	09:12:48
3	Mo 202.031†	5698.4	5604.4	498.66 ug/L	498.66 ppb	09:13:08
3	Ni 231.604†	16336.3	16007.2	508.04 ug/L	508.04 ppb	09:12:48
3	P 214.914†	3559.0	3318.3	2374.9 ug/L	2374.9 ppb	09:13:08
3	Pb 220.353†	3230.4	3240.2	499.23 ug/L	499.23 ppb	09:13:08
3	S 181.975 Axial†	591.9	552.9	988.76 ug/L	988.76 ppb	09:13:08
3	Sb 206.836†	1233.3	1191.2	516.26 ug/L	516.26 ppb	09:13:08
3	Se 196.026†	600.5	608.5	525.25 ug/L	525.25 ppb	09:13:08
3	Si 251.611†	67511.8	66010.7	2499.8 ug/L	2499.8 ppb	09:12:48
3	Sn 189.927†	2230.4	2189.7	497.53 ug/L	497.53 ppb	09:13:08
3	Ti 334.940†	286639.6	283460.1	492.80 ug/L	492.80 ppb	09:12:48
3	Tl 190.801†	1274.1	1284.1	500.05 ug/L	500.05 ppb	09:13:08
3	U 409.014†	14726.7	16710.0	505.23 ug/L	505.23 ppb	09:12:48
3	V 292.402†	62390.5	62771.8	507.88 ug/L	507.88 ppb	09:12:48
3	Zn 213.857†	42899.3	41685.6	500.39 ug/L	500.39 ppb	09:12:48
3	SiO2†	68263.8	66740.2	5433.2 ug/L	5433.2 ppb	09:13:23

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	834504.1	101.91 %		0.354			0.35%
Sc Radial	4266.3	97.1 %		0.10			0.10%
Y 371.029	695045.4	100.49 %		0.372			0.37%
Y RADIAL	4746.4	99.70 %		0.449			0.45%
Ag 328.068†	96132.8	502.25 ug/L		2.706	502.25 ppb	2.706	0.54%
QC value within limits for Ag 328.068 Recovery = 100.45%							
Al 396.153Radial†	5261.9	5144.4 ug/L		18.91	5144.4 ppb	18.91	0.37%
QC value within limits for Al 396.153Radial Recovery = 102.89%							
As 188.979†	916.3	507.32 ug/L		4.968	507.32 ppb	4.968	0.98%
QC value within limits for As 188.979 Recovery = 101.46%							
B 249.677†	18053.7	504.18 ug/L		2.459	504.18 ppb	2.459	0.49%
QC value within limits for B 249.677 Recovery = 100.84%							
Ba 233.527†	53301.0	500.49 ug/L		3.101	500.49 ppb	3.101	0.62%
QC value within limits for Ba 233.527 Recovery = 100.10%							
Be 313.107†	1181157.2	504.06 ug/L		0.496	504.06 ppb	0.496	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%							
Ca 317.933Radial†	2742.2	5188.8 ug/L		16.23	5188.8 ppb	16.23	0.31%

QC value within limits for Ca 317.933 Radial Recovery = 103.78%

Cd 226.502†	34516.0	500.69 ug/L	3.048	500.69 ppb	3.048	0.61%
QC value within limits for Cd 226.502 Recovery = 100.14%						
Co 228.616†	19634.3	507.57 ug/L	2.204	507.57 ppb	2.204	0.43%
QC value within limits for Co 228.616 Recovery = 101.51%						
Cr 267.716†	37219.5	500.17 ug/L	2.991	500.17 ppb	2.991	0.60%
QC value within limits for Cr 267.716 Recovery = 100.03%						
Cu 324.752†	149612.8	493.94 ug/L	3.203	493.94 ppb	3.203	0.65%
QC value within limits for Cu 324.752 Recovery = 98.79%						
Fe 238.204 Radial†	450.4	5234.3 ug/L	50.20	5234.3 ppb	50.20	0.96%
QC value within limits for Fe 238.204 Radial Recovery = 104.69%						
K 766.490 Radial†	27418.6	5217.6 ug/L	7.22	5217.6 ppb	7.22	0.14%
QC value within limits for K 766.490 Radial Recovery = 104.35%						
Mg 279.077 IEC†	131.1	5407.6 ug/L	111.73	5407.6 ppb	111.73	2.07%
QC value within limits for Mg 279.077 IEC Recovery = 108.15%						
Mn 257.610†	373903.6	491.91 ug/L	2.530	491.91 ppb	2.530	0.51%
QC value within limits for Mn 257.610 Recovery = 98.38%						
Mo 202.031†	5607.4	498.92 ug/L	3.125	498.92 ppb	3.125	0.63%
QC value within limits for Mo 202.031 Recovery = 99.78%						
Na 589.592 Radial†	28071.7	9895.9 ug/L	53.83	9895.9 ppb	53.83	0.54%
QC value within limits for Na 589.592 Radial Recovery = 98.96%						
Ni 231.604†	15946.0	506.09 ug/L	1.832	506.09 ppb	1.832	0.36%
QC value within limits for Ni 231.604 Recovery = 101.22%						
P 214.914†	3336.9	2389.4 ug/L	25.93	2389.4 ppb	25.93	1.09%
QC value within limits for P 214.914 Recovery = 95.57%						
Pb 220.353†	3243.1	499.68 ug/L	2.973	499.68 ppb	2.973	0.59%
QC value within limits for Pb 220.353 Recovery = 99.94%						
S 181.975 Axial†	553.5	989.89 ug/L	8.861	989.89 ppb	8.861	0.90%
QC value within limits for S 181.975 Axial Recovery = 98.99%						
Sb 206.836†	1193.0	517.03 ug/L	2.832	517.03 ppb	2.832	0.55%
QC value within limits for Sb 206.836 Recovery = 103.41%						
Se 196.026†	605.2	522.39 ug/L	3.594	522.39 ppb	3.594	0.69%
QC value within limits for Se 196.026 Recovery = 104.48%						
Si 251.611†	65670.2	2486.9 ug/L	15.64	2486.9 ppb	15.64	0.63%
QC value within limits for Si 251.611 Recovery = 99.48%						
Sn 189.927†	2193.6	498.40 ug/L	2.582	498.40 ppb	2.582	0.52%
QC value within limits for Sn 189.927 Recovery = 99.68%						
Sr 421.552†	63945.7	512.53 ug/L	0.813	512.53 ppb	0.813	0.16%
QC value within limits for Sr 421.552 Recovery = 102.51%						
Ti 334.940†	281702.5	489.75 ug/L	3.169	489.75 ppb	3.169	0.65%
QC value within limits for Ti 334.940 Recovery = 97.95%						
Tl 190.801†	1291.5	502.89 ug/L	5.573	502.89 ppb	5.573	1.11%
QC value within limits for Tl 190.801 Recovery = 100.58%						
U 409.014†	16676.7	504.23 ug/L	2.261	504.23 ppb	2.261	0.45%
QC value within limits for U 409.014 Recovery = 100.85%						
V 292.402†	62378.1	504.75 ug/L	2.939	504.75 ppb	2.939	0.58%
QC value within limits for V 292.402 Recovery = 100.95%						
Zn 213.857†	41501.2	498.18 ug/L	2.631	498.18 ppb	2.631	0.53%
QC value within limits for Zn 213.857 Recovery = 99.64%						
SiO2†	66274.6	5395.2 ug/L	33.76	5395.2 ppb	33.76	0.63%
QC value within limits for SiO2 Recovery = 100.89%						

All analyte(s) passed QC.

Sequence No.: 5

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 09:15:34

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4271.6	4271.6	97.2 %		09:17:46
1	Y RADIAL	4777.6	4777.6	100.4 %		09:17:26
1	Al 396.153Radial†	-79.6	-3.9	-3.8423 ug/L	-3.8423 ppb	09:17:46
1	Ca 317.933Radial†	19.6	4.5	8.4521 ug/L	8.4521 ppb	09:17:46
1	Fe 238.204 Radial†	6.5	-1.8	-20.460 ug/L	-20.460 ppb	09:17:46
1	K 766.490 Radial†	2764.2	245.3	46.730 ug/L	46.730 ppb	09:17:26
1	Mg 279.077 IEC†	2.5	1.0	42.322 ug/L	42.322 ppb	09:17:46
1	Na 589.592 Radial†	-782.7	69.8	24.603 ug/L	24.603 ppb	09:17:26
1	Sr 421.552†	33.1	13.2	0.1058 ug/L	0.1058 ppb	09:17:26
1	Sc 361.383	814482.5	814482.5	99.470 %		09:18:43
1	Y 371.029	687746.5	687746.5	99.436 %		09:18:43
1	Ag 328.068†	219.3	35.3	0.1775 ug/L	0.1775 ppb	09:18:43
1	As 188.979†	-17.3	9.4	5.1795 ug/L	5.1795 ppb	09:19:03
1	B 249.677†	-3.5	533.8	14.980 ug/L	14.980 ppb	09:19:03
1	Ba 233.527†	9.2	10.0	0.0933 ug/L	0.0933 ppb	09:19:03
1	Be 313.107†	-3582.3	129.6	0.0550 ug/L	0.0550 ppb	09:18:43
1	Cd 226.502†	-164.5	5.3	0.0788 ug/L	0.0788 ppb	09:19:03
1	Co 228.616†	-51.3	-5.3	-0.1349 ug/L	-0.1349 ppb	09:19:03
1	Cr 267.716†	75.2	4.1	0.0529 ug/L	0.0529 ppb	09:19:03
1	Cu 324.752†	5609.0	87.0	0.2858 ug/L	0.2858 ppb	09:18:43
1	Mn 257.610†	401.8	14.9	0.0159 ug/L	0.0159 ppb	09:19:03
1	Mo 202.031†	20.3	11.9	1.0542 ug/L	1.0542 ppb	09:19:03
1	Ni 231.604†	83.5	-0.1	-0.0036 ug/L	-0.0036 ppb	09:19:03
1	P 214.914†	187.8	1.5	1.0765 ug/L	1.0765 ppb	09:19:03
1	Pb 220.353†	-53.2	4.8	0.7489 ug/L	0.7489 ppb	09:19:03
1	S 181.975 Axial†	27.3	-2.7	-4.8368 ug/L	-4.8368 ppb	09:19:03
1	Sb 206.836†	39.0	15.5	6.5154 ug/L	6.5154 ppb	09:19:03
1	Se 196.026†	-12.3	4.6	3.7725 ug/L	3.7725 ppb	09:19:03
1	Si 251.611†	533.6	48.3	1.8197 ug/L	1.8197 ppb	09:19:03
1	Sn 189.927†	8.7	1.6	0.3694 ug/L	0.3694 ppb	09:19:03
1	Ti 334.940†	-1171.1	-56.1	-0.1001 ug/L	-0.1001 ppb	09:18:43
1	Tl 190.801†	-28.6	0.4	0.1418 ug/L	0.1418 ppb	09:19:03
1	U 409.014†	-2178.9	13.7	0.4170 ug/L	0.4170 ppb	09:18:43
1	V 292.402†	-1286.3	24.2	0.2131 ug/L	0.2131 ppb	09:18:43
1	Zn 213.857†	690.5	124.1	1.5064 ug/L	1.5064 ppb	09:19:03
1	SiO2†	541.5	45.1	3.6495 ug/L	3.6495 ppb	09:19:59
2	Sc Radial	4262.8	4262.8	97.0 %		09:18:11
2	Y RADIAL	4796.9	4796.9	100.8 %		09:17:51
2	Al 396.153Radial†	-78.0	-2.3	-2.3148 ug/L	-2.3148 ppb	09:18:11
2	Ca 317.933Radial†	19.3	4.3	8.0475 ug/L	8.0475 ppb	09:18:11
2	Fe 238.204 Radial†	7.2	-1.0	-11.440 ug/L	-11.440 ppb	09:18:11
2	K 766.490 Radial†	2748.7	235.2	44.821 ug/L	44.821 ppb	09:17:51
2	Mg 279.077 IEC†	2.8	1.3	55.437 ug/L	55.437 ppb	09:18:11
2	Na 589.592 Radial†	-871.9	-23.9	-8.4179 ug/L	-8.4179 ppb	09:17:51
2	Sr 421.552†	16.5	-3.9	-0.0310 ug/L	-0.0310 ppb	09:17:51
2	Sc 361.383	817570.3	817570.3	99.847 %		09:19:08
2	Y 371.029	690582.6	690582.6	99.846 %		09:19:08
2	Ag 328.068†	196.2	11.4	0.0530 ug/L	0.0530 ppb	09:19:08
2	As 188.979†	-27.6	-0.8	-0.4463 ug/L	-0.4463 ppb	09:19:28
2	B 249.677†	-4.1	533.3	14.962 ug/L	14.962 ppb	09:19:28
2	Ba 233.527†	26.6	27.4	0.2550 ug/L	0.2550 ppb	09:19:28
2	Be 313.107†	-3673.1	52.3	0.0223 ug/L	0.0223 ppb	09:19:08
2	Cd 226.502†	-163.4	7.0	0.1028 ug/L	0.1028 ppb	09:19:28
2	Co 228.616†	-52.3	-6.2	-0.1578 ug/L	-0.1578 ppb	09:19:28
2	Cr 267.716†	111.6	40.2	0.5373 ug/L	0.5373 ppb	09:19:28
2	Cu 324.752†	5650.1	106.8	0.3513 ug/L	0.3513 ppb	09:19:08
2	Mn 257.610†	409.8	21.4	0.0247 ug/L	0.0247 ppb	09:19:28
2	Mo 202.031†	15.6	7.1	0.6264 ug/L	0.6264 ppb	09:19:28
2	Ni 231.604†	69.7	-14.3	-0.4542 ug/L	-0.4542 ppb	09:19:28

2	P 214.914†	180.2	-6.8	-5.1075 ug/L	-5.1075 ppb	09:19:28
2	Pb 220.353†	-55.0	3.2	0.4903 ug/L	0.4903 ppb	09:19:28
2	S 181.975 Axial†	28.5	-1.6	-2.9431 ug/L	-2.9431 ppb	09:19:28
2	Sb 206.836†	34.7	11.1	4.6710 ug/L	4.6710 ppb	09:19:28
2	Se 196.026†	-15.5	1.4	1.1515 ug/L	1.1515 ppb	09:19:28
2	Si 251.611†	555.3	68.0	2.5719 ug/L	2.5719 ppb	09:19:28
2	Sn 189.927†	8.7	1.6	0.3569 ug/L	0.3569 ppb	09:19:28
2	Ti 334.940†	-1114.5	5.0	0.0047 ug/L	0.0047 ppb	09:19:08
2	Tl 190.801†	-19.5	9.5	3.6905 ug/L	3.6905 ppb	09:19:28
2	U 409.014†	-2170.8	30.1	0.9119 ug/L	0.9119 ppb	09:19:08
2	V 292.402†	-1366.1	-50.8	-0.3922 ug/L	-0.3922 ppb	09:19:08
2	Zn 213.857†	683.1	114.1	1.3864 ug/L	1.3864 ppb	09:19:28
2	SiO2†	541.1	42.6	3.4608 ug/L	3.4608 ppb	09:20:04
3	Sc Radial	4286.3	4286.3	97.5 %		09:18:36
3	Y RADIAL	4854.7	4854.7	102.0 %		09:18:16
3	Al 396.153Radial†	-90.4	-14.6	-14.360 ug/L	-14.360 ppb	09:18:36
3	Ca 317.933Radial†	24.9	9.9	18.648 ug/L	18.648 ppb	09:18:36
3	Fe 238.204 Radial†	7.6	-0.7	-7.7386 ug/L	-7.7386 ppb	09:18:36
3	K 766.490 Radial†	2787.2	259.2	49.398 ug/L	49.398 ppb	09:18:16
3	Mg 279.077 IEC†	3.8	2.3	96.474 ug/L	96.474 ppb	09:18:36
3	Na 589.592 Radial†	-957.9	-107.1	-37.767 ug/L	-37.767 ppb	09:18:16
3	Sr 421.552†	10.2	-10.4	-0.0832 ug/L	-0.0832 ppb	09:18:16
3	Sc 361.383	814846.7	814846.7	99.514 %		09:19:34
3	Y 371.029	688863.2	688863.2	99.598 %		09:19:34
3	Ag 328.068†	112.3	-72.3	-0.3809 ug/L	-0.3809 ppb	09:19:34
3	As 188.979†	-19.8	6.9	3.8016 ug/L	3.8016 ppb	09:19:54
3	B 249.677†	-11.6	525.7	14.748 ug/L	14.748 ppb	09:19:54
3	Ba 233.527†	13.2	14.0	0.1296 ug/L	0.1296 ppb	09:19:54
3	Be 313.107†	-3646.0	67.2	0.0286 ug/L	0.0286 ppb	09:19:34
3	Cd 226.502†	-174.8	-5.1	-0.0723 ug/L	-0.0723 ppb	09:19:54
3	Co 228.616†	-45.4	0.6	0.0137 ug/L	0.0137 ppb	09:19:54
3	Cr 267.716†	81.6	10.5	0.1380 ug/L	0.1380 ppb	09:19:54
3	Cu 324.752†	5635.8	111.3	0.3662 ug/L	0.3662 ppb	09:19:34
3	Mn 257.610†	399.2	12.1	0.0112 ug/L	0.0112 ppb	09:19:54
3	Mo 202.031†	4.4	-4.1	-0.3630 ug/L	-0.3630 ppb	09:19:54
3	Ni 231.604†	77.0	-6.7	-0.2117 ug/L	-0.2117 ppb	09:19:54
3	P 214.914†	186.2	-0.2	-0.1874 ug/L	-0.1874 ppb	09:19:54
3	Pb 220.353†	-67.8	-9.8	-1.5113 ug/L	-1.5113 ppb	09:19:54
3	S 181.975 Axial†	31.5	1.5	2.6801 ug/L	2.6801 ppb	09:19:54
3	Sb 206.836†	26.2	2.7	1.1279 ug/L	1.1279 ppb	09:19:54
3	Se 196.026†	-24.8	-7.9	-6.6490 ug/L	-6.6490 ppb	09:19:54
3	Si 251.611†	539.9	54.4	2.0696 ug/L	2.0696 ppb	09:19:54
3	Sn 189.927†	11.4	4.3	0.9890 ug/L	0.9890 ppb	09:19:54
3	Ti 334.940†	-1124.0	-8.2	-0.0205 ug/L	-0.0205 ppb	09:19:34
3	Tl 190.801†	-21.4	7.6	2.9459 ug/L	2.9459 ppb	09:19:54
3	U 409.014†	-2140.4	53.3	1.6188 ug/L	1.6188 ppb	09:19:34
3	V 292.402†	-1367.7	-56.9	-0.4537 ug/L	-0.4537 ppb	09:19:34
3	Zn 213.857†	679.6	112.8	1.3688 ug/L	1.3688 ppb	09:19:54
3	SiO2†	581.9	85.4	6.9819 ug/L	6.9819 ppb	09:20:09

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	815633.2	99.610 %		0.2061			0.21%
Sc Radial	4273.6	97.2 %		0.27			0.28%
Y 371.029	689064.1	99.627 %		0.2066			0.21%
Y RADIAL	4809.8	101.0 %		0.84			0.83%
Ag 328.068†	-8.5	-0.0502 ug/L		0.29315	-0.0502 ppb	0.29315	584.39%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-6.9	-6.8391 ug/L		6.55807	-6.8391 ppb	6.55807	95.89%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.2	2.8450 ug/L		2.93238	2.8450 ppb	2.93238	103.07%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	530.9	14.897 ug/L		0.1288	14.897 ppb	0.1288	0.86%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	17.1	0.1593 ug/L		0.08483	0.1593 ppb	0.08483	53.25%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	83.0	0.0353 ug/L		0.01733	0.0353 ppb	0.01733	49.14%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	6.2	11.716 ug/L		6.0069	11.716 ppb	6.0069	51.27%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	2.4	0.0364 ug/L	0.09492	0.0364 ppb	0.09492	260.66%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	-3.6	-0.0930 ug/L	0.09311	-0.0930 ppb	0.09311	100.13%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	18.3	0.2428 ug/L	0.25864	0.2428 ppb	0.25864	106.54%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	101.7	0.3344 ug/L	0.04278	0.3344 ppb	0.04278	12.79%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-1.1	-13.213 ug/L	6.5433	-13.213 ppb	6.5433	49.52%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	246.6	46.983 ug/L	2.2993	46.983 ppb	2.2993	4.89%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	1.6	64.745 ug/L	28.2505	64.745 ppb	28.2505	43.63%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	16.1	0.0173 ug/L	0.00685	0.0173 ppb	0.00685	39.68%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.0	0.4392 ug/L	0.72693	0.4392 ppb	0.72693	165.51%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-20.4	-7.1939 ug/L	31.20291	-7.1939 ppb	31.20291	433.74%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-7.0	-0.2232 ug/L	0.22549	-0.2232 ppb	0.22549	101.04%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-1.8	-1.4062 ug/L	3.26718	-1.4062 ppb	3.26718	232.35%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	-0.6	-0.0907 ug/L	1.23706	-0.0907 ppb	1.23706	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-1.0	-1.6999 ug/L	3.90961	-1.6999 ppb	3.90961	229.99%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	9.8	4.1048 ug/L	2.73805	4.1048 ppb	2.73805	66.70%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.6	-0.5750 ug/L	5.42099	-0.5750 ppb	5.42099	942.80%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	56.9	2.1537 ug/L	0.38312	2.1537 ppb	0.38312	17.79%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	2.5	0.5717 ug/L	0.36138	0.5717 ppb	0.36138	63.21%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-0.3	-0.0028 ug/L	0.09757	-0.0028 ppb	0.09757	>999.9%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	-19.8	-0.0386 ug/L	0.05470	-0.0386 ppb	0.05470	141.60%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.8	2.2594 ug/L	1.87131	2.2594 ppb	1.87131	82.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	32.4	0.9826 ug/L	0.60400	0.9826 ppb	0.60400	61.47%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-27.8	-0.2109 ug/L	0.36853	-0.2109 ppb	0.36853	174.72%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	117.0	1.4205 ug/L	0.07489	1.4205 ppb	0.07489	5.27%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	57.7	4.6974 ug/L	1.98072	4.6974 ppb	1.98072	42.17%
QC value within limits for SiO2 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 8

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 10:18:17

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4308.1	4308.1	98.0 %		10:20:30
1	Y RADIAL	4796.2	4796.2	100.7 %		10:20:10
1	Al 396.153Radial†	5020.5	5200.0	5083.7 ug/L	5083.7 ppb	10:20:10
1	Ca 317.933Radial†	2703.2	2742.1	5188.6 ug/L	5188.6 ppb	10:20:30
1	Fe 238.204 Radial†	458.1	458.9	5332.4 ug/L	5332.4 ppb	10:20:30
1	K 766.490 Radial†	29265.8	27258.0	5186.8 ug/L	5186.8 ppb	10:20:10
1	Mg 279.077 IEC†	128.8	129.9	5357.8 ug/L	5357.8 ppb	10:20:30
1	Na 589.592 Radial†	28262.5	29708.3	10473 ug/L	10473 ppb	10:20:10
1	Sr 421.552†	64065.1	65338.0	523.69 ug/L	523.69 ppb	10:20:10
1	Sc 361.383	840877.0	840877.0	102.69 %		10:21:27
1	Y 371.029	700106.4	700106.4	101.22 %		10:21:27
1	Ag 328.068†	98277.1	95514.6	499.06 ug/L	499.06 ppb	10:21:32
1	As 188.979†	922.7	925.3	512.29 ug/L	512.29 ppb	10:21:52
1	B 249.677†	17605.6	17681.2	493.72 ug/L	493.72 ppb	10:21:32
1	Ba 233.527†	54539.2	53109.6	498.70 ug/L	498.70 ppb	10:21:32
1	Be 313.107†	1210018.3	1182016.3	504.42 ug/L	504.42 ppb	10:21:27
1	Cd 226.502†	35152.8	34401.5	499.02 ug/L	499.02 ppb	10:21:32
1	Co 228.616†	20041.6	19562.2	505.71 ug/L	505.71 ppb	10:21:32
1	Cr 267.716†	38225.6	37151.6	499.27 ug/L	499.27 ppb	10:21:32
1	Cu 324.752†	158350.9	148646.1	490.76 ug/L	490.76 ppb	10:21:32
1	Mn 257.610†	390746.5	380110.0	500.08 ug/L	500.08 ppb	10:21:27
1	Mo 202.031†	5748.3	5589.0	497.29 ug/L	497.29 ppb	10:21:52
1	Ni 231.604†	16393.2	15879.2	503.98 ug/L	503.98 ppb	10:21:32
1	P 214.914†	3610.4	3328.4	2383.6 ug/L	2383.6 ppb	10:21:52
1	Pb 220.353†	3267.4	3240.1	499.18 ug/L	499.18 ppb	10:21:52
1	S 181.975 Axial†	599.3	553.4	989.74 ug/L	989.74 ppb	10:21:52
1	Sb 206.836†	1241.7	1185.5	513.90 ug/L	513.90 ppb	10:21:52
1	Se 196.026†	601.0	602.2	520.13 ug/L	520.13 ppb	10:21:52
1	Si 251.611†	67756.7	65491.6	2480.1 ug/L	2480.1 ppb	10:21:32
1	Sn 189.927†	2265.7	2199.2	499.66 ug/L	499.66 ppb	10:21:52
1	Ti 334.940†	286425.2	280034.8	486.85 ug/L	486.85 ppb	10:21:32
1	Tl 190.801†	1289.6	1284.9	500.36 ug/L	500.36 ppb	10:21:52
1	U 409.014†	14815.8	16631.5	502.85 ug/L	502.85 ppb	10:21:32
1	V 292.402†	62323.9	62006.9	501.75 ug/L	501.75 ppb	10:21:32
1	Zn 213.857†	42998.2	41300.5	495.75 ug/L	495.75 ppb	10:21:32
1	SiO2†	68433.6	66139.6	5384.2 ug/L	5384.2 ppb	10:23:00
2	Sc Radial	4303.6	4303.6	97.9 %		10:20:55
2	Y RADIAL	4888.7	4888.7	102.7 %		10:20:35
2	Al 396.153Radial†	5077.0	5263.0	5145.6 ug/L	5145.6 ppb	10:20:35
2	Ca 317.933Radial†	2703.5	2745.3	5194.6 ug/L	5194.6 ppb	10:20:55
2	Fe 238.204 Radial†	454.5	455.7	5294.9 ug/L	5294.9 ppb	10:20:55
2	K 766.490 Radial†	29796.5	27831.0	5295.9 ug/L	5295.9 ppb	10:20:35
2	Mg 279.077 IEC†	129.3	130.5	5384.2 ug/L	5384.2 ppb	10:20:55
2	Na 589.592 Radial†	28793.9	30281.0	10675 ug/L	10675 ppb	10:20:35
2	Sr 421.552†	65177.3	66541.7	533.34 ug/L	533.34 ppb	10:20:35
2	Sc 361.383	841989.2	841989.2	102.83 %		10:21:58
2	Y 371.029	701176.2	701176.2	101.38 %		10:21:58
2	Ag 328.068†	98955.0	96047.5	501.82 ug/L	501.82 ppb	10:22:03
2	As 188.979†	911.1	912.8	505.43 ug/L	505.43 ppb	10:22:23
2	B 249.677†	17727.0	17776.7	496.40 ug/L	496.40 ppb	10:22:03
2	Ba 233.527†	54790.6	53284.0	500.33 ug/L	500.33 ppb	10:22:03
2	Be 313.107†	1215519.9	1185810.1	506.04 ug/L	506.04 ppb	10:21:58
2	Cd 226.502†	35405.2	34601.8	501.93 ug/L	501.93 ppb	10:22:03
2	Co 228.616†	20165.2	19656.6	508.15 ug/L	508.15 ppb	10:22:03
2	Cr 267.716†	38383.2	37255.7	500.66 ug/L	500.66 ppb	10:22:03
2	Cu 324.752†	159218.3	149285.9	492.87 ug/L	492.87 ppb	10:22:03
2	Mn 257.610†	392163.2	380985.2	501.23 ug/L	501.23 ppb	10:21:58
2	Mo 202.031†	5763.9	5596.8	497.98 ug/L	497.98 ppb	10:22:23
2	Ni 231.604†	16452.0	15915.3	505.12 ug/L	505.12 ppb	10:22:03

2	P 214.914†	3642.1	3354.6	2402.7 ug/L	2402.7 ppb	10:22:23
2	Pb 220.353†	3262.6	3231.1	497.83 ug/L	497.83 ppb	10:22:23
2	S 181.975 Axial†	607.5	560.6	1002.6 ug/L	1002.6 ppb	10:22:23
2	Sb 206.836†	1261.5	1203.1	521.27 ug/L	521.27 ppb	10:22:23
2	Se 196.026†	606.4	606.7	523.77 ug/L	523.77 ppb	10:22:23
2	Si 251.611†	68049.2	65688.9	2487.6 ug/L	2487.6 ppb	10:22:03
2	Sn 189.927†	2268.5	2198.9	499.61 ug/L	499.61 ppb	10:22:23
2	Ti 334.940†	288221.2	281413.1	489.25 ug/L	489.25 ppb	10:22:03
2	Tl 190.801†	1312.0	1305.0	508.15 ug/L	508.15 ppb	10:22:23
2	U 409.014†	14914.3	16708.1	505.18 ug/L	505.18 ppb	10:22:03
2	V 292.402†	62602.0	62197.1	503.29 ug/L	503.29 ppb	10:22:03
2	Zn 213.857†	43197.0	41438.5	497.42 ug/L	497.42 ppb	10:22:03
2	SiO2†	68330.5	65951.3	5368.8 ug/L	5368.8 ppb	10:23:05
3	Sc Radial	4308.5	4308.5	98.0 %		10:21:20
3	Y RADIAL	4759.8	4759.8	99.98 %		10:21:00
3	Al 396.153Radial†	4982.1	5160.3	5044.7 ug/L	5044.7 ppb	10:21:00
3	Ca 317.933Radial†	2717.2	2756.1	5215.0 ug/L	5215.0 ppb	10:21:20
3	Fe 238.204 Radial†	458.5	459.2	5336.0 ug/L	5336.0 ppb	10:21:20
3	K 766.490 Radial†	29151.9	27138.8	5164.1 ug/L	5164.1 ppb	10:21:00
3	Mg 279.077 IEC†	130.2	131.2	5413.8 ug/L	5413.8 ppb	10:21:20
3	Na 589.592 Radial†	27882.2	29317.5	10335 ug/L	10335 ppb	10:21:00
3	Sr 421.552†	63477.4	64731.9	518.84 ug/L	518.84 ppb	10:21:00
3	Sc 361.383	841584.9	841584.9	102.78 %		10:22:29
3	Y 371.029	700121.4	700121.4	101.23 %		10:22:29
3	Ag 328.068†	97908.8	95075.7	496.77 ug/L	496.77 ppb	10:22:34
3	As 188.979†	915.3	917.4	507.90 ug/L	507.90 ppb	10:22:54
3	B 249.677†	17549.2	17611.9	491.79 ug/L	491.79 ppb	10:22:34
3	Ba 233.527†	54162.2	52698.1	494.84 ug/L	494.84 ppb	10:22:34
3	Be 313.107†	1208532.2	1179579.3	503.37 ug/L	503.37 ppb	10:22:29
3	Cd 226.502†	34838.9	34067.3	494.17 ug/L	494.17 ppb	10:22:34
3	Co 228.616†	19861.8	19370.8	500.77 ug/L	500.77 ppb	10:22:34
3	Cr 267.716†	37945.5	36847.8	495.19 ug/L	495.19 ppb	10:22:34
3	Cu 324.752†	157797.9	147978.4	488.55 ug/L	488.55 ppb	10:22:34
3	Mn 257.610†	390735.5	379779.2	499.65 ug/L	499.65 ppb	10:22:29
3	Mo 202.031†	5752.3	5588.2	497.22 ug/L	497.22 ppb	10:22:54
3	Ni 231.604†	16284.0	15759.5	500.18 ug/L	500.18 ppb	10:22:34
3	P 214.914†	3613.2	3328.2	2383.8 ug/L	2383.8 ppb	10:22:54
3	Pb 220.353†	3273.8	3243.6	499.72 ug/L	499.72 ppb	10:22:54
3	S 181.975 Axial†	608.0	561.3	1004.0 ug/L	1004.0 ppb	10:22:54
3	Sb 206.836†	1261.0	1203.2	521.27 ug/L	521.27 ppb	10:22:54
3	Se 196.026†	609.0	609.5	526.24 ug/L	526.24 ppb	10:22:54
3	Si 251.611†	67209.5	64903.6	2457.8 ug/L	2457.8 ppb	10:22:34
3	Sn 189.927†	2261.1	2192.7	498.21 ug/L	498.21 ppb	10:22:54
3	Ti 334.940†	284900.4	278316.7	483.86 ug/L	483.86 ppb	10:22:34
3	Tl 190.801†	1308.4	1302.1	507.01 ug/L	507.01 ppb	10:22:54
3	U 409.014†	14819.6	16623.0	502.60 ug/L	502.60 ppb	10:22:34
3	V 292.402†	61893.7	61537.3	498.00 ug/L	498.00 ppb	10:22:34
3	Zn 213.857†	42671.0	40946.9	491.50 ug/L	491.50 ppb	10:22:34
3	SiO2†	68350.8	66003.0	5373.1 ug/L	5373.1 ppb	10:23:10

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841483.7	102.77 %	0.069			0.07%
Sc Radial	4306.7	98.0 %	0.06			0.06%
Y 371.029	700468.0	101.28 %	0.089			0.09%
Y RADIAL	4814.9	101.1 %	1.40			1.38%
Ag 328.068†	95546.0	499.22 ug/L	2.529	499.22 ppb	2.529	0.51%
QC value within limits for Ag 328.068 Recovery = 99.84%						
Al 396.153Radial†	5207.8	5091.3 ug/L	50.85	5091.3 ppb	50.85	1.00%
QC value within limits for Al 396.153Radial Recovery = 101.83%						
As 188.979†	918.5	508.54 ug/L	3.473	508.54 ppb	3.473	0.68%
QC value within limits for As 188.979 Recovery = 101.71%						
B 249.677†	17689.9	493.97 ug/L	2.314	493.97 ppb	2.314	0.47%
QC value within limits for B 249.677 Recovery = 98.79%						
Ba 233.527†	53030.6	497.96 ug/L	2.823	497.96 ppb	2.823	0.57%
QC value within limits for Ba 233.527 Recovery = 99.59%						
Be 313.107†	1182468.6	504.61 ug/L	1.343	504.61 ppb	1.343	0.27%
QC value within limits for Be 313.107 Recovery = 100.92%						
Ca 317.933Radial†	2747.8	5199.4 ug/L	13.84	5199.4 ppb	13.84	0.27%

QC value within limits for Ca 317.933 Radial Recovery = 103.99%

Cd 226.502†	34356.9	498.37 ug/L	3.922	498.37 ppb	3.922	0.79%
QC value within limits for Cd 226.502 Recovery = 99.67%						
Co 228.616†	19529.9	504.88 ug/L	3.759	504.88 ppb	3.759	0.74%
QC value within limits for Co 228.616 Recovery = 100.98%						
Cr 267.716†	37085.1	498.38 ug/L	2.844	498.38 ppb	2.844	0.57%
QC value within limits for Cr 267.716 Recovery = 99.68%						
Cu 324.752†	148636.8	490.73 ug/L	2.157	490.73 ppb	2.157	0.44%
QC value within limits for Cu 324.752 Recovery = 98.15%						
Fe 238.204 Radial†	457.9	5321.1 ug/L	22.78	5321.1 ppb	22.78	0.43%
QC value within limits for Fe 238.204 Radial Recovery = 106.42%						
K 766.490 Radial†	27409.3	5215.6 ug/L	70.44	5215.6 ppb	70.44	1.35%
QC value within limits for K 766.490 Radial Recovery = 104.31%						
Mg 279.077 IEC†	130.6	5385.2 ug/L	28.03	5385.2 ppb	28.03	0.52%
QC value within limits for Mg 279.077 IEC Recovery = 107.70%						
Mn 257.610†	380291.5	500.32 ug/L	0.817	500.32 ppb	0.817	0.16%
QC value within limits for Mn 257.610 Recovery = 100.06%						
Mo 202.031†	5591.3	497.49 ug/L	0.422	497.49 ppb	0.422	0.08%
QC value within limits for Mo 202.031 Recovery = 99.50%						
Na 589.592 Radial†	29768.9	10494 ug/L	170.8	10494 ppb	170.8	1.63%
QC value within limits for Na 589.592 Radial Recovery = 104.94%						
Ni 231.604†	15851.3	503.09 ug/L	2.588	503.09 ppb	2.588	0.51%
QC value within limits for Ni 231.604 Recovery = 100.62%						
P 214.914†	3337.1	2390.0 ug/L	10.97	2390.0 ppb	10.97	0.46%
QC value within limits for P 214.914 Recovery = 95.60%						
Pb 220.353†	3238.3	498.91 ug/L	0.975	498.91 ppb	0.975	0.20%
QC value within limits for Pb 220.353 Recovery = 99.78%						
S 181.975 Axial†	558.4	998.75 ug/L	7.834	998.75 ppb	7.834	0.78%
QC value within limits for S 181.975 Axial Recovery = 99.88%						
Sb 206.836†	1197.3	518.82 ug/L	4.257	518.82 ppb	4.257	0.82%
QC value within limits for Sb 206.836 Recovery = 103.76%						
Se 196.026†	606.1	523.38 ug/L	3.070	523.38 ppb	3.070	0.59%
QC value within limits for Se 196.026 Recovery = 104.68%						
Si 251.611†	65361.4	2475.2 ug/L	15.50	2475.2 ppb	15.50	0.63%
QC value within limits for Si 251.611 Recovery = 99.01%						
Sn 189.927†	2196.9	499.16 ug/L	0.823	499.16 ppb	0.823	0.16%
QC value within limits for Sn 189.927 Recovery = 99.83%						
Sr 421.552†	65537.2	525.29 ug/L	7.384	525.29 ppb	7.384	1.41%
QC value within limits for Sr 421.552 Recovery = 105.06%						
Ti 334.940†	279921.5	486.65 ug/L	2.696	486.65 ppb	2.696	0.55%
QC value within limits for Ti 334.940 Recovery = 97.33%						
Tl 190.801†	1297.3	505.18 ug/L	4.211	505.18 ppb	4.211	0.83%
QC value within limits for Tl 190.801 Recovery = 101.04%						
U 409.014†	16654.2	503.54 ug/L	1.421	503.54 ppb	1.421	0.28%
QC value within limits for U 409.014 Recovery = 100.71%						
V 292.402†	61913.8	501.01 ug/L	2.717	501.01 ppb	2.717	0.54%
QC value within limits for V 292.402 Recovery = 100.20%						
Zn 213.857†	41228.6	494.89 ug/L	3.055	494.89 ppb	3.055	0.62%
QC value within limits for Zn 213.857 Recovery = 98.98%						
SiO2†	66031.3	5375.4 ug/L	7.95	5375.4 ppb	7.95	0.15%
QC value within limits for SiO2 Recovery = 100.52%						

All analyte(s) passed QC.

Sequence No.: 9

Sample ID: PQL

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 11

Date Collected: 3/19/2010 10:25:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: PQL

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4401.9	4401.9	100 %		10:27:15
1	Y RADIAL	4788.6	4788.6	100.6 %		10:27:15
1	Al 396.153Radial†	146.5	224.3	219.87 ug/L	219.87 ppb	10:27:35
1	Ca 317.933Radial†	136.1	120.2	227.52 ug/L	227.52 ppb	10:27:35
1	Fe 238.204 Radial†	19.2	10.7	124.60 ug/L	124.60 ppb	10:27:35
1	K 766.490 Radial†	3512.0	907.8	172.76 ug/L	172.76 ppb	10:27:15
1	Mg 279.077 IEC†	10.2	8.7	357.89 ug/L	357.89 ppb	10:27:35
1	Na 589.592 Radial†	-57.8	817.4	288.14 ug/L	288.14 ppb	10:27:15
1	Sr 421.552†	647.2	625.4	5.0111 ug/L	5.0111 ppb	10:27:15
1	Sc 361.383	822284.0	822284.0	100.42 %		10:28:32
1	Y 371.029	695589.3	695589.3	100.57 %		10:28:32
1	Ag 328.068†	1144.7	954.7	4.9620 ug/L	4.9620 ppb	10:28:32
1	As 188.979†	36.5	63.1	34.698 ug/L	34.698 ppb	10:28:52
1	B 249.677†	1493.9	2025.0	56.772 ug/L	56.772 ppb	10:28:32
1	Ba 233.527†	582.9	581.2	5.4571 ug/L	5.4571 ppb	10:28:52
1	Be 313.107†	8407.8	12103.5	5.1650 ug/L	5.1650 ppb	10:28:32
1	Cd 226.502†	205.0	374.8	5.4403 ug/L	5.4403 ppb	10:28:52
1	Co 228.616†	171.5	216.9	5.6192 ug/L	5.6192 ppb	10:28:52
1	Cr 267.716†	442.0	368.7	4.9398 ug/L	4.9398 ppb	10:28:52
1	Cu 324.752†	8629.8	3041.5	10.015 ug/L	10.015 ppb	10:28:32
1	Mn 257.610†	8561.3	8136.2	10.695 ug/L	10.695 ppb	10:28:32
1	Mo 202.031†	123.8	114.8	10.213 ug/L	10.213 ppb	10:28:52
1	Ni 231.604†	263.1	177.9	5.6471 ug/L	5.6471 ppb	10:28:52
1	P 214.914†	398.2	209.3	153.94 ug/L	153.94 ppb	10:28:52
1	Pb 220.353†	22.2	80.4	12.408 ug/L	12.408 ppb	10:28:52
1	S 181.975 Axial†	91.1	60.5	108.34 ug/L	108.34 ppb	10:28:52
1	Sb 206.836†	52.8	28.9	12.468 ug/L	12.468 ppb	10:28:52
1	Se 196.026†	20.4	37.2	31.477 ug/L	31.477 ppb	10:28:52
1	Si 251.611†	3185.3	2683.8	101.76 ug/L	101.76 ppb	10:28:52
1	Sn 189.927†	52.1	44.7	10.174 ug/L	10.174 ppb	10:28:52
1	Ti 334.940†	1753.5	2867.3	4.9598 ug/L	4.9598 ppb	10:28:32
1	Tl 190.801†	14.1	43.1	16.750 ug/L	16.750 ppb	10:28:52
1	U 409.014†	-246.9	1958.4	59.388 ug/L	59.388 ppb	10:28:32
1	V 292.402†	-752.2	568.4	4.7786 ug/L	4.7786 ppb	10:28:32
1	Zn 213.857†	1728.5	1151.2	13.880 ug/L	13.880 ppb	10:28:52
1	SiO2†	3288.3	2775.2	226.21 ug/L	226.21 ppb	10:29:48
2	Sc Radial	4445.8	4445.8	101 %		10:27:40
2	Y RADIAL	4794.0	4794.0	100.7 %		10:27:40
2	Al 396.153Radial†	128.3	204.9	200.78 ug/L	200.78 ppb	10:28:00
2	Ca 317.933Radial†	134.8	117.6	222.53 ug/L	222.53 ppb	10:28:00
2	Fe 238.204 Radial†	17.2	8.5	99.164 ug/L	99.164 ppb	10:28:00
2	K 766.490 Radial†	3570.5	931.1	177.19 ug/L	177.19 ppb	10:27:40
2	Mg 279.077 IEC†	10.9	9.3	382.08 ug/L	382.08 ppb	10:28:00
2	Na 589.592 Radial†	-46.0	829.6	292.46 ug/L	292.46 ppb	10:27:40
2	Sr 421.552†	645.8	617.6	4.9488 ug/L	4.9488 ppb	10:27:40
2	Sc 361.383	837271.4	837271.4	102.25 %		10:28:57
2	Y 371.029	706698.5	706698.5	102.18 %		10:28:57
2	Ag 328.068†	1173.1	962.1	4.9980 ug/L	4.9980 ppb	10:28:57
2	As 188.979†	26.2	52.4	28.810 ug/L	28.810 ppb	10:29:17
2	B 249.677†	1558.8	2061.8	57.810 ug/L	57.810 ppb	10:28:57
2	Ba 233.527†	574.9	562.9	5.2872 ug/L	5.2872 ppb	10:29:17
2	Be 313.107†	8476.9	12021.1	5.1302 ug/L	5.1302 ppb	10:28:57
2	Cd 226.502†	192.3	358.7	5.2089 ug/L	5.2089 ppb	10:29:17
2	Co 228.616†	160.2	202.9	5.2573 ug/L	5.2573 ppb	10:29:17
2	Cr 267.716†	476.6	394.6	5.2868 ug/L	5.2868 ppb	10:29:17
2	Cu 324.752†	8870.3	3122.9	10.284 ug/L	10.284 ppb	10:28:57
2	Mn 257.610†	8683.2	8102.8	10.648 ug/L	10.648 ppb	10:28:57
2	Mo 202.031†	129.1	117.7	10.475 ug/L	10.475 ppb	10:29:17
2	Ni 231.604†	264.0	174.1	5.5251 ug/L	5.5251 ppb	10:29:17

2	P 214.914†	395.3	199.3	146.52 ug/L	146.52 ppb	10:29:17
2	Pb 220.353†	27.6	85.3	13.165 ug/L	13.165 ppb	10:29:17
2	S 181.975 Axial†	84.9	52.8	94.531 ug/L	94.531 ppb	10:29:17
2	Sb 206.836†	44.5	19.9	8.7098 ug/L	8.7098 ppb	10:29:17
2	Se 196.026†	19.1	35.7	30.097 ug/L	30.097 ppb	10:29:17
2	Si 251.611†	3158.6	2600.8	98.606 ug/L	98.606 ppb	10:29:17
2	Sn 189.927†	61.3	52.8	12.017 ug/L	12.017 ppb	10:29:17
2	Ti 334.940†	1832.6	2913.4	5.0386 ug/L	5.0386 ppb	10:28:57
2	Tl 190.801†	27.5	56.0	21.724 ug/L	21.724 ppb	10:29:17
2	U 409.014†	-357.4	1854.6	56.243 ug/L	56.243 ppb	10:28:57
2	V 292.402†	-677.4	654.9	5.4708 ug/L	5.4708 ppb	10:28:57
2	Zn 213.857†	1716.0	1108.1	13.363 ug/L	13.363 ppb	10:29:17
2	SiO2†	3289.2	2717.4	221.49 ug/L	221.49 ppb	10:29:53
3	Sc Radial	4483.3	4483.3	102 %		10:28:05
3	Y RADIAL	4841.5	4841.5	101.7 %		10:28:05
3	Al 396.153Radial†	141.9	217.2	212.85 ug/L	212.85 ppb	10:28:25
3	Ca 317.933Radial†	130.9	112.7	213.20 ug/L	213.20 ppb	10:28:25
3	Fe 238.204 Radial†	17.3	8.5	98.662 ug/L	98.662 ppb	10:28:25
3	K 766.490 Radial†	3517.4	849.4	161.64 ug/L	161.64 ppb	10:28:05
3	Mg 279.077 IEC†	11.7	10.0	411.68 ug/L	411.68 ppb	10:28:25
3	Na 589.592 Radial†	-82.3	794.4	280.04 ug/L	280.04 ppb	10:28:05
3	Sr 421.552†	670.9	636.9	5.1036 ug/L	5.1036 ppb	10:28:05
3	Sc 361.383	836240.4	836240.4	102.13 %		10:29:23
3	Y 371.029	705188.3	705188.3	101.96 %		10:29:23
3	Ag 328.068†	1229.5	1018.7	5.2884 ug/L	5.2884 ppb	10:29:23
3	As 188.979†	36.9	62.9	34.584 ug/L	34.584 ppb	10:29:43
3	B 249.677†	1533.7	2039.1	57.173 ug/L	57.173 ppb	10:29:23
3	Ba 233.527†	569.0	557.9	5.2383 ug/L	5.2383 ppb	10:29:43
3	Be 313.107†	8522.5	12076.1	5.1539 ug/L	5.1539 ppb	10:29:23
3	Cd 226.502†	187.5	354.2	5.1435 ug/L	5.1435 ppb	10:29:43
3	Co 228.616†	163.0	205.8	5.3306 ug/L	5.3306 ppb	10:29:43
3	Cr 267.716†	463.5	382.4	5.1218 ug/L	5.1218 ppb	10:29:43
3	Cu 324.752†	8786.4	3051.5	10.048 ug/L	10.048 ppb	10:29:23
3	Mn 257.610†	8625.6	8056.9	10.586 ug/L	10.586 ppb	10:29:23
3	Mo 202.031†	124.3	113.2	10.075 ug/L	10.075 ppb	10:29:43
3	Ni 231.604†	259.0	169.5	5.3803 ug/L	5.3803 ppb	10:29:43
3	P 214.914†	398.5	202.9	149.24 ug/L	149.24 ppb	10:29:43
3	Pb 220.353†	12.0	70.1	10.819 ug/L	10.819 ppb	10:29:43
3	S 181.975 Axial†	85.1	53.1	95.060 ug/L	95.060 ppb	10:29:43
3	Sb 206.836†	57.7	32.9	14.105 ug/L	14.105 ppb	10:29:43
3	Se 196.026†	20.8	37.3	31.498 ug/L	31.498 ppb	10:29:43
3	Si 251.611†	3182.8	2628.4	99.656 ug/L	99.656 ppb	10:29:43
3	Sn 189.927†	53.7	45.4	10.337 ug/L	10.337 ppb	10:29:43
3	Ti 334.940†	1907.5	2989.0	5.1660 ug/L	5.1660 ppb	10:29:23
3	Tl 190.801†	25.8	54.4	21.092 ug/L	21.092 ppb	10:29:43
3	U 409.014†	-327.0	1884.0	57.134 ug/L	57.134 ppb	10:29:23
3	V 292.402†	-763.5	569.9	4.7882 ug/L	4.7882 ppb	10:29:23
3	Zn 213.857†	1721.2	1115.3	13.451 ug/L	13.451 ppb	10:29:43
3	SiO2†	3260.7	2693.5	219.55 ug/L	219.55 ppb	10:29:58

Mean Data: PQL

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831931.9	101.60 %		1.022			1.01%
Sc Radial	4443.7	101 %		0.9			0.92%
Y 371.029	702492.0	101.57 %		0.871			0.86%
Y RADIAL	4808.0	101.0 %		0.61			0.61%
Ag 328.068†	978.5	5.0828 ug/L		0.17895	5.0828 ppb	0.17895	3.52%
QC value within limits for Ag 328.068 Recovery = 101.66%							
Al 396.153Radial†	215.5	211.17 ug/L		9.660	211.17 ppb	9.660	4.57%
QC value within limits for Al 396.153Radial Recovery = 105.58%							
As 188.979†	59.5	32.697 ug/L		3.3670	32.697 ppb	3.3670	10.30%
QC value within limits for As 188.979 Recovery = 108.99%							
B 249.677†	2041.9	57.252 ug/L		0.5232	57.252 ppb	0.5232	0.91%
QC value within limits for B 249.677 Recovery = 114.50%							
Ba 233.527†	567.3	5.3275 ug/L		0.11484	5.3275 ppb	0.11484	2.16%
QC value within limits for Ba 233.527 Recovery = 106.55%							
Be 313.107†	12066.9	5.1497 ug/L		0.01781	5.1497 ppb	0.01781	0.35%
QC value within limits for Be 313.107 Recovery = 102.99%							
Ca 317.933Radial†	116.8	221.08 ug/L		7.270	221.08 ppb	7.270	3.29%

QC value within limits for Ca 317.933 Radial Recovery = 110.54%

Cd 226.502†	362.6	5.2642 ug/L	0.15594	5.2642 ppb	0.15594	2.96%
QC value within limits for Cd 226.502 Recovery = 105.28%						
Co 228.616†	208.5	5.4024 ug/L	0.19132	5.4024 ppb	0.19132	3.54%
QC value within limits for Co 228.616 Recovery = 108.05%						
Cr 267.716†	381.9	5.1161 ug/L	0.17357	5.1161 ppb	0.17357	3.39%
QC value within limits for Cr 267.716 Recovery = 102.32%						
Cu 324.752†	3071.9	10.116 ug/L	0.1468	10.116 ppb	0.1468	1.45%
QC value within limits for Cu 324.752 Recovery = 101.16%						
Fe 238.204 Radial†	9.3	107.47 ug/L	14.830	107.47 ppb	14.830	13.80%
QC value within limits for Fe 238.204 Radial Recovery = 107.47%						
K 766.490 Radial†	896.1	170.53 ug/L	8.011	170.53 ppb	8.011	4.70%
QC value within limits for K 766.490 Radial Recovery = 113.69%						
Mg 279.077 IEC†	9.3	383.89 ug/L	26.941	383.89 ppb	26.941	7.02%
QC value within limits for Mg 279.077 IEC Recovery = 127.96%						
Mn 257.610†	8098.6	10.643 ug/L	0.0547	10.643 ppb	0.0547	0.51%
QC value within limits for Mn 257.610 Recovery = 106.43%						
Mo 202.031†	115.2	10.254 ug/L	0.2030	10.254 ppb	0.2030	1.98%
QC value within limits for Mo 202.031 Recovery = 102.54%						
Na 589.592 Radial†	813.8	286.88 ug/L	6.307	286.88 ppb	6.307	2.20%
QC value within limits for Na 589.592 Radial Recovery = 95.63%						
Ni 231.604†	173.8	5.5175 ug/L	0.13352	5.5175 ppb	0.13352	2.42%
QC value within limits for Ni 231.604 Recovery = 110.35%						
P 214.914†	203.8	149.90 ug/L	3.755	149.90 ppb	3.755	2.50%
QC value within limits for P 214.914 Recovery = 99.93%						
Pb 220.353†	78.6	12.131 ug/L	1.1974	12.131 ppb	1.1974	9.87%
QC value within limits for Pb 220.353 Recovery = 121.31%						
S 181.975 Axial†	55.5	99.309 ug/L	7.8229	99.309 ppb	7.8229	7.88%
QC value within limits for S 181.975 Axial Recovery = 99.31%						
Sb 206.836†	27.2	11.761 ug/L	2.7662	11.761 ppb	2.7662	23.52%
QC value within limits for Sb 206.836 Recovery = 117.61%						
Se 196.026†	36.8	31.024 ug/L	0.8032	31.024 ppb	0.8032	2.59%
QC value within limits for Se 196.026 Recovery = 103.41%						
Si 251.611†	2637.7	100.01 ug/L	1.605	100.01 ppb	1.605	1.60%
QC value within limits for Si 251.611 Recovery = 100.01%						
Sn 189.927†	47.6	10.843 ug/L	1.0204	10.843 ppb	1.0204	9.41%
QC value within limits for Sn 189.927 Recovery = 108.43%						
Sr 421.552†	626.6	5.0212 ug/L	0.07790	5.0212 ppb	0.07790	1.55%
QC value within limits for Sr 421.552 Recovery = 100.42%						
Ti 334.940†	2923.2	5.0548 ug/L	0.10406	5.0548 ppb	0.10406	2.06%
QC value within limits for Ti 334.940 Recovery = 101.10%						
Tl 190.801†	51.2	19.855 ug/L	2.7075	19.855 ppb	2.7075	13.64%
QC value within limits for Tl 190.801 Recovery = 99.28%						
U 409.014†	1899.0	57.588 ug/L	1.6212	57.588 ppb	1.6212	2.82%
QC value within limits for U 409.014 Recovery = 115.18%						
V 292.402†	597.7	5.0125 ug/L	0.39690	5.0125 ppb	0.39690	7.92%
QC value within limits for V 292.402 Recovery = 100.25%						
Zn 213.857†	1124.9	13.565 ug/L	0.2770	13.565 ppb	0.2770	2.04%
QC value greater than the upper limit for Zn 213.857 Recovery = 135.65%						
SiO2†	2728.7	222.41 ug/L	3.427	222.41 ppb	3.427	1.54%
QC value within limits for SiO2 Recovery = 104.42%						

QC Failed. Continue with analysis.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 10:32:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4467.1	4467.1	102 %		10:34:02
1	Y RADIAL	4880.5	4880.5	102.5 %		10:34:02
1	Al 396.153Radial†	-80.8	-1.4	-1.4230 ug/L	-1.4230 ppb	10:34:22
1	Ca 317.933Radial†	21.9	5.8	11.020 ug/L	11.020 ppb	10:34:22
1	Fe 238.204 Radial†	9.9	1.3	14.506 ug/L	14.506 ppb	10:34:22
1	K 766.490 Radial†	2657.3	15.7	2.9980 ug/L	2.9980 ppb	10:34:02
1	Mg 279.077 IEC†	0.7	-0.8	-34.124 ug/L	-34.124 ppb	10:34:22
1	Na 589.592 Radial†	-924.0	-34.0	-11.981 ug/L	-11.981 ppb	10:34:02
1	Sr 421.552†	21.1	-0.1	-0.0006 ug/L	-0.0006 ppb	10:34:02
1	Sc 361.383	815849.0	815849.0	99.637 %		10:35:19
1	Y 371.029	689649.4	689649.4	99.711 %		10:35:19
1	Ag 328.068†	248.9	64.7	0.3382 ug/L	0.3382 ppb	10:35:19
1	As 188.979†	-18.2	8.5	4.6577 ug/L	4.6577 ppb	10:35:39
1	B 249.677†	-318.6	217.6	6.1019 ug/L	6.1019 ppb	10:35:39
1	Ba 233.527†	7.9	8.6	0.0808 ug/L	0.0808 ppb	10:35:39
1	Be 313.107†	-3623.2	94.6	0.0402 ug/L	0.0402 ppb	10:35:19
1	Cd 226.502†	-173.7	-3.7	-0.0547 ug/L	-0.0547 ppb	10:35:39
1	Co 228.616†	-45.6	0.5	0.0135 ug/L	0.0135 ppb	10:35:39
1	Cr 267.716†	76.1	4.9	0.0662 ug/L	0.0662 ppb	10:35:39
1	Cu 324.752†	5630.0	98.6	0.3251 ug/L	0.3251 ppb	10:35:19
1	Mn 257.610†	436.1	48.7	0.0668 ug/L	0.0668 ppb	10:35:39
1	Mo 202.031†	13.8	5.3	0.4709 ug/L	0.4709 ppb	10:35:39
1	Ni 231.604†	78.0	-5.8	-0.1828 ug/L	-0.1828 ppb	10:35:39
1	P 214.914†	190.4	3.8	2.7615 ug/L	2.7615 ppb	10:35:39
1	Pb 220.353†	-44.4	13.7	2.1042 ug/L	2.1042 ppb	10:35:39
1	S 181.975 Axial†	28.0	-2.1	-3.6725 ug/L	-3.6725 ppb	10:35:39
1	Sb 206.836†	44.0	20.5	8.5973 ug/L	8.5973 ppb	10:35:39
1	Se 196.026†	-15.0	1.9	1.6296 ug/L	1.6296 ppb	10:35:39
1	Si 251.611†	543.0	56.8	2.1517 ug/L	2.1517 ppb	10:35:39
1	Sn 189.927†	11.5	4.4	0.9946 ug/L	0.9946 ppb	10:35:39
1	Ti 334.940†	-1142.7	-25.7	-0.0413 ug/L	-0.0413 ppb	10:35:19
1	Tl 190.801†	-30.9	-1.9	-0.7441 ug/L	-0.7441 ppb	10:35:39
1	U 409.014†	-2131.9	64.5	1.9553 ug/L	1.9553 ppb	10:35:19
1	V 292.402†	-1328.1	-15.5	-0.1162 ug/L	-0.1162 ppb	10:35:19
1	Zn 213.857†	714.3	146.8	1.7773 ug/L	1.7773 ppb	10:35:39
1	SiO2†	550.1	52.8	4.2972 ug/L	4.2972 ppb	10:36:35
2	Sc Radial	4480.4	4480.4	102 %		10:34:27
2	Y RADIAL	4876.8	4876.8	102.4 %		10:34:27
2	Al 396.153Radial†	-82.1	-2.5	-2.4574 ug/L	-2.4574 ppb	10:34:47
2	Ca 317.933Radial†	28.0	11.8	22.307 ug/L	22.307 ppb	10:34:47
2	Fe 238.204 Radial†	8.1	-0.5	-5.7454 ug/L	-5.7454 ppb	10:34:47
2	K 766.490 Radial†	2699.4	49.2	9.3714 ug/L	9.3714 ppb	10:34:27
2	Mg 279.077 IEC†	0.5	-1.0	-40.966 ug/L	-40.966 ppb	10:34:47
2	Na 589.592 Radial†	-910.7	-18.3	-6.4367 ug/L	-6.4367 ppb	10:34:27
2	Sr 421.552†	-14.0	-34.6	-0.2774 ug/L	-0.2774 ppb	10:34:27
2	Sc 361.383	818594.5	818594.5	99.972 %		10:35:44
2	Y 371.029	691573.4	691573.4	99.989 %		10:35:44
2	Ag 328.068†	183.2	-1.9	-0.0151 ug/L	-0.0151 ppb	10:35:44
2	As 188.979†	-18.7	8.1	4.4279 ug/L	4.4279 ppb	10:36:04
2	B 249.677†	-356.2	181.1	5.0804 ug/L	5.0804 ppb	10:36:04
2	Ba 233.527†	12.6	13.3	0.1235 ug/L	0.1235 ppb	10:36:04
2	Be 313.107†	-3656.6	73.3	0.0312 ug/L	0.0312 ppb	10:35:44
2	Cd 226.502†	-161.3	9.3	0.1357 ug/L	0.1357 ppb	10:36:04
2	Co 228.616†	-43.0	3.2	0.0842 ug/L	0.0842 ppb	10:36:04
2	Cr 267.716†	47.3	-24.2	-0.3265 ug/L	-0.3265 ppb	10:36:04
2	Cu 324.752†	5641.1	90.7	0.2980 ug/L	0.2980 ppb	10:35:44
2	Mn 257.610†	423.6	34.6	0.0466 ug/L	0.0466 ppb	10:36:04
2	Mo 202.031†	11.0	2.5	0.2183 ug/L	0.2183 ppb	10:36:04
2	Ni 231.604†	94.5	10.4	0.3309 ug/L	0.3309 ppb	10:36:04

2	P 214.914†	171.8	-15.5	-11.576 ug/L	-11.576 ppb	10:36:04
2	Pb 220.353†	-62.1	-3.8	-0.5818 ug/L	-0.5818 ppb	10:36:04
2	S 181.975 Axial†	28.6	-1.6	-2.8708 ug/L	-2.8708 ppb	10:36:04
2	Sb 206.836†	32.1	8.4	3.5319 ug/L	3.5319 ppb	10:36:04
2	Se 196.026†	-19.4	-2.4	-2.0415 ug/L	-2.0415 ppb	10:36:04
2	Si 251.611†	545.7	57.7	2.1873 ug/L	2.1873 ppb	10:36:04
2	Sn 189.927†	7.4	0.3	0.0664 ug/L	0.0664 ppb	10:36:04
2	Ti 334.940†	-1137.7	-16.8	-0.0238 ug/L	-0.0238 ppb	10:35:44
2	Tl 190.801†	-27.1	1.9	0.7540 ug/L	0.7540 ppb	10:36:04
2	U 409.014†	-2129.2	74.5	2.2602 ug/L	2.2602 ppb	10:35:44
2	V 292.402†	-1364.3	-47.2	-0.3696 ug/L	-0.3696 ppb	10:35:44
2	Zn 213.857†	727.3	157.4	1.9055 ug/L	1.9055 ppb	10:36:04
2	SiO2†	549.9	50.7	4.1340 ug/L	4.1340 ppb	10:36:40
3	Sc Radial	4415.9	4415.9	100 %		10:34:52
3	Y RADIAL	4804.7	4804.7	100.9 %		10:34:52
3	Al 396.153Radial†	-69.6	8.8	8.6302 ug/L	8.6302 ppb	10:35:12
3	Ca 317.933Radial†	26.4	10.6	19.996 ug/L	19.996 ppb	10:35:12
3	Fe 238.204 Radial†	7.2	-1.3	-14.518 ug/L	-14.518 ppb	10:35:12
3	K 766.490 Radial†	2636.1	25.0	4.7603 ug/L	4.7603 ppb	10:34:52
3	Mg 279.077 IEC†	1.4	-0.2	-6.9036 ug/L	-6.9036 ppb	10:35:12
3	Na 589.592 Radial†	-934.4	-54.9	-19.340 ug/L	-19.340 ppb	10:34:52
3	Sr 421.552†	23.2	2.2	0.0179 ug/L	0.0179 ppb	10:34:52
3	Sc 361.383	837815.6	837815.6	102.32 %		10:36:09
3	Y 371.029	707201.2	707201.2	102.25 %		10:36:09
3	Ag 328.068†	256.6	65.6	0.3313 ug/L	0.3313 ppb	10:36:09
3	As 188.979†	-21.0	6.2	3.4192 ug/L	3.4192 ppb	10:36:29
3	B 249.677†	-354.2	191.2	5.3659 ug/L	5.3659 ppb	10:36:29
3	Ba 233.527†	13.5	13.9	0.1289 ug/L	0.1289 ppb	10:36:29
3	Be 313.107†	-3751.0	65.0	0.0280 ug/L	0.0280 ppb	10:36:09
3	Cd 226.502†	-171.4	3.1	0.0472 ug/L	0.0472 ppb	10:36:29
3	Co 228.616†	-49.6	-2.3	-0.0579 ug/L	-0.0579 ppb	10:36:29
3	Cr 267.716†	79.9	6.6	0.0846 ug/L	0.0846 ppb	10:36:29
3	Cu 324.752†	5709.2	27.8	0.0887 ug/L	0.0887 ppb	10:36:09
3	Mn 257.610†	417.8	19.2	0.0241 ug/L	0.0241 ppb	10:36:29
3	Mo 202.031†	15.3	6.4	0.5693 ug/L	0.5693 ppb	10:36:29
3	Ni 231.604†	91.9	5.8	0.1838 ug/L	0.1838 ppb	10:36:29
3	P 214.914†	172.1	-19.0	-14.192 ug/L	-14.192 ppb	10:36:29
3	Pb 220.353†	-53.9	5.6	0.8719 ug/L	0.8719 ppb	10:36:29
3	S 181.975 Axial†	27.2	-3.6	-6.5009 ug/L	-6.5009 ppb	10:36:29
3	Sb 206.836†	31.6	7.2	3.0043 ug/L	3.0043 ppb	10:36:29
3	Se 196.026†	-18.2	-0.8	-0.7030 ug/L	-0.7030 ppb	10:36:29
3	Si 251.611†	521.0	21.0	0.7911 ug/L	0.7911 ppb	10:36:29
3	Sn 189.927†	4.8	-2.5	-0.5546 ug/L	-0.5546 ppb	10:36:29
3	Ti 334.940†	-1064.9	80.4	0.1412 ug/L	0.1412 ppb	10:36:09
3	Tl 190.801†	-27.7	2.1	0.7968 ug/L	0.7968 ppb	10:36:29
3	U 409.014†	-2109.5	142.5	4.3242 ug/L	4.3242 ppb	10:36:09
3	V 292.402†	-1381.1	-32.4	-0.2403 ug/L	-0.2403 ppb	10:36:09
3	Zn 213.857†	738.5	151.7	1.8389 ug/L	1.8389 ppb	10:36:29
3	SiO2†	535.3	23.8	1.9278 ug/L	1.9278 ppb	10:36:45

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824086.4	100.64 %		1.462			1.45%
Sc Radial	4454.5	101 %		0.8			0.77%
Y 371.029	696141.3	100.65 %		1.392			1.38%
Y RADIAL	4854.0	102.0 %		0.90			0.88%
Ag 328.068†	42.8	0.2181 ug/L		0.20203	0.2181 ppb	0.20203	92.62%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	1.6	1.5833 ug/L		6.12472	1.5833 ppb	6.12472	386.84%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	7.6	4.1683 ug/L		0.65881	4.1683 ppb	0.65881	15.81%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	196.6	5.5161 ug/L		0.52706	5.5161 ppb	0.52706	9.56%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	11.9	0.1111 ug/L		0.02632	0.1111 ppb	0.02632	23.70%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	77.6	0.0331 ug/L		0.00631	0.0331 ppb	0.00631	19.05%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	9.4	17.774 ug/L		5.9625	17.774 ppb	5.9625	33.55%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	2.9	0.0427 ug/L	0.09529	0.0427 ppb	0.09529	222.93%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	0.5	0.0133 ug/L	0.07108	0.0133 ppb	0.07108	535.29%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-4.2	-0.0586 ug/L	0.23221	-0.0586 ppb	0.23221	396.54%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	72.4	0.2373 ug/L	0.12938	0.2373 ppb	0.12938	54.53%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	-0.2	-1.9190 ug/L	14.88554	-1.9190 ppb	14.88554	775.71%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	30.0	5.7099 ug/L	3.29108	5.7099 ppb	3.29108	57.64%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	-0.7	-27.331 ug/L	18.0188	-27.331 ppb	18.0188	65.93%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	34.2	0.0459 ug/L	0.02135	0.0459 ppb	0.02135	46.54%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	4.7	0.4195 ug/L	0.18103	0.4195 ppb	0.18103	43.15%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	-35.7	-12.586 ug/L	6.4730	-12.586 ppb	6.4730	51.43%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	3.5	0.1106 ug/L	0.26452	0.1106 ppb	0.26452	239.14%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	-10.2	-7.6690 ug/L	9.12731	-7.6690 ppb	9.12731	119.02%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	5.2	0.7981 ug/L	1.34456	0.7981 ppb	1.34456	168.47%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	-2.4	-4.3480 ug/L	1.90700	-4.3480 ppb	1.90700	43.86%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	12.0	5.0445 ug/L	3.08810	5.0445 ppb	3.08810	61.22%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.4	-0.3716 ug/L	1.85785	-0.3716 ppb	1.85785	499.98%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	45.2	1.7101 ug/L	0.79602	1.7101 ppb	0.79602	46.55%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.7	0.1688 ug/L	0.77966	0.1688 ppb	0.77966	461.89%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	-10.8	-0.0867 ug/L	0.16540	-0.0867 ppb	0.16540	190.77%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	12.7	0.0254 ug/L	0.10069	0.0254 ppb	0.10069	396.59%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.7	0.2689 ug/L	0.87754	0.2689 ppb	0.87754	326.36%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	93.8	2.8466 ug/L	1.28871	2.8466 ppb	1.28871	45.27%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-31.7	-0.2420 ug/L	0.12674	-0.2420 ppb	0.12674	52.37%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	152.0	1.8406 ug/L	0.06408	1.8406 ppb	0.06408	3.48%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	42.4	3.4530 ug/L	1.32338	3.4530 ppb	1.32338	38.33%
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: 7

Date Collected: 3/19/2010 11:38:19

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4231.5	4231.5	96.3 %		11:40:31
1	Y RADIAL	4688.3	4688.3	98.48 %		11:40:11
1	Al 396.153Radial†	5078.5	5352.8	5233.5 ug/L	5233.5 ppb	11:40:11
1	Ca 317.933Radial†	2683.8	2771.8	5244.9 ug/L	5244.9 ppb	11:40:31
1	Fe 238.204 Radial†	447.0	455.9	5297.3 ug/L	5297.3 ppb	11:40:31
1	K 766.490 Radial†	29712.9	28262.5	5378.2 ug/L	5378.2 ppb	11:40:11
1	Mg 279.077 IEC†	125.8	129.1	5327.4 ug/L	5327.4 ppb	11:40:31
1	Na 589.592 Radial†	27281.4	29210.9	10297 ug/L	10297 ppb	11:40:11
1	Sr 421.552†	63681.7	66122.0	529.98 ug/L	529.98 ppb	11:40:11
1	Sc 361.383	836694.1	836694.1	102.18 %		11:41:28
1	Y 371.029	695496.4	695496.4	100.56 %		11:41:28
1	Ag 328.068†	99816.9	97499.9	509.39 ug/L	509.39 ppb	11:41:34
1	As 188.979†	930.2	937.1	518.83 ug/L	518.83 ppb	11:41:54
1	B 249.677†	17942.6	18096.7	505.35 ug/L	505.35 ppb	11:41:34
1	Ba 233.527†	55244.6	54065.5	507.67 ug/L	507.67 ppb	11:41:34
1	Be 313.107†	1219044.5	1196740.3	510.71 ug/L	510.71 ppb	11:41:28
1	Cd 226.502†	35788.8	35195.1	510.55 ug/L	510.55 ppb	11:41:34
1	Co 228.616†	20347.1	19958.7	515.95 ug/L	515.95 ppb	11:41:34
1	Cr 267.716†	38697.3	37799.4	507.96 ug/L	507.96 ppb	11:41:34
1	Cu 324.752†	160727.0	151742.3	500.97 ug/L	500.97 ppb	11:41:34
1	Mn 257.610†	387247.8	378588.3	498.08 ug/L	498.08 ppb	11:41:34
1	Mo 202.031†	5787.3	5655.2	503.17 ug/L	503.17 ppb	11:41:54
1	Ni 231.604†	16666.6	16226.6	515.00 ug/L	515.00 ppb	11:41:34
1	P 214.914†	3658.7	3393.2	2429.9 ug/L	2429.9 ppb	11:41:54
1	Pb 220.353†	3286.4	3274.5	504.53 ug/L	504.53 ppb	11:41:54
1	S 181.975 Axial†	609.8	566.5	1013.3 ug/L	1013.3 ppb	11:41:54
1	Sb 206.836†	1273.0	1222.2	529.40 ug/L	529.40 ppb	11:41:54
1	Se 196.026†	607.6	611.6	527.92 ug/L	527.92 ppb	11:41:54
1	Si 251.611†	69000.0	67038.2	2538.8 ug/L	2538.8 ppb	11:41:34
1	Sn 189.927†	2266.5	2210.9	502.34 ug/L	502.34 ppb	11:41:54
1	Ti 334.940†	290738.2	285650.1	496.62 ug/L	496.62 ppb	11:41:34
1	Tl 190.801†	1309.7	1310.8	510.40 ug/L	510.40 ppb	11:41:54
1	U 409.014†	15042.5	16925.4	511.75 ug/L	511.75 ppb	11:41:34
1	V 292.402†	63168.1	63136.4	510.86 ug/L	510.86 ppb	11:41:34
1	Zn 213.857†	43730.0	42225.9	506.89 ug/L	506.89 ppb	11:41:34
1	SiO2†	68926.3	66954.9	5450.6 ug/L	5450.6 ppb	11:43:01
2	Sc Radial	4265.7	4265.7	97.1 %		11:40:56
2	Y RADIAL	4839.5	4839.5	101.7 %		11:40:36
2	Al 396.153Radial†	5150.2	5384.5	5265.0 ug/L	5265.0 ppb	11:40:36
2	Ca 317.933Radial†	2698.8	2764.9	5231.8 ug/L	5231.8 ppb	11:40:56
2	Fe 238.204 Radial†	449.8	455.0	5286.7 ug/L	5286.7 ppb	11:40:56
2	K 766.490 Radial†	29893.9	28201.7	5366.7 ug/L	5366.7 ppb	11:40:36
2	Mg 279.077 IEC†	131.2	133.7	5513.6 ug/L	5513.6 ppb	11:40:56
2	Na 589.592 Radial†	27374.6	29079.9	10251 ug/L	10251 ppb	11:40:36
2	Sr 421.552†	64071.5	65993.7	528.95 ug/L	528.95 ppb	11:40:36
2	Sc 361.383	848819.8	848819.8	103.66 %		11:41:59
2	Y 371.029	706333.9	706333.9	102.12 %		11:41:59
2	Ag 328.068†	99812.0	96099.8	502.10 ug/L	502.10 ppb	11:42:04
2	As 188.979†	913.1	907.6	502.60 ug/L	502.60 ppb	11:42:25
2	B 249.677†	17949.1	17852.2	498.51 ug/L	498.51 ppb	11:42:04
2	Ba 233.527†	55297.9	53344.6	500.90 ug/L	500.90 ppb	11:42:04
2	Be 313.107†	1237185.8	1197198.0	510.89 ug/L	510.89 ppb	11:41:59
2	Cd 226.502†	35790.9	34696.8	503.31 ug/L	503.31 ppb	11:42:04
2	Co 228.616†	20379.5	19705.5	509.40 ug/L	509.40 ppb	11:42:04
2	Cr 267.716†	38754.5	37313.5	501.44 ug/L	501.44 ppb	11:42:04
2	Cu 324.752†	160790.4	149556.5	493.76 ug/L	493.76 ppb	11:42:04
2	Mn 257.610†	386901.3	372840.2	490.51 ug/L	490.51 ppb	11:42:04
2	Mo 202.031†	5780.9	5568.1	495.43 ug/L	495.43 ppb	11:42:25
2	Ni 231.604†	16669.3	15996.2	507.69 ug/L	507.69 ppb	11:42:04

2	P 214.914†	3643.5	3327.5	2382.3 ug/L	2382.3 ppb	11:42:25
2	Pb 220.353†	3274.7	3217.3	495.73 ug/L	495.73 ppb	11:42:25
2	S 181.975 Axial†	602.1	550.6	984.78 ug/L	984.78 ppb	11:42:25
2	Sb 206.836†	1250.5	1182.6	512.53 ug/L	512.53 ppb	11:42:25
2	Se 196.026†	602.0	597.7	516.28 ug/L	516.28 ppb	11:42:25
2	Si 251.611†	69005.4	66078.7	2502.5 ug/L	2502.5 ppb	11:42:04
2	Sn 189.927†	2253.2	2166.4	492.23 ug/L	492.23 ppb	11:42:25
2	Ti 334.940†	291171.1	282003.1	490.27 ug/L	490.27 ppb	11:42:04
2	Tl 190.801†	1306.3	1289.2	502.00 ug/L	502.00 ppb	11:42:25
2	U 409.014†	15074.6	16746.1	506.33 ug/L	506.33 ppb	11:42:04
2	V 292.402†	63254.1	62336.3	504.37 ug/L	504.37 ppb	11:42:04
2	Zn 213.857†	43730.3	41614.9	499.54 ug/L	499.54 ppb	11:42:04
2	SiO2†	68517.6	65597.0	5340.0 ug/L	5340.0 ppb	11:43:06
3	Sc Radial	4269.7	4269.7	97.1 %		11:41:22
3	Y RADIAL	4809.0	4809.0	101.0 %		11:41:01
3	Al 396.153Radial†	5136.6	5365.6	5246.2 ug/L	5246.2 ppb	11:41:01
3	Ca 317.933Radial†	2697.3	2760.8	5224.0 ug/L	5224.0 ppb	11:41:22
3	Fe 238.204 Radial†	445.9	450.6	5236.1 ug/L	5236.1 ppb	11:41:22
3	K 766.490 Radial†	29946.0	28226.7	5371.5 ug/L	5371.5 ppb	11:41:01
3	Mg 279.077 IEC†	122.8	124.9	5152.6 ug/L	5152.6 ppb	11:41:22
3	Na 589.592 Radial†	27228.5	28903.2	10189 ug/L	10189 ppb	11:41:01
3	Sr 421.552†	63894.3	65749.9	527.00 ug/L	527.00 ppb	11:41:01
3	Sc 361.383	838817.3	838817.3	102.44 %		11:42:30
3	Y 371.029	698716.9	698716.9	101.02 %		11:42:30
3	Ag 328.068†	99235.4	96685.1	505.14 ug/L	505.14 ppb	11:42:35
3	As 188.979†	918.9	923.8	511.49 ug/L	511.49 ppb	11:42:55
3	B 249.677†	17901.0	18011.7	502.99 ug/L	502.99 ppb	11:42:35
3	Ba 233.527†	55002.2	53691.9	504.16 ug/L	504.16 ppb	11:42:35
3	Be 313.107†	1222413.8	1197009.5	510.81 ug/L	510.81 ppb	11:42:30
3	Cd 226.502†	35634.8	34956.1	507.08 ug/L	507.08 ppb	11:42:35
3	Co 228.616†	20235.0	19798.9	511.82 ug/L	511.82 ppb	11:42:35
3	Cr 267.716†	38586.2	37595.0	505.22 ug/L	505.22 ppb	11:42:35
3	Cu 324.752†	160008.7	150643.0	497.34 ug/L	497.34 ppb	11:42:35
3	Mn 257.610†	385207.0	375636.8	494.20 ug/L	494.20 ppb	11:42:35
3	Mo 202.031†	5767.3	5621.3	500.15 ug/L	500.15 ppb	11:42:55
3	Ni 231.604†	16538.7	16060.4	509.73 ug/L	509.73 ppb	11:42:35
3	P 214.914†	3658.9	3384.4	2424.1 ug/L	2424.1 ppb	11:42:55
3	Pb 220.353†	3276.9	3257.1	501.86 ug/L	501.86 ppb	11:42:55
3	S 181.975 Axial†	611.1	566.4	1013.0 ug/L	1013.0 ppb	11:42:55
3	Sb 206.836†	1263.9	1210.1	524.31 ug/L	524.31 ppb	11:42:55
3	Se 196.026†	606.1	608.6	525.28 ug/L	525.28 ppb	11:42:55
3	Si 251.611†	68566.9	66444.5	2516.3 ug/L	2516.3 ppb	11:42:35
3	Sn 189.927†	2275.7	2214.3	503.11 ug/L	503.11 ppb	11:42:55
3	Ti 334.940†	289344.8	283569.7	493.02 ug/L	493.02 ppb	11:42:35
3	Tl 190.801†	1294.0	1292.3	503.22 ug/L	503.22 ppb	11:42:55
3	U 409.014†	14750.9	16603.5	502.00 ug/L	502.00 ppb	11:42:35
3	V 292.402†	62942.9	62760.1	507.80 ug/L	507.80 ppb	11:42:35
3	Zn 213.857†	43510.6	41903.4	503.03 ug/L	503.03 ppb	11:42:35
3	SiO2†	67364.1	65259.2	5312.3 ug/L	5312.3 ppb	11:43:11

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	841443.7	102.76 %	0.791			0.77%
Sc Radial	4255.6	96.8 %	0.48			0.49%
Y 371.029	700182.4	101.23 %	0.805			0.79%
Y RADIAL	4778.9	100.4 %	1.68			1.67%
Ag 328.068†	96761.6	505.54 ug/L	3.664	505.54 ppb	3.664	0.72%
QC value within limits for Ag 328.068 Recovery = 101.11%						
Al 396.153Radial†	5367.6	5248.3 ug/L	15.85	5248.3 ppb	15.85	0.30%
QC value within limits for Al 396.153Radial Recovery = 104.97%						
As 188.979†	922.8	510.97 ug/L	8.127	510.97 ppb	8.127	1.59%
QC value within limits for As 188.979 Recovery = 102.19%						
B 249.677†	17986.9	502.29 ug/L	3.474	502.29 ppb	3.474	0.69%
QC value within limits for B 249.677 Recovery = 100.46%						
Ba 233.527†	53700.7	504.25 ug/L	3.384	504.25 ppb	3.384	0.67%
QC value within limits for Ba 233.527 Recovery = 100.85%						
Be 313.107†	1196982.6	510.80 ug/L	0.091	510.80 ppb	0.091	0.02%
QC value within limits for Be 313.107 Recovery = 102.16%						
Ca 317.933Radial†	2765.8	5233.6 ug/L	10.57	5233.6 ppb	10.57	0.20%

QC value within limits for Ca 317.933 Radial Recovery = 104.67%

Cd 226.502†	34949.3	506.98 ug/L	3.619	506.98 ppb	3.619	0.71%
QC value within limits for Cd 226.502 Recovery = 101.40%						
Co 228.616†	19821.0	512.39 ug/L	3.312	512.39 ppb	3.312	0.65%
QC value within limits for Co 228.616 Recovery = 102.48%						
Cr 267.716†	37569.3	504.87 ug/L	3.275	504.87 ppb	3.275	0.65%
QC value within limits for Cr 267.716 Recovery = 100.97%						
Cu 324.752†	150647.3	497.36 ug/L	3.607	497.36 ppb	3.607	0.73%
QC value within limits for Cu 324.752 Recovery = 99.47%						
Fe 238.204 Radial†	453.8	5273.4 ug/L	32.71	5273.4 ppb	32.71	0.62%
QC value within limits for Fe 238.204 Radial Recovery = 105.47%						
K 766.490 Radial†	28230.3	5372.1 ug/L	5.80	5372.1 ppb	5.80	0.11%
QC value within limits for K 766.490 Radial Recovery = 107.44%						
Mg 279.077 IEC†	129.2	5331.2 ug/L	180.50	5331.2 ppb	180.50	3.39%
QC value within limits for Mg 279.077 IEC Recovery = 106.62%						
Mn 257.610†	375688.4	494.26 ug/L	3.784	494.26 ppb	3.784	0.77%
QC value within limits for Mn 257.610 Recovery = 98.85%						
Mo 202.031†	5614.9	499.58 ug/L	3.902	499.58 ppb	3.902	0.78%
QC value within limits for Mo 202.031 Recovery = 99.92%						
Na 589.592 Radial†	29064.7	10246 ug/L	54.4	10246 ppb	54.4	0.53%
QC value within limits for Na 589.592 Radial Recovery = 102.46%						
Ni 231.604†	16094.4	510.81 ug/L	3.773	510.81 ppb	3.773	0.74%
QC value within limits for Ni 231.604 Recovery = 102.16%						
P 214.914†	3368.4	2412.1 ug/L	25.99	2412.1 ppb	25.99	1.08%
QC value within limits for P 214.914 Recovery = 96.48%						
Pb 220.353†	3249.7	500.70 ug/L	4.513	500.70 ppb	4.513	0.90%
QC value within limits for Pb 220.353 Recovery = 100.14%						
S 181.975 Axial†	561.2	1003.7 ug/L	16.36	1003.7 ppb	16.36	1.63%
QC value within limits for S 181.975 Axial Recovery = 100.37%						
Sb 206.836†	1205.0	522.08 ug/L	8.656	522.08 ppb	8.656	1.66%
QC value within limits for Sb 206.836 Recovery = 104.42%						
Se 196.026†	606.0	523.16 ug/L	6.101	523.16 ppb	6.101	1.17%
QC value within limits for Se 196.026 Recovery = 104.63%						
Si 251.611†	66520.5	2519.2 ug/L	18.34	2519.2 ppb	18.34	0.73%
QC value within limits for Si 251.611 Recovery = 100.77%						
Sn 189.927†	2197.2	499.23 ug/L	6.070	499.23 ppb	6.070	1.22%
QC value within limits for Sn 189.927 Recovery = 99.85%						
Sr 421.552†	65955.2	528.64 ug/L	1.515	528.64 ppb	1.515	0.29%
QC value within limits for Sr 421.552 Recovery = 105.73%						
Ti 334.940†	283741.0	493.30 ug/L	3.187	493.30 ppb	3.187	0.65%
QC value within limits for Ti 334.940 Recovery = 98.66%						
Tl 190.801†	1297.4	505.20 ug/L	4.539	505.20 ppb	4.539	0.90%
QC value within limits for Tl 190.801 Recovery = 101.04%						
U 409.014†	16758.3	506.69 ug/L	4.887	506.69 ppb	4.887	0.96%
QC value within limits for U 409.014 Recovery = 101.34%						
V 292.402†	62744.3	507.68 ug/L	3.249	507.68 ppb	3.249	0.64%
QC value within limits for V 292.402 Recovery = 101.54%						
Zn 213.857†	41914.8	503.15 ug/L	3.675	503.15 ppb	3.675	0.73%
QC value within limits for Zn 213.857 Recovery = 100.63%						
SiO2†	65937.0	5367.6 ug/L	73.18	5367.6 ppb	73.18	1.36%
QC value within limits for SiO2 Recovery = 100.38%						

All analyte(s) passed QC.

Sequence No.: 10

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 11:45:21

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4343.7	4343.7	98.8 %		11:47:14
1	Y RADIAL	4752.6	4752.6	99.83 %		11:47:14
1	Al 396.153Radial†	-72.3	4.9	4.8133 ug/L	4.8133 ppb	11:47:34
1	Ca 317.933Radial†	26.1	10.7	20.319 ug/L	20.319 ppb	11:47:34
1	Fe 238.204 Radial†	7.8	-0.6	-6.4728 ug/L	-6.4728 ppb	11:47:34
1	K 766.490 Radial†	2857.2	292.2	55.678 ug/L	55.678 ppb	11:47:14
1	Mg 279.077 IEC†	3.4	1.9	79.741 ug/L	79.741 ppb	11:47:34
1	Na 589.592 Radial†	-927.8	-63.7	-22.449 ug/L	-22.449 ppb	11:47:14
1	Sr 421.552†	28.1	7.6	0.0605 ug/L	0.0605 ppb	11:47:14
1	Sc 361.383	828290.0	828290.0	101.16 %		11:48:31
1	Y 371.029	698408.7	698408.7	100.98 %		11:48:31
1	Ag 328.068†	104.7	-81.6	-0.4271 ug/L	-0.4271 ppb	11:48:31
1	As 188.979†	-31.6	-4.5	-2.4585 ug/L	-2.4585 ppb	11:48:51
1	B 249.677†	-193.4	346.2	9.7120 ug/L	9.7120 ppb	11:48:51
1	Ba 233.527†	14.1	14.7	0.1368 ug/L	0.1368 ppb	11:48:51
1	Be 313.107†	-3650.4	122.4	0.0523 ug/L	0.0523 ppb	11:48:31
1	Cd 226.502†	-158.0	14.5	0.2110 ug/L	0.2110 ppb	11:48:51
1	Co 228.616†	-45.0	1.8	0.0456 ug/L	0.0456 ppb	11:48:51
1	Cr 267.716†	83.6	11.2	0.1488 ug/L	0.1488 ppb	11:48:51
1	Cu 324.752†	5611.4	-4.7	-0.0160 ug/L	-0.0160 ppb	11:48:31
1	Mn 257.610†	476.0	81.5	0.1032 ug/L	0.1032 ppb	11:48:51
1	Mo 202.031†	9.0	0.3	0.0289 ug/L	0.0289 ppb	11:48:51
1	Ni 231.604†	93.0	7.8	0.2484 ug/L	0.2484 ppb	11:48:51
1	P 214.914†	189.1	-0.4	-0.2430 ug/L	-0.2430 ppb	11:48:51
1	Pb 220.353†	-55.8	3.1	0.4814 ug/L	0.4814 ppb	11:48:51
1	S 181.975 Axial†	32.8	2.2	3.9603 ug/L	3.9603 ppb	11:48:51
1	Sb 206.836†	25.8	1.8	0.7907 ug/L	0.7907 ppb	11:48:51
1	Se 196.026†	-13.3	3.9	3.1912 ug/L	3.1912 ppb	11:48:51
1	Si 251.611†	646.0	150.5	5.7129 ug/L	5.7129 ppb	11:48:51
1	Sn 189.927†	15.0	7.7	1.7470 ug/L	1.7470 ppb	11:48:51
1	Ti 334.940†	-1081.0	52.5	0.0874 ug/L	0.0874 ppb	11:48:31
1	Tl 190.801†	-17.1	12.2	4.7325 ug/L	4.7325 ppb	11:48:51
1	U 409.014†	-2223.2	6.4	0.1952 ug/L	0.1952 ppb	11:48:31
1	V 292.402†	-1356.9	-23.9	-0.1879 ug/L	-0.1879 ppb	11:48:31
1	Zn 213.857†	920.4	339.8	4.1165 ug/L	4.1165 ppb	11:48:51
1	SiO2†	681.4	174.2	14.218 ug/L	14.218 ppb	11:50:02
2	Sc Radial	4441.9	4441.9	101 %		11:47:39
2	Y RADIAL	4833.4	4833.4	101.5 %		11:47:39
2	Al 396.153Radial†	-89.0	-10.0	-9.8127 ug/L	-9.8127 ppb	11:47:59
2	Ca 317.933Radial†	25.8	9.9	18.681 ug/L	18.681 ppb	11:47:59
2	Fe 238.204 Radial†	8.3	-0.3	-3.2666 ug/L	-3.2666 ppb	11:47:59
2	K 766.490 Radial†	2698.1	70.9	13.499 ug/L	13.499 ppb	11:47:39
2	Mg 279.077 IEC†	4.0	2.4	99.388 ug/L	99.388 ppb	11:47:59
2	Na 589.592 Radial†	-871.7	12.7	4.4605 ug/L	4.4605 ppb	11:47:39
2	Sr 421.552†	31.8	10.7	0.0855 ug/L	0.0855 ppb	11:47:39
2	Sc 361.383	822220.7	822220.7	100.41 %		11:48:56
2	Y 371.029	694053.4	694053.4	100.35 %		11:48:56
2	Ag 328.068†	97.9	-87.6	-0.4532 ug/L	-0.4532 ppb	11:48:56
2	As 188.979†	-18.2	8.7	4.7808 ug/L	4.7808 ppb	11:49:16
2	B 249.677†	-207.3	330.9	9.2829 ug/L	9.2829 ppb	11:49:16
2	Ba 233.527†	8.6	9.2	0.0863 ug/L	0.0863 ppb	11:49:16
2	Be 313.107†	-3738.2	8.3	0.0032 ug/L	0.0032 ppb	11:48:56
2	Cd 226.502†	-172.2	-0.9	-0.0129 ug/L	-0.0129 ppb	11:49:16
2	Co 228.616†	-48.8	-2.4	-0.0611 ug/L	-0.0611 ppb	11:49:16
2	Cr 267.716†	62.0	-9.8	-0.1300 ug/L	-0.1300 ppb	11:49:16
2	Cu 324.752†	5614.1	38.9	0.1304 ug/L	0.1304 ppb	11:48:56
2	Mn 257.610†	501.3	110.2	0.1405 ug/L	0.1405 ppb	11:49:16
2	Mo 202.031†	10.8	2.2	0.1973 ug/L	0.1973 ppb	11:49:16
2	Ni 231.604†	90.3	5.9	0.1874 ug/L	0.1874 ppb	11:49:16

2	P 214.914†	180.7	-7.3	-5.4650	ug/L	-5.4650	ppb	11:49:16
2	Pb 220.353†	-39.7	18.7	2.8759	ug/L	2.8759	ppb	11:49:16
2	S 181.975 Axial†	29.8	-0.5	-0.8807	ug/L	-0.8807	ppb	11:49:16
2	Sb 206.836†	23.8	0.1	0.0562	ug/L	0.0562	ppb	11:49:16
2	Se 196.026†	-17.5	-0.5	-0.3920	ug/L	-0.3920	ppb	11:49:16
2	Si 251.611†	640.6	149.7	5.6822	ug/L	5.6822	ppb	11:49:16
2	Sn 189.927†	13.4	6.2	1.4045	ug/L	1.4045	ppb	11:49:16
2	Ti 334.940†	-1200.9	-74.7	-0.1338	ug/L	-0.1338	ppb	11:48:56
2	Tl 190.801†	-29.2	0.0	0.0028	ug/L	0.0028	ppb	11:49:16
2	U 409.014†	-2336.4	-122.6	-3.7174	ug/L	-3.7174	ppb	11:48:56
2	V 292.402†	-1326.4	-3.5	-0.0295	ug/L	-0.0295	ppb	11:48:56
2	Zn 213.857†	929.9	356.0	4.3122	ug/L	4.3122	ppb	11:49:16
2	SiO2†	659.8	157.7	12.866	ug/L	12.866	ppb	11:50:22
3	Sc Radial	4304.4	4304.4	97.9	%			11:48:04
3	Y RADIAL	4703.3	4703.3	98.80	%			11:48:04
3	Al 396.153Radial†	-76.9	-0.5	-0.4680	ug/L	-0.4680	ppb	11:48:24
3	Ca 317.933Radial†	24.4	9.2	17.441	ug/L	17.441	ppb	11:48:24
3	Fe 238.204 Radial†	8.1	-0.2	-2.3264	ug/L	-2.3264	ppb	11:48:24
3	K 766.490 Radial†	2757.5	216.8	41.316	ug/L	41.316	ppb	11:48:04
3	Mg 279.077 IEC†	-1.8	-3.4	-138.98	ug/L	-138.98	ppb	11:48:24
3	Na 589.592 Radial†	-956.3	-101.3	-35.712	ug/L	-35.712	ppb	11:48:04
3	Sr 421.552†	17.2	-3.2	-0.0261	ug/L	-0.0261	ppb	11:48:04
3	Sc 361.383	833215.2	833215.2	101.76	%			11:49:21
3	Y 371.029	704277.1	704277.1	101.83	%			11:49:21
3	Ag 328.068†	241.3	52.0	0.2686	ug/L	0.2686	ppb	11:49:21
3	As 188.979†	-21.5	5.7	3.1078	ug/L	3.1078	ppb	11:49:41
3	B 249.677†	-197.2	343.6	9.6384	ug/L	9.6384	ppb	11:49:41
3	Ba 233.527†	18.2	18.6	0.1741	ug/L	0.1741	ppb	11:49:41
3	Be 313.107†	-3699.6	95.4	0.0407	ug/L	0.0407	ppb	11:49:21
3	Cd 226.502†	-179.9	-6.1	-0.0885	ug/L	-0.0885	ppb	11:49:41
3	Co 228.616†	-44.9	2.1	0.0532	ug/L	0.0532	ppb	11:49:41
3	Cr 267.716†	100.4	27.1	0.3634	ug/L	0.3634	ppb	11:49:41
3	Cu 324.752†	5718.7	67.9	0.2234	ug/L	0.2234	ppb	11:49:21
3	Mn 257.610†	479.2	81.9	0.1131	ug/L	0.1131	ppb	11:49:41
3	Mo 202.031†	10.6	1.9	0.1659	ug/L	0.1659	ppb	11:49:41
3	Ni 231.604†	99.0	13.2	0.4195	ug/L	0.4195	ppb	11:49:41
3	P 214.914†	193.1	2.5	1.8356	ug/L	1.8356	ppb	11:49:41
3	Pb 220.353†	-58.2	1.1	0.1647	ug/L	0.1647	ppb	11:49:41
3	S 181.975 Axial†	28.0	-2.6	-4.7374	ug/L	-4.7374	ppb	11:49:41
3	Sb 206.836†	29.2	5.0	2.1114	ug/L	2.1114	ppb	11:49:41
3	Se 196.026†	-18.5	-1.2	-1.0177	ug/L	-1.0177	ppb	11:49:41
3	Si 251.611†	635.3	136.2	5.1683	ug/L	5.1683	ppb	11:49:41
3	Sn 189.927†	11.5	4.1	0.9329	ug/L	0.9329	ppb	11:49:41
3	Ti 334.940†	-1105.7	34.6	0.0732	ug/L	0.0732	ppb	11:49:21
3	Tl 190.801†	-32.3	-2.6	-1.0229	ug/L	-1.0229	ppb	11:49:41
3	U 409.014†	-2206.7	35.6	1.0801	ug/L	1.0801	ppb	11:49:21
3	V 292.402†	-1323.5	16.7	0.1356	ug/L	0.1356	ppb	11:49:21
3	Zn 213.857†	913.1	327.3	3.9630	ug/L	3.9630	ppb	11:49:41
3	SiO2†	667.1	156.3	12.748	ug/L	12.748	ppb	11:50:42

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	827908.6	101.11 %		0.673			0.67%
Sc Radial	4363.4	99.3 %		1.61			1.62%
Y 371.029	698913.0	101.05 %		0.742			0.73%
Y RADIAL	4763.1	100.1 %		1.38			1.38%
Ag 328.068†	-39.1	-0.2039 ug/L		0.40937	-0.2039 ppb	0.40937	200.79%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-1.8	-1.8225 ug/L		7.40648	-1.8225 ppb	7.40648	406.40%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	3.3	1.8100 ug/L		3.79014	1.8100 ppb	3.79014	209.40%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	340.2	9.5444 ug/L		0.22946	9.5444 ppb	0.22946	2.40%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	14.2	0.1324 ug/L		0.04406	0.1324 ppb	0.04406	33.28%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	75.3	0.0321 ug/L		0.02566	0.0321 ppb	0.02566	79.97%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	9.9	18.814 ug/L		1.4439	18.814 ppb	1.4439	7.67%

QC value within limits for Ca 317.933 Radial	Recovery = Not calculated		
Cd 226.502†	2.5 0.0365 ug/L	0.15575 0.0365 ppb	0.15575 426.34%
QC value within limits for Cd 226.502	Recovery = Not calculated		
Co 228.616†	0.5 0.0126 ug/L	0.06393 0.0126 ppb	0.06393 508.85%
QC value within limits for Co 228.616	Recovery = Not calculated		
Cr 267.716†	9.5 0.1274 ug/L	0.24741 0.1274 ppb	0.24741 194.22%
QC value within limits for Cr 267.716	Recovery = Not calculated		
Cu 324.752†	34.0 0.1126 ug/L	0.12073 0.1126 ppb	0.12073 107.22%
QC value within limits for Cu 324.752	Recovery = Not calculated		
Fe 238.204 Radial†	-0.3 -4.0220 ug/L	2.17392 -4.0220 ppb	2.17392 54.05%
QC value within limits for Fe 238.204 Radial	Recovery = Not calculated		
K 766.490 Radial†	193.3 36.831 ug/L	21.4438 36.831 ppb	21.4438 58.22%
QC value within limits for K 766.490 Radial	Recovery = Not calculated		
Mg 279.077 IEC†	0.3 13.382 ug/L	132.3172 13.382 ppb	132.3172 988.75%
QC value within limits for Mg 279.077 IEC	Recovery = Not calculated		
Mn 257.610†	91.2 0.1189 ug/L	0.01931 0.1189 ppb	0.01931 16.23%
QC value within limits for Mn 257.610	Recovery = Not calculated		
Mo 202.031†	1.5 0.1307 ug/L	0.08959 0.1307 ppb	0.08959 68.54%
QC value within limits for Mo 202.031	Recovery = Not calculated		
Na 589.592 Radial†	-50.8 -17.900 ug/L	20.4690 -17.900 ppb	20.4690 114.35%
QC value within limits for Na 589.592 Radial	Recovery = Not calculated		
Ni 231.604†	9.0 0.2851 ug/L	0.12032 0.2851 ppb	0.12032 42.20%
QC value within limits for Ni 231.604	Recovery = Not calculated		
P 214.914†	-1.7 -1.2908 ug/L	3.76140 -1.2908 ppb	3.76140 291.40%
QC value within limits for P 214.914	Recovery = Not calculated		
Pb 220.353†	7.6 1.1740 ug/L	1.48236 1.1740 ppb	1.48236 126.27%
QC value within limits for Pb 220.353	Recovery = Not calculated		
S 181.975 Axial†	-0.3 -0.5526 ug/L	4.35816 -0.5526 ppb	4.35816 788.67%
QC value within limits for S 181.975 Axial	Recovery = Not calculated		
Sb 206.836†	2.3 0.9861 ug/L	1.04143 0.9861 ppb	1.04143 105.61%
QC value within limits for Sb 206.836	Recovery = Not calculated		
Se 196.026†	0.7 0.5938 ug/L	2.27102 0.5938 ppb	2.27102 382.45%
QC value within limits for Se 196.026	Recovery = Not calculated		
Si 251.611†	145.5 5.5211 ug/L	0.30596 5.5211 ppb	0.30596 5.54%
QC value within limits for Si 251.611	Recovery = Not calculated		
Sn 189.927†	6.0 1.3615 ug/L	0.40877 1.3615 ppb	0.40877 30.02%
QC value within limits for Sn 189.927	Recovery = Not calculated		
Sr 421.552†	5.0 0.0400 ug/L	0.05856 0.0400 ppb	0.05856 146.55%
QC value within limits for Sr 421.552	Recovery = Not calculated		
Ti 334.940†	4.1 0.0089 ug/L	0.12382 0.0089 ppb	0.12382 >999.9%
QC value within limits for Ti 334.940	Recovery = Not calculated		
Tl 190.801†	3.2 1.2375 ug/L	3.06995 1.2375 ppb	3.06995 248.08%
QC value within limits for Tl 190.801	Recovery = Not calculated		
U 409.014†	-26.8 -0.8140 ug/L	2.55300 -0.8140 ppb	2.55300 313.63%
QC value within limits for U 409.014	Recovery = Not calculated		
V 292.402†	-3.5 -0.0273 ug/L	0.16176 -0.0273 ppb	0.16176 593.25%
QC value within limits for V 292.402	Recovery = Not calculated		
Zn 213.857†	341.0 4.1306 ug/L	0.17503 4.1306 ppb	0.17503 4.24%
QC value within limits for Zn 213.857	Recovery = Not calculated		
SiO2†	162.7 13.278 ug/L	0.8169 13.278 ppb	0.8169 6.15%
QC value within limits for SiO2	Recovery = Not calculated		

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 12:49:40

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4261.9	4261.9	97.0 %			12:51:52
1	Y RADIAL	4786.4	4786.4	100.5 %			12:51:32
1	Al 396.153Radial†	5093.9	5331.2	5212.3 ug/L		5212.3 ppb	12:51:32
1	Ca 317.933Radial†	2683.5	2751.7	5206.8 ug/L		5206.8 ppb	12:51:52
1	Fe 238.204 Radial†	446.8	452.3	5256.6 ug/L		5256.6 ppb	12:51:52
1	K 766.490 Radial†	29720.1	28050.1	5337.7 ug/L		5337.7 ppb	12:51:32
1	Mg 279.077 IEC†	127.0	129.4	5338.2 ug/L		5338.2 ppb	12:51:52
1	Na 589.592 Radial†	28222.6	29979.7	10568 ug/L		10568 ppb	12:51:32
1	Sr 421.552†	64501.3	66496.3	532.98 ug/L		532.98 ppb	12:51:32
1	Sc 361.383	828749.8	828749.8	101.21 %			12:52:49
1	Y 371.029	689872.4	689872.4	99.743 %			12:52:49
1	Ag 328.068†	99303.8	97929.4	511.61 ug/L		511.61 ppb	12:52:54
1	As 188.979†	907.6	923.5	511.35 ug/L		511.35 ppb	12:53:14
1	B 249.677†	17583.9	17910.7	500.15 ug/L		500.15 ppb	12:52:54
1	Ba 233.527†	54830.6	54174.7	508.70 ug/L		508.70 ppb	12:52:54
1	Be 313.107†	1202781.6	1192108.2	508.74 ug/L		508.74 ppb	12:52:49
1	Cd 226.502†	35321.1	35068.8	508.72 ug/L		508.72 ppb	12:52:54
1	Co 228.616†	20083.2	19888.9	514.15 ug/L		514.15 ppb	12:52:54
1	Cr 267.716†	38399.6	37868.2	508.88 ug/L		508.88 ppb	12:52:54
1	Cu 324.752†	159658.3	152194.2	502.46 ug/L		502.46 ppb	12:52:54
1	Mn 257.610†	384664.4	379668.6	499.50 ug/L		499.50 ppb	12:52:54
1	Mo 202.031†	5739.0	5661.7	503.75 ug/L		503.75 ppb	12:53:14
1	Ni 231.604†	16468.1	16186.9	513.74 ug/L		513.74 ppb	12:52:54
1	P 214.914†	3605.0	3374.5	2415.7 ug/L		2415.7 ppb	12:53:14
1	Pb 220.353†	3261.4	3280.6	505.46 ug/L		505.46 ppb	12:53:14
1	S 181.975 Axial†	600.7	563.3	1007.5 ug/L		1007.5 ppb	12:53:14
1	Sb 206.836†	1234.1	1195.7	518.37 ug/L		518.37 ppb	12:53:14
1	Se 196.026†	590.6	600.5	518.57 ug/L		518.57 ppb	12:53:14
1	Si 251.611†	68245.0	66939.6	2535.0 ug/L		2535.0 ppb	12:52:54
1	Sn 189.927†	2253.1	2219.0	504.17 ug/L		504.17 ppb	12:53:14
1	Ti 334.940†	288608.1	286273.0	497.70 ug/L		497.70 ppb	12:52:54
1	Tl 190.801†	1286.6	1300.3	506.37 ug/L		506.37 ppb	12:53:14
1	U 409.014†	14990.3	17015.0	514.47 ug/L		514.47 ppb	12:52:54
1	V 292.402†	62830.4	63395.4	512.95 ug/L		512.95 ppb	12:52:54
1	Zn 213.857†	43245.4	42157.4	506.07 ug/L		506.07 ppb	12:52:54
1	SiO2†	68507.2	67187.4	5469.6 ug/L		5469.6 ppb	12:54:21
2	Sc Radial	4304.5	4304.5	97.9 %			12:52:17
2	Y RADIAL	4714.5	4714.5	99.03 %			12:51:57
2	Al 396.153Radial†	4972.9	5155.6	5039.8 ug/L		5039.8 ppb	12:51:57
2	Ca 317.933Radial†	2695.0	2736.0	5177.2 ug/L		5177.2 ppb	12:52:17
2	Fe 238.204 Radial†	451.1	452.1	5254.2 ug/L		5254.2 ppb	12:52:17
2	K 766.490 Radial†	29193.9	27209.2	5177.6 ug/L		5177.6 ppb	12:51:57
2	Mg 279.077 IEC†	128.3	129.4	5339.6 ug/L		5339.6 ppb	12:52:17
2	Na 589.592 Radial†	27372.0	28822.9	10161 ug/L		10161 ppb	12:51:57
2	Sr 421.552†	62671.0	63968.4	512.72 ug/L		512.72 ppb	12:51:57
2	Sc 361.383	832371.4	832371.4	101.65 %			12:53:20
2	Y 371.029	695164.8	695164.8	100.51 %			12:53:20
2	Ag 328.068†	99890.0	98079.2	512.40 ug/L		512.40 ppb	12:53:25
2	As 188.979†	910.5	922.5	510.80 ug/L		510.80 ppb	12:53:45
2	B 249.677†	17865.0	18111.6	505.77 ug/L		505.77 ppb	12:53:25
2	Ba 233.527†	55189.0	54291.6	509.80 ug/L		509.80 ppb	12:53:25
2	Be 313.107†	1218747.3	1202643.5	513.23 ug/L		513.23 ppb	12:53:20
2	Cd 226.502†	35688.8	35278.6	511.76 ug/L		511.76 ppb	12:53:25
2	Co 228.616†	20324.8	20040.3	518.06 ug/L		518.06 ppb	12:53:25
2	Cr 267.716†	38700.7	37999.3	510.64 ug/L		510.64 ppb	12:53:25
2	Cu 324.752†	160866.7	152696.7	504.12 ug/L		504.12 ppb	12:53:25
2	Mn 257.610†	387332.0	380639.2	500.77 ug/L		500.77 ppb	12:53:25
2	Mo 202.031†	5751.8	5649.6	502.67 ug/L		502.67 ppb	12:53:45
2	Ni 231.604†	16569.9	16216.2	514.67 ug/L		514.67 ppb	12:53:25

2	P 214.914†	3628.3	3381.9	2420.9 ug/L	2420.9 ppb	12:53:45
2	Pb 220.353†	3281.8	3286.7	506.36 ug/L	506.36 ppb	12:53:45
2	S 181.975 Axial†	602.5	562.5	1006.1 ug/L	1006.1 ppb	12:53:45
2	Sb 206.836†	1262.4	1218.2	527.79 ug/L	527.79 ppb	12:53:45
2	Se 196.026†	608.2	615.3	530.79 ug/L	530.79 ppb	12:53:45
2	Si 251.611†	68655.1	67049.6	2539.2 ug/L	2539.2 ppb	12:53:25
2	Sn 189.927†	2273.0	2228.8	506.39 ug/L	506.39 ppb	12:53:45
2	Ti 334.940†	290598.2	286990.0	498.94 ug/L	498.94 ppb	12:53:25
2	Tl 190.801†	1294.9	1302.9	507.38 ug/L	507.38 ppb	12:53:45
2	U 409.014†	15118.1	17076.2	516.32 ug/L	516.32 ppb	12:53:25
2	V 292.402†	63417.0	63702.4	515.38 ug/L	515.38 ppb	12:53:25
2	Zn 213.857†	43539.1	42260.5	507.31 ug/L	507.31 ppb	12:53:25
2	SiO2†	68156.5	66548.0	5417.4 ug/L	5417.4 ppb	12:54:27
3	Sc Radial	4246.7	4246.7	96.6 %		12:52:42
3	Y RADIAL	4814.1	4814.1	101.1 %		12:52:22
3	Al 396.153Radial†	5061.9	5316.9	5198.5 ug/L	5198.5 ppb	12:52:22
3	Ca 317.933Radial†	2688.3	2766.6	5234.9 ug/L	5234.9 ppb	12:52:42
3	Fe 238.204 Radial†	454.8	462.2	5370.5 ug/L	5370.5 ppb	12:52:42
3	K 766.490 Radial†	29670.6	28108.9	5348.9 ug/L	5348.9 ppb	12:52:22
3	Mg 279.077 IEC†	125.5	128.4	5294.8 ug/L	5294.8 ppb	12:52:42
3	Na 589.592 Radial†	28072.0	29928.3	10550 ug/L	10550 ppb	12:52:22
3	Sr 421.552†	64332.8	66560.5	533.49 ug/L	533.49 ppb	12:52:22
3	Sc 361.383	837178.6	837178.6	102.24 %		12:53:51
3	Y 371.029	698029.1	698029.1	100.92 %		12:53:51
3	Ag 328.068†	98356.8	96015.3	501.68 ug/L	501.68 ppb	12:53:56
3	As 188.979†	909.8	916.6	507.54 ug/L	507.54 ppb	12:54:16
3	B 249.677†	17499.0	17652.8	492.92 ug/L	492.92 ppb	12:53:56
3	Ba 233.527†	54300.7	53110.9	498.72 ug/L	498.72 ppb	12:53:56
3	Be 313.107†	1209735.4	1186944.8	506.52 ug/L	506.52 ppb	12:53:51
3	Cd 226.502†	35124.3	34524.9	500.81 ug/L	500.81 ppb	12:53:56
3	Co 228.616†	19951.5	19560.3	505.66 ug/L	505.66 ppb	12:53:56
3	Cr 267.716†	38093.5	37186.8	499.75 ug/L	499.75 ppb	12:53:56
3	Cu 324.752†	157873.2	148860.1	491.46 ug/L	491.46 ppb	12:53:56
3	Mn 257.610†	381533.0	372779.4	490.45 ug/L	490.45 ppb	12:53:56
3	Mo 202.031†	5739.4	5605.0	498.72 ug/L	498.72 ppb	12:54:16
3	Ni 231.604†	16305.4	15863.9	503.49 ug/L	503.49 ppb	12:53:56
3	P 214.914†	3597.0	3330.9	2385.2 ug/L	2385.2 ppb	12:54:16
3	Pb 220.353†	3275.3	3261.8	502.55 ug/L	502.55 ppb	12:54:16
3	S 181.975 Axial†	599.8	556.4	995.14 ug/L	995.14 ppb	12:54:16
3	Sb 206.836†	1256.7	1205.4	522.26 ug/L	522.26 ppb	12:54:16
3	Se 196.026†	602.6	606.3	523.72 ug/L	523.72 ppb	12:54:16
3	Si 251.611†	67639.5	65668.4	2486.8 ug/L	2486.8 ppb	12:53:56
3	Sn 189.927†	2253.0	2196.4	499.04 ug/L	499.04 ppb	12:54:16
3	Ti 334.940†	285965.2	280817.1	488.22 ug/L	488.22 ppb	12:53:56
3	Tl 190.801†	1292.6	1293.3	503.60 ug/L	503.60 ppb	12:54:16
3	U 409.014†	14765.8	16646.3	503.29 ug/L	503.29 ppb	12:53:56
3	V 292.402†	62348.1	62298.6	504.09 ug/L	504.09 ppb	12:53:56
3	Zn 213.857†	42944.7	41433.1	497.36 ug/L	497.36 ppb	12:53:56
3	SiO2†	68149.5	66156.1	5385.5 ug/L	5385.5 ppb	12:54:32

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	832766.6	101.70 %	0.516			0.51%
Sc Radial	4271.0	97.2 %	0.68			0.70%
Y 371.029	694355.4	100.39 %	0.598			0.60%
Y RADIAL	4771.7	100.2 %	1.08			1.08%
Ag 328.068†	97341.3	508.57 ug/L	5.972	508.57 ppb	5.972	1.17%
QC value within limits for Ag 328.068 Recovery = 101.71%						
Al 396.153Radial†	5267.9	5150.2 ug/L	95.84	5150.2 ppb	95.84	1.86%
QC value within limits for Al 396.153Radial Recovery = 103.00%						
As 188.979†	920.9	509.90 ug/L	2.058	509.90 ppb	2.058	0.40%
QC value within limits for As 188.979 Recovery = 101.98%						
B 249.677†	17891.7	499.61 ug/L	6.445	499.61 ppb	6.445	1.29%
QC value within limits for B 249.677 Recovery = 99.92%						
Ba 233.527†	53859.0	505.74 ug/L	6.104	505.74 ppb	6.104	1.21%
QC value within limits for Ba 233.527 Recovery = 101.15%						
Be 313.107†	1193898.8	509.49 ug/L	3.418	509.49 ppb	3.418	0.67%
QC value within limits for Be 313.107 Recovery = 101.90%						
Ca 317.933Radial†	2751.4	5206.3 ug/L	28.88	5206.3 ppb	28.88	0.55%

QC value within limits for Ca 317.933 Radial Recovery = 104.13%

Cd 226.502†	34957.4	507.10 ug/L	5.656	507.10 ppb	5.656	1.12%
QC value within limits for Cd 226.502 Recovery = 101.42%						
Co 228.616†	19829.8	512.62 ug/L	6.337	512.62 ppb	6.337	1.24%
QC value within limits for Co 228.616 Recovery = 102.52%						
Cr 267.716†	37684.8	506.43 ug/L	5.848	506.43 ppb	5.848	1.15%
QC value within limits for Cr 267.716 Recovery = 101.29%						
Cu 324.752†	151250.3	499.35 ug/L	6.877	499.35 ppb	6.877	1.38%
QC value within limits for Cu 324.752 Recovery = 99.87%						
Fe 238.204 Radial†	455.6	5293.8 ug/L	66.47	5293.8 ppb	66.47	1.26%
QC value within limits for Fe 238.204 Radial Recovery = 105.88%						
K 766.490 Radial†	27789.4	5288.1 ug/L	95.80	5288.1 ppb	95.80	1.81%
QC value within limits for K 766.490 Radial Recovery = 105.76%						
Mg 279.077 IEC†	129.1	5324.2 ug/L	25.49	5324.2 ppb	25.49	0.48%
QC value within limits for Mg 279.077 IEC Recovery = 106.48%						
Mn 257.610†	377695.8	496.91 ug/L	5.627	496.91 ppb	5.627	1.13%
QC value within limits for Mn 257.610 Recovery = 99.38%						
Mo 202.031†	5638.8	501.71 ug/L	2.649	501.71 ppb	2.649	0.53%
QC value within limits for Mo 202.031 Recovery = 100.34%						
Na 589.592 Radial†	29576.9	10427 ug/L	230.4	10427 ppb	230.4	2.21%
QC value within limits for Na 589.592 Radial Recovery = 104.27%						
Ni 231.604†	16089.0	510.63 ug/L	6.204	510.63 ppb	6.204	1.21%
QC value within limits for Ni 231.604 Recovery = 102.13%						
P 214.914†	3362.4	2407.3 ug/L	19.27	2407.3 ppb	19.27	0.80%
QC value within limits for P 214.914 Recovery = 96.29%						
Pb 220.353†	3276.4	504.79 ug/L	1.993	504.79 ppb	1.993	0.39%
QC value within limits for Pb 220.353 Recovery = 100.96%						
S 181.975 Axial†	560.8	1002.9 ug/L	6.76	1002.9 ppb	6.76	0.67%
QC value within limits for S 181.975 Axial Recovery = 100.29%						
Sb 206.836†	1206.4	522.80 ug/L	4.735	522.80 ppb	4.735	0.91%
QC value within limits for Sb 206.836 Recovery = 104.56%						
Se 196.026†	607.4	524.36 ug/L	6.133	524.36 ppb	6.133	1.17%
QC value within limits for Se 196.026 Recovery = 104.87%						
Si 251.611†	66552.5	2520.4 ug/L	29.11	2520.4 ppb	29.11	1.15%
QC value within limits for Si 251.611 Recovery = 100.81%						
Sn 189.927†	2214.7	503.20 ug/L	3.770	503.20 ppb	3.770	0.75%
QC value within limits for Sn 189.927 Recovery = 100.64%						
Sr 421.552†	65675.1	526.40 ug/L	11.850	526.40 ppb	11.850	2.25%
QC value within limits for Sr 421.552 Recovery = 105.28%						
Ti 334.940†	284693.4	494.95 ug/L	5.860	494.95 ppb	5.860	1.18%
QC value within limits for Ti 334.940 Recovery = 98.99%						
Tl 190.801†	1298.9	505.78 ug/L	1.953	505.78 ppb	1.953	0.39%
QC value within limits for Tl 190.801 Recovery = 101.16%						
U 409.014†	16912.5	511.36 ug/L	7.050	511.36 ppb	7.050	1.38%
QC value within limits for U 409.014 Recovery = 102.27%						
V 292.402†	63132.1	510.81 ug/L	5.942	510.81 ppb	5.942	1.16%
QC value within limits for V 292.402 Recovery = 102.16%						
Zn 213.857†	41950.3	503.58 ug/L	5.424	503.58 ppb	5.424	1.08%
QC value within limits for Zn 213.857 Recovery = 100.72%						
SiO2†	66630.5	5424.2 ug/L	42.42	5424.2 ppb	42.42	0.78%
QC value within limits for SiO2 Recovery = 101.43%						

All analyte(s) passed QC.

Sequence No.: 20

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 12:56:41

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4122.8	4122.8	93.8 %		12:58:54
1	Y RADIAL	4237.6	4237.6	89.01 %		12:58:34
1	Al 396.153Radial†	-72.2	1.1	1.0140 ug/L	1.0140 ppb	12:58:54
1	Ca 317.933Radial†	19.5	5.1	9.5949 ug/L	9.5949 ppb	12:58:54
1	Fe 238.204 Radial†	6.3	-1.8	-20.749 ug/L	-20.749 ppb	12:58:54
1	K 766.490 Radial†	2742.0	324.3	61.784 ug/L	61.784 ppb	12:58:34
1	Mg 279.077 IEC†	1.8	0.4	16.217 ug/L	16.217 ppb	12:58:54
1	Na 589.592 Radial†	-841.8	-22.3	-7.8636 ug/L	-7.8636 ppb	12:58:34
1	Sr 421.552†	22.9	3.5	0.0283 ug/L	0.0283 ppb	12:58:34
1	Sc 361.383	820286.5	820286.5	100.18 %		12:59:51
1	Y 371.029	693929.7	693929.7	100.33 %		12:59:51
1	Ag 328.068†	165.9	-19.6	-0.1098 ug/L	-0.1098 ppb	12:59:51
1	As 188.979†	-22.3	4.5	2.4690 ug/L	2.4690 ppb	13:00:11
1	B 249.677†	-310.7	227.2	6.3770 ug/L	6.3770 ppb	13:00:11
1	Ba 233.527†	3.2	3.9	0.0347 ug/L	0.0347 ppb	13:00:11
1	Be 313.107†	-3607.0	130.5	0.0559 ug/L	0.0559 ppb	12:59:51
1	Cd 226.502†	-163.0	7.9	0.1166 ug/L	0.1166 ppb	13:00:11
1	Co 228.616†	-31.6	14.7	0.3824 ug/L	0.3824 ppb	13:00:11
1	Cr 267.716†	71.5	-0.2	-0.0048 ug/L	-0.0048 ppb	13:00:11
1	Cu 324.752†	5624.1	62.1	0.2040 ug/L	0.2040 ppb	12:59:51
1	Mn 257.610†	486.4	96.5	0.1241 ug/L	0.1241 ppb	13:00:11
1	Mo 202.031†	19.0	10.5	0.9285 ug/L	0.9285 ppb	13:00:11
1	Ni 231.604†	92.7	8.4	0.2679 ug/L	0.2679 ppb	13:00:11
1	P 214.914†	184.0	-3.6	-2.7086 ug/L	-2.7086 ppb	13:00:11
1	Pb 220.353†	-51.3	7.1	1.0952 ug/L	1.0952 ppb	13:00:11
1	S 181.975 Axial†	27.2	-3.0	-5.4258 ug/L	-5.4258 ppb	13:00:11
1	Sb 206.836†	23.9	0.2	0.0873 ug/L	0.0873 ppb	13:00:11
1	Se 196.026†	-13.7	3.3	2.6542 ug/L	2.6542 ppb	13:00:11
1	Si 251.611†	636.7	147.4	5.5832 ug/L	5.5832 ppb	13:00:11
1	Sn 189.927†	6.6	-0.6	-0.1354 ug/L	-0.1354 ppb	13:00:11
1	Ti 334.940†	-1033.3	89.8	0.1561 ug/L	0.1561 ppb	12:59:51
1	Tl 190.801†	-27.9	1.2	0.4639 ug/L	0.4639 ppb	13:00:11
1	U 409.014†	-2215.6	-7.5	-0.2238 ug/L	-0.2238 ppb	12:59:51
1	V 292.402†	-1375.0	-55.2	-0.4246 ug/L	-0.4246 ppb	12:59:51
1	Zn 213.857†	851.6	280.0	3.3939 ug/L	3.3939 ppb	13:00:11
1	SiO2†	638.6	138.1	11.247 ug/L	11.247 ppb	13:01:22
2	Sc Radial	4186.6	4186.6	95.3 %		12:59:19
2	Y RADIAL	4679.1	4679.1	98.29 %		12:58:59
2	Al 396.153Radial†	-87.4	-13.7	-13.461 ug/L	-13.461 ppb	12:59:19
2	Ca 317.933Radial†	22.7	8.1	15.366 ug/L	15.366 ppb	12:59:19
2	Fe 238.204 Radial†	7.5	-0.6	-6.4238 ug/L	-6.4238 ppb	12:59:19
2	K 766.490 Radial†	2754.6	293.0	55.823 ug/L	55.823 ppb	12:58:59
2	Mg 279.077 IEC†	0.8	-0.7	-27.119 ug/L	-27.119 ppb	12:59:19
2	Na 589.592 Radial†	-886.4	-55.5	-19.549 ug/L	-19.549 ppb	12:58:59
2	Sr 421.552†	21.0	1.2	0.0097 ug/L	0.0097 ppb	12:58:59
2	Sc 361.383	820591.8	820591.8	100.22 %		13:00:16
2	Y 371.029	693619.7	693619.7	100.29 %		13:00:16
2	Ag 328.068†	137.4	-48.0	-0.2526 ug/L	-0.2526 ppb	13:00:16
2	As 188.979†	-25.6	1.3	0.6986 ug/L	0.6986 ppb	13:00:36
2	B 249.677†	-293.6	244.4	6.8564 ug/L	6.8564 ppb	13:00:36
2	Ba 233.527†	9.0	9.7	0.0893 ug/L	0.0893 ppb	13:00:36
2	Be 313.107†	-3652.3	86.6	0.0372 ug/L	0.0372 ppb	13:00:16
2	Cd 226.502†	-166.4	4.6	0.0669 ug/L	0.0669 ppb	13:00:36
2	Co 228.616†	-41.3	5.0	0.1287 ug/L	0.1287 ppb	13:00:36
2	Cr 267.716†	79.9	8.2	0.1090 ug/L	0.1090 ppb	13:00:36
2	Cu 324.752†	5675.4	111.2	0.3674 ug/L	0.3674 ppb	13:00:16
2	Mn 257.610†	483.2	93.1	0.1229 ug/L	0.1229 ppb	13:00:36
2	Mo 202.031†	10.6	2.1	0.1845 ug/L	0.1845 ppb	13:00:36
2	Ni 231.604†	97.8	13.5	0.4294 ug/L	0.4294 ppb	13:00:36

2	P 214.914†	186.5	-1.2	-0.9377 ug/L	-0.9377 ppb	13:00:36
2	Pb 220.353†	-61.1	-2.6	-0.4083 ug/L	-0.4083 ppb	13:00:36
2	S 181.975 Axial†	29.3	-0.9	-1.6210 ug/L	-1.6210 ppb	13:00:36
2	Sb 206.836†	26.0	2.3	0.9839 ug/L	0.9839 ppb	13:00:36
2	Se 196.026†	-13.8	3.2	2.6731 ug/L	2.6731 ppb	13:00:36
2	Si 251.611†	652.9	163.3	6.1968 ug/L	6.1968 ppb	13:00:36
2	Sn 189.927†	12.5	5.3	1.2124 ug/L	1.2124 ppb	13:00:36
2	Ti 334.940†	-1036.2	87.3	0.1565 ug/L	0.1565 ppb	13:00:16
2	Tl 190.801†	-29.8	-0.7	-0.2529 ug/L	-0.2529 ppb	13:00:36
2	U 409.014†	-2247.7	-38.6	-1.1711 ug/L	-1.1711 ppb	13:00:16
2	V 292.402†	-1381.9	-61.5	-0.4908 ug/L	-0.4908 ppb	13:00:16
2	Zn 213.857†	850.6	278.7	3.3742 ug/L	3.3742 ppb	13:00:36
2	SiO2†	638.7	138.0	11.256 ug/L	11.256 ppb	13:01:42
3	Sc Radial	4228.2	4228.2	96.2 %		12:59:44
3	Y RADIAL	4655.5	4655.5	97.79 %		12:59:24
3	Al 396.153Radial†	-73.3	1.9	1.8952 ug/L	1.8952 ppb	12:59:44
3	Ca 317.933Radial†	27.0	12.4	23.461 ug/L	23.461 ppb	12:59:44
3	Fe 238.204 Radial†	6.2	-2.0	-23.574 ug/L	-23.574 ppb	12:59:44
3	K 766.490 Radial†	2678.8	185.7	35.373 ug/L	35.373 ppb	12:59:24
3	Mg 279.077 IEC†	3.6	2.2	90.892 ug/L	90.892 ppb	12:59:44
3	Na 589.592 Radial†	-859.2	-18.0	-6.3412 ug/L	-6.3412 ppb	12:59:24
3	Sr 421.552†	27.4	7.6	0.0609 ug/L	0.0609 ppb	12:59:24
3	Sc 361.383	819441.0	819441.0	100.08 %		13:00:41
3	Y 371.029	693279.0	693279.0	100.24 %		13:00:41
3	Ag 328.068†	227.2	41.9	0.2062 ug/L	0.2062 ppb	13:00:41
3	As 188.979†	-19.4	7.4	4.0824 ug/L	4.0824 ppb	13:01:01
3	B 249.677†	-335.2	202.4	5.6818 ug/L	5.6818 ppb	13:01:01
3	Ba 233.527†	13.3	14.0	0.1308 ug/L	0.1308 ppb	13:01:01
3	Be 313.107†	-3646.0	87.7	0.0377 ug/L	0.0377 ppb	13:00:41
3	Cd 226.502†	-169.5	1.3	0.0222 ug/L	0.0222 ppb	13:01:01
3	Co 228.616†	-41.7	4.6	0.1177 ug/L	0.1177 ppb	13:01:01
3	Cr 267.716†	71.9	0.3	0.0001 ug/L	0.0001 ppb	13:01:01
3	Cu 324.752†	5660.5	104.2	0.3398 ug/L	0.3398 ppb	13:00:41
3	Mn 257.610†	483.4	94.0	0.1175 ug/L	0.1175 ppb	13:01:01
3	Mo 202.031†	5.8	-2.7	-0.2418 ug/L	-0.2418 ppb	13:01:01
3	Ni 231.604†	81.9	-2.2	-0.0710 ug/L	-0.0710 ppb	13:01:01
3	P 214.914†	187.3	-0.1	-0.1132 ug/L	-0.1132 ppb	13:01:01
3	Pb 220.353†	-50.0	8.3	1.2784 ug/L	1.2784 ppb	13:01:01
3	S 181.975 Axial†	34.3	4.0	7.2446 ug/L	7.2446 ppb	13:01:01
3	Sb 206.836†	28.6	4.9	2.0605 ug/L	2.0605 ppb	13:01:01
3	Se 196.026†	-21.1	-4.1	-3.4948 ug/L	-3.4948 ppb	13:01:01
3	Si 251.611†	646.5	157.9	5.9962 ug/L	5.9962 ppb	13:01:01
3	Sn 189.927†	12.3	5.1	1.1633 ug/L	1.1633 ppb	13:01:01
3	Ti 334.940†	-1046.5	75.5	0.1245 ug/L	0.1245 ppb	13:00:41
3	Tl 190.801†	-30.8	-1.7	-0.6569 ug/L	-0.6569 ppb	13:01:01
3	U 409.014†	-2022.8	183.0	5.5531 ug/L	5.5531 ppb	13:00:41
3	V 292.402†	-1297.7	20.7	0.1779 ug/L	0.1779 ppb	13:00:41
3	Zn 213.857†	843.6	272.9	3.3102 ug/L	3.3102 ppb	13:01:01
3	SiO2†	641.2	141.4	11.549 ug/L	11.549 ppb	13:02:02

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	820106.4	100.16 %		0.073			0.07%
Sc Radial	4179.2	95.1 %		1.21			1.27%
Y 371.029	693609.5	100.28 %		0.047			0.05%
Y RADIAL	4524.1	95.03 %		5.217			5.49%
Ag 328.068†	-8.6	-0.0521 ug/L		0.23480	-0.0521 ppb	0.23480	450.92%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	-3.6	-3.5172 ug/L		8.62256	-3.5172 ppb	8.62256	245.16%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	4.4	2.4167 ug/L		1.69248	2.4167 ppb	1.69248	70.03%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	224.7	6.3051 ug/L		0.59056	6.3051 ppb	0.59056	9.37%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	9.2	0.0849 ug/L		0.04816	0.0849 ppb	0.04816	56.71%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	101.6	0.0436 ug/L		0.01067	0.0436 ppb	0.01067	24.49%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	8.5	16.141 ug/L		6.9654	16.141 ppb	6.9654	43.15%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	4.6	0.0686 ug/L	0.04722	0.0686 ppb	0.04722	68.89%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	8.1	0.2096 ug/L	0.14974	0.2096 ppb	0.14974	71.44%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	2.8	0.0347 ug/L	0.06433	0.0347 ppb	0.06433	185.23%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	92.5	0.3037 ug/L	0.08749	0.3037 ppb	0.08749	28.81%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	-1.5	-16.916 ug/L	9.1955	-16.916 ppb	9.1955	54.36%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	267.6	50.993 ug/L	13.8523	50.993 ppb	13.8523	27.17%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	0.6	26.663 ug/L	59.6950	26.663 ppb	59.6950	223.88%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	94.5	0.1215 ug/L	0.00352	0.1215 ppb	0.00352	2.90%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	3.3	0.2904 ug/L	0.59228	0.2904 ppb	0.59228	203.93%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-31.9	-11.251 ug/L	7.2261	-11.251 ppb	7.2261	64.23%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	6.6	0.2088 ug/L	0.25541	0.2088 ppb	0.25541	122.34%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-1.6	-1.2532 ug/L	1.32612	-1.2532 ppb	1.32612	105.82%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	4.2	0.6551 ug/L	0.92549	0.6551 ppb	0.92549	141.28%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	0.0	0.0660 ug/L	6.50146	0.0660 ppb	6.50146	>999.9%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	2.5	1.0439 ug/L	0.98794	1.0439 ppb	0.98794	94.64%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	0.8	0.6108 ug/L	3.55557	0.6108 ppb	3.55557	582.11%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	156.2	5.9254 ug/L	0.31285	5.9254 ppb	0.31285	5.28%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	3.3	0.7467 ug/L	0.76437	0.7467 ppb	0.76437	102.36%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	4.1	0.0330 ug/L	0.02594	0.0330 ppb	0.02594	78.72%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	84.2	0.1457 ug/L	0.01835	0.1457 ppb	0.01835	12.59%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	-0.4	-0.1486 ug/L	0.56763	-0.1486 ppb	0.56763	381.86%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	45.6	1.3860 ug/L	3.63969	1.3860 ppb	3.63969	262.60%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-32.0	-0.2458 ug/L	0.36848	-0.2458 ppb	0.36848	149.89%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	277.2	3.3594 ug/L	0.04376	3.3594 ppb	0.04376	1.30%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		139.2	11.351 ug/L	0.1715	11.351 ppb	0.1715	1.51%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

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Analysis Begun

Start Time: 3/19/2010 13:15:22

Plasma On Time: 3/15/2010 06:51:19

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\031910.sif

Batch ID:

Results Data Set: 031910

Results Library: C:\pe\Optima3\Results\Results.mdb

Sequence No.: 1

Autosampler Location: 7

Sample ID: CCV

Date Collected: 3/19/2010 13:15:23

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	4422.0	4422.0	101 %		13:17:15
1	Y RADIAL	4780.1	4780.1	100.4 %		13:17:15
1	Al 396.153Radial†	4976.3	5024.0	4910.8 ug/L	4910.8 ppb	13:17:15
1	Ca 317.933Radial†	2700.5	2668.4	5049.1 ug/L	5049.1 ppb	13:17:35
1	Fe 238.204 Radial†	452.2	441.0	5124.8 ug/L	5124.8 ppb	13:17:35
1	K 766.490 Radial†	28954.1	26178.8	4981.5 ug/L	4981.5 ppb	13:17:15
1	Mg 279.077 IEC†	127.2	124.9	5152.1 ug/L	5152.1 ppb	13:17:35
1	Na 589.592 Radial†	27030.2	27740.5	9779.1 ug/L	9779.1 ppb	13:17:15
1	Sr 421.552†	62430.7	62029.2	497.17 ug/L	497.17 ppb	13:17:15
1	Sc 361.383	836041.4	836041.4	102.10 %		13:18:32
1	Y 371.029	695666.9	695666.9	100.58 %		13:18:32
1	Ag 328.068†	99741.5	97502.4	509.35 ug/L	509.35 ppb	13:18:37
1	As 188.979†	902.8	911.0	504.45 ug/L	504.45 ppb	13:18:57
1	B 249.677†	17798.3	17969.1	501.80 ug/L	501.80 ppb	13:18:37
1	Ba 233.527†	55289.1	54151.2	508.47 ug/L	508.47 ppb	13:18:37
1	Be 313.107†	1212462.2	1191224.9	508.36 ug/L	508.36 ppb	13:18:32
1	Cd 226.502†	35617.7	35054.9	508.53 ug/L	508.53 ppb	13:18:37
1	Co 228.616†	20302.2	19930.3	515.21 ug/L	515.21 ppb	13:18:37
1	Cr 267.716†	38592.6	37726.3	506.96 ug/L	506.96 ppb	13:18:37
1	Cu 324.752†	160977.9	152110.9	502.18 ug/L	502.18 ppb	13:18:37
1	Mn 257.610†	392889.1	384409.3	505.72 ug/L	505.72 ppb	13:18:32
1	Mo 202.031†	5733.6	5606.9	498.87 ug/L	498.87 ppb	13:18:57
1	Ni 231.604†	16562.6	16137.5	512.17 ug/L	512.17 ppb	13:18:37
1	P 214.914†	3592.6	3331.3	2383.6 ug/L	2383.6 ppb	13:18:57
1	Pb 220.353†	3245.5	3237.0	498.70 ug/L	498.70 ppb	13:18:57
1	S 181.975 Axial†	595.4	552.9	988.90 ug/L	988.90 ppb	13:18:57
1	Sb 206.836†	1246.1	1196.8	518.64 ug/L	518.64 ppb	13:18:57
1	Se 196.026†	605.1	609.6	525.69 ug/L	525.69 ppb	13:18:57
1	Si 251.611†	68974.5	67066.0	2539.9 ug/L	2539.9 ppb	13:18:37
1	Sn 189.927†	2249.7	2196.2	498.98 ug/L	498.98 ppb	13:18:57
1	Ti 334.940†	291047.8	286175.5	497.52 ug/L	497.52 ppb	13:18:37
1	Tl 190.801†	1279.6	1282.3	499.44 ug/L	499.44 ppb	13:18:57
1	U 409.014†	15153.6	17045.7	515.42 ug/L	515.42 ppb	13:18:37
1	V 292.402†	63088.1	63106.3	510.59 ug/L	510.59 ppb	13:18:37
1	Zn 213.857†	43547.5	42080.7	505.17 ug/L	505.17 ppb	13:18:37
1	SiO2†	69192.6	67268.3	5476.3 ug/L	5476.3 ppb	13:20:05
2	Sc Radial	4371.3	4371.3	99.5 %		13:17:40
2	Y RADIAL	4764.2	4764.2	100.1 %		13:17:40
2	Al 396.153Radial†	5013.3	5118.7	5001.8 ug/L	5001.8 ppb	13:17:40
2	Ca 317.933Radial†	2726.3	2725.5	5157.2 ug/L	5157.2 ppb	13:18:00
2	Fe 238.204 Radial†	455.1	449.1	5219.7 ug/L	5219.7 ppb	13:18:00
2	K 766.490 Radial†	29490.7	27052.7	5147.8 ug/L	5147.8 ppb	13:17:40
2	Mg 279.077 IEC†	130.5	129.7	5350.0 ug/L	5350.0 ppb	13:18:00
2	Na 589.592 Radial†	27159.9	28183.1	9935.1 ug/L	9935.1 ppb	13:17:40
2	Sr 421.552†	63189.5	63513.1	509.07 ug/L	509.07 ppb	13:17:40
2	Sc 361.383	780265.1	780265.1	95.291 %		13:19:03
2	Y 371.029	650259.2	650259.2	94.016 %		13:19:03

2	Ag 328.068†	98573.2	103259.4	539.38 ug/L	539.38 ppb	13:19:08
2	As 188.979†	919.2	991.5	548.84 ug/L	548.84 ppb	13:19:28
2	B 249.677†	17450.0	18849.7	526.40 ug/L	526.40 ppb	13:19:08
2	Ba 233.527†	54777.2	57485.0	539.77 ug/L	539.77 ppb	13:19:08
2	Be 313.107†	1214795.0	1278559.6	545.62 ug/L	545.62 ppb	13:19:03
2	Cd 226.502†	35129.2	37035.9	537.29 ug/L	537.29 ppb	13:19:08
2	Co 228.616†	20097.6	21137.0	546.43 ug/L	546.43 ppb	13:19:08
2	Cr 267.716†	38463.9	40293.3	541.43 ug/L	541.43 ppb	13:19:08
2	Cu 324.752†	159071.0	161380.1	532.77 ug/L	532.77 ppb	13:19:08
2	Mn 257.610†	393681.2	412747.3	542.98 ug/L	542.98 ppb	13:19:03
2	Mo 202.031†	5788.9	6066.5	539.72 ug/L	539.72 ppb	13:19:28
2	Ni 231.604†	16444.8	17173.4	545.05 ug/L	545.05 ppb	13:19:08
2	P 214.914†	3636.2	3628.6	2599.3 ug/L	2599.3 ppb	13:19:28
2	Pb 220.353†	3292.1	3513.1	541.22 ug/L	541.22 ppb	13:19:28
2	S 181.975 Axial†	596.4	595.7	1065.5 ug/L	1065.5 ppb	13:19:28
2	Sb 206.836†	1259.5	1298.0	562.53 ug/L	562.53 ppb	13:19:28
2	Se 196.026†	593.8	640.1	551.52 ug/L	551.52 ppb	13:19:28
2	Si 251.611†	67834.1	70698.2	2677.3 ug/L	2677.3 ppb	13:19:08
2	Sn 189.927†	2279.1	2384.6	541.74 ug/L	541.74 ppb	13:19:28
2	Ti 334.940†	288492.3	303870.4	528.27 ug/L	528.27 ppb	13:19:08
2	Tl 190.801†	1298.1	1391.4	541.85 ug/L	541.85 ppb	13:19:28
2	U 409.014†	15019.8	17966.3	543.26 ug/L	543.26 ppb	13:19:08
2	V 292.402†	62992.3	67422.8	545.63 ug/L	545.63 ppb	13:19:08
2	Zn 213.857†	42669.0	44207.5	530.68 ug/L	530.68 ppb	13:19:08
2	SiO2†	67938.2	70796.3	5763.1 ug/L	5763.1 ppb	13:20:10
3	Sc Radial	4235.6	4235.6	96.4 %		13:18:05
3	Y RADIAL	4578.7	4578.7	96.18 %		13:18:05
3	Al 396.153Radial†	5061.7	5330.3	5211.5 ug/L	5211.5 ppb	13:18:05
3	Ca 317.933Radial†	2685.3	2770.7	5242.7 ug/L	5242.7 ppb	13:18:25
3	Fe 238.204 Radial†	451.0	459.5	5339.8 ug/L	5339.8 ppb	13:18:25
3	K 766.490 Radial†	29654.4	28171.8	5360.9 ug/L	5360.9 ppb	13:18:05
3	Mg 279.077 IEC†	126.6	129.9	5356.3 ug/L	5356.3 ppb	13:18:25
3	Na 589.592 Radial†	27458.7	29367.4	10353 ug/L	10353 ppb	13:18:05
3	Sr 421.552†	63431.8	65798.5	527.38 ug/L	527.38 ppb	13:18:05
3	Sc 361.383	836309.7	836309.7	102.14 %		13:19:34
3	Y 371.029	697379.0	697379.0	100.83 %		13:19:34
3	Ag 328.068†	98803.2	96552.4	504.47 ug/L	504.47 ppb	13:19:39
3	As 188.979†	902.8	910.7	504.29 ug/L	504.29 ppb	13:19:59
3	B 249.677†	17576.7	17746.6	495.54 ug/L	495.54 ppb	13:19:39
3	Ba 233.527†	54612.1	53471.0	502.09 ug/L	502.09 ppb	13:19:39
3	Be 313.107†	1217346.2	1195625.9	510.22 ug/L	510.22 ppb	13:19:34
3	Cd 226.502†	35283.2	34716.1	503.59 ug/L	503.59 ppb	13:19:39
3	Co 228.616†	20062.5	19689.2	508.99 ug/L	508.99 ppb	13:19:39
3	Cr 267.716†	38307.3	37434.9	503.08 ug/L	503.08 ppb	13:19:39
3	Cu 324.752†	158684.0	149814.3	494.61 ug/L	494.61 ppb	13:19:39
3	Mn 257.610†	392833.1	384231.0	505.50 ug/L	505.50 ppb	13:19:34
3	Mo 202.031†	5772.3	5643.1	502.10 ug/L	502.10 ppb	13:19:59
3	Ni 231.604†	16433.1	16005.4	507.98 ug/L	507.98 ppb	13:19:39
3	P 214.914†	3637.4	3374.1	2416.9 ug/L	2416.9 ppb	13:19:59
3	Pb 220.353†	3275.8	3265.6	503.14 ug/L	503.14 ppb	13:19:59
3	S 181.975 Axial†	595.7	553.1	989.20 ug/L	989.20 ppb	13:19:59
3	Sb 206.836†	1259.7	1209.7	524.15 ug/L	524.15 ppb	13:19:59
3	Se 196.026†	604.4	608.7	525.65 ug/L	525.65 ppb	13:19:59
3	Si 251.611†	67839.7	65933.2	2496.8 ug/L	2496.8 ppb	13:19:39
3	Sn 189.927†	2259.5	2205.1	501.02 ug/L	501.02 ppb	13:19:59
3	Ti 334.940†	287629.2	282736.9	491.56 ug/L	491.56 ppb	13:19:39
3	Tl 190.801†	1293.5	1295.6	504.55 ug/L	504.55 ppb	13:19:59
3	U 409.014†	14827.1	16721.4	505.57 ug/L	505.57 ppb	13:19:39
3	V 292.402†	62590.7	62599.5	506.55 ug/L	506.55 ppb	13:19:39
3	Zn 213.857†	43091.5	41620.4	499.60 ug/L	499.60 ppb	13:19:39
3	SiO2†	68658.1	66723.3	5431.7 ug/L	5431.7 ppb	13:20:15

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	817538.8	99.843 %	3.9423			3.95%
Sc Radial	4343.0	98.8 %	2.19			2.22%
Y 371.029	681101.7	98.475 %	3.8638			3.92%
Y RADIAL	4707.7	98.89 %	2.352			2.38%
Ag 328.068†	99104.7	517.73 ug/L	18.906	517.73 ppb	18.906	3.65%

QC value within limits for Ag 328.068 Recovery = 103.55%							
Al 396.153Radial†	5157.7	5041.4 ug/L	154.20	5041.4 ppb	154.20	3.06%	
QC value within limits for Al 396.153Radial Recovery = 100.83%							
As 188.979†	937.7	519.19 ug/L	25.673	519.19 ppb	25.673	4.94%	
QC value within limits for As 188.979 Recovery = 103.84%							
B 249.677†	18188.5	507.92 ug/L	16.313	507.92 ppb	16.313	3.21%	
QC value within limits for B 249.677 Recovery = 101.58%							
Ba 233.527†	55035.7	516.78 ug/L	20.167	516.78 ppb	20.167	3.90%	
QC value within limits for Ba 233.527 Recovery = 103.36%							
Be 313.107†	1221803.4	521.40 ug/L	20.994	521.40 ppb	20.994	4.03%	
QC value within limits for Be 313.107 Recovery = 104.28%							
Ca 317.933Radial†	2721.5	5149.7 ug/L	97.02	5149.7 ppb	97.02	1.88%	
QC value within limits for Ca 317.933Radial Recovery = 102.99%							
Cd 226.502†	35602.3	516.47 ug/L	18.200	516.47 ppb	18.200	3.52%	
QC value within limits for Cd 226.502 Recovery = 103.29%							
Co 228.616†	20252.2	523.54 ug/L	20.061	523.54 ppb	20.061	3.83%	
QC value within limits for Co 228.616 Recovery = 104.71%							
Cr 267.716†	38484.8	517.16 ug/L	21.113	517.16 ppb	21.113	4.08%	
QC value within limits for Cr 267.716 Recovery = 103.43%							
Cu 324.752†	154435.1	509.85 ug/L	20.203	509.85 ppb	20.203	3.96%	
QC value within limits for Cu 324.752 Recovery = 101.97%							
Fe 238.204 Radial†	449.9	5228.1 ug/L	107.73	5228.1 ppb	107.73	2.06%	
QC value within limits for Fe 238.204 Radial Recovery = 104.56%							
K 766.490 Radial†	27134.5	5163.4 ug/L	190.20	5163.4 ppb	190.20	3.68%	
QC value within limits for K 766.490 Radial Recovery = 103.27%							
Mg 279.077 IEC†	128.1	5286.1 ug/L	116.14	5286.1 ppb	116.14	2.20%	
QC value within limits for Mg 279.077 IEC Recovery = 105.72%							
Mn 257.610†	393795.9	518.07 ug/L	21.577	518.07 ppb	21.577	4.16%	
QC value within limits for Mn 257.610 Recovery = 103.61%							
Mo 202.031†	5772.2	513.56 ug/L	22.713	513.56 ppb	22.713	4.42%	
QC value within limits for Mo 202.031 Recovery = 102.71%							
Na 589.592 Radial†	28430.3	10022 ug/L	296.5	10022 ppb	296.5	2.96%	
QC value within limits for Na 589.592 Radial Recovery = 100.22%							
Ni 231.604†	16438.8	521.74 ug/L	20.300	521.74 ppb	20.300	3.89%	
QC value within limits for Ni 231.604 Recovery = 104.35%							
P 214.914†	3444.7	2466.6 ug/L	116.16	2466.6 ppb	116.16	4.71%	
QC value within limits for P 214.914 Recovery = 98.66%							
Pb 220.353†	3338.6	514.35 ug/L	23.371	514.35 ppb	23.371	4.54%	
QC value within limits for Pb 220.353 Recovery = 102.87%							
S 181.975 Axial†	567.2	1014.5 ug/L	44.16	1014.5 ppb	44.16	4.35%	
QC value within limits for S 181.975 Axial Recovery = 101.45%							
Sb 206.836†	1234.8	535.11 ug/L	23.909	535.11 ppb	23.909	4.47%	
QC value within limits for Sb 206.836 Recovery = 107.02%							
Se 196.026†	619.5	534.29 ug/L	14.922	534.29 ppb	14.922	2.79%	
QC value within limits for Se 196.026 Recovery = 106.86%							
Si 251.611†	67899.1	2571.3 ug/L	94.24	2571.3 ppb	94.24	3.66%	
QC value within limits for Si 251.611 Recovery = 102.85%							
Sn 189.927†	2262.0	513.91 ug/L	24.123	513.91 ppb	24.123	4.69%	
QC value within limits for Sn 189.927 Recovery = 102.78%							
Sr 421.552†	63780.3	511.21 ug/L	15.220	511.21 ppb	15.220	2.98%	
QC value within limits for Sr 421.552 Recovery = 102.24%							
Ti 334.940†	290927.6	505.78 ug/L	19.700	505.78 ppb	19.700	3.90%	
QC value within limits for Ti 334.940 Recovery = 101.16%							
Tl 190.801†	1323.1	515.28 ug/L	23.152	515.28 ppb	23.152	4.49%	
QC value within limits for Tl 190.801 Recovery = 103.06%							
U 409.014†	17244.4	521.42 ug/L	19.550	521.42 ppb	19.550	3.75%	
QC value within limits for U 409.014 Recovery = 104.28%							
V 292.402†	64376.2	520.92 ug/L	21.493	520.92 ppb	21.493	4.13%	
QC value within limits for V 292.402 Recovery = 104.18%							
Zn 213.857†	42636.2	511.81 ug/L	16.570	511.81 ppb	16.570	3.24%	
QC value within limits for Zn 213.857 Recovery = 102.36%							
SiO2†	68262.6	5557.1 ug/L	179.84	5557.1 ppb	179.84	3.24%	
QC value within limits for SiO2 Recovery = 103.92%							
All analyte(s) passed QC.							

Sequence No.: 2
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/19/2010 13:22:26
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4214.0	4214.0	95.9 %		13:24:38
1	Y RADIAL	4617.8	4617.8	97.00 %		13:24:18
1	Al 396.153Radial†	-78.0	-3.3	-3.2278 ug/L	-3.2278 ppb	13:24:38
1	Ca 317.933Radial†	25.8	11.2	21.266 ug/L	21.266 ppb	13:24:38
1	Fe 238.204 Radial†	6.9	-1.3	-14.901 ug/L	-14.901 ppb	13:24:38
1	K 766.490 Radial†	2560.2	71.4	13.599 ug/L	13.599 ppb	13:24:18
1	Mg 279.077 IEC†	2.3	0.9	37.080 ug/L	37.080 ppb	13:24:38
1	Na 589.592 Radial†	-866.0	-28.1	-9.9122 ug/L	-9.9122 ppb	13:24:18
1	Sr 421.552†	25.6	5.9	0.0470 ug/L	0.0470 ppb	13:24:18
1	Sc 361.383	828827.6	828827.6	101.22 %		13:25:35
1	Y 371.029	700055.9	700055.9	101.22 %		13:25:35
1	Ag 328.068†	206.7	19.1	0.0888 ug/L	0.0888 ppb	13:25:35
1	As 188.979†	-29.4	-2.3	-1.2633 ug/L	-1.2633 ppb	13:25:55
1	B 249.677†	-290.5	250.3	7.0258 ug/L	7.0258 ppb	13:25:55
1	Ba 233.527†	1.9	2.6	0.0237 ug/L	0.0237 ppb	13:25:55
1	Be 313.107†	-3640.9	134.1	0.0571 ug/L	0.0571 ppb	13:25:35
1	Cd 226.502†	-168.1	4.6	0.0690 ug/L	0.0690 ppb	13:25:55
1	Co 228.616†	-49.5	-2.7	-0.0682 ug/L	-0.0682 ppb	13:25:55
1	Cr 267.716†	72.4	0.0	-0.0036 ug/L	-0.0036 ppb	13:25:55
1	Cu 324.752†	5691.7	71.0	0.2304 ug/L	0.2304 ppb	13:25:35
1	Mn 257.610†	475.1	80.3	0.1026 ug/L	0.1026 ppb	13:25:55
1	Mo 202.031†	16.0	7.2	0.6416 ug/L	0.6416 ppb	13:25:55
1	Ni 231.604†	93.4	8.3	0.2620 ug/L	0.2620 ppb	13:25:55
1	P 214.914†	183.1	-6.4	-4.8145 ug/L	-4.8145 ppb	13:25:55
1	Pb 220.353†	-56.0	3.0	0.4595 ug/L	0.4595 ppb	13:25:55
1	S 181.975 Axial†	32.6	2.0	3.5771 ug/L	3.5771 ppb	13:25:55
1	Sb 206.836†	30.2	6.2	2.6171 ug/L	2.6171 ppb	13:25:55
1	Se 196.026†	-6.0	11.1	9.1807 ug/L	9.1807 ppb	13:25:55
1	Si 251.611†	640.7	144.8	5.4888 ug/L	5.4888 ppb	13:25:55
1	Sn 189.927†	10.5	3.2	0.7280 ug/L	0.7280 ppb	13:25:55
1	Ti 334.940†	-1118.9	15.8	0.0248 ug/L	0.0248 ppb	13:25:35
1	Tl 190.801†	-30.5	-1.0	-0.3917 ug/L	-0.3917 ppb	13:25:55
1	U 409.014†	-2040.5	188.3	5.7146 ug/L	5.7146 ppb	13:25:35
1	V 292.402†	-1357.2	-23.4	-0.1643 ug/L	-0.1643 ppb	13:25:35
1	Zn 213.857†	824.2	244.1	2.9585 ug/L	2.9585 ppb	13:25:55
1	SiO2†	614.0	107.2	8.7346 ug/L	8.7346 ppb	13:26:51
2	Sc Radial	4287.6	4287.6	97.6 %		13:25:03
2	Y RADIAL	4853.5	4853.5	102.0 %		13:24:43
2	Al 396.153Radial†	-79.3	-3.2	-3.2285 ug/L	-3.2285 ppb	13:25:03
2	Ca 317.933Radial†	28.5	13.5	25.522 ug/L	25.522 ppb	13:25:03
2	Fe 238.204 Radial†	7.8	-0.5	-5.6203 ug/L	-5.6203 ppb	13:25:03
2	K 766.490 Radial†	2708.7	177.8	33.882 ug/L	33.882 ppb	13:24:43
2	Mg 279.077 IEC†	1.9	0.4	15.487 ug/L	15.487 ppb	13:25:03
2	Na 589.592 Radial†	-956.7	-105.6	-37.211 ug/L	-37.211 ppb	13:24:43
2	Sr 421.552†	37.2	17.3	0.1382 ug/L	0.1382 ppb	13:24:43
2	Sc 361.383	836907.6	836907.6	102.21 %		13:26:00
2	Y 371.029	707095.7	707095.7	102.23 %		13:26:00
2	Ag 328.068†	124.8	-63.0	-0.3304 ug/L	-0.3304 ppb	13:26:00
2	As 188.979†	-22.0	5.3	2.8864 ug/L	2.8864 ppb	13:26:20
2	B 249.677†	-270.3	272.9	7.6575 ug/L	7.6575 ppb	13:26:20
2	Ba 233.527†	16.9	17.3	0.1616 ug/L	0.1616 ppb	13:26:20
2	Be 313.107†	-3628.8	180.7	0.0773 ug/L	0.0773 ppb	13:26:00
2	Cd 226.502†	-169.9	4.4	0.0656 ug/L	0.0656 ppb	13:26:20
2	Co 228.616†	-50.5	-3.2	-0.0794 ug/L	-0.0794 ppb	13:26:20
2	Cr 267.716†	64.1	-8.8	-0.1196 ug/L	-0.1196 ppb	13:26:20
2	Cu 324.752†	5653.3	-20.8	-0.0701 ug/L	-0.0701 ppb	13:26:00
2	Mn 257.610†	476.1	76.8	0.0998 ug/L	0.0998 ppb	13:26:20
2	Mo 202.031†	21.7	12.7	1.1268 ug/L	1.1268 ppb	13:26:20
2	Ni 231.604†	91.6	5.5	0.1758 ug/L	0.1758 ppb	13:26:20

2	P 214.914†	183.5	-7.7	-5.7343 ug/L	-5.7343 ppb	13:26:20
2	Pb 220.353†	-52.7	6.8	1.0466 ug/L	1.0466 ppb	13:26:20
2	S 181.975 Axial†	36.4	5.4	9.6328 ug/L	9.6328 ppb	13:26:20
2	Sb 206.836†	20.4	-3.7	-1.5352 ug/L	-1.5352 ppb	13:26:20
2	Se 196.026†	-17.9	-0.6	-0.4926 ug/L	-0.4926 ppb	13:26:20
2	Si 251.611†	636.7	134.8	5.1028 ug/L	5.1028 ppb	13:26:20
2	Sn 189.927†	9.4	2.0	0.4691 ug/L	0.4691 ppb	13:26:20
2	Ti 334.940†	-1040.5	103.2	0.1808 ug/L	0.1808 ppb	13:26:00
2	Tl 190.801†	-17.0	12.4	4.8149 ug/L	4.8149 ppb	13:26:20
2	U 409.014†	-2187.0	64.5	1.9568 ug/L	1.9568 ppb	13:26:00
2	V 292.402†	-1336.3	10.0	0.1004 ug/L	0.1004 ppb	13:26:00
2	Zn 213.857†	847.0	258.7	3.1339 ug/L	3.1339 ppb	13:26:20
2	SiO2†	672.8	159.0	12.943 ug/L	12.943 ppb	13:26:56
3	Sc Radial	4223.8	4223.8	96.1 %		13:25:29
3	Y RADIAL	4787.5	4787.5	100.6 %		13:25:08
3	Al 396.153Radial†	-68.0	7.3	7.1801 ug/L	7.1801 ppb	13:25:29
3	Ca 317.933Radial†	26.0	11.4	21.587 ug/L	21.587 ppb	13:25:29
3	Fe 238.204 Radial†	10.4	2.3	27.019 ug/L	27.019 ppb	13:25:29
3	K 766.490 Radial†	2761.7	274.9	52.379 ug/L	52.379 ppb	13:25:08
3	Mg 279.077 IEC†	3.9	2.5	103.77 ug/L	103.77 ppb	13:25:29
3	Na 589.592 Radial†	-913.7	-75.6	-26.662 ug/L	-26.662 ppb	13:25:08
3	Sr 421.552†	26.1	6.3	0.0504 ug/L	0.0504 ppb	13:25:08
3	Sc 361.383	826019.3	826019.3	100.88 %		13:26:26
3	Y 371.029	699154.6	699154.6	101.09 %		13:26:26
3	Ag 328.068†	254.0	66.6	0.3502 ug/L	0.3502 ppb	13:26:26
3	As 188.979†	-18.3	8.7	4.7742 ug/L	4.7742 ppb	13:26:46
3	B 249.677†	-276.0	263.7	7.3939 ug/L	7.3939 ppb	13:26:46
3	Ba 233.527†	2.5	3.1	0.0295 ug/L	0.0295 ppb	13:26:46
3	Be 313.107†	-3722.1	41.4	0.0180 ug/L	0.0180 ppb	13:26:26
3	Cd 226.502†	-167.3	4.8	0.0667 ug/L	0.0667 ppb	13:26:46
3	Co 228.616†	-48.2	-1.5	-0.0409 ug/L	-0.0409 ppb	13:26:46
3	Cr 267.716†	91.7	19.4	0.2616 ug/L	0.2616 ppb	13:26:46
3	Cu 324.752†	5709.6	107.9	0.3559 ug/L	0.3559 ppb	13:26:26
3	Mn 257.610†	484.6	91.3	0.1185 ug/L	0.1185 ppb	13:26:46
3	Mo 202.031†	5.8	-2.7	-0.2411 ug/L	-0.2411 ppb	13:26:46
3	Ni 231.604†	81.5	-3.3	-0.1050 ug/L	-0.1050 ppb	13:26:46
3	P 214.914†	185.3	-3.6	-2.7581 ug/L	-2.7581 ppb	13:26:46
3	Pb 220.353†	-51.2	7.5	1.1535 ug/L	1.1535 ppb	13:26:46
3	S 181.975 Axial†	29.6	-0.8	-1.4364 ug/L	-1.4364 ppb	13:26:46
3	Sb 206.836†	21.4	-2.5	-0.9971 ug/L	-0.9971 ppb	13:26:46
3	Se 196.026†	-25.5	-8.3	-6.8747 ug/L	-6.8747 ppb	13:26:46
3	Si 251.611†	640.1	146.4	5.5592 ug/L	5.5592 ppb	13:26:46
3	Sn 189.927†	19.1	11.8	2.6769 ug/L	2.6769 ppb	13:26:46
3	Ti 334.940†	-1044.7	85.7	0.1419 ug/L	0.1419 ppb	13:26:26
3	Tl 190.801†	-23.1	6.2	2.3838 ug/L	2.3838 ppb	13:26:46
3	U 409.014†	-2122.7	99.9	3.0285 ug/L	3.0285 ppb	13:26:26
3	V 292.402†	-1369.3	-39.9	-0.3187 ug/L	-0.3187 ppb	13:26:26
3	Zn 213.857†	853.0	275.4	3.3336 ug/L	3.3336 ppb	13:26:46
3	SiO2†	645.5	140.5	11.476 ug/L	11.476 ppb	13:27:01

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	830584.8	101.44 %	0.690			0.68%
Sc Radial	4241.8	96.5 %	0.91			0.94%
Y 371.029	702102.1	101.51 %	0.629			0.62%
Y RADIAL	4753.0	99.84 %	2.554			2.56%
Ag 328.068†	7.6	0.0362 ug/L	0.34331	0.0362 ppb	0.34331	948.38%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153Radial†	0.3	0.2413 ug/L	6.00919	0.2413 ppb	6.00919	>999.9%
QC value within limits for Al 396.153Radial Recovery = Not calculated						
As 188.979†	3.9	2.1324 ug/L	3.08859	2.1324 ppb	3.08859	144.84%
QC value within limits for As 188.979 Recovery = Not calculated						
B 249.677†	262.3	7.3591 ug/L	0.31728	7.3591 ppb	0.31728	4.31%
QC value within limits for B 249.677 Recovery = Not calculated						
Ba 233.527†	7.7	0.0716 ug/L	0.07804	0.0716 ppb	0.07804	108.99%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 313.107†	118.7	0.0508 ug/L	0.03019	0.0508 ppb	0.03019	59.42%
QC value within limits for Be 313.107 Recovery = Not calculated						
Ca 317.933Radial†	12.0	22.792 ug/L	2.3703	22.792 ppb	2.3703	10.40%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated									
Cd	226.502†	4.6	0.0671 ug/L	0.00174	0.0671 ppb	0.00174	2.59%		
QC value within limits for Cd 226.502 Recovery = Not calculated									
Co	228.616†	-2.5	-0.0628 ug/L	0.01978	-0.0628 ppb	0.01978	31.48%		
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr	267.716†	3.5	0.0461 ug/L	0.19542	0.0461 ppb	0.19542	423.60%		
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu	324.752†	52.7	0.1720 ug/L	0.21892	0.1720 ppb	0.21892	127.26%		
QC value within limits for Cu 324.752 Recovery = Not calculated									
Fe	238.204 Radial†	0.2	2.1660 ug/L	22.01818	2.1660 ppb	22.01818	>999.9%		
QC value within limits for Fe 238.204 Radial Recovery = Not calculated									
K	766.490 Radial†	174.7	33.287 ug/L	19.3971	33.287 ppb	19.3971	58.27%		
QC value within limits for K 766.490 Radial Recovery = Not calculated									
Mg	279.077 IEC†	1.3	52.114 ug/L	46.0235	52.114 ppb	46.0235	88.31%		
QC value within limits for Mg 279.077 IEC Recovery = Not calculated									
Mn	257.610†	82.8	0.1069 ug/L	0.01008	0.1069 ppb	0.01008	9.43%		
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo	202.031†	5.7	0.5091 ug/L	0.69348	0.5091 ppb	0.69348	136.22%		
QC value within limits for Mo 202.031 Recovery = Not calculated									
Na	589.592 Radial†	-69.8	-24.595 ug/L	13.7661	-24.595 ppb	13.7661	55.97%		
QC value within limits for Na 589.592 Radial Recovery = Not calculated									
Ni	231.604†	3.5	0.1110 ug/L	0.19193	0.1110 ppb	0.19193	172.99%		
QC value within limits for Ni 231.604 Recovery = Not calculated									
P	214.914†	-5.9	-4.4357 ug/L	1.52384	-4.4357 ppb	1.52384	34.35%		
QC value within limits for P 214.914 Recovery = Not calculated									
Pb	220.353†	5.8	0.8865 ug/L	0.37365	0.8865 ppb	0.37365	42.15%		
QC value within limits for Pb 220.353 Recovery = Not calculated									
S	181.975 Axial†	2.2	3.9245 ug/L	5.54276	3.9245 ppb	5.54276	141.24%		
QC value within limits for S 181.975 Axial Recovery = Not calculated									
Sb	206.836†	-0.0	0.0283 ug/L	2.25812	0.0283 ppb	2.25812	>999.9%		
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se	196.026†	0.7	0.6045 ug/L	8.08370	0.6045 ppb	8.08370	>999.9%		
QC value within limits for Se 196.026 Recovery = Not calculated									
Si	251.611†	142.0	5.3836 ug/L	0.24572	5.3836 ppb	0.24572	4.56%		
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn	189.927†	5.7	1.2913 ug/L	1.20690	1.2913 ppb	1.20690	93.46%		
QC value within limits for Sn 189.927 Recovery = Not calculated									
Sr	421.552†	9.8	0.0785 ug/L	0.05168	0.0785 ppb	0.05168	65.82%		
QC value within limits for Sr 421.552 Recovery = Not calculated									
Ti	334.940†	68.2	0.1159 ug/L	0.08122	0.1159 ppb	0.08122	70.10%		
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl	190.801†	5.9	2.2690 ug/L	2.60522	2.2690 ppb	2.60522	114.82%		
QC value within limits for Tl 190.801 Recovery = Not calculated									
U	409.014†	117.6	3.5666 ug/L	1.93587	3.5666 ppb	1.93587	54.28%		
QC value within limits for U 409.014 Recovery = Not calculated									
V	292.402†	-17.8	-0.1275 ug/L	0.21193	-0.1275 ppb	0.21193	166.18%		
QC value within limits for V 292.402 Recovery = Not calculated									
Zn	213.857†	259.4	3.1420 ug/L	0.18772	3.1420 ppb	0.18772	5.97%		
QC value within limits for Zn 213.857 Recovery = Not calculated									
SiO2†		135.6	11.051 ug/L	2.1364	11.051 ppb	2.1364	19.33%		
QC value within limits for SiO2 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 3
 Sample ID: 1202053053|957492|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 25
 Date Collected: 3/19/2010 13:29:12
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053053|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4515.5	4515.5	103 %		13:31:05
1	Y RADIAL	4933.1	4933.1	103.6 %		13:31:05
1	Al 396.153Radial†	-66.6	13.3	13.010 ug/L	13.010 ppb	13:31:25
1	Ca 317.933Radial†	18.6	2.4	4.5265 ug/L	4.5265 ppb	13:31:25
1	Fe 238.204 Radial†	6.8	-1.9	-21.763 ug/L	-21.763 ppb	13:31:25
1	K 766.490 Radial†	2615.3	-53.3	-10.149 ug/L	-10.149 ppb	13:31:05
1	Mg 279.077 IEC†	0.4	-1.2	-48.357 ug/L	-48.357 ppb	13:31:25
1	Na 589.592 Radial†	-911.0	-11.5	-4.0694 ug/L	-4.0694 ppb	13:31:05
1	Sr 421.552†	19.8	-1.5	-0.0124 ug/L	-0.0124 ppb	13:31:05
1	Sc 361.383	862414.2	862414.2	105.32 %		13:32:22
1	Y 371.029	725447.2	725447.2	104.89 %		13:32:22
1	Ag 328.068†	209.8	14.0	0.0656 ug/L	0.0656 ppb	13:32:27
1	As 188.979†	-19.5	8.2	4.5231 ug/L	4.5231 ppb	13:32:47
1	B 249.677†	-317.4	236.0	6.6239 ug/L	6.6239 ppb	13:32:47
1	Ba 233.527†	-0.9	-0.1	-0.0006 ug/L	-0.0006 ppb	13:32:47
1	Be 313.107†	-3822.4	101.8	0.0441 ug/L	0.0441 ppb	13:32:27
1	Cd 226.502†	-170.1	9.1	0.1353 ug/L	0.1353 ppb	13:32:47
1	Co 228.616†	-51.9	-3.1	-0.0795 ug/L	-0.0795 ppb	13:32:47
1	Cr 267.716†	206.8	124.8	1.6713 ug/L	1.6713 ppb	13:32:47
1	Cu 324.752†	5644.7	-192.6	-0.6391 ug/L	-0.6391 ppb	13:32:27
1	Mn 257.610†	526.8	111.1	0.1460 ug/L	0.1460 ppb	13:32:47
1	Mo 202.031†	11.5	2.4	0.2096 ug/L	0.2096 ppb	13:32:47
1	Ni 231.604†	99.1	10.0	0.3172 ug/L	0.3172 ppb	13:32:47
1	P 214.914†	192.5	-4.5	-3.2064 ug/L	-3.2064 ppb	13:32:47
1	Pb 220.353†	-53.9	7.2	1.1057 ug/L	1.1057 ppb	13:32:47
1	S 181.975 Axial†	27.5	-4.0	-7.2143 ug/L	-7.2143 ppb	13:32:47
1	Sb 206.836†	40.8	15.1	6.3302 ug/L	6.3302 ppb	13:32:47
1	Se 196.026†	-15.6	2.1	1.7184 ug/L	1.7184 ppb	13:32:47
1	Si 251.611†	771.3	244.1	9.2652 ug/L	9.2652 ppb	13:32:47
1	Sn 189.927†	9.9	2.2	0.5107 ug/L	0.5107 ppb	13:32:47
1	Ti 334.940†	-989.0	182.2	0.3193 ug/L	0.3193 ppb	13:32:27
1	Tl 190.801†	-23.0	7.2	2.7929 ug/L	2.7929 ppb	13:32:47
1	U 409.014†	-2195.1	120.1	3.6421 ug/L	3.6421 ppb	13:32:22
1	V 292.402†	-1306.4	77.0	0.6264 ug/L	0.6264 ppb	13:32:27
1	Zn 213.857†	629.4	27.5	0.3357 ug/L	0.3357 ppb	13:32:47
1	SiO2†	779.0	240.3	19.602 ug/L	19.602 ppb	13:33:53
2	Sc Radial	4390.3	4390.3	99.9 %		13:31:30
2	Y RADIAL	4775.4	4775.4	100.3 %		13:31:30
2	Al 396.153Radial†	-78.8	-0.8	-0.7772 ug/L	-0.7772 ppb	13:31:50
2	Ca 317.933Radial†	19.0	3.4	6.3777 ug/L	6.3777 ppb	13:31:50
2	Fe 238.204 Radial†	10.0	1.6	18.409 ug/L	18.409 ppb	13:31:50
2	K 766.490 Radial†	2686.8	91.0	17.349 ug/L	17.349 ppb	13:31:30
2	Mg 279.077 IEC†	2.3	0.7	30.442 ug/L	30.442 ppb	13:31:50
2	Na 589.592 Radial†	-951.4	-77.4	-27.273 ug/L	-27.273 ppb	13:31:30
2	Sr 421.552†	-13.3	-34.1	-0.2735 ug/L	-0.2735 ppb	13:31:30
2	Sc 361.383	847113.5	847113.5	103.45 %		13:32:52
2	Y 371.029	713152.6	713152.6	103.11 %		13:32:52
2	Ag 328.068†	128.9	-60.5	-0.3152 ug/L	-0.3152 ppb	13:32:57
2	As 188.979†	-26.5	1.2	0.6638 ug/L	0.6638 ppb	13:33:17
2	B 249.677†	-333.7	214.8	6.0219 ug/L	6.0219 ppb	13:33:17
2	Ba 233.527†	17.9	18.0	0.1687 ug/L	0.1687 ppb	13:33:17
2	Be 313.107†	-3748.9	107.3	0.0468 ug/L	0.0468 ppb	13:32:57
2	Cd 226.502†	-164.5	11.7	0.1690 ug/L	0.1690 ppb	13:33:17
2	Co 228.616†	-50.4	-2.5	-0.0685 ug/L	-0.0685 ppb	13:33:17
2	Cr 267.716†	214.4	135.7	1.8187 ug/L	1.8187 ppb	13:33:17
2	Cu 324.752†	5685.0	-56.8	-0.1903 ug/L	-0.1903 ppb	13:32:57
2	Mn 257.610†	533.8	126.9	0.1674 ug/L	0.1674 ppb	13:33:17
2	Mo 202.031†	0.8	-7.8	-0.6891 ug/L	-0.6891 ppb	13:33:17
2	Ni 231.604†	110.0	22.3	0.7084 ug/L	0.7084 ppb	13:33:17

2	P 214.914†	199.6	5.6	4.2220 ug/L	4.2220 ppb	13:33:17
2	Pb 220.353†	-59.5	0.8	0.1128 ug/L	0.1128 ppb	13:33:17
2	S 181.975 Axial†	28.6	-2.5	-4.4755 ug/L	-4.4755 ppb	13:33:17
2	Sb 206.836†	33.0	8.3	3.4353 ug/L	3.4353 ppb	13:33:17
2	Se 196.026†	-21.1	-3.4	-2.7904 ug/L	-2.7904 ppb	13:33:17
2	Si 251.611†	768.5	254.7	9.6764 ug/L	9.6764 ppb	13:33:17
2	Sn 189.927†	5.0	-2.3	-0.5294 ug/L	-0.5294 ppb	13:33:17
2	Ti 334.940†	-874.1	276.3	0.4753 ug/L	0.4753 ppb	13:32:57
2	Tl 190.801†	-28.8	1.3	0.5068 ug/L	0.5068 ppb	13:33:17
2	U 409.014†	-2056.3	216.6	6.5643 ug/L	6.5643 ppb	13:32:52
2	V 292.402†	-1405.6	-41.2	-0.3295 ug/L	-0.3295 ppb	13:32:57
2	Zn 213.857†	648.5	56.7	0.6805 ug/L	0.6805 ppb	13:33:17
2	SiO2†	870.3	341.9	27.919 ug/L	27.919 ppb	13:33:58
3	Sc Radial	4597.0	4597.0	105 %		13:31:55
3	Y RADIAL	4965.0	4965.0	104.3 %		13:31:55
3	Al 396.153Radial†	-75.4	6.0	5.9048 ug/L	5.9048 ppb	13:32:15
3	Ca 317.933Radial†	22.1	5.4	10.245 ug/L	10.245 ppb	13:32:15
3	Fe 238.204 Radial†	10.9	1.9	22.188 ug/L	22.188 ppb	13:32:15
3	K 766.490 Radial†	2523.3	-186.4	-35.508 ug/L	-35.508 ppb	13:31:55
3	Mg 279.077 IEC†	2.0	0.3	14.253 ug/L	14.253 ppb	13:32:15
3	Na 589.592 Radial†	-920.8	-5.2	-1.8381 ug/L	-1.8381 ppb	13:31:55
3	Sr 421.552†	42.3	19.6	0.1572 ug/L	0.1572 ppb	13:31:55
3	Sc 361.383	842923.8	842923.8	102.94 %		13:33:23
3	Y 371.029	710046.3	710046.3	102.66 %		13:33:23
3	Ag 328.068†	142.7	-46.5	-0.2397 ug/L	-0.2397 ppb	13:33:28
3	As 188.979†	-19.5	7.9	4.3329 ug/L	4.3329 ppb	13:33:48
3	B 249.677†	-349.8	197.5	5.5373 ug/L	5.5373 ppb	13:33:48
3	Ba 233.527†	11.2	11.5	0.1093 ug/L	0.1093 ppb	13:33:48
3	Be 313.107†	-3769.5	69.3	0.0301 ug/L	0.0301 ppb	13:33:28
3	Cd 226.502†	-163.4	11.9	0.1725 ug/L	0.1725 ppb	13:33:48
3	Co 228.616†	-43.7	3.8	0.0971 ug/L	0.0971 ppb	13:33:48
3	Cr 267.716†	197.3	120.2	1.6116 ug/L	1.6116 ppb	13:33:48
3	Cu 324.752†	5642.6	-70.7	-0.2362 ug/L	-0.2362 ppb	13:33:28
3	Mn 257.610†	558.4	153.4	0.2033 ug/L	0.2033 ppb	13:33:48
3	Mo 202.031†	12.5	3.6	0.3197 ug/L	0.3197 ppb	13:33:48
3	Ni 231.604†	106.1	19.0	0.6041 ug/L	0.6041 ppb	13:33:48
3	P 214.914†	207.0	13.8	10.340 ug/L	10.340 ppb	13:33:48
3	Pb 220.353†	-64.8	-4.7	-0.7161 ug/L	-0.7161 ppb	13:33:48
3	S 181.975 Axial†	26.8	-4.2	-7.4943 ug/L	-7.4943 ppb	13:33:48
3	Sb 206.836†	42.7	17.8	7.4570 ug/L	7.4570 ppb	13:33:48
3	Se 196.026†	-15.5	1.9	1.6596 ug/L	1.6596 ppb	13:33:48
3	Si 251.611†	783.6	273.0	10.360 ug/L	10.360 ppb	13:33:48
3	Sn 189.927†	10.3	2.8	0.6419 ug/L	0.6419 ppb	13:33:48
3	Ti 334.940†	-1015.1	135.1	0.2314 ug/L	0.2314 ppb	13:33:28
3	Tl 190.801†	-32.9	-2.9	-1.1116 ug/L	-1.1116 ppb	13:33:48
3	U 409.014†	-2021.8	240.2	7.2817 ug/L	7.2817 ppb	13:33:23
3	V 292.402†	-1322.8	32.5	0.2741 ug/L	0.2741 ppb	13:33:28
3	Zn 213.857†	654.4	65.6	0.7880 ug/L	0.7880 ppb	13:33:48
3	SiO2†	786.0	264.2	21.556 ug/L	21.556 ppb	13:34:03

Mean Data: 1202053053|957492|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity		Units		Units			
Sc 361.383	850817.2	103.91	%	1.253				1.21%
Sc Radial	4500.9	102	%	2.4				2.31%
Y 371.029	716215.4	103.55	%	1.178				1.14%
Y RADIAL	4891.1	102.7	%	2.13				2.08%
Ag 328.068†	-31.0	-0.1631	ug/L	0.20166	-0.1631	ppb	0.20166	123.64%
Al 396.153Radial†	6.2	6.0459	ug/L	6.89476	6.0459	ppb	6.89476	114.04%
As 188.979†	5.8	3.1733	ug/L	2.17537	3.1733	ppb	2.17537	68.55%
B 249.677†	216.1	6.0610	ug/L	0.54437	6.0610	ppb	0.54437	8.98%
Ba 233.527†	9.8	0.0925	ug/L	0.08590	0.0925	ppb	0.08590	92.91%
Be 313.107†	92.8	0.0403	ug/L	0.00898	0.0403	ppb	0.00898	22.29%
Ca 317.933Radial†	3.7	7.0498	ug/L	2.91808	7.0498	ppb	2.91808	41.39%
Cd 226.502†	10.9	0.1589	ug/L	0.02052	0.1589	ppb	0.02052	12.91%
Co 228.616†	-0.6	-0.0170	ug/L	0.09896	-0.0170	ppb	0.09896	583.55%
Cr 267.716†	126.9	1.7005	ug/L	0.10662	1.7005	ppb	0.10662	6.27%
Cu 324.752†	-106.7	-0.3552	ug/L	0.24692	-0.3552	ppb	0.24692	69.52%
Fe 238.204 Radial†	0.5	6.2782	ug/L	24.35746	6.2782	ppb	24.35746	387.97%
K 766.490 Radial†	-49.5	-9.4361	ug/L	26.43592	-9.4361	ppb	26.43592	280.16%

Mg 279.077 IEC†	-0.0	-1.2209 ug/L	41.61616	-1.2209 ppb	41.61616 >999.9%
Mn 257.610†	130.5	0.1722 ug/L	0.02896	0.1722 ppb	0.02896 16.82%
Mo 202.031†	-0.6	-0.0533 ug/L	0.55341	-0.0533 ppb	0.55341 >999.9%
Na 589.592 Radial†	-31.4	-11.060 ug/L	14.0850	-11.060 ppb	14.0850 127.35%
Ni 231.604†	17.1	0.5432 ug/L	0.20257	0.5432 ppb	0.20257 37.29%
P 214.914†	5.0	3.7850 ug/L	6.78357	3.7850 ppb	6.78357 179.22%
Pb 220.353†	1.1	0.1675 ug/L	0.91210	0.1675 ppb	0.91210 544.65%
S 181.975 Axial†	-3.6	-6.3947 ug/L	1.66796	-6.3947 ppb	1.66796 26.08%
Sb 206.836†	13.7	5.7408 ug/L	2.07462	5.7408 ppb	2.07462 36.14%
Se 196.026†	0.2	0.1959 ug/L	2.58632	0.1959 ppb	2.58632 >999.9%
Si 251.611†	257.3	9.7673 ug/L	0.55320	9.7673 ppb	0.55320 5.66%
Sn 189.927†	0.9	0.2077 ug/L	0.64172	0.2077 ppb	0.64172 308.93%
Sr 421.552†	-5.3	-0.0429 ug/L	0.21699	-0.0429 ppb	0.21699 506.00%
Ti 334.940†	197.9	0.3420 ug/L	0.12354	0.3420 ppb	0.12354 36.12%
Tl 190.801†	1.9	0.7294 ug/L	1.96172	0.7294 ppb	1.96172 268.96%
U 409.014†	192.3	5.8294 ug/L	1.92791	5.8294 ppb	1.92791 33.07%
V 292.402†	22.8	0.1903 ug/L	0.48345	0.1903 ppb	0.48345 254.02%
Zn 213.857†	50.0	0.6014 ug/L	0.23628	0.6014 ppb	0.23628 39.29%
SiO2†	282.1	23.026 ug/L	4.3488	23.026 ppb	4.3488 18.89%

Sequence No.: 4

Sample ID: 1202053054|957492|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 26

Date Collected: 3/19/2010 13:36:16

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053054|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4509.0	4509.0	103 %		13:38:08
1	Y RADIAL	4819.0	4819.0	101.2 %		13:38:08
1	Al 396.153Radial†	5240.1	5185.8	5069.5 ug/L	5069.5 ppb	13:38:08
1	Ca 317.933Radial†	2777.3	2691.4	5092.7 ug/L	5092.7 ppb	13:38:28
1	Fe 238.204 Radial†	460.7	440.6	5120.5 ug/L	5120.5 ppb	13:38:28
1	K 766.490 Radial†	30534.2	27163.9	5171.0 ug/L	5171.0 ppb	13:38:08
1	Mg 279.077 IEC†	132.0	127.1	5243.3 ug/L	5243.3 ppb	13:38:28
1	Na 589.592 Radial†	14108.1	14626.7	5156.2 ug/L	5156.2 ppb	13:38:08
1	Sr 421.552†	66714.3	65007.7	521.05 ug/L	521.05 ppb	13:38:08
1	Sc 361.383	847506.8	847506.8	103.50 %		13:39:26
1	Y 371.029	706016.9	706016.9	102.08 %		13:39:26
1	Ag 328.068†	99200.8	95658.5	499.77 ug/L	499.77 ppb	13:39:31
1	As 188.979†	945.7	940.5	520.68 ug/L	520.68 ppb	13:39:51
1	B 249.677†	18253.1	18172.7	507.53 ug/L	507.53 ppb	13:39:31
1	Ba 233.527†	57205.4	55270.1	518.96 ug/L	518.96 ppb	13:39:31
1	Be 313.107†	1251684.3	1213054.7	517.66 ug/L	517.66 ppb	13:39:26
1	Cd 226.502†	35918.6	34873.6	505.91 ug/L	505.91 ppb	13:39:31
1	Co 228.616†	20333.6	19691.6	509.05 ug/L	509.05 ppb	13:39:31
1	Cr 267.716†	39049.5	37656.5	506.03 ug/L	506.03 ppb	13:39:31
1	Cu 324.752†	166168.4	154992.8	511.68 ug/L	511.68 ppb	13:39:31
1	Mn 257.610†	401474.7	387498.6	509.78 ug/L	509.78 ppb	13:39:26
1	Mo 202.031†	5857.4	5650.7	502.75 ug/L	502.75 ppb	13:39:51
1	Ni 231.604†	16917.2	16260.6	516.08 ug/L	516.08 ppb	13:39:31
1	P 214.914†	995.6	774.6	477.35 ug/L	477.35 ppb	13:39:51
1	Pb 220.353†	3385.2	3329.0	512.87 ug/L	512.87 ppb	13:39:51
1	S 181.975 Axial†	3002.7	2870.8	5138.5 ug/L	5138.5 ppb	13:39:51
1	Sb 206.836†	1334.6	1265.8	547.81 ug/L	547.81 ppb	13:39:51
1	Se 196.026†	606.8	603.2	520.38 ug/L	520.38 ppb	13:39:51
1	Si 251.611†	136679.8	131566.0	4988.4 ug/L	4988.4 ppb	13:39:31
1	Sn 189.927†	2341.9	2255.5	512.44 ug/L	512.44 ppb	13:39:51
1	Ti 334.940†	296430.9	287520.1	499.85 ug/L	499.85 ppb	13:39:31
1	Tl 190.801†	1327.0	1311.1	510.64 ug/L	510.64 ppb	13:39:51
1	U 409.014†	16162.7	17819.9	538.91 ug/L	538.91 ppb	13:39:31
1	V 292.402†	64659.4	63788.5	516.14 ug/L	516.14 ppb	13:39:31
1	Zn 213.857†	43565.6	41521.1	498.35 ug/L	498.35 ppb	13:39:31
1	SiO2†	136942.4	131808.6	10743 ug/L	10743 ppb	13:40:58
2	Sc Radial	4401.5	4401.5	100 %		13:38:33
2	Y RADIAL	4718.4	4718.4	99.11 %		13:38:33
2	Al 396.153Radial†	5149.9	5220.5	5103.3 ug/L	5103.3 ppb	13:38:33
2	Ca 317.933Radial†	2806.0	2786.2	5272.2 ug/L	5272.2 ppb	13:38:53
2	Fe 238.204 Radial†	466.0	456.8	5308.5 ug/L	5308.5 ppb	13:38:53
2	K 766.490 Radial†	30139.6	27497.0	5234.4 ug/L	5234.4 ppb	13:38:33
2	Mg 279.077 IEC†	134.0	132.3	5456.3 ug/L	5456.3 ppb	13:38:53
2	Na 589.592 Radial†	13675.5	14530.8	5122.4 ug/L	5122.4 ppb	13:38:33
2	Sr 421.552†	65121.4	65006.0	521.03 ug/L	521.03 ppb	13:38:33
2	Sc 361.383	842532.2	842532.2	102.90 %		13:39:57
2	Y 371.029	703197.5	703197.5	101.67 %		13:39:57
2	Ag 328.068†	99243.3	96265.6	503.00 ug/L	503.00 ppb	13:40:02
2	As 188.979†	930.2	930.8	515.41 ug/L	515.41 ppb	13:40:22
2	B 249.677†	18252.4	18276.1	510.39 ug/L	510.39 ppb	13:40:02
2	Ba 233.527†	57362.7	55749.3	523.46 ug/L	523.46 ppb	13:40:02
2	Be 313.107†	1245530.7	1214214.6	518.16 ug/L	518.16 ppb	13:39:57
2	Cd 226.502†	36053.3	35209.5	510.76 ug/L	510.76 ppb	13:40:02
2	Co 228.616†	20364.3	19837.5	512.82 ug/L	512.82 ppb	13:40:02
2	Cr 267.716†	39174.9	38001.1	510.67 ug/L	510.67 ppb	13:40:02
2	Cu 324.752†	166410.4	156175.9	515.59 ug/L	515.59 ppb	13:40:02
2	Mn 257.610†	397846.0	386262.2	508.17 ug/L	508.17 ppb	13:39:57
2	Mo 202.031†	5886.9	5712.7	508.29 ug/L	508.29 ppb	13:40:22
2	Ni 231.604†	16933.8	16373.2	519.66 ug/L	519.66 ppb	13:40:02

2	P 214.914†	986.0	771.0	473.77 ug/L	473.77 ppb	13:40:22
2	Pb 220.353†	3379.7	3343.0	515.01 ug/L	515.01 ppb	13:40:22
2	S 181.975 Axial†	3016.1	2901.1	5192.6 ug/L	5192.6 ppb	13:40:22
2	Sb 206.836†	1352.0	1290.2	558.26 ug/L	558.26 ppb	13:40:22
2	Se 196.026†	613.3	613.0	529.07 ug/L	529.07 ppb	13:40:22
2	Si 251.611†	136857.5	132518.4	5024.5 ug/L	5024.5 ppb	13:40:02
2	Sn 189.927†	2360.6	2287.0	519.61 ug/L	519.61 ppb	13:40:22
2	Ti 334.940†	297281.5	290037.7	504.23 ug/L	504.23 ppb	13:40:02
2	Tl 190.801†	1321.6	1313.5	511.54 ug/L	511.54 ppb	13:40:22
2	U 409.014†	16245.2	17992.3	544.11 ug/L	544.11 ppb	13:40:02
2	V 292.402†	64940.3	64430.5	521.32 ug/L	521.32 ppb	13:40:02
2	Zn 213.857†	43622.9	41825.3	501.98 ug/L	501.98 ppb	13:40:02
2	SiO2†	138090.8	133705.9	10898 ug/L	10898 ppb	13:41:03
3	Sc Radial	4599.2	4599.2	105 %		13:38:58
3	Y RADIAL	4934.0	4934.0	103.6 %		13:38:58
3	Al 396.153Radial†	5384.4	5223.5	5106.3 ug/L	5106.3 ppb	13:38:58
3	Ca 317.933Radial†	2784.7	2645.4	5005.7 ug/L	5005.7 ppb	13:39:18
3	Fe 238.204 Radial†	458.7	429.9	4996.0 ug/L	4996.0 ppb	13:39:18
3	K 766.490 Radial†	31206.9	27223.1	5182.3 ug/L	5182.3 ppb	13:38:58
3	Mg 279.077 IEC†	131.6	124.3	5126.2 ug/L	5126.2 ppb	13:39:18
3	Na 589.592 Radial†	14449.2	14683.0	5176.1 ug/L	5176.1 ppb	13:38:58
3	Sr 421.552†	68284.4	65233.0	522.85 ug/L	522.85 ppb	13:38:58
3	Sc 361.383	846910.8	846910.8	103.43 %		13:40:28
3	Y 371.029	705809.0	705809.0	102.05 %		13:40:28
3	Ag 328.068†	99243.0	95766.7	500.32 ug/L	500.32 ppb	13:40:33
3	As 188.979†	940.9	936.5	518.44 ug/L	518.44 ppb	13:40:53
3	B 249.677†	18320.6	18250.4	509.73 ug/L	509.73 ppb	13:40:33
3	Ba 233.527†	57500.8	55594.6	522.00 ug/L	522.00 ppb	13:40:33
3	Be 313.107†	1255338.7	1217439.0	519.53 ug/L	519.53 ppb	13:40:28
3	Cd 226.502†	36194.3	35164.6	510.14 ug/L	510.14 ppb	13:40:33
3	Co 228.616†	20408.0	19777.4	511.27 ug/L	511.27 ppb	13:40:33
3	Cr 267.716†	39350.8	37974.3	510.28 ug/L	510.28 ppb	13:40:33
3	Cu 324.752†	165925.5	154870.9	511.27 ug/L	511.27 ppb	13:40:33
3	Mn 257.610†	401854.7	388139.0	510.62 ug/L	510.62 ppb	13:40:28
3	Mo 202.031†	5899.3	5695.1	506.69 ug/L	506.69 ppb	13:40:53
3	Ni 231.604†	17008.9	16360.8	519.27 ug/L	519.27 ppb	13:40:33
3	P 214.914†	1001.4	780.9	482.24 ug/L	482.24 ppb	13:40:53
3	Pb 220.353†	3371.7	3318.2	511.26 ug/L	511.26 ppb	13:40:53
3	S 181.975 Axial†	3008.9	2879.0	5153.0 ug/L	5153.0 ppb	13:40:53
3	Sb 206.836†	1346.0	1277.7	552.94 ug/L	552.94 ppb	13:40:53
3	Se 196.026†	617.3	613.8	528.87 ug/L	528.87 ppb	13:40:53
3	Si 251.611†	136963.2	131932.9	5002.3 ug/L	5002.3 ppb	13:40:33
3	Sn 189.927†	2361.2	2275.8	517.03 ug/L	517.03 ppb	13:40:53
3	Ti 334.940†	297783.4	289029.3	502.47 ug/L	502.47 ppb	13:40:33
3	Tl 190.801†	1324.1	1309.3	509.93 ug/L	509.93 ppb	13:40:53
3	U 409.014†	16002.5	17676.1	534.55 ug/L	534.55 ppb	13:40:33
3	V 292.402†	65020.9	64182.1	519.34 ug/L	519.34 ppb	13:40:33
3	Zn 213.857†	43757.5	41736.3	500.96 ug/L	500.96 ppb	13:40:33
3	SiO2†	138532.7	133439.2	10876 ug/L	10876 ppb	13:41:09

Mean Data: 1202053054|957492|1

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Sample	Std.Dev.	RSD
	Intensity	Units			Conc. Units		
Sc 361.383	845649.9	103.28 %		0.332			0.32%
Sc Radial	4503.2	102 %		2.3			2.20%
Y 371.029	705007.8	101.93 %		0.227			0.22%
Y RADIAL	4823.8	101.3 %		2.27			2.24%
Ag 328.068†	95896.9	501.03 ug/L		1.727	501.03 ppb	1.727	0.34%
Al 396.153Radial†	5209.9	5093.0 ug/L		20.47	5093.0 ppb	20.47	0.40%
As 188.979†	935.9	518.18 ug/L		2.646	518.18 ppb	2.646	0.51%
B 249.677†	18233.1	509.22 ug/L		1.496	509.22 ppb	1.496	0.29%
Ba 233.527†	55538.0	521.48 ug/L		2.299	521.48 ppb	2.299	0.44%
Be 313.107†	1214902.8	518.45 ug/L		0.969	518.45 ppb	0.969	0.19%
Ca 317.933Radial†	2707.7	5123.5 ug/L		135.89	5123.5 ppb	135.89	2.65%
Cd 226.502†	35082.6	508.94 ug/L		2.643	508.94 ppb	2.643	0.52%
Co 228.616†	19768.8	511.05 ug/L		1.896	511.05 ppb	1.896	0.37%
Cr 267.716†	37877.3	508.99 ug/L		2.577	508.99 ppb	2.577	0.51%
Cu 324.752†	155346.5	512.85 ug/L		2.385	512.85 ppb	2.385	0.47%
Fe 238.204 Radial†	442.4	5141.6 ug/L		157.32	5141.6 ppb	157.32	3.06%
K 766.490 Radial†	27294.7	5195.9 ug/L		33.83	5195.9 ppb	33.83	0.65%

Mg 279.077 IEC†	127.9	5275.3 ug/L	167.38	5275.3 ppb	167.38	3.17%
Mn 257.610†	387299.9	509.52 ug/L	1.246	509.52 ppb	1.246	0.24%
Mo 202.031†	5686.2	505.91 ug/L	2.849	505.91 ppb	2.849	0.56%
Na 589.592 Radial†	14613.5	5151.6 ug/L	27.14	5151.6 ppb	27.14	0.53%
Ni 231.604†	16331.5	518.34 ug/L	1.960	518.34 ppb	1.960	0.38%
P 214.914†	775.5	477.79 ug/L	4.253	477.79 ppb	4.253	0.89%
Pb 220.353†	3330.0	513.05 ug/L	1.885	513.05 ppb	1.885	0.37%
S 181.975 Axial†	2883.6	5161.4 ug/L	27.99	5161.4 ppb	27.99	0.54%
Sb 206.836†	1277.9	553.00 ug/L	5.226	553.00 ppb	5.226	0.95%
Se 196.026†	610.0	526.11 ug/L	4.964	526.11 ppb	4.964	0.94%
Si 251.611†	132005.8	5005.1 ug/L	18.20	5005.1 ppb	18.20	0.36%
Sn 189.927†	2272.7	516.36 ug/L	3.630	516.36 ppb	3.630	0.70%
Sr 421.552†	65082.3	521.64 ug/L	1.047	521.64 ppb	1.047	0.20%
Ti 334.940†	288862.3	502.18 ug/L	2.205	502.18 ppb	2.205	0.44%
Tl 190.801†	1311.3	510.70 ug/L	0.804	510.70 ppb	0.804	0.16%
U 409.014†	17829.4	539.19 ug/L	4.785	539.19 ppb	4.785	0.89%
V 292.402†	64133.7	518.93 ug/L	2.616	518.93 ppb	2.616	0.50%
Zn 213.857†	41694.2	500.43 ug/L	1.871	500.43 ppb	1.871	0.37%
SiO2†	132984.5	10839 ug/L	83.7	10839 ppb	83.7	0.77%

Sequence No.: 5
 Sample ID: 247771001|957492|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 27
 Date Collected: 3/19/2010 13:43:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 247771001|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4402.1	4402.1	100 %		13:45:11
1	Y RADIAL	4772.2	4772.2	100.2 %		13:45:11
1	Al 396.153Radial†	-68.1	10.1	9.9122 ug/L	9.9122 ppb	13:45:31
1	Ca 317.933Radial†	49.2	33.5	63.302 ug/L	63.302 ppb	13:45:31
1	Fe 238.204 Radial†	11.1	2.6	30.297 ug/L	30.297 ppb	13:45:31
1	K 766.490 Radial†	5065.5	2458.7	468.28 ug/L	468.28 ppb	13:45:11
1	Mg 279.077 IEC†	1.0	-0.5	-21.578 ug/L	-21.578 ppb	13:45:31
1	Na 589.592 Radial†	130.9	1005.8	354.57 ug/L	354.57 ppb	13:45:11
1	Sr 421.552†	52.8	31.9	0.2551 ug/L	0.2551 ppb	13:45:11
1	Sc 361.383	835180.3	835180.3	102.00 %		13:46:28
1	Y 371.029	703692.8	703692.8	101.74 %		13:46:28
1	Ag 328.068†	137.7	-50.1	-0.2532 ug/L	-0.2532 ppb	13:46:28
1	As 188.979†	-25.5	1.8	1.0194 ug/L	1.0194 ppb	13:46:48
1	B 249.677†	698.0	1221.7	34.268 ug/L	34.268 ppb	13:46:48
1	Ba 233.527†	86.6	85.6	0.8025 ug/L	0.8025 ppb	13:46:48
1	Be 313.107†	-3737.9	66.4	0.0292 ug/L	0.0292 ppb	13:46:28
1	Cd 226.502†	-175.8	-1.7	-0.0272 ug/L	-0.0272 ppb	13:46:48
1	Co 228.616†	-42.7	4.4	0.1114 ug/L	0.1114 ppb	13:46:48
1	Cr 267.716†	142.7	68.4	0.9198 ug/L	0.9198 ppb	13:46:48
1	Cu 324.752†	6110.5	438.8	1.4492 ug/L	1.4492 ppb	13:46:28
1	Mn 257.610†	1596.2	1175.9	1.5499 ug/L	1.5499 ppb	13:46:48
1	Mo 202.031†	9.3	0.5	0.0511 ug/L	0.0511 ppb	13:46:48
1	Ni 231.604†	98.5	12.5	0.3974 ug/L	0.3974 ppb	13:46:48
1	P 214.914†	201.7	10.5	7.5005 ug/L	7.5005 ppb	13:46:48
1	Pb 220.353†	-45.5	13.7	2.0959 ug/L	2.0959 ppb	13:46:48
1	S 181.975 Axial†	59.6	28.2	50.526 ug/L	50.526 ppb	13:46:48
1	Sb 206.836†	40.1	15.7	6.5401 ug/L	6.5401 ppb	13:46:48
1	Se 196.026†	-25.9	-8.5	-6.9646 ug/L	-6.9646 ppb	13:46:48
1	Si 251.611†	55939.8	54356.2	2063.5 ug/L	2063.5 ppb	13:46:28
1	Sn 189.927†	4.4	-2.9	-0.6431 ug/L	-0.6431 ppb	13:46:48
1	Ti 334.940†	-898.4	240.4	0.4271 ug/L	0.4271 ppb	13:46:28
1	Tl 190.801†	-23.6	6.0	2.3178 ug/L	2.3178 ppb	13:46:48
1	U 409.014†	-2177.0	69.8	2.1123 ug/L	2.1123 ppb	13:46:28
1	V 292.402†	-1337.3	6.4	0.0499 ug/L	0.0499 ppb	13:46:28
1	Zn 213.857†	727.2	142.9	1.7226 ug/L	1.7226 ppb	13:46:48
1	SiO2†	56950.1	55335.5	4516.0 ug/L	4516.0 ppb	13:47:44
2	Sc Radial	4469.6	4469.6	102 %		13:45:36
2	Y RADIAL	4821.3	4821.3	101.3 %		13:45:36
2	Al 396.153Radial†	-67.5	11.7	11.510 ug/L	11.510 ppb	13:45:56
2	Ca 317.933Radial†	48.8	32.3	61.174 ug/L	61.174 ppb	13:45:56
2	Fe 238.204 Radial†	8.3	-0.3	-3.9882 ug/L	-3.9882 ppb	13:45:56
2	K 766.490 Radial†	5052.8	2369.8	451.36 ug/L	451.36 ppb	13:45:36
2	Mg 279.077 IEC†	1.7	0.2	6.8857 ug/L	6.8857 ppb	13:45:56
2	Na 589.592 Radial†	94.2	967.8	341.15 ug/L	341.15 ppb	13:45:36
2	Sr 421.552†	51.9	30.2	0.2418 ug/L	0.2418 ppb	13:45:36
2	Sc 361.383	837276.6	837276.6	102.25 %		13:46:53
2	Y 371.029	705670.0	705670.0	102.03 %		13:46:53
2	Ag 328.068†	199.2	9.7	0.0451 ug/L	0.0451 ppb	13:46:53
2	As 188.979†	-19.4	7.8	4.2836 ug/L	4.2836 ppb	13:47:13
2	B 249.677†	682.9	1205.2	33.813 ug/L	33.813 ppb	13:47:13
2	Ba 233.527†	96.3	94.9	0.8886 ug/L	0.8886 ppb	13:47:13
2	Be 313.107†	-3728.2	84.9	0.0368 ug/L	0.0368 ppb	13:46:53
2	Cd 226.502†	-173.6	0.8	0.0133 ug/L	0.0133 ppb	13:47:13
2	Co 228.616†	-47.5	-0.3	-0.0071 ug/L	-0.0071 ppb	13:47:13
2	Cr 267.716†	142.2	67.6	0.9039 ug/L	0.9039 ppb	13:47:13
2	Cu 324.752†	6111.5	424.8	1.4000 ug/L	1.4000 ppb	13:46:53
2	Mn 257.610†	1565.1	1141.6	1.5003 ug/L	1.5003 ppb	13:47:13
2	Mo 202.031†	12.7	3.9	0.3448 ug/L	0.3448 ppb	13:47:13
2	Ni 231.604†	96.2	10.0	0.3176 ug/L	0.3176 ppb	13:47:13

2	P 214.914†	205.2	13.4	9.7406 ug/L	9.7406 ppb	13:47:13
2	Pb 220.353†	-39.7	19.4	2.9899 ug/L	2.9899 ppb	13:47:13
2	S 181.975 Axial†	63.5	31.9	57.060 ug/L	57.060 ppb	13:47:13
2	Sb 206.836†	31.2	6.8	2.8685 ug/L	2.8685 ppb	13:47:13
2	Se 196.026†	-17.4	-0.1	-0.0690 ug/L	-0.0690 ppb	13:47:13
2	Si 251.611†	56182.1	54455.8	2067.3 ug/L	2067.3 ppb	13:46:53
2	Sn 189.927†	9.7	2.4	0.5457 ug/L	0.5457 ppb	13:47:13
2	Ti 334.940†	-981.8	161.1	0.2855 ug/L	0.2855 ppb	13:46:53
2	Tl 190.801†	-31.1	-1.3	-0.4933 ug/L	-0.4933 ppb	13:47:13
2	U 409.014†	-2106.2	144.5	4.3810 ug/L	4.3810 ppb	13:46:53
2	V 292.402†	-1333.4	13.5	0.1209 ug/L	0.1209 ppb	13:46:53
2	Zn 213.857†	742.8	156.4	1.8914 ug/L	1.8914 ppb	13:47:13
2	SiO2†	56534.4	54789.2	4471.4 ug/L	4471.4 ppb	13:47:49
3	Sc Radial	4473.9	4473.9	102 %		13:46:01
3	Y RADIAL	4849.6	4849.6	101.9 %		13:46:01
3	Al 396.153Radial†	-62.3	16.9	16.535 ug/L	16.535 ppb	13:46:21
3	Ca 317.933Radial†	50.5	33.9	64.091 ug/L	64.091 ppb	13:46:21
3	Fe 238.204 Radial†	10.0	1.4	15.967 ug/L	15.967 ppb	13:46:21
3	K 766.490 Radial†	5134.1	2444.9	465.66 ug/L	465.66 ppb	13:46:01
3	Mg 279.077 IEC†	-0.6	-2.1	-87.214 ug/L	-87.214 ppb	13:46:21
3	Na 589.592 Radial†	50.2	924.4	325.86 ug/L	325.86 ppb	13:46:01
3	Sr 421.552†	37.1	15.6	0.1244 ug/L	0.1244 ppb	13:46:01
3	Sc 361.383	847382.1	847382.1	103.49 %		13:47:19
3	Y 371.029	714239.5	714239.5	103.27 %		13:47:19
3	Ag 328.068†	179.7	-11.5	-0.0583 ug/L	-0.0583 ppb	13:47:19
3	As 188.979†	-24.5	3.2	1.7364 ug/L	1.7364 ppb	13:47:39
3	B 249.677†	657.8	1173.0	32.905 ug/L	32.905 ppb	13:47:39
3	Ba 233.527†	93.9	91.4	0.8566 ug/L	0.8566 ppb	13:47:39
3	Be 313.107†	-3766.0	91.9	0.0399 ug/L	0.0399 ppb	13:47:19
3	Cd 226.502†	-182.0	-5.3	-0.0775 ug/L	-0.0775 ppb	13:47:39
3	Co 228.616†	-49.5	-1.6	-0.0413 ug/L	-0.0413 ppb	13:47:39
3	Cr 267.716†	126.4	50.7	0.6798 ug/L	0.6798 ppb	13:47:39
3	Cu 324.752†	6269.4	506.1	1.6697 ug/L	1.6697 ppb	13:47:19
3	Mn 257.610†	1613.9	1170.4	1.5440 ug/L	1.5440 ppb	13:47:39
3	Mo 202.031†	14.6	5.6	0.5005 ug/L	0.5005 ppb	13:47:39
3	Ni 231.604†	82.9	-3.9	-0.1250 ug/L	-0.1250 ppb	13:47:39
3	P 214.914†	200.0	5.9	4.0772 ug/L	4.0772 ppb	13:47:39
3	Pb 220.353†	-55.2	5.0	0.7697 ug/L	0.7697 ppb	13:47:39
3	S 181.975 Axial†	55.7	23.7	42.349 ug/L	42.349 ppb	13:47:39
3	Sb 206.836†	27.7	3.1	1.3121 ug/L	1.3121 ppb	13:47:39
3	Se 196.026†	-16.0	1.5	1.2956 ug/L	1.2956 ppb	13:47:39
3	Si 251.611†	56913.4	54507.2	2069.2 ug/L	2069.2 ppb	13:47:19
3	Sn 189.927†	8.8	1.3	0.3095 ug/L	0.3095 ppb	13:47:39
3	Ti 334.940†	-965.0	188.8	0.3421 ug/L	0.3421 ppb	13:47:19
3	Tl 190.801†	-32.3	-2.1	-0.8177 ug/L	-0.8177 ppb	13:47:39
3	U 409.014†	-2152.2	124.5	3.7745 ug/L	3.7745 ppb	13:47:19
3	V 292.402†	-1357.4	5.8	0.0560 ug/L	0.0560 ppb	13:47:19
3	Zn 213.857†	728.8	134.2	1.6222 ug/L	1.6222 ppb	13:47:39
3	SiO2†	56826.7	54412.3	4440.7 ug/L	4440.7 ppb	13:47:54

Mean Data: 247771001|957492|1

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	839946.3	102.58 %	0.797			0.78%
Sc Radial	4448.5	101 %	0.9			0.91%
Y 371.029	707867.4	102.35 %	0.811			0.79%
Y RADIAL	4814.4	101.1 %	0.82			0.81%
Ag 328.068†	-17.3	-0.0888 ug/L	0.15147	-0.0888 ppb	0.15147	170.49%
Al 396.153Radial†	12.9	12.652 ug/L	3.4557	12.652 ppb	3.4557	27.31%
As 188.979†	4.3	2.3464 ug/L	1.71548	2.3464 ppb	1.71548	73.11%
B 249.677†	1200.0	33.662 ug/L	0.6938	33.662 ppb	0.6938	2.06%
Ba 233.527†	90.6	0.8493 ug/L	0.04354	0.8493 ppb	0.04354	5.13%
Be 313.107†	81.1	0.0353 ug/L	0.00550	0.0353 ppb	0.00550	15.58%
Ca 317.933Radial†	33.2	62.856 ug/L	1.5090	62.856 ppb	1.5090	2.40%
Cd 226.502†	-2.1	-0.0305 ug/L	0.04548	-0.0305 ppb	0.04548	149.24%
Co 228.616†	0.8	0.0210 ug/L	0.08010	0.0210 ppb	0.08010	381.37%
Cr 267.716†	62.2	0.8345 ug/L	0.13423	0.8345 ppb	0.13423	16.09%
Cu 324.752†	456.6	1.5063 ug/L	0.14365	1.5063 ppb	0.14365	9.54%
Fe 238.204 Radial†	1.2	14.092 ug/L	17.2191	14.092 ppb	17.2191	122.19%
K 766.490 Radial†	2424.4	461.77 ug/L	9.109	461.77 ppb	9.109	1.97%

Mg 279.077 IEC†	-0.8	-33.969 ug/L	48.2580	-33.969 ppb	48.2580	142.07%
Mn 257.610†	1162.6	1.5314 ug/L	0.02710	1.5314 ppb	0.02710	1.77%
Mo 202.031†	3.3	0.2988 ug/L	0.22823	0.2988 ppb	0.22823	76.39%
Na 589.592 Radial†	966.0	340.53 ug/L	14.365	340.53 ppb	14.365	4.22%
Ni 231.604†	6.2	0.1967 ug/L	0.28137	0.1967 ppb	0.28137	143.08%
P 214.914†	10.0	7.1061 ug/L	2.85218	7.1061 ppb	2.85218	40.14%
Pb 220.353†	12.7	1.9518 ug/L	1.11713	1.9518 ppb	1.11713	57.24%
S 181.975 Axial†	27.9	49.978 ug/L	7.3708	49.978 ppb	7.3708	14.75%
Sb 206.836†	8.5	3.5736 ug/L	2.68437	3.5736 ppb	2.68437	75.12%
Se 196.026†	-2.4	-1.9127 ug/L	4.42800	-1.9127 ppb	4.42800	231.51%
Si 251.611†	54439.7	2066.7 ug/L	2.91	2066.7 ppb	2.91	0.14%
Sn 189.927†	0.3	0.0707 ug/L	0.62938	0.0707 ppb	0.62938	889.82%
Sr 421.552†	25.9	0.2071 ug/L	0.07190	0.2071 ppb	0.07190	34.71%
Ti 334.940†	196.8	0.3516 ug/L	0.07127	0.3516 ppb	0.07127	20.27%
Tl 190.801†	0.8	0.3356 ug/L	1.72432	0.3356 ppb	1.72432	513.81%
U 409.014†	112.9	3.4226 ug/L	1.17457	3.4226 ppb	1.17457	34.32%
V 292.402†	8.5	0.0756 ug/L	0.03933	0.0756 ppb	0.03933	52.03%
Zn 213.857†	144.5	1.7454 ug/L	0.13605	1.7454 ppb	0.13605	7.79%
SiO2†	54845.6	4476.0 ug/L	37.89	4476.0 ppb	37.89	0.85%

Sequence No.: 10
 Sample ID: CCV
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 7
 Date Collected: 3/19/2010 14:17:09
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4286.6	4286.6	97.5 %		14:19:21
1	Y RADIAL	4712.3	4712.3	98.99 %		14:19:01
1	Al 396.153Radial†	4948.0	5151.3	5035.7 ug/L	5035.7 ppb	14:19:01
1	Ca 317.933Radial†	2681.9	2734.1	5173.4 ug/L	5173.4 ppb	14:19:21
1	Fe 238.204 Radial†	445.8	448.7	5213.7 ug/L	5213.7 ppb	14:19:21
1	K 766.490 Radial†	29143.9	27282.4	5191.6 ug/L	5191.6 ppb	14:19:01
1	Mg 279.077 IEC†	128.4	130.2	5369.0 ug/L	5369.0 ppb	14:19:21
1	Na 589.592 Radial†	27278.3	28843.5	10168 ug/L	10168 ppb	14:19:01
1	Sr 421.552†	62479.4	64039.2	513.28 ug/L	513.28 ppb	14:19:01
1	Sc 361.383	831477.9	831477.9	101.55 %		14:20:18
1	Y 371.029	692747.3	692747.3	100.16 %		14:20:18
1	Ag 328.068†	98324.6	96643.2	504.90 ug/L	504.90 ppb	14:20:24
1	As 188.979†	905.4	918.4	508.54 ug/L	508.54 ppb	14:20:44
1	B 249.677†	17422.4	17694.6	494.10 ug/L	494.10 ppb	14:20:24
1	Ba 233.527†	54391.7	53564.7	502.96 ug/L	502.96 ppb	14:20:24
1	Be 313.107†	1194858.5	1180406.6	503.74 ug/L	503.74 ppb	14:20:18
1	Cd 226.502†	35200.5	34835.4	505.33 ug/L	505.33 ppb	14:20:24
1	Co 228.616†	20048.9	19790.0	511.60 ug/L	511.60 ppb	14:20:24
1	Cr 267.716†	37955.7	37306.6	501.34 ug/L	501.34 ppb	14:20:24
1	Cu 324.752†	157713.0	149761.0	494.43 ug/L	494.43 ppb	14:20:24
1	Mn 257.610†	381470.8	375276.7	493.72 ug/L	493.72 ppb	14:20:24
1	Mo 202.031†	5726.4	5630.7	500.99 ug/L	500.99 ppb	14:20:44
1	Ni 231.604†	16346.0	16013.1	508.23 ug/L	508.23 ppb	14:20:24
1	P 214.914†	3603.1	3360.9	2407.2 ug/L	2407.2 ppb	14:20:44
1	Pb 220.353†	3243.2	3252.2	501.06 ug/L	501.06 ppb	14:20:44
1	S 181.975 Axial†	604.1	564.7	1010.0 ug/L	1010.0 ppb	14:20:44
1	Sb 206.836†	1248.8	1206.2	522.61 ug/L	522.61 ppb	14:20:44
1	Se 196.026†	598.5	606.4	523.26 ug/L	523.26 ppb	14:20:44
1	Si 251.611†	68567.2	67035.6	2538.7 ug/L	2538.7 ppb	14:20:24
1	Sn 189.927†	2241.0	2199.7	499.80 ug/L	499.80 ppb	14:20:44
1	Ti 334.940†	287050.0	283803.0	493.40 ug/L	493.40 ppb	14:20:24
1	Tl 190.801†	1277.2	1286.9	501.13 ug/L	501.13 ppb	14:20:44
1	U 409.014†	14715.7	16695.9	504.81 ug/L	504.81 ppb	14:20:24
1	V 292.402†	61985.5	62359.7	504.63 ug/L	504.63 ppb	14:20:24
1	Zn 213.857†	42736.7	41516.3	498.35 ug/L	498.35 ppb	14:20:24
1	SiO2†	68779.3	67233.3	5473.4 ug/L	5473.4 ppb	14:21:51
2	Sc Radial	4298.9	4298.9	97.8 %		14:19:46
2	Y RADIAL	4801.9	4801.9	100.9 %		14:19:26
2	Al 396.153Radial†	5052.3	5243.4	5126.5 ug/L	5126.5 ppb	14:19:26
2	Ca 317.933Radial†	2690.8	2735.3	5175.8 ug/L	5175.8 ppb	14:19:46
2	Fe 238.204 Radial†	448.2	449.8	5226.7 ug/L	5226.7 ppb	14:19:46
2	K 766.490 Radial†	29575.8	27638.4	5259.4 ug/L	5259.4 ppb	14:19:26
2	Mg 279.077 IEC†	124.6	125.8	5189.8 ug/L	5189.8 ppb	14:19:46
2	Na 589.592 Radial†	27711.8	29206.6	10296 ug/L	10296 ppb	14:19:26
2	Sr 421.552†	63721.4	65125.5	521.99 ug/L	521.99 ppb	14:19:26
2	Sc 361.383	838934.0	838934.0	102.46 %		14:20:49
2	Y 371.029	696901.9	696901.9	100.76 %		14:20:49
2	Ag 328.068†	98089.8	95553.4	499.22 ug/L	499.22 ppb	14:20:54
2	As 188.979†	897.0	902.3	499.63 ug/L	499.63 ppb	14:21:15
2	B 249.677†	17432.6	17552.1	490.12 ug/L	490.12 ppb	14:20:54
2	Ba 233.527†	54141.6	52844.5	496.20 ug/L	496.20 ppb	14:20:54
2	Be 313.107†	1207828.3	1182607.7	504.67 ug/L	504.67 ppb	14:20:49
2	Cd 226.502†	34973.2	34305.6	497.64 ug/L	497.64 ppb	14:20:54
2	Co 228.616†	19965.7	19533.3	504.96 ug/L	504.96 ppb	14:20:54
2	Cr 267.716†	37713.6	36738.1	493.71 ug/L	493.71 ppb	14:20:54
2	Cu 324.752†	157185.6	147865.8	488.18 ug/L	488.18 ppb	14:20:54
2	Mn 257.610†	379619.5	370131.0	486.96 ug/L	486.96 ppb	14:20:54
2	Mo 202.031†	5693.9	5548.9	493.72 ug/L	493.72 ppb	14:21:15
2	Ni 231.604†	16251.4	15777.8	500.76 ug/L	500.76 ppb	14:20:54

2	P 214.914†	3594.4	3321.0	2378.6 ug/L	2378.6 ppb	14:21:15
2	Pb 220.353†	3259.7	3239.8	499.16 ug/L	499.16 ppb	14:21:15
2	S 181.975 Axial†	605.2	560.5	1002.5 ug/L	1002.5 ppb	14:21:15
2	Sb 206.836†	1248.3	1194.7	517.64 ug/L	517.64 ppb	14:21:15
2	Se 196.026†	589.8	592.6	511.83 ug/L	511.83 ppb	14:21:15
2	Si 251.611†	68173.9	66051.6	2501.4 ug/L	2501.4 ppb	14:20:54
2	Sn 189.927†	2257.8	2196.6	499.08 ug/L	499.08 ppb	14:21:15
2	Ti 334.940†	285541.1	279817.9	486.49 ug/L	486.49 ppb	14:20:54
2	Tl 190.801†	1275.8	1274.3	496.22 ug/L	496.22 ppb	14:21:15
2	U 409.014†	14699.2	16551.0	500.43 ug/L	500.43 ppb	14:20:54
2	V 292.402†	61693.6	61532.2	497.92 ug/L	497.92 ppb	14:20:54
2	Zn 213.857†	42687.0	41093.7	493.29 ug/L	493.29 ppb	14:20:54
2	SiO2†	69054.8	66900.2	5446.4 ug/L	5446.4 ppb	14:21:56
3	Sc Radial	4285.5	4285.5	97.5 %		14:20:11
3	Y RADIAL	4880.2	4880.2	102.5 %		14:19:51
3	Al 396.153Radial†	5069.9	5277.6	5159.6 ug/L	5159.6 ppb	14:19:51
3	Ca 317.933Radial†	2697.6	2750.8	5205.1 ug/L	5205.1 ppb	14:20:11
3	Fe 238.204 Radial†	454.8	458.0	5322.0 ug/L	5322.0 ppb	14:20:11
3	K 766.490 Radial†	29958.4	28125.4	5352.1 ug/L	5352.1 ppb	14:19:51
3	Mg 279.077 IEC†	131.4	133.2	5495.5 ug/L	5495.5 ppb	14:20:11
3	Na 589.592 Radial†	27959.3	29549.0	10417 ug/L	10417 ppb	14:19:51
3	Sr 421.552†	64362.6	65986.8	528.89 ug/L	528.89 ppb	14:19:51
3	Sc 361.383	825187.1	825187.1	100.78 %		14:21:20
3	Y 371.029	686685.7	686685.7	99.283 %		14:21:20
3	Ag 328.068†	97337.1	96401.4	503.67 ug/L	503.67 ppb	14:21:25
3	As 188.979†	913.9	933.6	516.86 ug/L	516.86 ppb	14:21:45
3	B 249.677†	17209.9	17614.5	491.84 ug/L	491.84 ppb	14:21:25
3	Ba 233.527†	53489.1	53077.4	498.40 ug/L	498.40 ppb	14:21:25
3	Be 313.107†	1185936.7	1180523.9	503.79 ug/L	503.79 ppb	14:21:20
3	Cd 226.502†	34609.4	34513.2	500.64 ug/L	500.64 ppb	14:21:25
3	Co 228.616†	19749.9	19643.9	507.83 ug/L	507.83 ppb	14:21:25
3	Cr 267.716†	37555.4	37194.3	499.84 ug/L	499.84 ppb	14:21:25
3	Cu 324.752†	155986.3	149231.7	492.69 ug/L	492.69 ppb	14:21:25
3	Mn 257.610†	376330.0	373039.4	490.78 ug/L	490.78 ppb	14:21:25
3	Mo 202.031†	5723.8	5671.2	504.59 ug/L	504.59 ppb	14:21:45
3	Ni 231.604†	16186.7	15977.8	507.11 ug/L	507.11 ppb	14:21:25
3	P 214.914†	3581.7	3366.8	2411.9 ug/L	2411.9 ppb	14:21:45
3	Pb 220.353†	3250.7	3283.9	505.96 ug/L	505.96 ppb	14:21:45
3	S 181.975 Axial†	603.6	568.8	1017.3 ug/L	1017.3 ppb	14:21:45
3	Sb 206.836†	1251.1	1217.8	527.67 ug/L	527.67 ppb	14:21:45
3	Se 196.026†	597.0	609.3	526.11 ug/L	526.11 ppb	14:21:45
3	Si 251.611†	67487.4	66478.9	2517.5 ug/L	2517.5 ppb	14:21:25
3	Sn 189.927†	2258.7	2234.1	507.59 ug/L	507.59 ppb	14:21:45
3	Ti 334.940†	283433.1	282369.0	490.90 ug/L	490.90 ppb	14:21:25
3	Tl 190.801†	1286.7	1305.8	508.45 ug/L	508.45 ppb	14:21:45
3	U 409.014†	14522.6	16614.8	502.34 ug/L	502.34 ppb	14:21:25
3	V 292.402†	61245.5	62090.7	502.52 ug/L	502.52 ppb	14:21:25
3	Zn 213.857†	42292.7	41396.5	496.90 ug/L	496.90 ppb	14:21:25
3	SiO2†	68089.2	67064.8	5459.5 ug/L	5459.5 ppb	14:22:01

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	831866.4	101.59 %	0.840			0.83%
Sc Radial	4290.4	97.6 %	0.17			0.17%
Y 371.029	692111.7	100.07 %	0.743			0.74%
Y RADIAL	4798.1	100.8 %	1.76			1.75%
Ag 328.068†	96199.3	502.60 ug/L	2.987	502.60 ppb	2.987	0.59%
QC value within limits for Ag 328.068 Recovery = 100.52%						
Al 396.153Radial†	5224.1	5107.2 ug/L	64.17	5107.2 ppb	64.17	1.26%
QC value within limits for Al 396.153Radial Recovery = 102.14%						
As 188.979†	918.1	508.34 ug/L	8.615	508.34 ppb	8.615	1.69%
QC value within limits for As 188.979 Recovery = 101.67%						
B 249.677†	17620.4	492.02 ug/L	1.996	492.02 ppb	1.996	0.41%
QC value within limits for B 249.677 Recovery = 98.40%						
Ba 233.527†	53162.2	499.19 ug/L	3.449	499.19 ppb	3.449	0.69%
QC value within limits for Ba 233.527 Recovery = 99.84%						
Be 313.107†	1181179.4	504.07 ug/L	0.520	504.07 ppb	0.520	0.10%
QC value within limits for Be 313.107 Recovery = 100.81%						
Ca 317.933Radial†	2740.1	5184.8 ug/L	17.64	5184.8 ppb	17.64	0.34%

QC value within limits for Ca 317.933 Radial Recovery = 103.70%							
Cd	226.502†	34551.4	501.20 ug/L	3.878	501.20 ppb	3.878	0.77%
QC value within limits for Cd 226.502 Recovery = 100.24%							
Co	228.616†	19655.7	508.13 ug/L	3.329	508.13 ppb	3.329	0.66%
QC value within limits for Co 228.616 Recovery = 101.63%							
Cr	267.716†	37079.7	498.30 ug/L	4.043	498.30 ppb	4.043	0.81%
QC value within limits for Cr 267.716 Recovery = 99.66%							
Cu	324.752†	148952.8	491.77 ug/L	3.228	491.77 ppb	3.228	0.66%
QC value within limits for Cu 324.752 Recovery = 98.35%							
Fe	238.204 Radial†	452.2	5254.2 ug/L	59.13	5254.2 ppb	59.13	1.13%
QC value within limits for Fe 238.204 Radial Recovery = 105.08%							
K	766.490 Radial†	27682.1	5267.7 ug/L	80.57	5267.7 ppb	80.57	1.53%
QC value within limits for K 766.490 Radial Recovery = 105.35%							
Mg	279.077 IEC†	129.7	5351.4 ug/L	153.62	5351.4 ppb	153.62	2.87%
QC value within limits for Mg 279.077 IEC Recovery = 107.03%							
Mn	257.610†	372815.7	490.48 ug/L	3.388	490.48 ppb	3.388	0.69%
QC value within limits for Mn 257.610 Recovery = 98.10%							
Mo	202.031†	5616.9	499.77 ug/L	5.539	499.77 ppb	5.539	1.11%
QC value within limits for Mo 202.031 Recovery = 99.95%							
Na	589.592 Radial†	29199.7	10294 ug/L	124.4	10294 ppb	124.4	1.21%
QC value within limits for Na 589.592 Radial Recovery = 102.94%							
Ni	231.604†	15922.9	505.36 ug/L	4.029	505.36 ppb	4.029	0.80%
QC value within limits for Ni 231.604 Recovery = 101.07%							
P	214.914†	3349.6	2399.2 ug/L	17.98	2399.2 ppb	17.98	0.75%
QC value within limits for P 214.914 Recovery = 95.97%							
Pb	220.353†	3258.6	502.06 ug/L	3.508	502.06 ppb	3.508	0.70%
QC value within limits for Pb 220.353 Recovery = 100.41%							
S	181.975 Axial†	564.7	1009.9 ug/L	7.41	1009.9 ppb	7.41	0.73%
QC value within limits for S 181.975 Axial Recovery = 100.99%							
Sb	206.836†	1206.2	522.64 ug/L	5.013	522.64 ppb	5.013	0.96%
QC value within limits for Sb 206.836 Recovery = 104.53%							
Se	196.026†	602.8	520.40 ug/L	7.558	520.40 ppb	7.558	1.45%
QC value within limits for Se 196.026 Recovery = 104.08%							
Si	251.611†	66522.0	2519.2 ug/L	18.69	2519.2 ppb	18.69	0.74%
QC value within limits for Si 251.611 Recovery = 100.77%							
Sn	189.927†	2210.1	502.15 ug/L	4.722	502.15 ppb	4.722	0.94%
QC value within limits for Sn 189.927 Recovery = 100.43%							
Sr	421.552†	65050.5	521.39 ug/L	7.823	521.39 ppb	7.823	1.50%
QC value within limits for Sr 421.552 Recovery = 104.28%							
Ti	334.940†	281996.6	490.26 ug/L	3.499	490.26 ppb	3.499	0.71%
QC value within limits for Ti 334.940 Recovery = 98.05%							
Tl	190.801†	1289.0	501.94 ug/L	6.156	501.94 ppb	6.156	1.23%
QC value within limits for Tl 190.801 Recovery = 100.39%							
U	409.014†	16620.6	502.53 ug/L	2.197	502.53 ppb	2.197	0.44%
QC value within limits for U 409.014 Recovery = 100.51%							
V	292.402†	61994.2	501.69 ug/L	3.433	501.69 ppb	3.433	0.68%
QC value within limits for V 292.402 Recovery = 100.34%							
Zn	213.857†	41335.5	496.18 ug/L	2.608	496.18 ppb	2.608	0.53%
QC value within limits for Zn 213.857 Recovery = 99.24%							
SiO2†		67066.1	5459.8 ug/L	13.50	5459.8 ppb	13.50	0.25%
QC value within limits for SiO2 Recovery = 102.10%							

All analyte(s) passed QC.

Sequence No.: 11
 Sample ID: CCB
 Analyst:
 Initial Sample Wt:
 Dilution:

Autosampler Location: 8
 Date Collected: 3/19/2010 14:24:11
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4205.6	4205.6	95.7 %		14:26:24
1	Y RADIAL	4674.8	4674.8	98.20 %		14:26:04
1	Al 396.153Radial†	-79.0	-4.5	-4.4237 ug/L	-4.4237 ppb	14:26:24
1	Ca 317.933Radial†	19.5	4.7	8.8716 ug/L	8.8716 ppb	14:26:24
1	Fe 238.204 Radial†	6.8	-1.3	-15.152 ug/L	-15.152 ppb	14:26:24
1	K 766.490 Radial†	2657.1	178.0	33.925 ug/L	33.925 ppb	14:26:04
1	Mg 279.077 IEC†	2.1	0.7	28.443 ug/L	28.443 ppb	14:26:24
1	Na 589.592 Radial†	-889.3	-54.3	-19.138 ug/L	-19.138 ppb	14:26:04
1	Sr 421.552†	24.1	4.3	0.0345 ug/L	0.0345 ppb	14:26:04
1	Sc 361.383	823769.2	823769.2	100.60 %		14:27:21
1	Y 371.029	695270.5	695270.5	100.52 %		14:27:21
1	Ag 328.068†	239.9	53.4	0.2721 ug/L	0.2721 ppb	14:27:21
1	As 188.979†	-22.7	4.3	2.3396 ug/L	2.3396 ppb	14:27:41
1	B 249.677†	-326.0	213.3	5.9855 ug/L	5.9855 ppb	14:27:41
1	Ba 233.527†	2.4	3.1	0.0279 ug/L	0.0279 ppb	14:27:41
1	Be 313.107†	-3704.2	49.1	0.0210 ug/L	0.0210 ppb	14:27:21
1	Cd 226.502†	-181.7	-10.0	-0.1442 ug/L	-0.1442 ppb	14:27:41
1	Co 228.616†	-39.1	7.3	0.1900 ug/L	0.1900 ppb	14:27:41
1	Cr 267.716†	76.1	4.1	0.0536 ug/L	0.0536 ppb	14:27:41
1	Cu 324.752†	5545.9	-39.4	-0.1306 ug/L	-0.1306 ppb	14:27:21
1	Mn 257.610†	381.1	-10.3	-0.0162 ug/L	-0.0162 ppb	14:27:41
1	Mo 202.031†	14.0	5.4	0.4818 ug/L	0.4818 ppb	14:27:41
1	Ni 231.604†	72.9	-11.6	-0.3696 ug/L	-0.3696 ppb	14:27:41
1	P 214.914†	183.4	-5.0	-3.6798 ug/L	-3.6798 ppb	14:27:41
1	Pb 220.353†	-46.8	11.8	1.8119 ug/L	1.8119 ppb	14:27:41
1	S 181.975 Axial†	32.0	1.6	2.8912 ug/L	2.8912 ppb	14:27:41
1	Sb 206.836†	43.9	20.0	8.3742 ug/L	8.3742 ppb	14:27:41
1	Se 196.026†	-22.6	-5.5	-4.6659 ug/L	-4.6659 ppb	14:27:41
1	Si 251.611†	500.4	9.2	0.3440 ug/L	0.3440 ppb	14:27:41
1	Sn 189.927†	7.2	0.0	0.0045 ug/L	0.0045 ppb	14:27:41
1	Ti 334.940†	-1115.0	12.9	0.0215 ug/L	0.0215 ppb	14:27:21
1	Tl 190.801†	-27.7	1.5	0.5959 ug/L	0.5959 ppb	14:27:41
1	U 409.014†	-2231.3	-13.8	-0.4157 ug/L	-0.4157 ppb	14:27:21
1	V 292.402†	-1342.4	-17.0	-0.1266 ug/L	-0.1266 ppb	14:27:21
1	Zn 213.857†	544.5	-28.8	-0.3443 ug/L	-0.3443 ppb	14:27:41
1	SiO2†	528.6	26.1	2.1191 ug/L	2.1191 ppb	14:28:52
2	Sc Radial	4264.1	4264.1	97.0 %		14:26:49
2	Y RADIAL	4759.1	4759.1	99.97 %		14:26:29
2	Al 396.153Radial†	-70.3	5.6	5.5009 ug/L	5.5009 ppb	14:26:49
2	Ca 317.933Radial†	18.4	3.2	6.0968 ug/L	6.0968 ppb	14:26:49
2	Fe 238.204 Radial†	5.2	-3.1	-35.431 ug/L	-35.431 ppb	14:26:49
2	K 766.490 Radial†	2765.0	251.1	47.845 ug/L	47.845 ppb	14:26:29
2	Mg 279.077 IEC†	0.2	-1.3	-52.606 ug/L	-52.606 ppb	14:26:49
2	Na 589.592 Radial†	-846.1	3.0	1.0656 ug/L	1.0656 ppb	14:26:29
2	Sr 421.552†	8.3	-12.3	-0.0986 ug/L	-0.0986 ppb	14:26:29
2	Sc 361.383	820046.7	820046.7	100.15 %		14:27:46
2	Y 371.029	692570.4	692570.4	100.13 %		14:27:46
2	Ag 328.068†	155.7	-29.7	-0.1663 ug/L	-0.1663 ppb	14:27:46
2	As 188.979†	-21.4	5.4	2.9797 ug/L	2.9797 ppb	14:28:06
2	B 249.677†	-341.2	196.7	5.5226 ug/L	5.5226 ppb	14:28:06
2	Ba 233.527†	10.9	11.6	0.1074 ug/L	0.1074 ppb	14:28:06
2	Be 313.107†	-3692.5	44.0	0.0186 ug/L	0.0186 ppb	14:27:46
2	Cd 226.502†	-177.9	-7.0	-0.0978 ug/L	-0.0978 ppb	14:28:06
2	Co 228.616†	-34.2	12.0	0.3131 ug/L	0.3131 ppb	14:28:06
2	Cr 267.716†	63.7	-7.9	-0.1096 ug/L	-0.1096 ppb	14:28:06
2	Cu 324.752†	5570.5	10.2	0.0316 ug/L	0.0316 ppb	14:27:46
2	Mn 257.610†	410.2	20.5	0.0256 ug/L	0.0256 ppb	14:28:06
2	Mo 202.031†	16.5	7.9	0.7010 ug/L	0.7010 ppb	14:28:06
2	Ni 231.604†	72.9	-11.2	-0.3570 ug/L	-0.3570 ppb	14:28:06

2	P 214.914†	186.8	-0.8	-0.5492 ug/L	-0.5492 ppb	14:28:06
2	Pb 220.353†	-58.2	0.2	0.0395 ug/L	0.0395 ppb	14:28:06
2	S 181.975 Axial†	27.1	-3.1	-5.5952 ug/L	-5.5952 ppb	14:28:06
2	Sb 206.836†	28.8	5.1	2.1640 ug/L	2.1640 ppb	14:28:06
2	Se 196.026†	-18.2	-1.2	-1.1286 ug/L	-1.1286 ppb	14:28:06
2	Si 251.611†	504.7	15.7	0.5887 ug/L	0.5887 ppb	14:28:06
2	Sn 189.927†	9.4	2.2	0.4997 ug/L	0.4997 ppb	14:28:06
2	Ti 334.940†	-1163.2	-40.2	-0.0649 ug/L	-0.0649 ppb	14:27:46
2	Tl 190.801†	-24.2	5.0	1.9222 ug/L	1.9222 ppb	14:28:06
2	U 409.014†	-2198.7	8.8	0.2707 ug/L	0.2707 ppb	14:27:46
2	V 292.402†	-1351.3	-31.9	-0.2400 ug/L	-0.2400 ppb	14:27:46
2	Zn 213.857†	568.5	-2.4	-0.0213 ug/L	-0.0213 ppb	14:28:06
2	SiO2†	525.9	25.8	2.0856 ug/L	2.0856 ppb	14:29:12
3	Sc Radial	4260.5	4260.5	96.9 %		14:27:14
3	Y RADIAL	4745.0	4745.0	99.67 %		14:26:54
3	Al 396.153Radial†	-75.0	0.8	0.7173 ug/L	0.7173 ppb	14:27:14
3	Ca 317.933Radial†	17.2	2.0	3.8392 ug/L	3.8392 ppb	14:27:14
3	Fe 238.204 Radial†	9.8	1.6	18.570 ug/L	18.570 ppb	14:27:14
3	K 766.490 Radial†	2583.2	66.1	12.593 ug/L	12.593 ppb	14:26:54
3	Mg 279.077 IEC†	4.2	2.8	116.12 ug/L	116.12 ppb	14:27:14
3	Na 589.592 Radial†	-905.2	-58.7	-20.689 ug/L	-20.689 ppb	14:26:54
3	Sr 421.552†	51.1	31.9	0.2554 ug/L	0.2554 ppb	14:26:54
3	Sc 361.383	830623.4	830623.4	101.44 %		14:28:11
3	Y 371.029	700309.7	700309.7	101.25 %		14:28:11
3	Ag 328.068†	154.3	-33.0	-0.1667 ug/L	-0.1667 ppb	14:28:11
3	As 188.979†	-19.3	7.8	4.2894 ug/L	4.2894 ppb	14:28:31
3	B 249.677†	-338.5	203.7	5.7097 ug/L	5.7097 ppb	14:28:31
3	Ba 233.527†	3.3	4.0	0.0384 ug/L	0.0384 ppb	14:28:31
3	Be 313.107†	-3793.1	-8.2	-0.0031 ug/L	-0.0031 ppb	14:28:11
3	Cd 226.502†	-163.4	9.5	0.1367 ug/L	0.1367 ppb	14:28:31
3	Co 228.616†	-38.1	8.6	0.2236 ug/L	0.2236 ppb	14:28:31
3	Cr 267.716†	71.6	-1.0	-0.0114 ug/L	-0.0114 ppb	14:28:31
3	Cu 324.752†	5605.6	-26.0	-0.0864 ug/L	-0.0864 ppb	14:28:11
3	Mn 257.610†	397.9	3.2	0.0012 ug/L	0.0012 ppb	14:28:31
3	Mo 202.031†	14.3	5.6	0.4998 ug/L	0.4998 ppb	14:28:31
3	Ni 231.604†	66.4	-18.6	-0.5896 ug/L	-0.5896 ppb	14:28:31
3	P 214.914†	183.4	-6.5	-4.8409 ug/L	-4.8409 ppb	14:28:31
3	Pb 220.353†	-56.2	2.9	0.4381 ug/L	0.4381 ppb	14:28:31
3	S 181.975 Axial†	30.1	-0.5	-0.8845 ug/L	-0.8845 ppb	14:28:31
3	Sb 206.836†	25.6	1.6	0.6614 ug/L	0.6614 ppb	14:28:31
3	Se 196.026†	-20.1	-2.8	-2.3008 ug/L	-2.3008 ppb	14:28:31
3	Si 251.611†	507.2	11.8	0.4437 ug/L	0.4437 ppb	14:28:31
3	Sn 189.927†	3.8	-3.4	-0.7653 ug/L	-0.7653 ppb	14:28:31
3	Ti 334.940†	-1039.1	96.9	0.1583 ug/L	0.1583 ppb	14:28:11
3	Tl 190.801†	-26.5	2.9	1.1346 ug/L	1.1346 ppb	14:28:31
3	U 409.014†	-2141.1	93.5	2.8347 ug/L	2.8347 ppb	14:28:11
3	V 292.402†	-1290.2	45.6	0.3759 ug/L	0.3759 ppb	14:28:11
3	Zn 213.857†	545.0	-32.8	-0.3965 ug/L	-0.3965 ppb	14:28:31
3	SiO2†	528.5	21.6	1.7513 ug/L	1.7513 ppb	14:29:32

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	824813.1	100.73 %		0.655			0.65%
Sc Radial	4243.4	96.5 %		0.75			0.77%
Y 371.029	696050.2	100.64 %		0.568			0.56%
Y RADIAL	4726.3	99.28 %		0.949			0.96%
Ag 328.068†	-3.1	-0.0203 ug/L		0.25322	-0.0203 ppb	0.25322	>999.9%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	0.6	0.5982 ug/L		4.96338	0.5982 ppb	4.96338	829.76%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	5.8	3.2029 ug/L		0.99385	3.2029 ppb	0.99385	31.03%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	204.5	5.7393 ug/L		0.23288	5.7393 ppb	0.23288	4.06%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	6.2	0.0579 ug/L		0.04318	0.0579 ppb	0.04318	74.57%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	28.3	0.0121 ug/L		0.01325	0.0121 ppb	0.01325	109.09%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	3.3	6.2692 ug/L		2.52066	6.2692 ppb	2.52066	40.21%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated					
Cd 226.502†	-2.5	-0.0351 ug/L	0.15058	-0.0351 ppb	0.15058 429.43%
QC value within limits for Cd 226.502 Recovery = Not calculated					
Co 228.616†	9.3	0.2423 ug/L	0.06365	0.2423 ppb	0.06365 26.27%
QC value within limits for Co 228.616 Recovery = Not calculated					
Cr 267.716†	-1.6	-0.0225 ug/L	0.08221	-0.0225 ppb	0.08221 365.69%
QC value within limits for Cr 267.716 Recovery = Not calculated					
Cu 324.752†	-18.4	-0.0618 ug/L	0.08382	-0.0618 ppb	0.08382 135.61%
QC value within limits for Cu 324.752 Recovery = Not calculated					
Fe 238.204 Radial†	-0.9	-10.671 ug/L	27.2781	-10.671 ppb	27.2781 255.63%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated					
K 766.490 Radial†	165.1	31.454 ug/L	17.7553	31.454 ppb	17.7553 56.45%
QC value within limits for K 766.490 Radial Recovery = Not calculated					
Mg 279.077 IEC†	0.7	30.653 ug/L	84.3857	30.653 ppb	84.3857 275.29%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated					
Mn 257.610†	4.5	0.0036 ug/L	0.02100	0.0036 ppb	0.02100 589.65%
QC value within limits for Mn 257.610 Recovery = Not calculated					
Mo 202.031†	6.3	0.5609 ug/L	0.12168	0.5609 ppb	0.12168 21.69%
QC value within limits for Mo 202.031 Recovery = Not calculated					
Na 589.592 Radial†	-36.7	-12.921 ug/L	12.1373	-12.921 ppb	12.1373 93.94%
QC value within limits for Na 589.592 Radial Recovery = Not calculated					
Ni 231.604†	-13.8	-0.4387 ug/L	0.13079	-0.4387 ppb	0.13079 29.81%
QC value within limits for Ni 231.604 Recovery = Not calculated					
P 214.914†	-4.1	-3.0233 ug/L	2.21992	-3.0233 ppb	2.21992 73.43%
QC value within limits for P 214.914 Recovery = Not calculated					
Pb 220.353†	4.9	0.7632 ug/L	0.92984	0.7632 ppb	0.92984 121.84%
QC value within limits for Pb 220.353 Recovery = Not calculated					
S 181.975 Axial†	-0.7	-1.1962 ug/L	4.25178	-1.1962 ppb	4.25178 355.45%
QC value within limits for S 181.975 Axial Recovery = Not calculated					
Sb 206.836†	8.9	3.7332 ug/L	4.08887	3.7332 ppb	4.08887 109.53%
QC value within limits for Sb 206.836 Recovery = Not calculated					
Se 196.026†	-3.2	-2.6985 ug/L	1.80185	-2.6985 ppb	1.80185 66.77%
QC value within limits for Se 196.026 Recovery = Not calculated					
Si 251.611†	12.3	0.4588 ug/L	0.12302	0.4588 ppb	0.12302 26.81%
QC value within limits for Si 251.611 Recovery = Not calculated					
Sn 189.927†	-0.4	-0.0870 ug/L	0.63746	-0.0870 ppb	0.63746 732.63%
QC value within limits for Sn 189.927 Recovery = Not calculated					
Sr 421.552†	8.0	0.0638 ug/L	0.17881	0.0638 ppb	0.17881 280.39%
QC value within limits for Sr 421.552 Recovery = Not calculated					
Ti 334.940†	23.2	0.0383 ug/L	0.11258	0.0383 ppb	0.11258 294.02%
QC value within limits for Ti 334.940 Recovery = Not calculated					
Tl 190.801†	3.1	1.2176 ug/L	0.66700	1.2176 ppb	0.66700 54.78%
QC value within limits for Tl 190.801 Recovery = Not calculated					
U 409.014†	29.5	0.8966 ug/L	1.71320	0.8966 ppb	1.71320 191.08%
QC value within limits for U 409.014 Recovery = Not calculated					
V 292.402†	-1.1	0.0031 ug/L	0.32780	0.0031 ppb	0.32780 >999.9%
QC value within limits for V 292.402 Recovery = Not calculated					
Zn 213.857†	-21.3	-0.2541 ug/L	0.20321	-0.2541 ppb	0.20321 79.99%
QC value within limits for Zn 213.857 Recovery = Not calculated					
SiO2†	24.5	1.9853 ug/L	0.20340	1.9853 ppb	0.20340 10.25%
QC value within limits for SiO2 Recovery = Not calculated					

All analyte(s) passed QC.

Sequence No.: 14
 Sample ID: 1202053055|957492|1
 Analyst: HSC
 Initial Sample Wt:
 Dilution:

Autosampler Location: 34
 Date Collected: 3/19/2010 14:45:19
 Data Type: Original
 Initial Sample Vol:
 Sample Prep Vol:

Replicate Data: 1202053055|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4430.4	4430.4	101 %		14:47:12
1	Y RADIAL	4932.5	4932.5	103.6 %		14:47:12
1	Al 396.153Radial†	5401.9	5437.0	5340.7 ug/L	5340.7 ppb	14:47:12
1	Ca 317.933Radial†	14647.9	14515.5	27466 ug/L	27466 ppb	14:47:12
1	Fe 238.204 Radial†	4878.7	4831.4	55983 ug/L	55983 ppb	14:47:12
1	K 766.490 Radial†	26682.5	23871.2	4530.5 ug/L	4530.5 ppb	14:47:12
1	Mg 279.077 IEC†	161.5	158.7	6487.6 ug/L	6487.6 ppb	14:47:32
1	Na 589.592 Radial†	57625.2	58041.4	20461 ug/L	20461 ppb	14:47:12
1	Sr 421.552†	18664.3	18494.8	148.04 ug/L	148.04 ppb	14:47:12
1	Sc 361.383	822874.2	822874.2	100.49 %		14:48:29
1	Y 371.029	706417.4	706417.4	102.14 %		14:48:29
1	Ag 328.068†	-2942.0	-3112.6	0.9024 ug/L	0.9024 ppb	14:48:29
1	As 188.979†	-37.7	-10.7	7.5330 ug/L	7.5330 ppb	14:48:49
1	B 249.677†	1499.2	2029.2	47.598 ug/L	47.598 ppb	14:48:29
1	Ba 233.527†	39668.3	39473.8	371.49 ug/L	371.49 ppb	14:48:29
1	Be 313.107†	-2413.5	1329.4	0.6408 ug/L	0.6408 ppb	14:48:29
1	Cd 226.502†	250.7	420.1	0.3389 ug/L	0.3389 ppb	14:48:49
1	Co 228.616†	3183.0	3213.5	82.348 ug/L	82.348 ppb	14:48:49
1	Cr 267.716†	1765.4	1685.2	28.576 ug/L	28.576 ppb	14:48:49
1	Cu 324.752†	15937.6	10307.2	37.006 ug/L	37.006 ppb	14:48:29
1	Mn 257.610†	999390.1	994082.9	1312.3 ug/L	1312.3 ppb	14:48:29
1	Mo 202.031†	-13.8	-22.2	2.6962 ug/L	2.6962 ppb	14:48:49
1	Ni 231.604†	1590.1	1498.2	47.530 ug/L	47.530 ppb	14:48:49
1	P 214.914†	1369.6	1175.6	824.82 ug/L	824.82 ppb	14:48:49
1	Pb 220.353†	7.4	65.7	3.6649 ug/L	3.6649 ppb	14:48:49
1	S 181.975 Axial†	450.2	417.8	747.02 ug/L	747.02 ppb	14:48:49
1	Sb 206.836†	30.6	6.8	1.3972 ug/L	1.3972 ppb	14:48:49
1	Se 196.026†	-235.6	-217.5	-18.568 ug/L	-18.568 ppb	14:48:49
1	Si 251.611†	858425.0	853712.4	32409 ug/L	32409 ppb	14:48:29
1	Sn 189.927†	-177.5	-183.8	-40.047 ug/L	-40.047 ppb	14:48:49
1	Ti 334.940†	17885.1	18918.3	36.052 ug/L	36.052 ppb	14:48:29
1	Tl 190.801†	-60.2	-30.8	-5.8186 ug/L	-5.8186 ppb	14:48:49
1	U 409.014†	-3020.7	-801.6	-30.753 ug/L	-30.753 ppb	14:48:29
1	V 292.402†	1930.0	3237.9	17.711 ug/L	17.711 ppb	14:48:49
1	Zn 213.857†	288381.8	286392.6	3461.4 ug/L	3461.4 ppb	14:48:29
1	SiO2†	869266.8	864489.7	70553 ug/L	70553 ppb	14:49:47
2	Sc Radial	4422.5	4422.5	101 %		14:47:37
2	Y RADIAL	4906.3	4906.3	103.1 %		14:47:37
2	Al 396.153Radial†	5382.9	5427.5	5331.4 ug/L	5331.4 ppb	14:47:37
2	Ca 317.933Radial†	14682.3	14575.4	27580 ug/L	27580 ppb	14:47:37
2	Fe 238.204 Radial†	4863.3	4824.6	55904 ug/L	55904 ppb	14:47:37
2	K 766.490 Radial†	26723.3	23958.6	4547.0 ug/L	4547.0 ppb	14:47:37
2	Mg 279.077 IEC†	165.3	162.8	6656.4 ug/L	6656.4 ppb	14:47:57
2	Na 589.592 Radial†	57650.0	58167.1	20505 ug/L	20505 ppb	14:47:37
2	Sr 421.552†	18630.2	18493.7	148.03 ug/L	148.03 ppb	14:47:37
2	Sc 361.383	827257.8	827257.8	101.03 %		14:48:55
2	Y 371.029	710073.7	710073.7	102.66 %		14:48:55
2	Ag 328.068†	-3029.6	-3183.9	0.5077 ug/L	0.5077 ppb	14:48:55
2	As 188.979†	-34.7	-7.6	9.2254 ug/L	9.2254 ppb	14:49:15
2	B 249.677†	1498.1	2020.2	47.359 ug/L	47.359 ppb	14:48:55
2	Ba 233.527†	39709.7	39305.6	369.91 ug/L	369.91 ppb	14:48:55
2	Be 313.107†	-2411.6	1344.0	0.6474 ug/L	0.6474 ppb	14:48:55
2	Cd 226.502†	235.3	403.6	0.1064 ug/L	0.1064 ppb	14:49:15
2	Co 228.616†	3193.2	3206.9	82.177 ug/L	82.177 ppb	14:49:15
2	Cr 267.716†	1759.7	1670.3	28.368 ug/L	28.368 ppb	14:49:15
2	Cu 324.752†	16049.3	10333.7	37.090 ug/L	37.090 ppb	14:48:55
2	Mn 257.610†	999227.4	988652.3	1305.1 ug/L	1305.1 ppb	14:48:55
2	Mo 202.031†	-4.4	-12.9	3.5240 ug/L	3.5240 ppb	14:49:15
2	Ni 231.604†	1594.1	1493.8	47.388 ug/L	47.388 ppb	14:49:15

2	P 214.914†	1369.7	1168.4	819.53 ug/L	819.53 ppb	14:49:15
2	Pb 220.353†	5.6	63.9	3.3966 ug/L	3.3966 ppb	14:49:15
2	S 181.975 Axial†	451.9	417.1	745.69 ug/L	745.69 ppb	14:49:15
2	Sb 206.836†	35.2	11.1	3.2575 ug/L	3.2575 ppb	14:49:15
2	Se 196.026†	-241.1	-221.7	-22.255 ug/L	-22.255 ppb	14:49:15
2	Si 251.611†	860895.4	851631.3	32330 ug/L	32330 ppb	14:48:55
2	Sn 189.927†	-170.9	-176.3	-38.318 ug/L	-38.318 ppb	14:49:15
2	Ti 334.940†	18074.6	19011.5	36.216 ug/L	36.216 ppb	14:48:55
2	Tl 190.801†	-57.2	-27.6	-4.5939 ug/L	-4.5939 ppb	14:49:15
2	U 409.014†	-3099.7	-863.9	-32.633 ug/L	-32.633 ppb	14:48:55
2	V 292.402†	1926.3	3224.1	17.623 ug/L	17.623 ppb	14:49:15
2	Zn 213.857†	288654.7	285142.1	3446.3 ug/L	3446.3 ppb	14:48:55
2	SiO2†	859633.8	850371.5	69400 ug/L	69400 ppb	14:49:53
3	Sc Radial	4404.7	4404.7	100 %		14:48:02
3	Y RADIAL	4921.8	4921.8	103.4 %		14:48:02
3	Al 396.153Radial†	5383.9	5450.2	5353.6 ug/L	5353.6 ppb	14:48:02
3	Ca 317.933Radial†	14546.9	14499.3	27436 ug/L	27436 ppb	14:48:02
3	Fe 238.204 Radial†	4809.0	4790.0	55503 ug/L	55503 ppb	14:48:02
3	K 766.490 Radial†	26576.9	23919.9	4539.8 ug/L	4539.8 ppb	14:48:02
3	Mg 279.077 IEC†	163.1	161.2	6592.7 ug/L	6592.7 ppb	14:48:22
3	Na 589.592 Radial†	57045.2	57795.2	20374 ug/L	20374 ppb	14:48:02
3	Sr 421.552†	18502.0	18440.6	147.61 ug/L	147.61 ppb	14:48:02
3	Sc 361.383	829791.2	829791.2	101.34 %		14:49:21
3	Y 371.029	711638.2	711638.2	102.89 %		14:49:21
3	Ag 328.068†	-3014.2	-3159.5	0.5148 ug/L	0.5148 ppb	14:49:21
3	As 188.979†	-42.5	-15.1	4.9773 ug/L	4.9773 ppb	14:49:41
3	B 249.677†	1400.0	1918.9	44.582 ug/L	44.582 ppb	14:49:21
3	Ba 233.527†	39895.7	39369.1	370.49 ug/L	370.49 ppb	14:49:21
3	Be 313.107†	-2422.7	1340.4	0.6453 ug/L	0.6453 ppb	14:49:21
3	Cd 226.502†	229.8	397.4	0.0580 ug/L	0.0580 ppb	14:49:41
3	Co 228.616†	3213.1	3216.9	82.442 ug/L	82.442 ppb	14:49:41
3	Cr 267.716†	1792.1	1696.9	28.684 ug/L	28.684 ppb	14:49:41
3	Cu 324.752†	16000.5	10237.0	36.751 ug/L	36.751 ppb	14:49:21
3	Mn 257.610†	1005048.7	991377.1	1308.7 ug/L	1308.7 ppb	14:49:21
3	Mo 202.031†	-6.2	-14.7	3.3321 ug/L	3.3321 ppb	14:49:41
3	Ni 231.604†	1610.4	1505.1	47.746 ug/L	47.746 ppb	14:49:41
3	P 214.914†	1370.0	1164.6	817.07 ug/L	817.07 ppb	14:49:41
3	Pb 220.353†	14.4	72.6	4.7941 ug/L	4.7941 ppb	14:49:41
3	S 181.975 Axial†	439.9	403.9	722.10 ug/L	722.10 ppb	14:49:41
3	Sb 206.836†	31.9	7.8	1.8045 ug/L	1.8045 ppb	14:49:41
3	Se 196.026†	-231.0	-211.0	-14.479 ug/L	-14.479 ppb	14:49:41
3	Si 251.611†	863327.5	851429.7	32323 ug/L	32323 ppb	14:49:21
3	Sn 189.927†	-184.6	-189.3	-41.267 ug/L	-41.267 ppb	14:49:41
3	Ti 334.940†	18010.0	18893.2	35.997 ug/L	35.997 ppb	14:49:21
3	Tl 190.801†	-60.1	-30.3	-5.6165 ug/L	-5.6165 ppb	14:49:41
3	U 409.014†	-3184.5	-938.2	-34.841 ug/L	-34.841 ppb	14:49:21
3	V 292.402†	1949.6	3241.2	17.811 ug/L	17.811 ppb	14:49:41
3	Zn 213.857†	289707.6	285308.8	3448.3 ug/L	3448.3 ppb	14:49:21
3	SiO2†	872534.0	860503.4	70227 ug/L	70227 ppb	14:49:59

Mean Data: 1202053055|957492|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Conc. Units	Sample Std.Dev.	RSD
Sc 361.383	826641.1	100.95 %		0.427			0.42%
Sc Radial	4419.2	101 %		0.3			0.30%
Y 371.029	709376.4	102.56 %		0.387			0.38%
Y RADIAL	4920.2	103.4 %		0.28			0.27%
Ag 328.068†	-3152.0	0.6416 ug/L		0.22587	0.6416 ppb	0.22587	35.20%
Al 396.153Radial†	5438.2	5341.9 ug/L		11.19	5341.9 ppb	11.19	0.21%
As 188.979†	-11.1	7.2452 ug/L		2.13862	7.2452 ppb	2.13862	29.52%
B 249.677†	1989.4	46.513 ug/L		1.6769	46.513 ppb	1.6769	3.61%
Ba 233.527†	39382.9	370.63 ug/L		0.798	370.63 ppb	0.798	0.22%
Be 313.107†	1337.9	0.6445 ug/L		0.00338	0.6445 ppb	0.00338	0.52%
Ca 317.933Radial†	14530.1	27494 ug/L		75.9	27494 ppb	75.9	0.28%
Cd 226.502†	407.0	0.1678 ug/L		0.15014	0.1678 ppb	0.15014	89.50%
Co 228.616†	3212.4	82.322 ug/L		0.1340	82.322 ppb	0.1340	0.16%
Cr 267.716†	1684.1	28.542 ug/L		0.1606	28.542 ppb	0.1606	0.56%
Cu 324.752†	10292.6	36.949 ug/L		0.1765	36.949 ppb	0.1765	0.48%
Fe 238.204 Radial†	4815.4	55797 ug/L		257.0	55797 ppb	257.0	0.46%
K 766.490 Radial†	23916.6	4539.1 ug/L		8.32	4539.1 ppb	8.32	0.18%

Mg 279.077 IEC†	160.9	6578.9 ug/L	85.25	6578.9 ppb	85.25	1.30%
Mn 257.610†	991370.8	1308.7 ug/L	3.58	1308.7 ppb	3.58	0.27%
Mo 202.031†	-16.6	3.1841 ug/L	0.43328	3.1841 ppb	0.43328	13.61%
Na 589.592 Radial†	58001.2	20447 ug/L	66.7	20447 ppb	66.7	0.33%
Ni 231.604†	1499.0	47.555 ug/L	0.1804	47.555 ppb	0.1804	0.38%
P 214.914†	1169.6	820.47 ug/L	3.958	820.47 ppb	3.958	0.48%
Pb 220.353†	67.4	3.9519 ug/L	0.74159	3.9519 ppb	0.74159	18.77%
S 181.975 Axial†	412.9	738.27 ug/L	14.018	738.27 ppb	14.018	1.90%
Sb 206.836†	8.6	2.1531 ug/L	0.97793	2.1531 ppb	0.97793	45.42%
Se 196.026†	-216.7	-18.434 ug/L	3.8898	-18.434 ppb	3.8898	21.10%
Si 251.611†	852257.8	32354 ug/L	48.0	32354 ppb	48.0	0.15%
Sn 189.927†	-183.1	-39.877 ug/L	1.4817	-39.877 ppb	1.4817	3.72%
Sr 421.552†	18476.4	147.90 ug/L	0.248	147.90 ppb	0.248	0.17%
Ti 334.940†	18941.0	36.088 ug/L	0.1140	36.088 ppb	0.1140	0.32%
Tl 190.801†	-29.6	-5.3430 ug/L	0.65656	-5.3430 ppb	0.65656	12.29%
U 409.014†	-867.9	-32.742 ug/L	2.0465	-32.742 ppb	2.0465	6.25%
V 292.402†	3234.4	17.715 ug/L	0.0939	17.715 ppb	0.0939	0.53%
Zn 213.857†	285614.5	3452.0 ug/L	8.21	3452.0 ppb	8.21	0.24%
SiO2†	858454.9	70060 ug/L	594.0	70060 ppb	594.0	0.85%

Sequence No.: 15

Sample ID: 1202053056|957492|1

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 35

Date Collected: 3/19/2010 14:52:10

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053056|957492|1

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4264.5	4264.5	97.0 %		14:54:24
1	Y RADIAL	4862.7	4862.7	102.1 %		14:54:04
1	Al 396.153Radial†	10780.5	11188.6	10966 ug/L	10966 ppb	14:54:04
1	Ca 317.933Radial†	17244.1	17756.2	33598 ug/L	33598 ppb	14:54:04
1	Fe 238.204 Radial†	5369.3	5525.2	64036 ug/L	64036 ppb	14:54:04
1	K 766.490 Radial†	54276.1	53338.7	10140 ug/L	10140 ppb	14:54:04
1	Mg 279.077 IEC†	289.4	296.8	12180 ug/L	12180 ppb	14:54:24
1	Na 589.592 Radial†	71002.1	74050.6	26104 ug/L	26104 ppb	14:54:04
1	Sr 421.552†	82367.2	84867.6	680.03 ug/L	680.03 ppb	14:54:04
1	Sc 361.383	822292.7	822292.7	100.42 %		14:55:22
1	Y 371.029	704435.6	704435.6	101.85 %		14:55:22
1	Ag 328.068†	93578.7	92998.9	503.96 ug/L	503.96 ppb	14:55:22
1	As 188.979†	919.0	941.9	535.65 ug/L	535.65 ppb	14:55:42
1	B 249.677†	19640.9	20095.4	551.70 ug/L	551.70 ppb	14:55:22
1	Ba 233.527†	94578.5	94180.4	885.26 ug/L	885.26 ppb	14:55:22
1	Be 313.107†	1215878.2	1214481.4	518.38 ug/L	518.38 ppb	14:55:22
1	Cd 226.502†	34676.8	34701.2	497.33 ug/L	497.33 ppb	14:55:42
1	Co 228.616†	22487.3	22438.6	579.28 ug/L	579.28 ppb	14:55:42
1	Cr 267.716†	39039.1	38802.9	527.70 ug/L	527.70 ppb	14:55:22
1	Cu 324.752†	175539.8	169247.5	561.90 ug/L	561.90 ppb	14:55:22
1	Mn 257.610†	1384513.3	1378285.2	1818.0 ug/L	1818.0 ppb	14:55:22
1	Mo 202.031†	5752.2	5719.4	513.78 ug/L	513.78 ppb	14:55:42
1	Ni 231.604†	17535.2	17377.2	551.50 ug/L	551.50 ppb	14:55:42
1	P 214.914†	2196.9	2000.3	1334.8 ug/L	1334.8 ppb	14:55:42
1	Pb 220.353†	3292.5	3337.0	507.40 ug/L	507.40 ppb	14:55:42
1	S 181.975 Axial†	3396.1	3351.6	5998.1 ug/L	5998.1 ppb	14:55:42
1	Sb 206.836†	1301.6	1272.4	549.43 ug/L	549.43 ppb	14:55:42
1	Se 196.026†	376.0	391.3	515.15 ug/L	515.15 ppb	14:55:42
1	Si 251.611†	999132.7	994430.8	37745 ug/L	37745 ppb	14:55:22
1	Sn 189.927†	2156.1	2139.8	487.88 ug/L	487.88 ppb	14:55:42
1	Ti 334.940†	315389.7	315180.8	551.23 ug/L	551.23 ppb	14:55:22
1	Tl 190.801†	1245.8	1269.6	500.84 ug/L	500.84 ppb	14:55:42
1	U 409.014†	13509.8	15657.0	466.54 ug/L	466.54 ppb	14:55:22
1	V 292.402†	66069.8	67108.6	534.11 ug/L	534.11 ppb	14:55:22
1	Zn 213.857†	327721.9	325769.7	3933.4 ug/L	3933.4 ppb	14:55:22
1	SiO2†	999290.0	994576.3	81155 ug/L	81155 ppb	14:56:43
2	Sc Radial	4251.8	4251.8	96.7 %		14:54:49
2	Y RADIAL	4842.8	4842.8	101.7 %		14:54:29
2	Al 396.153Radial†	10756.6	11197.1	10974 ug/L	10974 ppb	14:54:29
2	Ca 317.933Radial†	17174.2	17737.1	33562 ug/L	33562 ppb	14:54:29
2	Fe 238.204 Radial†	5309.3	5479.7	63509 ug/L	63509 ppb	14:54:29
2	K 766.490 Radial†	54005.6	53226.3	10118 ug/L	10118 ppb	14:54:29
2	Mg 279.077 IEC†	283.9	291.9	11982 ug/L	11982 ppb	14:54:49
2	Na 589.592 Radial†	70589.9	73843.1	26031 ug/L	26031 ppb	14:54:29
2	Sr 421.552†	82231.2	84980.8	680.93 ug/L	680.93 ppb	14:54:29
2	Sc 361.383	830182.8	830182.8	101.39 %		14:55:50
2	Y 371.029	709694.9	709694.9	102.61 %		14:55:50
2	Ag 328.068†	94208.2	92734.1	502.43 ug/L	502.43 ppb	14:55:50
2	As 188.979†	905.1	919.5	523.26 ug/L	523.26 ppb	14:56:10
2	B 249.677†	19904.4	20169.5	553.89 ug/L	553.89 ppb	14:55:50
2	Ba 233.527†	95659.1	94351.0	886.84 ug/L	886.84 ppb	14:55:50
2	Be 313.107†	1226314.4	1213267.8	517.86 ug/L	517.86 ppb	14:55:50
2	Cd 226.502†	34593.6	34290.9	491.43 ug/L	491.43 ppb	14:56:10
2	Co 228.616†	22432.1	22171.4	572.37 ug/L	572.37 ppb	14:56:10
2	Cr 267.716†	39482.4	38870.7	528.56 ug/L	528.56 ppb	14:55:50
2	Cu 324.752†	176828.4	168857.1	560.58 ug/L	560.58 ppb	14:55:50
2	Mn 257.610†	1399663.1	1380124.7	1820.4 ug/L	1820.4 ppb	14:55:50
2	Mo 202.031†	5746.9	5659.7	508.43 ug/L	508.43 ppb	14:56:10
2	Ni 231.604†	17455.3	17132.4	543.73 ug/L	543.73 ppb	14:56:10

2	P 214.914†	2197.9	1980.5	1320.7 ug/L	1320.7 ppb	14:56:10
2	Pb 220.353†	3271.6	3285.2	499.51 ug/L	499.51 ppb	14:56:10
2	S 181.975 Axial†	3389.2	3312.6	5928.2 ug/L	5928.2 ppb	14:56:10
2	Sb 206.836†	1314.0	1272.3	549.18 ug/L	549.18 ppb	14:56:10
2	Se 196.026†	383.0	394.7	516.42 ug/L	516.42 ppb	14:56:10
2	Si 251.611†	1009394.6	995096.6	37771 ug/L	37771 ppb	14:55:50
2	Sn 189.927†	2148.8	2112.3	481.65 ug/L	481.65 ppb	14:56:10
2	Ti 334.940†	318601.1	315363.4	551.56 ug/L	551.56 ppb	14:55:50
2	Tl 190.801†	1245.8	1257.8	496.33 ug/L	496.33 ppb	14:56:10
2	U 409.014†	13514.0	15533.3	462.85 ug/L	462.85 ppb	14:55:50
2	V 292.402†	66798.1	67201.7	534.84 ug/L	534.84 ppb	14:55:50
2	Zn 213.857†	331008.7	325909.9	3935.2 ug/L	3935.2 ppb	14:55:50
2	SiO2†	1009076.9	994772.0	81171 ug/L	81171 ppb	14:56:49
3	Sc Radial	4239.7	4239.7	96.5 %		14:55:14
3	Y RADIAL	4820.0	4820.0	101.2 %		14:54:54
3	Al 396.153Radial†	10665.0	11134.0	10912 ug/L	10912 ppb	14:54:54
3	Ca 317.933Radial†	17065.6	17675.3	33445 ug/L	33445 ppb	14:54:54
3	Fe 238.204 Radial†	5287.5	5472.8	63429 ug/L	63429 ppb	14:54:54
3	K 766.490 Radial†	53650.8	53018.2	10079 ug/L	10079 ppb	14:54:54
3	Mg 279.077 IEC†	285.6	294.5	12088 ug/L	12088 ppb	14:55:14
3	Na 589.592 Radial†	69684.0	73112.8	25774 ug/L	25774 ppb	14:54:54
3	Sr 421.552†	81157.3	84110.6	673.96 ug/L	673.96 ppb	14:54:54
3	Sc 361.383	827089.3	827089.3	101.01 %		14:56:17
3	Y 371.029	707093.0	707093.0	102.23 %		14:56:17
3	Ag 328.068†	94056.6	92931.6	503.43 ug/L	503.43 ppb	14:56:17
3	As 188.979†	900.6	918.4	522.61 ug/L	522.61 ppb	14:56:37
3	B 249.677†	19810.4	20149.8	553.34 ug/L	553.34 ppb	14:56:17
3	Ba 233.527†	95138.4	94188.5	885.32 ug/L	885.32 ppb	14:56:17
3	Be 313.107†	1220609.6	1212144.0	517.38 ug/L	517.38 ppb	14:56:17
3	Cd 226.502†	34544.3	34369.8	492.58 ug/L	492.58 ppb	14:56:37
3	Co 228.616†	22409.7	22231.9	573.94 ug/L	573.94 ppb	14:56:37
3	Cr 267.716†	39276.7	38812.8	527.78 ug/L	527.78 ppb	14:56:17
3	Cu 324.752†	176498.5	169182.9	561.65 ug/L	561.65 ppb	14:56:17
3	Mn 257.610†	1393561.3	1379247.4	1819.2 ug/L	1819.2 ppb	14:56:17
3	Mo 202.031†	5740.2	5674.3	509.72 ug/L	509.72 ppb	14:56:37
3	Ni 231.604†	17440.2	17181.9	545.30 ug/L	545.30 ppb	14:56:37
3	P 214.914†	2196.7	1987.5	1325.7 ug/L	1325.7 ppb	14:56:37
3	Pb 220.353†	3282.9	3308.4	503.07 ug/L	503.07 ppb	14:56:37
3	S 181.975 Axial†	3382.1	3318.1	5938.1 ug/L	5938.1 ppb	14:56:37
3	Sb 206.836†	1303.9	1267.2	547.08 ug/L	547.08 ppb	14:56:37
3	Se 196.026†	372.0	385.2	508.25 ug/L	508.25 ppb	14:56:37
3	Si 251.611†	1004665.5	994138.5	37734 ug/L	37734 ppb	14:56:17
3	Sn 189.927†	2139.9	2111.3	481.41 ug/L	481.41 ppb	14:56:37
3	Ti 334.940†	317462.6	315411.7	551.62 ug/L	551.62 ppb	14:56:17
3	Tl 190.801†	1240.5	1257.2	496.05 ug/L	496.05 ppb	14:56:37
3	U 409.014†	13393.9	15464.3	460.76 ug/L	460.76 ppb	14:56:17
3	V 292.402†	66570.2	67222.4	535.03 ug/L	535.03 ppb	14:56:17
3	Zn 213.857†	329263.7	325403.5	3929.1 ug/L	3929.1 ppb	14:56:17
3	SiO2†	1002377.8	991862.5	80934 ug/L	80934 ppb	14:56:55

Mean Data: 1202053056|957492|1

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	826521.6	100.94 %		0.486			0.48%
Sc Radial	4252.0	96.7 %		0.28			0.29%
Y 371.029	707074.5	102.23 %		0.380			0.37%
Y RADIAL	4841.8	101.7 %		0.45			0.44%
Ag 328.068†	92888.2	503.27 ug/L		0.778	503.27 ppb	0.778	0.15%
Al 396.153Radial†	11173.2	10951 ug/L		33.6	10951 ppb	33.6	0.31%
As 188.979†	926.6	527.17 ug/L		7.348	527.17 ppb	7.348	1.39%
B 249.677†	20138.2	552.98 ug/L		1.136	552.98 ppb	1.136	0.21%
Ba 233.527†	94240.0	885.81 ug/L		0.898	885.81 ppb	0.898	0.10%
Be 313.107†	1213297.8	517.87 ug/L		0.497	517.87 ppb	0.497	0.10%
Ca 317.933Radial†	17722.9	33535 ug/L		80.0	33535 ppb	80.0	0.24%
Cd 226.502†	34454.0	493.78 ug/L		3.130	493.78 ppb	3.130	0.63%
Co 228.616†	22280.7	575.20 ug/L		3.624	575.20 ppb	3.624	0.63%
Cr 267.716†	38828.8	528.01 ug/L		0.475	528.01 ppb	0.475	0.09%
Cu 324.752†	169095.9	561.38 ug/L		0.700	561.38 ppb	0.700	0.12%
Fe 238.204 Radial†	5492.6	63658 ug/L		330.2	63658 ppb	330.2	0.52%
K 766.490 Radial†	53194.4	10112 ug/L		30.9	10112 ppb	30.9	0.31%

Mg 279.077 IEC†	294.4	12084 ug/L	99.3	12084 ppb	99.3	0.82%
Mn 257.610†	1379219.1	1819.2 ug/L	1.19	1819.2 ppb	1.19	0.07%
Mo 202.031†	5684.5	510.64 ug/L	2.791	510.64 ppb	2.791	0.55%
Na 589.592 Radial†	73668.8	25970 ug/L	173.7	25970 ppb	173.7	0.67%
Ni 231.604†	17230.5	546.85 ug/L	4.108	546.85 ppb	4.108	0.75%
P 214.914†	1989.4	1327.1 ug/L	7.16	1327.1 ppb	7.16	0.54%
Pb 220.353†	3310.2	503.33 ug/L	3.952	503.33 ppb	3.952	0.79%
S 181.975 Axial†	3327.4	5954.8 ug/L	37.80	5954.8 ppb	37.80	0.63%
Sb 206.836†	1270.7	548.56 ug/L	1.288	548.56 ppb	1.288	0.23%
Se 196.026†	390.4	513.27 ug/L	4.396	513.27 ppb	4.396	0.86%
Si 251.611†	994555.3	37750 ug/L	18.7	37750 ppb	18.7	0.05%
Sn 189.927†	2121.1	483.65 ug/L	3.667	483.65 ppb	3.667	0.76%
Sr 421.552†	84653.0	678.31 ug/L	3.792	678.31 ppb	3.792	0.56%
Ti 334.940†	315318.6	551.47 ug/L	0.210	551.47 ppb	0.210	0.04%
Tl 190.801†	1261.5	497.74 ug/L	2.688	497.74 ppb	2.688	0.54%
U 409.014†	15551.5	463.39 ug/L	2.927	463.39 ppb	2.927	0.63%
V 292.402†	67177.6	534.66 ug/L	0.489	534.66 ppb	0.489	0.09%
Zn 213.857†	325694.4	3932.6 ug/L	3.15	3932.6 ppb	3.15	0.08%
SiO2†	993736.9	81087 ug/L	132.7	81087 ppb	132.7	0.16%

Sequence No.: 16

Sample ID: 1202053057|957492|5

Analyst: HSC

Initial Sample Wt:

Dilution:

Autosampler Location: 36

Date Collected: 3/19/2010 14:59:06

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: 1202053057|957492|5

Repl#	Analyte	Net Intensity	Corrected Intensity	Conc. Units	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4481.7	4481.7	102 %			15:01:00
1	Y RADIAL	4829.0	4829.0	101.4 %			15:01:00
1	Al 396.153Radial†	910.1	970.6	953.44 ug/L		953.44 ppb	15:01:00
1	Ca 317.933Radial†	2878.5	2807.2	5311.7 ug/L		5311.7 ppb	15:01:20
1	Fe 238.204 Radial†	917.0	890.8	10322 ug/L		10322 ppb	15:01:20
1	K 766.490 Radial†	7470.7	4727.5	897.21 ug/L		897.21 ppb	15:01:00
1	Mg 279.077 IEC†	33.8	31.6	1293.6 ug/L		1293.6 ppb	15:01:20
1	Na 589.592 Radial†	11309.4	11965.8	4218.2 ug/L		4218.2 ppb	15:01:00
1	Sr 421.552†	3695.0	3602.7	28.839 ug/L		28.839 ppb	15:01:00
1	Sc 361.383	833152.3	833152.3	101.75 %			15:02:17
1	Y 371.029	701529.7	701529.7	101.43 %			15:02:17
1	Ag 328.068†	-437.9	-615.5	-0.0559 ug/L		-0.0559 ppb	15:02:17
1	As 188.979†	-22.7	4.5	4.9463 ug/L		4.9463 ppb	15:02:37
1	B 249.677†	-26.3	511.5	12.628 ug/L		12.628 ppb	15:02:17
1	Ba 233.527†	7676.0	7544.7	70.991 ug/L		70.991 ppb	15:02:17
1	Be 313.107†	-3468.7	322.0	0.1495 ug/L		0.1495 ppb	15:02:17
1	Cd 226.502†	-107.9	64.6	-0.1240 ug/L		-0.1240 ppb	15:02:37
1	Co 228.616†	582.9	619.1	15.874 ug/L		15.874 ppb	15:02:37
1	Cr 267.716†	370.2	292.3	5.0212 ug/L		5.0212 ppb	15:02:37
1	Cu 324.752†	7440.8	1760.8	6.3608 ug/L		6.3608 ppb	15:02:17
1	Mn 257.610†	196247.0	192483.1	254.05 ug/L		254.05 ppb	15:02:17
1	Mo 202.031†	7.3	-1.4	0.7424 ug/L		0.7424 ppb	15:02:37
1	Ni 231.604†	356.6	266.4	8.4521 ug/L		8.4521 ppb	15:02:37
1	P 214.914†	404.3	210.1	147.15 ug/L		147.15 ppb	15:02:37
1	Pb 220.353†	-39.3	19.7	1.8407 ug/L		1.8407 ppb	15:02:37
1	S 181.975 Axial†	113.6	81.4	145.61 ug/L		145.61 ppb	15:02:37
1	Sb 206.836†	30.7	6.5	2.3860 ug/L		2.3860 ppb	15:02:37
1	Se 196.026†	-60.4	-42.4	-5.3702 ug/L		-5.3702 ppb	15:02:37
1	Si 251.611†	170066.7	166653.9	6326.7 ug/L		6326.7 ppb	15:02:17
1	Sn 189.927†	-51.1	-57.4	-12.681 ug/L		-12.681 ppb	15:02:37
1	Ti 334.940†	2044.5	3130.5	6.0495 ug/L		6.0495 ppb	15:02:17
1	Tl 190.801†	-41.9	-12.1	-3.5149 ug/L		-3.5149 ppb	15:02:37
1	U 409.014†	-2308.7	-64.8	-3.1514 ug/L		-3.1514 ppb	15:02:17
1	V 292.402†	-751.6	578.8	3.1309 ug/L		3.1309 ppb	15:02:17
1	Zn 213.857†	57674.9	56113.0	678.30 ug/L		678.30 ppb	15:02:17
1	SiO2†	166696.3	163330.3	13330 ug/L		13330 ppb	15:03:33
2	Sc Radial	4489.0	4489.0	102 %			15:01:25
2	Y RADIAL	4861.5	4861.5	102.1 %			15:01:25
2	Al 396.153Radial†	913.1	972.1	954.84 ug/L		954.84 ppb	15:01:25
2	Ca 317.933Radial†	2824.3	2749.5	5202.7 ug/L		5202.7 ppb	15:01:45
2	Fe 238.204 Radial†	900.6	873.3	10119 ug/L		10119 ppb	15:01:45
2	K 766.490 Radial†	7429.0	4674.9	887.23 ug/L		887.23 ppb	15:01:25
2	Mg 279.077 IEC†	37.0	34.7	1419.3 ug/L		1419.3 ppb	15:01:45
2	Na 589.592 Radial†	11193.8	11834.9	4172.0 ug/L		4172.0 ppb	15:01:25
2	Sr 421.552†	3709.6	3611.2	28.907 ug/L		28.907 ppb	15:01:25
2	Sc 361.383	817813.6	817813.6	99.877 %			15:02:42
2	Y 371.029	688158.5	688158.5	99.496 %			15:02:42
2	Ag 328.068†	-455.5	-641.2	-0.2458 ug/L		-0.2458 ppb	15:02:42
2	As 188.979†	-31.0	-4.3	0.0821 ug/L		0.0821 ppb	15:03:02
2	B 249.677†	-30.5	506.8	12.528 ug/L		12.528 ppb	15:02:42
2	Ba 233.527†	7571.4	7581.5	71.330 ug/L		71.330 ppb	15:02:42
2	Be 313.107†	-3439.6	287.2	0.1348 ug/L		0.1348 ppb	15:02:42
2	Cd 226.502†	-110.5	60.0	-0.1710 ug/L		-0.1710 ppb	15:03:02
2	Co 228.616†	586.7	633.6	16.252 ug/L		16.252 ppb	15:03:02
2	Cr 267.716†	360.4	289.3	4.9615 ug/L		4.9615 ppb	15:03:02
2	Cu 324.752†	7346.8	1803.9	6.4947 ug/L		6.4947 ppb	15:02:42
2	Mn 257.610†	193491.7	193341.9	255.15 ug/L		255.15 ppb	15:02:42
2	Mo 202.031†	11.4	2.9	1.1073 ug/L		1.1073 ppb	15:03:02
2	Ni 231.604†	360.6	277.0	8.7867 ug/L		8.7867 ppb	15:03:02

2	P 214.914†	416.0	229.3	161.57 ug/L	161.57 ppb	15:03:02
2	Pb 220.353†	-39.3	19.0	1.7579 ug/L	1.7579 ppb	15:03:02
2	S 181.975 Axial†	116.5	86.4	154.53 ug/L	154.53 ppb	15:03:02
2	Sb 206.836†	32.6	9.0	3.4357 ug/L	3.4357 ppb	15:03:02
2	Se 196.026†	-57.4	-40.5	-4.3765 ug/L	-4.3765 ppb	15:03:02
2	Si 251.611†	167138.3	166856.8	6334.4 ug/L	6334.4 ppb	15:02:42
2	Sn 189.927†	-47.5	-54.8	-12.083 ug/L	-12.083 ppb	15:03:02
2	Ti 334.940†	2052.6	3176.4	6.1063 ug/L	6.1063 ppb	15:02:42
2	Tl 190.801†	-28.6	0.4	1.3404 ug/L	1.3404 ppb	15:03:02
2	U 409.014†	-2413.6	-212.4	-7.6062 ug/L	-7.6062 ppb	15:02:42
2	V 292.402†	-718.3	598.3	3.3152 ug/L	3.3152 ppb	15:02:42
2	Zn 213.857†	56723.6	56223.7	679.67 ug/L	679.67 ppb	15:02:42
2	SiO2†	168968.7	168678.3	13766 ug/L	13766 ppb	15:03:39
3	Sc Radial	4419.3	4419.3	101 %		15:01:50
3	Y RADIAL	4813.1	4813.1	101.1 %		15:01:50
3	Al 396.153Radial†	891.5	964.7	947.63 ug/L	947.63 ppb	15:01:50
3	Ca 317.933Radial†	2869.9	2838.5	5371.0 ug/L	5371.0 ppb	15:02:10
3	Fe 238.204 Radial†	917.5	904.0	10475 ug/L	10475 ppb	15:02:10
3	K 766.490 Radial†	7253.3	4614.8	875.72 ug/L	875.72 ppb	15:01:50
3	Mg 279.077 IEC†	34.2	32.5	1329.3 ug/L	1329.3 ppb	15:02:10
3	Na 589.592 Radial†	11030.4	11845.0	4175.6 ug/L	4175.6 ppb	15:01:50
3	Sr 421.552†	3644.5	3603.7	28.846 ug/L	28.846 ppb	15:01:50
3	Sc 361.383	827425.7	827425.7	101.05 %		15:03:08
3	Y 371.029	696870.1	696870.1	100.76 %		15:03:08
3	Ag 328.068†	-375.8	-557.0	0.2936 ug/L	0.2936 ppb	15:03:08
3	As 188.979†	-27.9	-0.9	2.0283 ug/L	2.0283 ppb	15:03:28
3	B 249.677†	22.9	560.0	13.964 ug/L	13.964 ppb	15:03:08
3	Ba 233.527†	7657.5	7578.6	71.312 ug/L	71.312 ppb	15:03:08
3	Be 313.107†	-3538.3	229.5	0.1102 ug/L	0.1102 ppb	15:03:08
3	Cd 226.502†	-91.5	80.1	0.0854 ug/L	0.0854 ppb	15:03:28
3	Co 228.616†	577.6	617.8	15.837 ug/L	15.837 ppb	15:03:28
3	Cr 267.716†	372.1	296.7	5.0954 ug/L	5.0954 ppb	15:03:28
3	Cu 324.752†	7508.8	1878.8	6.7588 ug/L	6.7588 ppb	15:03:08
3	Mn 257.610†	195141.8	192724.2	254.38 ug/L	254.38 ppb	15:03:08
3	Mo 202.031†	5.0	-3.6	0.5570 ug/L	0.5570 ppb	15:03:28
3	Ni 231.604†	373.9	286.0	9.0727 ug/L	9.0727 ppb	15:03:28
3	P 214.914†	409.4	217.8	152.72 ug/L	152.72 ppb	15:03:28
3	Pb 220.353†	-47.8	11.0	0.4738 ug/L	0.4738 ppb	15:03:28
3	S 181.975 Axial†	108.3	77.0	137.67 ug/L	137.67 ppb	15:03:28
3	Sb 206.836†	27.3	3.3	1.0398 ug/L	1.0398 ppb	15:03:28
3	Se 196.026†	-64.2	-46.5	-8.3535 ug/L	-8.3535 ppb	15:03:28
3	Si 251.611†	169128.1	166881.9	6335.3 ug/L	6335.3 ppb	15:03:08
3	Sn 189.927†	-50.1	-56.7	-12.522 ug/L	-12.522 ppb	15:03:28
3	Ti 334.940†	2059.3	3159.1	6.1045 ug/L	6.1045 ppb	15:03:08
3	Tl 190.801†	-28.4	1.0	1.5536 ug/L	1.5536 ppb	15:03:28
3	U 409.014†	-2320.2	-91.9	-3.9907 ug/L	-3.9907 ppb	15:03:08
3	V 292.402†	-803.6	522.2	2.6532 ug/L	2.6532 ppb	15:03:08
3	Zn 213.857†	57261.9	56096.6	678.07 ug/L	678.07 ppb	15:03:08
3	SiO2†	168796.7	166542.8	13592 ug/L	13592 ppb	15:03:44

Mean Data: 1202053057|957492|5

Analyte	Mean Corrected	Conc.	Calib.	Std.Dev.	Conc.	Sample	Std.Dev.	RSD
	Intensity		Units		Units			
Sc 361.383	826130.5	100.89	%	0.947				0.94%
Sc Radial	4463.3	102	%	0.9				0.86%
Y 371.029	695519.4	100.56	%	0.981				0.98%
Y RADIAL	4834.5	101.6	%	0.52				0.51%
Ag 328.068†	-604.6	-0.0027	ug/L	0.27361	-0.0027	ppb	0.27361	>999.9%
Al 396.153Radial†	969.1	951.97	ug/L	3.822	951.97	ppb	3.822	0.40%
As 188.979†	-0.2	2.3522	ug/L	2.44820	2.3522	ppb	2.44820	104.08%
B 249.677†	526.1	13.040	ug/L	0.8014	13.040	ppb	0.8014	6.15%
Ba 233.527†	7568.3	71.211	ug/L	0.1907	71.211	ppb	0.1907	0.27%
Be 313.107†	279.5	0.1315	ug/L	0.01986	0.1315	ppb	0.01986	15.10%
Ca 317.933Radial†	2798.4	5295.1	ug/L	85.38	5295.1	ppb	85.38	1.61%
Cd 226.502†	68.2	-0.0698	ug/L	0.13649	-0.0698	ppb	0.13649	195.42%
Co 228.616†	623.5	15.988	ug/L	0.2298	15.988	ppb	0.2298	1.44%
Cr 267.716†	292.8	5.0260	ug/L	0.06706	5.0260	ppb	0.06706	1.33%
Cu 324.752†	1814.5	6.5381	ug/L	0.20253	6.5381	ppb	0.20253	3.10%
Fe 238.204 Radial†	889.4	10305	ug/L	178.7	10305	ppb	178.7	1.73%
K 766.490 Radial†	4672.4	886.72	ug/L	10.756	886.72	ppb	10.756	1.21%

Mg 279.077 IEC†	32.9	1347.4 ug/L	64.73	1347.4 ppb	64.73	4.80%
Mn 257.610†	192849.8	254.53 ug/L	0.567	254.53 ppb	0.567	0.22%
Mo 202.031†	-0.7	0.8022 ug/L	0.27998	0.8022 ppb	0.27998	34.90%
Na 589.592 Radial†	11881.9	4188.6 ug/L	25.69	4188.6 ppb	25.69	0.61%
Ni 231.604†	276.5	8.7705 ug/L	0.31063	8.7705 ppb	0.31063	3.54%
P 214.914†	219.1	153.82 ug/L	7.271	153.82 ppb	7.271	4.73%
Pb 220.353†	16.6	1.3575 ug/L	0.76638	1.3575 ppb	0.76638	56.46%
S 181.975 Axial†	81.6	145.93 ug/L	8.435	145.93 ppb	8.435	5.78%
Sb 206.836†	6.3	2.2872 ug/L	1.20102	2.2872 ppb	1.20102	52.51%
Se 196.026†	-43.2	-6.0334 ug/L	2.06976	-6.0334 ppb	2.06976	34.30%
Si 251.611†	166797.5	6332.1 ug/L	4.74	6332.1 ppb	4.74	0.07%
Sn 189.927†	-56.3	-12.428 ug/L	0.3099	-12.428 ppb	0.3099	2.49%
Sr 421.552†	3605.9	28.864 ug/L	0.0375	28.864 ppb	0.0375	0.13%
Ti 334.940†	3155.3	6.0868 ug/L	0.03229	6.0868 ppb	0.03229	0.53%
Tl 190.801†	-3.6	-0.2070 ug/L	2.86675	-0.2070 ppb	2.86675	>999.9%
U 409.014†	-123.0	-4.9161 ug/L	2.36716	-4.9161 ppb	2.36716	48.15%
V 292.402†	566.4	3.0331 ug/L	0.34166	3.0331 ppb	0.34166	11.26%
Zn 213.857†	56144.4	678.68 ug/L	0.863	678.68 ppb	0.863	0.13%
SiO2†	166183.8	13563 ug/L	219.7	13563 ppb	219.7	1.62%

Sequence No.: 18

Sample ID: CCV

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 7

Date Collected: 3/19/2010 15:12:45

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCV

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4404.0	4404.0	100 %		15:14:37
1	Y RADIAL	4730.6	4730.6	99.37 %		15:14:37
1	Al 396.153Radial†	5002.3	5070.3	4955.5 ug/L	4955.5 ppb	15:14:37
1	Ca 317.933Radial†	2665.0	2643.9	5002.8 ug/L	5002.8 ppb	15:14:57
1	Fe 238.204 Radial†	445.1	435.7	5064.4 ug/L	5064.4 ppb	15:14:57
1	K 766.490 Radial†	29328.0	26670.1	5075.1 ug/L	5075.1 ppb	15:14:37
1	Mg 279.077 IEC†	128.1	126.4	5212.2 ug/L	5212.2 ppb	15:14:57
1	Na 589.592 Radial†	26896.2	27717.1	9770.9 ug/L	9770.9 ppb	15:14:37
1	Sr 421.552†	62531.5	62384.5	500.02 ug/L	500.02 ppb	15:14:37
1	Sc 361.383	815981.5	815981.5	99.653 %		15:15:54
1	Y 371.029	678972.4	678972.4	98.168 %		15:15:54
1	Ag 328.068†	99323.4	99484.4	519.65 ug/L	519.65 ppb	15:15:59
1	As 188.979†	916.3	946.3	523.88 ug/L	523.88 ppb	15:16:19
1	B 249.677†	17665.7	18264.6	510.08 ug/L	510.08 ppb	15:15:59
1	Ba 233.527†	54677.6	54868.8	515.21 ug/L	515.21 ppb	15:15:59
1	Be 313.107†	1198712.4	1206620.3	514.94 ug/L	514.94 ppb	15:15:54
1	Cd 226.502†	35251.0	35544.4	515.65 ug/L	515.65 ppb	15:15:59
1	Co 228.616†	20174.1	20290.6	524.53 ug/L	524.53 ppb	15:15:59
1	Cr 267.716†	38269.8	38331.7	515.08 ug/L	515.08 ppb	15:15:59
1	Cu 324.752†	159857.8	154862.8	511.26 ug/L	511.26 ppb	15:15:59
1	Mn 257.610†	387826.8	388789.1	511.47 ug/L	511.47 ppb	15:15:54
1	Mo 202.031†	5749.0	5760.5	512.51 ug/L	512.51 ppb	15:16:19
1	Ni 231.604†	16400.6	16373.6	519.67 ug/L	519.67 ppb	15:15:59
1	P 214.914†	3631.4	3456.8	2475.4 ug/L	2475.4 ppb	15:16:19
1	Pb 220.353†	3246.5	3316.2	510.91 ug/L	510.91 ppb	15:16:19
1	S 181.975 Axial†	607.6	579.5	1036.6 ug/L	1036.6 ppb	15:16:19
1	Sb 206.836†	1250.0	1230.7	533.32 ug/L	533.32 ppb	15:16:19
1	Se 196.026†	594.8	613.8	529.04 ug/L	529.04 ppb	15:16:19
1	Si 251.611†	69143.7	68896.5	2609.2 ug/L	2609.2 ppb	15:15:59
1	Sn 189.927†	2261.0	2261.7	513.83 ug/L	513.83 ppb	15:16:19
1	Ti 334.940†	289769.3	291900.3	507.46 ug/L	507.46 ppb	15:15:59
1	Tl 190.801†	1279.6	1313.1	511.41 ug/L	511.41 ppb	15:16:19
1	U 409.014†	14956.9	17213.2	520.49 ug/L	520.49 ppb	15:15:59
1	V 292.402†	62622.7	64158.3	519.19 ug/L	519.19 ppb	15:15:59
1	Zn 213.857†	43109.4	42689.5	512.50 ug/L	512.50 ppb	15:15:59
1	SiO2†	68460.8	68200.0	5552.0 ug/L	5552.0 ppb	15:17:27
2	Sc Radial	4392.0	4392.0	99.9 %		15:15:02
2	Y RADIAL	4731.1	4731.1	99.38 %		15:15:02
2	Al 396.153Radial†	4974.3	5055.8	4942.1 ug/L	4942.1 ppb	15:15:02
2	Ca 317.933Radial†	2657.5	2643.6	5002.3 ug/L	5002.3 ppb	15:15:22
2	Fe 238.204 Radial†	442.7	434.5	5050.3 ug/L	5050.3 ppb	15:15:22
2	K 766.490 Radial†	29402.7	26824.3	5104.5 ug/L	5104.5 ppb	15:15:02
2	Mg 279.077 IEC†	126.8	125.3	5170.3 ug/L	5170.3 ppb	15:15:22
2	Na 589.592 Radial†	26914.6	27808.3	9803.0 ug/L	9803.0 ppb	15:15:02
2	Sr 421.552†	62368.6	62390.9	500.07 ug/L	500.07 ppb	15:15:02
2	Sc 361.383	834394.9	834394.9	101.90 %		15:16:25
2	Y 371.029	694397.6	694397.6	100.40 %		15:16:25
2	Ag 328.068†	99525.8	97483.5	509.22 ug/L	509.22 ppb	15:16:30
2	As 188.979†	888.4	898.6	497.66 ug/L	497.66 ppb	15:16:50
2	B 249.677†	17654.2	17862.1	498.82 ug/L	498.82 ppb	15:16:30
2	Ba 233.527†	54672.4	53652.9	503.79 ug/L	503.79 ppb	15:16:30
2	Be 313.107†	1208362.9	1189545.5	507.64 ug/L	507.64 ppb	15:16:25
2	Cd 226.502†	35289.2	34801.3	504.86 ug/L	504.86 ppb	15:16:30
2	Co 228.616†	20123.5	19794.2	511.69 ug/L	511.69 ppb	15:16:30
2	Cr 267.716†	38179.5	37395.5	502.52 ug/L	502.52 ppb	15:16:30
2	Cu 324.752†	159882.0	151346.5	499.65 ug/L	499.65 ppb	15:16:30
2	Mn 257.610†	391166.3	383477.9	504.49 ug/L	504.49 ppb	15:16:25
2	Mo 202.031†	5685.1	5570.5	495.62 ug/L	495.62 ppb	15:16:50
2	Ni 231.604†	16441.2	16050.3	509.41 ug/L	509.41 ppb	15:16:30

2	P 214.914†	3569.9	3316.0	2372.7 ug/L	2372.7 ppb	15:16:50
2	Pb 220.353†	3236.1	3234.0	498.25 ug/L	498.25 ppb	15:16:50
2	S 181.975 Axial†	595.9	554.6	991.99 ug/L	991.99 ppb	15:16:50
2	Sb 206.836†	1237.5	1190.8	516.03 ug/L	516.03 ppb	15:16:50
2	Se 196.026†	584.8	590.9	509.84 ug/L	509.84 ppb	15:16:50
2	Si 251.611†	69211.5	67431.8	2553.8 ug/L	2553.8 ppb	15:16:30
2	Sn 189.927†	2235.2	2186.3	496.74 ug/L	496.74 ppb	15:16:50
2	Ti 334.940†	289447.9	285167.9	495.76 ug/L	495.76 ppb	15:16:30
2	Tl 190.801†	1270.6	1276.0	496.99 ug/L	496.99 ppb	15:16:50
2	U 409.014†	15111.0	17033.2	515.06 ug/L	515.06 ppb	15:16:30
2	V 292.402†	62576.2	62725.9	507.52 ug/L	507.52 ppb	15:16:30
2	Zn 213.857†	43153.1	41777.8	501.53 ug/L	501.53 ppb	15:16:30
2	SiO2†	68493.7	66716.3	5431.3 ug/L	5431.3 ppb	15:17:32
3	Sc Radial	4459.3	4459.3	101 %		15:15:27
3	Y RADIAL	4814.6	4814.6	101.1 %		15:15:27
3	Al 396.153Radial†	4993.1	4999.3	4886.3 ug/L	4886.3 ppb	15:15:27
3	Ca 317.933Radial†	2664.6	2610.6	4939.8 ug/L	4939.8 ppb	15:15:47
3	Fe 238.204 Radial†	446.8	431.9	5019.7 ug/L	5019.7 ppb	15:15:47
3	K 766.490 Radial†	29415.5	26393.2	5022.4 ug/L	5022.4 ppb	15:15:27
3	Mg 279.077 IEC†	128.2	124.8	5148.6 ug/L	5148.6 ppb	15:15:47
3	Na 589.592 Radial†	27038.4	27524.2	9702.9 ug/L	9702.9 ppb	15:15:27
3	Sr 421.552†	62826.9	61901.4	496.15 ug/L	496.15 ppb	15:15:27
3	Sc 361.383	833630.7	833630.7	101.81 %		15:16:56
3	Y 371.029	692553.2	692553.2	100.13 %		15:16:56
3	Ag 328.068†	97710.7	95790.2	500.40 ug/L	500.40 ppb	15:17:01
3	As 188.979†	899.6	910.4	504.02 ug/L	504.02 ppb	15:17:21
3	B 249.677†	17246.9	17477.9	488.07 ug/L	488.07 ppb	15:17:01
3	Ba 233.527†	53738.1	52784.4	495.64 ug/L	495.64 ppb	15:17:01
3	Be 313.107†	1192189.2	1174746.1	501.32 ug/L	501.32 ppb	15:16:56
3	Cd 226.502†	34796.6	34349.3	498.29 ug/L	498.29 ppb	15:17:01
3	Co 228.616†	19805.2	19499.7	504.11 ug/L	504.11 ppb	15:17:01
3	Cr 267.716†	37606.7	36867.3	495.42 ug/L	495.42 ppb	15:17:01
3	Cu 324.752†	156722.8	148387.3	489.89 ug/L	489.89 ppb	15:17:01
3	Mn 257.610†	387453.6	380183.1	500.16 ug/L	500.16 ppb	15:16:56
3	Mo 202.031†	5766.5	5655.5	503.17 ug/L	503.17 ppb	15:17:21
3	Ni 231.604†	16153.9	15783.0	500.92 ug/L	500.92 ppb	15:17:01
3	P 214.914†	3634.3	3382.5	2424.3 ug/L	2424.3 ppb	15:17:21
3	Pb 220.353†	3285.2	3285.1	506.12 ug/L	506.12 ppb	15:17:21
3	S 181.975 Axial†	600.0	559.2	1000.1 ug/L	1000.1 ppb	15:17:21
3	Sb 206.836†	1263.4	1217.3	527.40 ug/L	527.40 ppb	15:17:21
3	Se 196.026†	606.3	612.5	527.75 ug/L	527.75 ppb	15:17:21
3	Si 251.611†	67911.9	66217.5	2507.6 ug/L	2507.6 ppb	15:17:01
3	Sn 189.927†	2271.2	2223.7	505.20 ug/L	505.20 ppb	15:17:21
3	Ti 334.940†	284631.4	280697.4	487.99 ug/L	487.99 ppb	15:17:01
3	Tl 190.801†	1292.7	1298.8	505.78 ug/L	505.78 ppb	15:17:21
3	U 409.014†	14495.0	16441.7	497.14 ug/L	497.14 ppb	15:17:01
3	V 292.402†	61439.3	61665.5	499.14 ug/L	499.14 ppb	15:17:01
3	Zn 213.857†	42394.5	41071.4	493.05 ug/L	493.05 ppb	15:17:01
3	SiO2†	69769.2	68030.7	5538.4 ug/L	5538.4 ppb	15:17:37

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	828002.3	101.12 %	1.272			1.26%
Sc Radial	4418.4	101 %	0.8			0.81%
Y 371.029	688641.1	99.565 %	1.2179			1.22%
Y RADIAL	4758.8	99.96 %	1.015			1.02%
Ag 328.068†	97586.0	509.75 ug/L	9.638	509.75 ppb	9.638	1.89%
QC value within limits for Ag 328.068 Recovery = 101.95%						
Al 396.153Radial†	5041.8	4928.0 ug/L	36.71	4928.0 ppb	36.71	0.74%
QC value within limits for Al 396.153Radial Recovery = 98.56%						
As 188.979†	918.4	508.52 ug/L	13.678	508.52 ppb	13.678	2.69%
QC value within limits for As 188.979 Recovery = 101.70%						
B 249.677†	17868.2	498.99 ug/L	11.003	498.99 ppb	11.003	2.21%
QC value within limits for B 249.677 Recovery = 99.80%						
Ba 233.527†	53768.7	504.88 ug/L	9.830	504.88 ppb	9.830	1.95%
QC value within limits for Ba 233.527 Recovery = 100.98%						
Be 313.107†	1190304.0	507.97 ug/L	6.814	507.97 ppb	6.814	1.34%
QC value within limits for Be 313.107 Recovery = 101.59%						
Ca 317.933Radial†	2632.7	4981.6 ug/L	36.27	4981.6 ppb	36.27	0.73%

QC value within limits for Ca 317.933 Radial Recovery = 99.63%							
Cd 226.502†	34898.3	506.26 ug/L	8.762	506.26 ppb	8.762	1.73%	
QC value within limits for Cd 226.502 Recovery = 101.25%							
Co 228.616†	19861.5	513.44 ug/L	10.324	513.44 ppb	10.324	2.01%	
QC value within limits for Co 228.616 Recovery = 102.69%							
Cr 267.716†	37531.5	504.34 ug/L	9.957	504.34 ppb	9.957	1.97%	
QC value within limits for Cr 267.716 Recovery = 100.87%							
Cu 324.752†	151532.2	500.27 ug/L	10.697	500.27 ppb	10.697	2.14%	
QC value within limits for Cu 324.752 Recovery = 100.05%							
Fe 238.204 Radial†	434.1	5044.8 ug/L	22.84	5044.8 ppb	22.84	0.45%	
QC value within limits for Fe 238.204 Radial Recovery = 100.90%							
K 766.490 Radial†	26629.2	5067.3 ug/L	41.59	5067.3 ppb	41.59	0.82%	
QC value within limits for K 766.490 Radial Recovery = 101.35%							
Mg 279.077 IEC†	125.5	5177.0 ug/L	32.36	5177.0 ppb	32.36	0.63%	
QC value within limits for Mg 279.077 IEC Recovery = 103.54%							
Mn 257.610†	384150.0	505.37 ug/L	5.710	505.37 ppb	5.710	1.13%	
QC value within limits for Mn 257.610 Recovery = 101.07%							
Mo 202.031†	5662.2	503.77 ug/L	8.461	503.77 ppb	8.461	1.68%	
QC value within limits for Mo 202.031 Recovery = 100.75%							
Na 589.592 Radial†	27683.2	9758.9 ug/L	51.14	9758.9 ppb	51.14	0.52%	
QC value within limits for Na 589.592 Radial Recovery = 97.59%							
Ni 231.604†	16069.0	510.00 ug/L	9.387	510.00 ppb	9.387	1.84%	
QC value within limits for Ni 231.604 Recovery = 102.00%							
P 214.914†	3385.1	2424.1 ug/L	51.37	2424.1 ppb	51.37	2.12%	
QC value within limits for P 214.914 Recovery = 96.96%							
Pb 220.353†	3278.4	505.09 ug/L	6.393	505.09 ppb	6.393	1.27%	
QC value within limits for Pb 220.353 Recovery = 101.02%							
S 181.975 Axial†	564.4	1009.6 ug/L	23.75	1009.6 ppb	23.75	2.35%	
QC value within limits for S 181.975 Axial Recovery = 100.96%							
Sb 206.836†	1212.9	525.58 ug/L	8.789	525.58 ppb	8.789	1.67%	
QC value within limits for Sb 206.836 Recovery = 105.12%							
Se 196.026†	605.7	522.21 ug/L	10.735	522.21 ppb	10.735	2.06%	
QC value within limits for Se 196.026 Recovery = 104.44%							
Si 251.611†	67515.3	2556.9 ug/L	50.86	2556.9 ppb	50.86	1.99%	
QC value within limits for Si 251.611 Recovery = 102.28%							
Sn 189.927†	2223.9	505.26 ug/L	8.547	505.26 ppb	8.547	1.69%	
QC value within limits for Sn 189.927 Recovery = 101.05%							
Sr 421.552†	62225.6	498.75 ug/L	2.251	498.75 ppb	2.251	0.45%	
QC value within limits for Sr 421.552 Recovery = 99.75%							
Ti 334.940†	285921.8	497.07 ug/L	9.800	497.07 ppb	9.800	1.97%	
QC value within limits for Ti 334.940 Recovery = 99.41%							
Tl 190.801†	1296.0	504.73 ug/L	7.266	504.73 ppb	7.266	1.44%	
QC value within limits for Tl 190.801 Recovery = 100.95%							
U 409.014†	16896.0	510.90 ug/L	12.223	510.90 ppb	12.223	2.39%	
QC value within limits for U 409.014 Recovery = 102.18%							
V 292.402†	62849.9	508.61 ug/L	10.069	508.61 ppb	10.069	1.98%	
QC value within limits for V 292.402 Recovery = 101.72%							
Zn 213.857†	41846.3	502.36 ug/L	9.752	502.36 ppb	9.752	1.94%	
QC value within limits for Zn 213.857 Recovery = 100.47%							
SiO2†	67649.0	5507.2 ug/L	66.08	5507.2 ppb	66.08	1.20%	
QC value within limits for SiO2 Recovery = 102.99%							

All analyte(s) passed QC.

Sequence No.: 19

Sample ID: CCB

Analyst:

Initial Sample Wt:

Dilution:

Autosampler Location: 8

Date Collected: 3/19/2010 15:19:47

Data Type: Original

Initial Sample Vol:

Sample Prep Vol:

Replicate Data: CCB

Repl#	Analyte	Net Intensity	Corrected Intensity	Calib. Conc. Units	Sample Conc. Units	Analysis Time
1	Sc Radial	4561.2	4561.2	104 %		15:21:39
1	Y RADIAL	4943.3	4943.3	103.8 %		15:21:39
1	Al 396.153Radial†	-82.3	-1.3	-1.2627 ug/L	-1.2627 ppb	15:21:59
1	Ca 317.933Radial†	20.9	4.4	8.3378 ug/L	8.3378 ppb	15:21:59
1	Fe 238.204 Radial†	7.8	-0.9	-10.521 ug/L	-10.521 ppb	15:21:59
1	K 766.490 Radial†	2758.8	59.5	11.332 ug/L	11.332 ppb	15:21:39
1	Mg 279.077 IEC†	2.6	1.0	39.950 ug/L	39.950 ppb	15:21:59
1	Na 589.592 Radial†	-843.2	62.6	22.070 ug/L	22.070 ppb	15:21:39
1	Sr 421.552†	26.0	4.2	0.0335 ug/L	0.0335 ppb	15:21:39
1	Sc 361.383	812531.2	812531.2	99.231 %		15:22:56
1	Y 371.029	687107.4	687107.4	99.344 %		15:22:56
1	Ag 328.068†	225.0	41.6	0.2104 ug/L	0.2104 ppb	15:22:56
1	As 188.979†	-22.2	4.5	2.4473 ug/L	2.4473 ppb	15:23:16
1	B 249.677†	-303.9	231.1	6.4852 ug/L	6.4852 ppb	15:23:16
1	Ba 233.527†	3.7	4.4	0.0400 ug/L	0.0400 ppb	15:23:16
1	Be 313.107†	-3705.1	-2.7	-0.0013 ug/L	-0.0013 ppb	15:22:56
1	Cd 226.502†	-168.8	0.5	0.0088 ug/L	0.0088 ppb	15:23:16
1	Co 228.616†	-45.5	0.4	0.0116 ug/L	0.0116 ppb	15:23:16
1	Cr 267.716†	74.3	3.4	0.0438 ug/L	0.0438 ppb	15:23:16
1	Cu 324.752†	5446.3	-63.5	-0.2108 ug/L	-0.2108 ppb	15:22:56
1	Mn 257.610†	438.5	52.9	0.0668 ug/L	0.0668 ppb	15:23:16
1	Mo 202.031†	15.7	7.3	0.6438 ug/L	0.6438 ppb	15:23:16
1	Ni 231.604†	66.2	-17.3	-0.5503 ug/L	-0.5503 ppb	15:23:16
1	P 214.914†	186.1	0.3	0.2556 ug/L	0.2556 ppb	15:23:16
1	Pb 220.353†	-59.8	-2.0	-0.3012 ug/L	-0.3012 ppb	15:23:16
1	S 181.975 Axial†	32.2	2.2	4.0167 ug/L	4.0167 ppb	15:23:16
1	Sb 206.836†	42.0	18.7	7.7890 ug/L	7.7890 ppb	15:23:16
1	Se 196.026†	-9.1	7.8	6.4898 ug/L	6.4898 ppb	15:23:16
1	Si 251.611†	517.9	33.8	1.2738 ug/L	1.2738 ppb	15:23:16
1	Sn 189.927†	-0.6	-7.7	-1.7537 ug/L	-1.7537 ppb	15:23:16
1	Ti 334.940†	-1144.0	-31.6	-0.0576 ug/L	-0.0576 ppb	15:22:56
1	Tl 190.801†	-20.8	8.1	3.1394 ug/L	3.1394 ppb	15:23:16
1	U 409.014†	-2158.3	29.2	0.8862 ug/L	0.8862 ppb	15:22:56
1	V 292.402†	-1354.7	-47.7	-0.3679 ug/L	-0.3679 ppb	15:22:56
1	Zn 213.857†	584.1	18.5	0.2295 ug/L	0.2295 ppb	15:23:16
1	SiO2†	515.7	20.4	1.6444 ug/L	1.6444 ppb	15:24:27
2	Sc Radial	4315.7	4315.7	98.2 %		15:22:05
2	Y RADIAL	4683.2	4683.2	98.37 %		15:22:05
2	Al 396.153Radial†	-77.4	-0.7	-0.6792 ug/L	-0.6792 ppb	15:22:25
2	Ca 317.933Radial†	16.9	1.6	2.9400 ug/L	2.9400 ppb	15:22:25
2	Fe 238.204 Radial†	12.0	3.8	43.926 ug/L	43.926 ppb	15:22:25
2	K 766.490 Radial†	2745.9	197.6	37.644 ug/L	37.644 ppb	15:22:05
2	Mg 279.077 IEC†	0.9	-0.6	-24.744 ug/L	-24.744 ppb	15:22:25
2	Na 589.592 Radial†	-812.0	48.1	16.974 ug/L	16.974 ppb	15:22:05
2	Sr 421.552†	39.4	19.4	0.1551 ug/L	0.1551 ppb	15:22:05
2	Sc 361.383	830170.6	830170.6	101.39 %		15:23:22
2	Y 371.029	701100.0	701100.0	101.37 %		15:23:22
2	Ag 328.068†	161.1	-26.3	-0.1273 ug/L	-0.1273 ppb	15:23:22
2	As 188.979†	-26.5	0.7	0.3885 ug/L	0.3885 ppb	15:23:42
2	B 249.677†	-305.1	236.5	6.6262 ug/L	6.6262 ppb	15:23:42
2	Ba 233.527†	0.3	1.0	0.0108 ug/L	0.0108 ppb	15:23:42
2	Be 313.107†	-3685.3	96.1	0.0413 ug/L	0.0413 ppb	15:23:22
2	Cd 226.502†	-165.1	7.8	0.1093 ug/L	0.1093 ppb	15:23:42
2	Co 228.616†	-36.9	9.8	0.2516 ug/L	0.2516 ppb	15:23:42
2	Cr 267.716†	87.9	15.2	0.2059 ug/L	0.2059 ppb	15:23:42
2	Cu 324.752†	5508.2	-119.1	-0.3942 ug/L	-0.3942 ppb	15:23:22
2	Mn 257.610†	409.3	14.6	0.0246 ug/L	0.0246 ppb	15:23:42
2	Mo 202.031†	7.6	-1.1	-0.0920 ug/L	-0.0920 ppb	15:23:42
2	Ni 231.604†	72.4	-12.6	-0.4018 ug/L	-0.4018 ppb	15:23:42

2	P 214.914†	194.2	4.3	3.2216 ug/L	3.2216 ppb	15:23:42
2	Pb 220.353†	-59.1	0.0	-0.0005 ug/L	-0.0005 ppb	15:23:42
2	S 181.975 Axial†	32.1	1.4	2.5716 ug/L	2.5716 ppb	15:23:42
2	Sb 206.836†	28.8	4.7	1.9615 ug/L	1.9615 ppb	15:23:42
2	Se 196.026†	-20.5	-3.3	-2.6269 ug/L	-2.6269 ppb	15:23:42
2	Si 251.611†	502.8	7.7	0.2951 ug/L	0.2951 ppb	15:23:42
2	Sn 189.927†	3.6	-3.6	-0.8238 ug/L	-0.8238 ppb	15:23:42
2	Ti 334.940†	-1041.5	93.9	0.1629 ug/L	0.1629 ppb	15:23:22
2	Tl 190.801†	-31.4	-1.9	-0.7308 ug/L	-0.7308 ppb	15:23:42
2	U 409.014†	-2028.3	203.6	6.1723 ug/L	6.1723 ppb	15:23:22
2	V 292.402†	-1316.9	18.5	0.1514 ug/L	0.1514 ppb	15:23:22
2	Zn 213.857†	587.0	8.9	0.1045 ug/L	0.1045 ppb	15:23:42
2	SiO2†	533.5	26.8	2.1935 ug/L	2.1935 ppb	15:24:47
3	Sc Radial	4508.6	4508.6	103 %		15:22:30
3	Y RADIAL	4909.7	4909.7	103.1 %		15:22:30
3	Al 396.153Radial†	-70.5	9.3	9.1260 ug/L	9.1260 ppb	15:22:50
3	Ca 317.933Radial†	15.7	-0.3	-0.6519 ug/L	-0.6519 ppb	15:22:50
3	Fe 238.204 Radial†	8.7	0.1	0.5782 ug/L	0.5782 ppb	15:22:50
3	K 766.490 Radial†	2587.6	-76.3	-14.548 ug/L	-14.548 ppb	15:22:30
3	Mg 279.077 IEC†	1.4	-0.2	-7.9990 ug/L	-7.9990 ppb	15:22:50
3	Na 589.592 Radial†	-873.2	23.9	8.4342 ug/L	8.4342 ppb	15:22:30
3	Sr 421.552†	25.7	4.2	0.0337 ug/L	0.0337 ppb	15:22:30
3	Sc 361.383	814827.9	814827.9	99.512 %		15:23:47
3	Y 371.029	686828.7	686828.7	99.303 %		15:23:47
3	Ag 328.068†	97.6	-87.1	-0.4563 ug/L	-0.4563 ppb	15:23:47
3	As 188.979†	-25.2	1.5	0.8026 ug/L	0.8026 ppb	15:24:07
3	B 249.677†	-327.7	208.0	5.8359 ug/L	5.8359 ppb	15:24:07
3	Ba 233.527†	-5.0	-4.3	-0.0411 ug/L	-0.0411 ppb	15:24:07
3	Be 313.107†	-3699.6	13.2	0.0055 ug/L	0.0055 ppb	15:23:47
3	Cd 226.502†	-177.6	-7.8	-0.1132 ug/L	-0.1132 ppb	15:24:07
3	Co 228.616†	-50.0	-4.0	-0.1022 ug/L	-0.1022 ppb	15:24:07
3	Cr 267.716†	68.5	-2.6	-0.0370 ug/L	-0.0370 ppb	15:24:07
3	Cu 324.752†	5513.3	-11.7	-0.0402 ug/L	-0.0402 ppb	15:23:47
3	Mn 257.610†	419.8	32.8	0.0435 ug/L	0.0435 ppb	15:24:07
3	Mo 202.031†	17.2	8.8	0.7797 ug/L	0.7797 ppb	15:24:07
3	Ni 231.604†	63.2	-20.6	-0.6526 ug/L	-0.6526 ppb	15:24:07
3	P 214.914†	191.3	4.9	3.6842 ug/L	3.6842 ppb	15:24:07
3	Pb 220.353†	-45.4	12.7	1.9561 ug/L	1.9561 ppb	15:24:07
3	S 181.975 Axial†	30.9	0.9	1.5220 ug/L	1.5220 ppb	15:24:07
3	Sb 206.836†	21.1	-2.5	-1.0139 ug/L	-1.0139 ppb	15:24:07
3	Se 196.026†	-17.9	-1.0	-0.8526 ug/L	-0.8526 ppb	15:24:07
3	Si 251.611†	522.0	36.3	1.3701 ug/L	1.3701 ppb	15:24:07
3	Sn 189.927†	9.5	2.4	0.5431 ug/L	0.5431 ppb	15:24:07
3	Ti 334.940†	-1157.4	-41.8	-0.0736 ug/L	-0.0736 ppb	15:23:47
3	Tl 190.801†	-26.3	2.6	1.0117 ug/L	1.0117 ppb	15:24:07
3	U 409.014†	-2090.9	103.0	3.1251 ug/L	3.1251 ppb	15:23:47
3	V 292.402†	-1369.2	-58.5	-0.4501 ug/L	-0.4501 ppb	15:23:47
3	Zn 213.857†	584.1	16.9	0.2084 ug/L	0.2084 ppb	15:24:07
3	SiO2†	531.2	34.5	2.7955 ug/L	2.7955 ppb	15:25:07

Mean Data: CCB

Analyte	Mean Corrected Intensity	Conc. Units	Calib.	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Sc 361.383	819176.6	100.04 %		1.171			1.17%
Sc Radial	4461.8	102 %		2.9			2.90%
Y 371.029	691678.7	100.00 %		1.180			1.18%
Y RADIAL	4845.4	101.8 %		2.97			2.92%
Ag 328.068†	-23.9	-0.1244 ug/L		0.33336	-0.1244 ppb	0.33336	267.92%
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153Radial†	2.5	2.3947 ug/L		5.83674	2.3947 ppb	5.83674	243.73%
QC value within limits for Al 396.153Radial Recovery = Not calculated							
As 188.979†	2.2	1.2128 ug/L		1.08894	1.2128 ppb	1.08894	89.79%
QC value within limits for As 188.979 Recovery = Not calculated							
B 249.677†	225.2	6.3158 ug/L		0.42150	6.3158 ppb	0.42150	6.67%
QC value within limits for B 249.677 Recovery = Not calculated							
Ba 233.527†	0.4	0.0032 ug/L		0.04111	0.0032 ppb	0.04111	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 313.107†	35.5	0.0152 ug/L		0.02288	0.0152 ppb	0.02288	150.99%
QC value within limits for Be 313.107 Recovery = Not calculated							
Ca 317.933Radial†	1.9	3.5420 ug/L		4.52499	3.5420 ppb	4.52499	127.75%

QC value within limits for Ca 317.933 Radial Recovery = Not calculated						
Cd 226.502†	0.2	0.0016 ug/L	0.11138	0.0016 ppb	0.11138	>999.9%
QC value within limits for Cd 226.502 Recovery = Not calculated						
Co 228.616†	2.0	0.0537 ug/L	0.18063	0.0537 ppb	0.18063	336.65%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	5.3	0.0709 ug/L	0.12370	0.0709 ppb	0.12370	174.51%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 324.752†	-64.8	-0.2151 ug/L	0.17704	-0.2151 ppb	0.17704	82.32%
QC value within limits for Cu 324.752 Recovery = Not calculated						
Fe 238.204 Radial†	1.0	11.328 ug/L	28.7716	11.328 ppb	28.7716	253.99%
QC value within limits for Fe 238.204 Radial Recovery = Not calculated						
K 766.490 Radial†	60.3	11.476 ug/L	26.0963	11.476 ppb	26.0963	227.40%
QC value within limits for K 766.490 Radial Recovery = Not calculated						
Mg 279.077 IEC†	0.1	2.4023 ug/L	33.57814	2.4023 ppb	33.57814	>999.9%
QC value within limits for Mg 279.077 IEC Recovery = Not calculated						
Mn 257.610†	33.4	0.0450 ug/L	0.02116	0.0450 ppb	0.02116	47.05%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	5.0	0.4438 ug/L	0.46896	0.4438 ppb	0.46896	105.66%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Na 589.592 Radial†	44.9	15.826 ug/L	6.8900	15.826 ppb	6.8900	43.54%
QC value within limits for Na 589.592 Radial Recovery = Not calculated						
Ni 231.604†	-16.8	-0.5349 ug/L	0.12613	-0.5349 ppb	0.12613	23.58%
QC value within limits for Ni 231.604 Recovery = Not calculated						
P 214.914†	3.2	2.3871 ug/L	1.86043	2.3871 ppb	1.86043	77.94%
QC value within limits for P 214.914 Recovery = Not calculated						
Pb 220.353†	3.6	0.5514 ug/L	1.22574	0.5514 ppb	1.22574	222.28%
QC value within limits for Pb 220.353 Recovery = Not calculated						
S 181.975 Axial†	1.5	2.7034 ug/L	1.25258	2.7034 ppb	1.25258	46.33%
QC value within limits for S 181.975 Axial Recovery = Not calculated						
Sb 206.836†	7.0	2.9122 ug/L	4.47781	2.9122 ppb	4.47781	153.76%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.2	1.0034 ug/L	4.83345	1.0034 ppb	4.83345	481.70%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	25.9	0.9797 ug/L	0.59481	0.9797 ppb	0.59481	60.72%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-3.0	-0.6781 ug/L	1.15533	-0.6781 ppb	1.15533	170.37%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Sr 421.552†	9.2	0.0741 ug/L	0.07015	0.0741 ppb	0.07015	94.68%
QC value within limits for Sr 421.552 Recovery = Not calculated						
Ti 334.940†	6.8	0.0106 ug/L	0.13217	0.0106 ppb	0.13217	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.9	1.1401 ug/L	1.93830	1.1401 ppb	1.93830	170.01%
QC value within limits for Tl 190.801 Recovery = Not calculated						
U 409.014†	111.9	3.3945 ug/L	2.65336	3.3945 ppb	2.65336	78.17%
QC value within limits for U 409.014 Recovery = Not calculated						
V 292.402†	-29.2	-0.2222 ug/L	0.32618	-0.2222 ppb	0.32618	146.79%
QC value within limits for V 292.402 Recovery = Not calculated						
Zn 213.857†	14.8	0.1808 ug/L	0.06693	0.1808 ppb	0.06693	37.01%
QC value within limits for Zn 213.857 Recovery = Not calculated						
SiO2†	27.2	2.2111 ug/L	0.57579	2.2111 ppb	0.57579	26.04%
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: Tuesday, April 20, 2010 12:13:09

Sample Description:

Method File: c:\elandata\Method\Daily2.mth

Dataset File: c:\elandata\Dataset\default\Sample.1112

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	2313.0	2312.987	14.187	0.6
Mg	24.0	31900.2	31900.180	303.025	0.9
Co	58.9	67855.0	67854.979	618.654	0.9
Rh	102.9	133570.6	133570.581	1318.743	1.0
In	114.9	189135.9	189135.864	1537.568	0.8
Pb	208.0	201237.1	201237.076	778.547	0.4
[> Ba	137.9	179976.5	179976.475	1603.323	0.9
[Ba++	69.0	2756.0	0.015	0.000	2.5
[> Ce	139.9	219223.1	219223.131	1727.246	0.8
[CeO	155.9	4598.3	0.021	0.000	1.1
Bkgd	220.0	28.2	28.200	4.222	15.0

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
6.75	Lens Voltage
1450.00	ICP RF Power
-1812.50	Analog Stage Voltage
1300.00	Pulse Stage Voltage
200.00	Discriminator Threshold
-6.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	21	8.3	2874.6
Co	59	21	9.3	60162.1
In	115	21	10.3	173624.0

ICPMS #5 Instrument Tuning Report

File Name: 100420.tun
File Path: C:\elandata\Tuning

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width
He	3.0	3.0	608	2072	0.545
Be	9.0	9.1	2061	2088	0.565
Mg	24.0	24.0	5697	2085	0.569
Mg	25.0	25.0	5925	2085	0.541
Mg	26.0	26.0	6187	2100	0.550
Co	58.9	58.9	14191	2125	0.541
Rh	102.9	102.9	24879	2180	0.553
In	114.9	114.9	27795	2200	0.545
Ce	139.9	139.9	33877	2220	0.559
Pb	206.0	206.0	49948	2305	0.557
Pb	207.0	207.0	50183	2240	0.641
Pb	208.0	208.0	50451	2280	0.666
U	238.1	238.1	57736	2295	0.660

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, April 20, 2010 12:30:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\Blank.001

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9		ug/L			24
> Sc	45		ug/L		616965	
[Mn	55		ug/L		888	
> In	115		ug/L		224502	
| Sb	121		ug/L		148	
[Sb	123		ug/L		124	
> Lu	175		ug/L		393559	
| Tl	205		ug/L		2331	
[U	238		ug/L		154	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Be	9	Simple Linear	
Sc	45	Simple Linear	
Mn	55	Simple Linear	
In	115	Simple Linear	
Sb	121	Simple Linear	
Sb	123	Simple Linear	
Lu	175	Simple Linear	
Tl	205	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						
> In	115						
| Sb	121						
[Sb	123						
> Lu	175						
| Tl	205						
[U	238						

QC Out Of Limits

Measurement Type: Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Blank

Report Date/Time: Tuesday, April 20, 2010 12:31:17

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, April 20, 2010 12:33:44

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\Standard 1.002

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	10.000	ug/L	6.547	2607	0.004
> Sc	45		ug/L		600985	600984.794
Mn	55	10.000	ug/L	0.407	76809	0.126
> In	115		ug/L		220573	220573.400
Sb	121	10.000	ug/L	1.508	52044	0.235
Sb	123		ug/L		40663	0.184
> Lu	175		ug/L		386251	386251.248
Tl	205	10.000	ug/L	1.909	190785	0.488
U	238	10.000	ug/L	1.125	437996	1.134

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recov	Dilution %	Dil	Duplicate	Rel. % Difference
Be	9										
> Sc	45										
Mn	55										
> In	115										
Sb	121										
Sb	123										
> Lu	175										
Tl	205										
U	238										

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 1

Report Date/Time: Tuesday, April 20, 2010 12:34:22

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, April 20, 2010 12:36:49

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\Standard 2.003

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	100.007	ug/L	2.189	25258	0.043
[> Sc	45		ug/L		582798	582798.392
[Mn	55	99.981	ug/L	1.977	723305	1.240
[> In	115		ug/L		215719	215718.695
[Sb	121	99.989	ug/L	1.779	502185	2.328
[Sb	123		ug/L		391489	1.814
[> Lu	175		ug/L		379544	379543.528
[Tl	205	99.912	ug/L	1.170	1703568	4.483
[U	238	99.911	ug/L	0.937	3947088	10.399

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
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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45						
[Mn	55						
[> In	115						
[Sb	121						
[Sb	123						
[> Lu	175						
[Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, April 20, 2010 12:37:27

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, April 20, 2010 12:39:55

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 1.004

Concentration Results

	Analyte Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be 9	49.216	ug/L	3.871	12695	0.021
[>	Sc 45		ug/L		594723	594723.463
[	Mn 55	50.400	ug/L	0.922	372544	0.625
[>	In 115		ug/L		217775	217775.349
[	Sb 121	49.064	ug/L	0.784	248866	1.142
[	Sb 123		ug/L		192649	0.884
[>	Lu 175		ug/L		386411	386411.460
[	Tl 205	49.950	ug/L	0.459	868240	2.241
[	U 238	50.043	ug/L	1.294	2012926	5.209

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be 9	98.433					
[>	Sc 45		96.4				
[	Mn 55	100.801					
[>	In 115		97.0				
[	Sb 121	98.127					
[	Sb 123						
[>	Lu 175		98.2				
[	Tl 205	99.900					
[	U 238	100.085					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Tuesday, April 20, 2010 12:40:32

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 20, 2010 12:43:02

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani llq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 2.005

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.010	ug/L	55.963	20	-0.000
> Sc	45		ug/L		580059	580058.954
Mn	55	0.012	ug/L	14.190	924	0.000
> In	115		ug/L		214827	214826.950
Sb	121	0.071	ug/L	8.753	495	0.002
Sb	123		ug/L		397	0.001
> Lu	175		ug/L		377313	377312.899
Tl	205	0.051	ug/L	5.124	3105	0.002
U	238	0.007	ug/L	11.816	421	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		94.0				
Mn	55						
> In	115		95.7				
Sb	121						
Sb	123						
> Lu	175		95.9				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 2

Report Date/Time: Tuesday, April 20, 2010 12:43:42

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, April 20, 2010 12:46:10

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 3.006

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.640	ug/L	9.386	185	0.000
> Sc	45		ug/L		584136	584136.001
[Mn	55	6.171	ug/L	1.537	45536	0.077
> In	115		ug/L		215962	215961.905
| Sb	121	2.847	ug/L	2.352	14455	0.066
[Sb	123		ug/L		11447	0.052
> Lu	175		ug/L		380044	380043.614
| Tl	205	1.225	ug/L	2.577	23127	0.055
[U	238	0.302	ug/L	2.442	12095	0.031

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	127.901					
> Sc	45		94.7				
[Mn	55	123.423					
> In	115		96.2				
| Sb	121	94.908					
[Sb	123						
> Lu	175		96.6				
| Tl	205	122.451					
[U	238	151.030					

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 3	U	238CRDL is out of limits

QC Action

QC Action Line: Continue

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 20, 2010 12:46:48

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 20, 2010 12:49:16

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 4.007

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.125	ug/L	22.859	54	0.000
> Sc	45		ug/L		576339	576338.616
[Mn	55	5.627	ug/L	0.658	41045	0.070
> In	115		ug/L		206904	206904.254
| Sb	121	0.108	ug/L	1.920	655	0.003
[Sb	123		ug/L		513	0.002
> Lu	175		ug/L		366872	366872.234
| Tl	205	-0.014	ug/L	15.101	1938	-0.001
[U	238	0.001	ug/L	2.507	189	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	1.0000
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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		93.4				
[Mn	55	97.021					
> In	115		92.2				
| Sb	121						
[Sb	123						
> Lu	175		93.2				
| Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Tuesday, April 20, 2010 12:49:55

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 20, 2010 12:52:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 5.008

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	19.767	ug/L	2.055	4964	0.009
> Sc	45		ug/L		577312	577311.635
[Mn	55	25.187	ug/L	1.177	181133	0.312
> In	115		ug/L		211090	211090.117
| Sb	121	18.820	ug/L	1.684	92608	0.438
[Sb	123		ug/L		71640	0.339
> Lu	175		ug/L		371057	371057.186
| Tl	205	19.498	ug/L	0.058	326793	0.875
[U	238	21.353	ug/L	0.382	824815	2.223

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	98.836					
> Sc	45		93.6				
[Mn	55	97.624					
> In	115		94.0				
| Sb	121	94.102					
[Sb	123						
> Lu	175		94.3				
| Tl	205	97.490					
[U	238	106.763					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Tuesday, April 20, 2010 12:53:02

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 12:55:31

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.009

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	51.424	ug/L	1.562	13143	0.022
> Sc	45		ug/L		589218	589218.106
[Mn	55	51.088	ug/L	0.411	374121	0.633
> In	115		ug/L		217571	217571.351
| Sb	121	49.961	ug/L	1.281	253159	1.163
[Sb	123		ug/L		196432	0.902
> Lu	175		ug/L		382898	382897.908
| Tl	205	50.945	ug/L	1.504	877361	2.286
[U	238	51.441	ug/L	1.932	2050112	5.354

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	102.848				
> Sc	45		95.5			
[Mn	55	102.175				
> In	115		96.9			
| Sb	121	99.923				
[Sb	123					
> Lu	175		97.3			
| Tl	205	101.889				
[U	238	102.882				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 12:56:09

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 12:58:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\Nanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.010

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.007	ug/L	156.137	22	-0.000
Sc	45		ug/L		595800	595800.175
Mn	55	0.008	ug/L	37.397	918	0.000
In	115		ug/L		219459	219458.744
Sb	121	0.087	ug/L	7.307	590	0.002
Sb	123		ug/L		463	0.002
Lu	175		ug/L		386087	386087.013
Tl	205	0.031	ug/L	17.020	2827	0.001
U	238	0.006	ug/L	16.246	380	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
Sc	45		96.6				
Mn	55						
In	115		97.8				
Sb	121						
Sb	123						
Lu	175		98.1				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 12:59:19

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 10

Sample Date/Time: Tuesday, April 20, 2010 13:01:46

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\ani liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 10.011

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	1009.076	ug/L	1.797	245342	0.437
> Sc	45		ug/L		561466	561465.847
Mn	55	912.813	ug/L	2.257	6356181	11.319
> In	115		ug/L		200622	200622.301
Sb	121	249.360	ug/L	1.975	1164396	5.805
Sb	123		ug/L		919554	4.584
> Lu	175		ug/L		373554	373554.212
Tl	205	445.756	ug/L	0.914	7472623	19.999
U	238	5008.459	ug/L	0.739	194733835	521.309

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
Be	9	100.908				
> Sc	45		91.0			
Mn	55	91.281				
> In	115		89.4			
Sb	121	99.744				
Sb	123					
> Lu	175		94.9			
Tl	205	89.151				
U	238	100.169				

QC Out Of Limits

Measurement Type	Analyte	MassOut of Limits Message
QC Std 10	Tl	205LRS is out of limits (+/- 10%)

QC Action

QC Action Line: Continue

Sample ID: QC Std 10

Report Date/Time: Tuesday, April 20, 2010 13:02:24

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 11

Sample Date/Time: Tuesday, April 20, 2010 13:04:52

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal\lq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 11.012

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	51.298	ug/L	2.474	13015	0.022
|> Sc	45		ug/L		585009	585008.935
[Mn	55	51.429	ug/L	1.051	373914	0.638
[> In	115		ug/L		215661	215660.716
| Sb	121	49.467	ug/L	1.429	248470	1.151
[Sb	123		ug/L		193707	0.898
[> Lu	175		ug/L		382802	382802.186
| Tl	205	50.937	ug/L	0.505	877095	2.285
[U	238	51.828	ug/L	0.617	2065157	5.395

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	102.597					
|> Sc	45		94.8				
[Mn	55	102.859					
[> In	115		96.1				
| Sb	121	98.933					
[Sb	123						
[> Lu	175		97.3				
| Tl	205	101.873					
[U	238	103.655					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 11

Report Date/Time: Tuesday, April 20, 2010 13:05:29

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 12

Sample Date/Time: Tuesday, April 20, 2010 13:07:59

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl ilq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 12.013

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.000	ug/L	6725.556	23	-0.000
> Sc	45		ug/L		592881	592881.383
Mn	55	0.034	ug/L	15.001	1101	0.000
> In	115		ug/L		219028	219028.066
Sb	121	0.099	ug/L	1.744	647	0.002
Sb	123		ug/L		496	0.002
> Lu	175		ug/L		386986	386985.951
Tl	205	0.197	ug/L	1.147	5708	0.009
U	238	0.128	ug/L	6.805	5314	0.013

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		96.1				
Mn	55						
> In	115		97.6				
Sb	121						
Sb	123						
> Lu	175		98.3				
Tl	205						
U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 12

Report Date/Time: Tuesday, April 20, 2010 13:08:39

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202053058

Sample Date/Time: Tuesday, April 20, 2010 13:11:07

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053058.014

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	0.030	ug/L	28.948	31	0.000
[> Sc	45		ug/L		597273	597272.887
[Mn	55	0.318	ug/L	4.817	3212	0.004
[> In	115		ug/L		214214	214213.577
[Sb	121	0.129	ug/L	3.302	783	0.003
[Sb	123		ug/L		654	0.003
[> Lu	175		ug/L		387871	387871.460
[Tl	205	0.062	ug/L	5.547	3374	0.003
[U	238	0.262	ug/L	23.236	10753	0.027

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std	% Recovery	Int Std	% Recovery	Spike %	Recovery	Dilution %	Di	Duplicate Rel.	% Difference
[Be	9										
[> Sc	45				96.8						
[Mn	55										
[> In	115				95.4						
[Sb	121										
[Sb	123										
[> Lu	175				98.6						
[Tl	205										
[U	238										

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202053058

Report Date/Time: Tuesday, April 20, 2010 13:11:45

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202053059

Sample Date/Time: Tuesday, April 20, 2010 13:14:13

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957494[1]skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053059.015

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	54.665	ug/L	2.775	13995	0.024
[> Sc	45		ug/L		590285	590284.622
[Mn	55	51.096	ug/L	1.653	374839	0.634
[> In	115		ug/L		216241	216241.357
[Sb	121	51.152	ug/L	1.097	257609	1.191
[Sb	123		ug/L		201538	0.932
[> Lu	175		ug/L		386729	386729.330
[Tl	205	44.333	ug/L	1.794	771521	1.989
[U	238	50.991	ug/L	0.640	2052720	5.307

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
[> Sc	45		95.7				
[Mn	55						
[> In	115		96.3				
[Sb	121						
[Sb	123						
[> Lu	175		98.3				
[Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202053059

Report Date/Time: Tuesday, April 20, 2010 13:14:51

Page 1

ICPMS#5 - Summary Report

Sample ID: 247771001

Sample Date/Time: Tuesday, April 20, 2010 13:17:19

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\ani liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\247771001.016

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.073	ug/L	37.053	42	0.000
|>	Sc	45		ug/L		595139	595138.837
[	Mn	55	2.507	ug/L	1.553	19357	0.031
[>	In	115		ug/L		216562	216562.034
|	Sb	121	0.150	ug/L	4.954	897	0.003
[	Sb	123		ug/L		681	0.003
[>	Lu	175		ug/L		392248	392248.433
|	Tl	205	0.381	ug/L	2.544	9020	0.017
[	U	238	0.134	ug/L	9.616	5633	0.014

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[	Be	9						
|>	Sc	45		96.5				
[	Mn	55						
[>	In	115		96.5				
|	Sb	121						
[	Sb	123						
[>	Lu	175		99.7				
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 247771001

Report Date/Time: Tuesday, April 20, 2010 13:17:57

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ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 20, 2010 13:36:00

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anal liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 8.022

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.235	ug/L	1.907	12908	0.022
|> Sc	45		ug/L		592347	592346.802
[Mn	55	50.504	ug/L	2.552	371789	0.626
[> In	115		ug/L		218137	218136.815
| Sb	121	49.018	ug/L	2.754	249002	1.141
[Sb	123		ug/L		196213	0.899
[> Lu	175		ug/L		385836	385836.443
| Tl	205	49.369	ug/L	1.457	856896	2.215
[U	238	49.861	ug/L	1.624	2002356	5.190

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9	100.469					
|> Sc	45		96.0				
[Mn	55	101.007					
[> In	115		97.2				
| Sb	121	98.036					
[Sb	123						
[> Lu	175		98.0				
| Tl	205	98.737					
[U	238	99.723					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Tuesday, April 20, 2010 13:36:38

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 20, 2010 13:39:08

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 9.023

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	-0.002	ug/L	678.287	23	-0.000
> Sc	45		ug/L		597228	597228.126
[Mn	55	0.020	ug/L	6.800	1009	0.000
> In	115		ug/L		220766	220765.926
| Sb	121	0.069	ug/L	6.257	498	0.002
[Sb	123		ug/L		385	0.001
> Lu	175		ug/L		388202	388201.893
| Tl	205	0.099	ug/L	6.386	4023	0.004
[U	238	0.012	ug/L	9.103	641	0.001

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
Be	9						
> Sc	45		96.8				
[Mn	55						
> In	115		98.3				
| Sb	121						
[Sb	123						
> Lu	175		98.6				
| Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 9

Report Date/Time: Tuesday, April 20, 2010 13:39:48

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202053060

Sample Date/Time: Tuesday, April 20, 2010 13:57:50

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053060.029

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	0.477	ug/L	15.662	162	0.000
Sc	45		ug/L		660160	660159.888
Mn	55	912.942	ug/L	1.481	7472663	11.321
In	115		ug/L		217145	217145.189
Sb	121	0.234	ug/L	5.781	1324	0.005
Sb	123		ug/L		1054	0.004
Lu	175		ug/L		397767	397766.764
Tl	205	0.014	ug/L	56.714	2603	0.001
U	238	1.673	ug/L	2.712	69425	0.174

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
Be	9					
Sc	45		107.0			
Mn	55					
In	115		96.7			
Sb	121					
Sb	123					
Lu	175		101.1			
Tl	205					
U	238					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202053060

Report Date/Time: Tuesday, April 20, 2010 13:58:29

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202053061

Sample Date/Time: Tuesday, April 20, 2010 14:00:57

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 957494[1]skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053061.030

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[Be	9	50.384	ug/L	1.914	14306	0.022
> Sc	45		ug/L		654736	654735.937
[Mn	55	1026.921	ug/L	3.339	8333813	12.734
> In	115		ug/L		214650	214650.363
[Sb	121	201.333	ug/L	1.222	1006117	4.687
[Sb	123		ug/L		792422	3.691
> Lu	175		ug/L		402513	402513.420
[Tl	205	77.992	ug/L	1.864	1410990	3.499
[U	238	49.331	ug/L	0.575	2066865	5.135

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[Be	9						
> Sc	45		106.1				
[Mn	55						
> In	115		95.6				
[Sb	121						
[Sb	123						
> Lu	175		102.3				
[Tl	205						
[U	238						

QC Out Of Limits

Measurement Type Analyte
Mn 55 Upper, S, EEIMn

MassOut of Limits Message
55Sample is out of limits (over linear range)

QC Action

QC Action Line: Continue

Sample ID: 1202053061

Report Date/Time: Tuesday, April 20, 2010 14:01:35

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ICPMS#5 - Summary Report

Sample ID: 1202053062

Sample Date/Time: Tuesday, April 20, 2010 14:04:04

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957494|5|skj

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\1202053062.031

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.153	ug/L	17.619	60	0.000
|>	Sc	45		ug/L		570108	570108.245
[	Mn	55	201.559	ug/L	1.365	1425503	2.499
[>	In	115		ug/L		208372	208371.512
|	Sb	121	0.171	ug/L	3.769	968	0.004
[	Sb	123		ug/L		737	0.003
[>	Lu	175		ug/L		369883	369882.685
|	Tl	205	1.060	ug/L	5.321	19789	0.048
[	U	238	1.046	ug/L	1.719	40416	0.109

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
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
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		92.4				
[	Mn	55						
[>	In	115		92.8				
|	Sb	121						
[	Sb	123						
[>	Lu	175		94.0				
|	Tl	205						
[	U	238						

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202053062

Report Date/Time: Tuesday, April 20, 2010 14:04:42

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 14:10:18

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\anl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.033

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
Be	9	52.169	ug/L	1.461	12837	0.023
> Sc	45		ug/L		567293	567292.861
[Mn	55	50.824	ug/L	2.237	358313	0.630
> In	115		ug/L		213000	213000.208
| Sb	121	48.930	ug/L	1.412	242717	1.139
[Sb	123		ug/L		190373	0.893
> Lu	175		ug/L		374125	374124.817
| Tl	205	49.782	ug/L	2.102	837749	2.234
[U	238	50.430	ug/L	2.628	1963537	5.249

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Be	9Linear Thru Zero	1.0000
Sc	45Linear Thru Zero	
Mn	55Linear Thru Zero	1.0000
In	115Linear Thru Zero	
Sb	121Linear Thru Zero	1.0000
Sb	123Linear Thru Zero	
Lu	175Linear Thru Zero	
Tl	205Linear Thru Zero	1.0000
U	238Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
Be	9	104.339					
> Sc	45		91.9				
[Mn	55	101.647					
> In	115		94.9				
| Sb	121	97.859					
[Sb	123						
> Lu	175		95.1				
| Tl	205	99.565					
[U	238	100.860					

QC Out Of Limits

Measurement Type: Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 14:10:57

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 14:13:27

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\lanl liq rerun 2.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.034

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[	Be	9	0.007	ug/L	196.740	24	0.000
|>	Sc	45		ug/L		564748	564748.121
[	Mn	55	0.052	ug/L	12.403	1176	0.001
[>	In	115		ug/L		213323	213323.365
|	Sb	121	0.073	ug/L	4.981	503	0.002
[	Sb	123		ug/L		390	0.001
[>	Lu	175		ug/L		375008	375007.556
|	Tl	205	0.226	ug/L	0.972	6030	0.010
[	U	238	0.011	ug/L	6.693	568	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	1.0000
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
U	238	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[	Be	9					
|>	Sc	45		91.5			
[	Mn	55					
[>	In	115		95.0			
|	Sb	121					
[	Sb	123					
[>	Lu	175		95.3			
|	Tl	205					
[	U	238					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 14:14:06

Page 1

ICPMS#5 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, April 20, 2010 15:40:01

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\Blank.061

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		532417	
|	Cu	63		ug/L		254	
|	Cu	65		ug/L		128	
|	Cd	111		ug/L		46	
|	Cd	114		ug/L		84	
[>	In	115		ug/L		207226	
[>	Lu	175		ug/L		372404	
|	Pb	208		ug/L		2938	

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Simple Linear	
Cu	63	Simple Linear	
Cu	65	Simple Linear	
Cd	111	Simple Linear	
Cd	114	Simple Linear	
In	115	Simple Linear	
Lu	175	Linear Thru Zero	
Pb	208	Simple Linear	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45						
|	Cu	63						
|	Cu	65						
|	Cd	111						
|	Cd	114						
[>	In	115						
[>	Lu	175						
|	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

Sample ID: Blank

Report Date/Time: Tuesday, April 20, 2010 15:40:47

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ICPMS#5 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, April 20, 2010 15:42:14

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\Standard 1.062

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		530164	530163.982
|	Cu	63		ug/L		27112	0.051
|	Cu	65	10.000	ug/L	1.615	13008	0.024
|	Cd	111	10.000	ug/L	0.681	11924	0.057
|	Cd	114		ug/L		28595	0.137
[>	In	115		ug/L		208455	208454.749
[>	Lu	175		ug/L		371699	371698.702
|	Pb	208	10.000	ug/L	1.383	300604	0.801

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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					
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115					
[>	Lu	175					
|	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

Sample ID: Standard 1

Report Date/Time: Tuesday, April 20, 2010 15:42:58

Page 1

ICPMS#5 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, April 20, 2010 15:44:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\Standard 2.063

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		539476	539476.133
|	Cu	63		ug/L		264797	0.490
|	Cu	65	99.993	ug/L	0.050	130331	0.241
|	Cd	111	99.967	ug/L	1.120	117025	0.552
|	Cd	114		ug/L		285835	1.348
[>	In	115		ug/L		212061	212060.749
[>	Lu	175		ug/L		377614	377614.372
|	Pb	208	99.925	ug/L	0.604	2815464	7.448

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45						
|	Cu	63						
|	Cu	65						
|	Cd	111						
|	Cd	114						
[>	In	115						
[>	Lu	175						
|	Pb	208						

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: Standard 2

Report Date/Time: Tuesday, April 20, 2010 15:45:09

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, April 20, 2010 15:46:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 1.064

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		552428	552428.101
| Cu	63		ug/L		139666	0.252
| Cu	65	49.328	ug/L	2.236	65886	0.119
[Cd	111	52.298	ug/L	1.051	60912	0.289
| Cd	114		ug/L		144935	0.687
[> In	115		ug/L		210915	210914.654
[> Lu	175		ug/L		378705	378705.418
| Pb	208	52.029	ug/L	0.537	1471614	3.878

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Sc	45		103.8			
| Cu	63					
| Cu	65	98.656				
[Cd	111	104.596				
| Cd	114					
[> In	115		101.8			
[> Lu	175		101.7			
| Pb	208	104.057				

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 1

Report Date/Time: Tuesday, April 20, 2010 15:47:21

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ICPMS#5 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, April 20, 2010 15:48:51

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 2.065

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		542518	542517.903
| Cu	63		ug/L		332	0.000
| Cu	65	0.028	ug/L	37.015	167	0.000
| Cd	111	0.002	ug/L	384.463	49	0.000
| Cd	114		ug/L		139	0.000
[> In	115		ug/L		213146	213146.362
[> Lu	175		ug/L		375198	375197.946
| Pb	208	0.013	ug/L	36.953	3332	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dilution	Duplicate Rel. % Difference
[> Sc	45		101.9			
| Cu	63					
| Cu	65					
| Cd	111					
| Cd	114					
[> In	115		102.9			
[> Lu	175		100.8			
| 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

Sample ID: QC Std 2

Report Date/Time: Tuesday, April 20, 2010 15:49:37

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, April 20, 2010 15:51:05

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 3.066

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		542935	542935.325
| Cu	63		ug/L		3540	0.006
| Cu	65	1.245	ug/L	1.651	1762	0.003
[Cd	111	1.240	ug/L	4.162	1515	0.007
| Cd	114		ug/L		3575	0.016
[> In	115		ug/L		214346	214345.810
[> Lu	175		ug/L		374887	374887.053
| Pb	208	2.493	ug/L	2.602	72600	0.186

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel.	% Difference
[> Sc	45		102.0				
| Cu	63						
| Cu	65	124.546					
[Cd	111	124.027					
| Cd	114						
[> In	115		103.4				
[> Lu	175		100.7				
| Pb	208	124.668					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 3

Report Date/Time: Tuesday, April 20, 2010 15:51:49

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ICPMS#5 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, April 20, 2010 15:53:17

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 4.067

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		542931	542931.316
| Cu	63		ug/L		5828	0.010
| Cu	65	2.732	ug/L	0.157	3710	0.007
| Cd	111	0.465	ug/L	17.883	586	0.003
| Cd	114		ug/L		6448	0.030
[> In	115		ug/L		209846	209845.945
[> Lu	175		ug/L		372216	372215.841
| Pb	208	0.197	ug/L	3.012	8411	0.015

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		102.0				
| Cu	63						
| Cu	65	81.792					
| Cd	111	104.706					
| Cd	114						
[> In	115		101.3				
[> Lu	175		99.9				
| Pb	208	104.419					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 4

Report Date/Time: Tuesday, April 20, 2010 15:54:02

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ICPMS#5 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, April 20, 2010 15:55:30

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 5.068

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		549175	549175.439
| Cu	63		ug/L		56154	0.102
| Cu	65	21.139	ug/L	0.497	28151	0.051
[Cd	111	19.060	ug/L	0.777	22337	0.105
| Cd	114		ug/L		59430	0.280
[> In	115		ug/L		211950	211950.045
[> Lu	175		ug/L		370365	370364.584
| Pb	208	19.844	ug/L	0.387	550726	1.479

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		103.1				
| Cu	63						
| Cu	65	90.568					
[Cd	111	93.233					
| Cd	114						
[> In	115		102.3				
[> Lu	175		99.5				
| Pb	208	98.290					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 5

Report Date/Time: Tuesday, April 20, 2010 15:56:15

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 15:57:43

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.069

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		553811	553810.689
|	Cu	63		ug/L		142469	0.257
[	Cu	65	51.603	ug/L	0.664	69110	0.125
[	Cd	111	51.272	ug/L	0.759	61191	0.283
|	Cd	114		ug/L		146929	0.679
[>	In	115		ug/L		216116	216116.437
[>	Lu	175		ug/L		380325	380325.291
[	Pb	208	52.348	ug/L	0.256	1486930	3.902

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel.	% Difference
[>	Sc	45		104.0				
|	Cu	63						
[	Cu	65	103.206					
[	Cd	111	102.543					
|	Cd	114						
[>	In	115		104.3				
[>	Lu	175		102.1				
[	Pb	208	104.695					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 15:58:27

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 15:59:56

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.070

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		560584	560583.805
| Cu	63		ug/L		315	0.000
| Cu	65	0.039	ug/L	8.657	187	0.000
| Cd	111	0.004	ug/L	218.397	53	0.000
| Cd	114		ug/L		132	0.000
[> In	115		ug/L		217331	217331.336
[> Lu	175		ug/L		384293	384293.381
| Pb	208	0.009	ug/L	46.525	3276	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		105.3			
| Cu	63					
| Cu	65					
| Cd	111					
| Cd	114					
[> In	115		104.9			
[> Lu	175		103.2			
| 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

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 16:00:42

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ICPMS#5 - Summary Report

Sample ID: 1202053058

Sample Date/Time: Tuesday, April 20, 2010 16:02:10

Sample Type:

Sample Description: LANL 6020 MB

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053058.071

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		558093	558092.591
| Cu	63		ug/L		680	0.001
| Cu	65	0.164	ug/L	9.487	354	0.000
| Cd	111	0.011	ug/L	118.167	60	0.000
| Cd	114		ug/L		122	0.000
[> In	115		ug/L		213029	213029.153
[> Lu	175		ug/L		384727	384726.959
| Pb	208	0.055	ug/L	8.672	4621	0.004

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Di	Duplicate Rel. % Difference
[> Sc	45		104.8			
| Cu	63					
| Cu	65					
| Cd	111					
| Cd	114					
[> In	115		102.8			
[> Lu	175		103.3			
| 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

Sample ID: 1202053058

Report Date/Time: Tuesday, April 20, 2010 16:02:55

Page 1

ICPMS#5 - Summary Report

Sample ID: 1202053059

Sample Date/Time: Tuesday, April 20, 2010 16:04:23

Sample Type:

Sample Description: LANL 6020 LCS

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053059.072

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		551808	551807.882
| Cu	63		ug/L		142334	0.258
| Cu	65	51.667	ug/L	4.271	68904	0.125
[Cd	111	50.908	ug/L	0.619	59905	0.281
| Cd	114		ug/L		145174	0.681
[> In	115		ug/L		213106	213106.435
[> Lu	175		ug/L		378556	378556.123
| Pb	208	51.693	ug/L	1.607	1461358	3.853

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		103.6			
| Cu	63					
| Cu	65					
[Cd	111					
| Cd	114					
[> In	115		102.8			
[> Lu	175		101.7			
| Pb	208					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: 1202053059

Report Date/Time: Tuesday, April 20, 2010 16:05:07

Page 1

ICPMS#5 - Summary Report

Sample ID: 247771001

Sample Date/Time: Tuesday, April 20, 2010 16:06:35

Sample Type:

Sample Description: LANL 6020

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\247771001.073

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		562279	562278.501
| Cu	63		ug/L		4844	0.008
| Cu	65	1.627	ug/L	6.249	2341	0.004
[Cd	111	0.070	ug/L	10.775	133	0.000
| Cd	114		ug/L		300	0.001
[> In	115		ug/L		218315	218314.720
[> Lu	175		ug/L		389526	389526.386
| Pb	208	0.168	ug/L	2.272	7956	0.013

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		105.6				
| Cu	63						
| Cu	65						
[Cd	111						
| Cd	114						
[> In	115		105.4				
[> Lu	175		104.6				
| 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

Sample ID: 247771001

Report Date/Time: Tuesday, April 20, 2010 16:07:19

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, April 20, 2010 16:15:25

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 8.077

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		557180	557180.446
| Cu	63		ug/L		142944	0.256
| Cu	65	49.848	ug/L	0.677	67168	0.120
[Cd	111	50.916	ug/L	0.885	61046	0.281
| Cd	114		ug/L		146786	0.676
[> In	115		ug/L		217111	217110.878
[> Lu	175		ug/L		377401	377401.115
| Pb	208	52.340	ug/L	1.652	1475150	3.901

Calibration

Analyte	MassCurve Type	Correlation Coefficient
Sc	45Linear Thru Zero	
Cu	63Linear Thru Zero	
Cu	65Linear Thru Zero	1.0000
Cd	111Linear Thru Zero	1.0000
Cd	114Linear Thru Zero	
In	115Linear Thru Zero	
Lu	175Linear Thru Zero	
Pb	208Linear Thru Zero	1.0000

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recov	Dilution % Dil	Duplicate Rel.	% Difference
[> Sc	45		104.7				
| Cu	63						
| Cu	65	99.695					
[Cd	111	101.833					
| Cd	114						
[> In	115		104.8				
[> Lu	175		101.3				
| Pb	208	104.680					

QC Out Of Limits

Measurement Type Analyte MassOut of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 8

Report Date/Time: Tuesday, April 20, 2010 16:16:09

Page 1

ICPMS#5 - Summary Report

Sample ID: QC Std 9

Sample Date/Time: Tuesday, April 20, 2010 16:17:39

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 9.078

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		553367	553367.017
|	Cu	63		ug/L		256	-0.000
|	Cu	65	0.020	ug/L	48.895	160	0.000
|	Cd	111	0.005	ug/L	180.645	55	0.000
|	Cd	114		ug/L		123	0.000
[>	In	115		ug/L		217958	217957.825
[>	Lu	175		ug/L		381121	381120.830
|	Pb	208	0.008	ug/L	41.246	3248	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		103.9			
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115		105.2			
[>	Lu	175		102.3			
|	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

Sample ID: QC Std 9

Report Date/Time: Tuesday, April 20, 2010 16:18:25

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ICPMS#5 - Summary Report

Sample ID: 1202053060

Sample Date/Time: Tuesday, April 20, 2010 16:26:32

Sample Type:

Sample Description: LANL 6020 DUP

Number of Replicates: 3

Batch ID: 957494|1|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053060.082

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		601925	601924.642
|	Cu	63		ug/L		80172	0.133
|	Cu	65	26.392	ug/L	1.813	38483	0.064
|	Cd	111	0.210	ug/L	10.571	296	0.001
|	Cd	114		ug/L		487	0.002
[>	In	115		ug/L		214279	214279.169
[>	Lu	175		ug/L		399768	399768.269
|	Pb	208	4.215	ug/L	1.538	128749	0.314

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		113.1			
|	Cu	63					
|	Cu	65					
|	Cd	111					
|	Cd	114					
[>	In	115		103.4			
[>	Lu	175		107.3			
|	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

Sample ID: 1202053060

Report Date/Time: Tuesday, April 20, 2010 16:27:16

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ICPMS#5 - Summary Report

Sample ID: 1202053061

Sample Date/Time: Tuesday, April 20, 2010 16:28:45

Sample Type:

Sample Description: LANL 6020 MS

Number of Replicates: 3

Batch ID: 9574941|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053061.083

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		591000	591000.234
|	Cu	63		ug/L		223122	0.377
|	Cu	65	74.625	ug/L	1.032	106591	0.180
[	Cd	111	10.548	ug/L	2.844	12407	0.058
|	Cd	114		ug/L		28255	0.133
[>	In	115		ug/L		212401	212400.984
[>	Lu	175		ug/L		401907	401906.968
|	Pb	208	42.372	ug/L	1.641	1272321	3.158

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	Linear Thru Zero	1.0000

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Dil	Duplicate Rel. % Difference
[>	Sc	45		111.0			
|	Cu	63					
|	Cu	65					
[	Cd	111					
|	Cd	114					
[>	In	115		102.5			
[>	Lu	175		107.9			
|	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

Sample ID: 1202053061

Report Date/Time: Tuesday, April 20, 2010 16:29:29

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ICPMS#5 - Summary Report

Sample ID: 1202053062

Sample Date/Time: Tuesday, April 20, 2010 16:30:57

Sample Type:

Sample Description: LANL 6020 SDILT

Number of Replicates: 3

Batch ID: 957494|5|skj

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\1202053062.084

Concentration Results

Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[> Sc	45		ug/L		534504	534503.995
| Cu	63		ug/L		15726	0.029
| Cu	65	5.704	ug/L	0.548	7487	0.014
[Cd	111	0.048	ug/L	27.762	100	0.000
| Cd	114		ug/L		173	0.000
[> In	115		ug/L		204700	204700.314
[> Lu	175		ug/L		379414	379413.620
| Pb	208	0.900	ug/L	0.950	28458	0.067

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		100.4				
| Cu	63						
| Cu	65						
[Cd	111						
| Cd	114						
[> In	115		98.8				
[> Lu	175		101.9				
| 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

Sample ID: 1202053062

Report Date/Time: Tuesday, April 20, 2010 16:31:42

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ICPMS#5 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, April 20, 2010 16:35:23

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 6.086

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		529112	529111.533
|	Cu	63		ug/L		133526	0.252
|	Cu	65	50.479	ug/L	0.818	64591	0.122
|	Cd	111	51.151	ug/L	1.279	58347	0.282
|	Cd	114		ug/L		140254	0.678
[>	In	115		ug/L		206591	206591.333
[>	Lu	175		ug/L		368013	368012.601
|	Pb	208	52.986	ug/L	1.039	1456282	3.949

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		99.4				
|	Cu	63						
|	Cu	65	100.959					
|	Cd	111	102.302					
|	Cd	114						
[>	In	115		99.7				
[>	Lu	175		98.8				
|	Pb	208	105.973					

QC Out Of Limits

Measurement Type Analyte Mass Out of Limits Message

QC Action

QC Action Line: No QC out of limits detected

Sample ID: QC Std 6

Report Date/Time: Tuesday, April 20, 2010 16:36:07

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ICPMS#5 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, April 20, 2010 16:37:37

Sample Type:

Sample Description:

Number of Replicates: 3

Batch ID:

Method File: c:\elandata\Method\cd cu and pb.mth

Dataset File: C:\elandata\Dataset\100420\QC Std 7.087

Concentration Results

	Analyte	Mass	Conc. Mean	Report Unit	Conc. RSD	Meas. Intens. Mean	Net Intens. Mean
[>	Sc	45		ug/L		529279	529279.292
|	Cu	63		ug/L		261	0.000
|	Cu	65	0.015	ug/L	155.167	147	0.000
|	Cd	111	0.016	ug/L	128.604	64	0.000
|	Cd	114		ug/L		118	0.000
[>	In	115		ug/L		206791	206791.258
[>	Lu	175		ug/L		367610	367609.828
|	Pb	208	0.011	ug/L	43.749	3213	0.001

Calibration

Analyte	Mass	Curve Type	Correlation Coefficient
Sc	45	Linear Thru Zero	
Cu	63	Linear Thru Zero	
Cu	65	Linear Thru Zero	1.0000
Cd	111	Linear Thru Zero	1.0000
Cd	114	Linear Thru Zero	
In	115	Linear Thru Zero	
Lu	175	Linear Thru Zero	
Pb	208	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		99.4				
|	Cu	63						
|	Cu	65						
|	Cd	111						
|	Cd	114						
[>	In	115		99.8				
[>	Lu	175		98.7				
|	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

Sample ID: QC Std 7

Report Date/Time: Tuesday, April 20, 2010 16:38:23

Page 1

Method Name: WATER
 Method Description: 7470A, 245.2, ILM04 ANALYST JXL
 Element: Hg

Date: 03/03/2010
 Technique: FI-MHS
 Calibration Type:
 Hg, Calc. Intercept : Linear
 Wavelength: 253.7 nm
 Sample Info Name: 030310W1.SIF Results Data Set Name: 030310W2

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 03/03/2010
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0026	0.0026	10:20:00	No
2			0.0026	0.0026	10:20:35	No
Mean:			0.0026			
SD :			0.0000			
%RSD:			1.7868			

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 03/03/2010
 Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0024	0.0050	10:21:57	No
2			0.0024	0.0050	10:22:31	No
Mean:			0.0024			
SD :			0.0000			
%RSD:			0.6044			

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.01200
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 03/03/2010
 Sample ID: S0.5

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0046	0.0073	10:23:54	No
2			0.0046	0.0072	10:24:29	No
Mean:			0.0046			
SD :			0.0000			
%RSD:			0.7802			

[Hg] Standard number 2 applied. [0.500]
 Correlation Coefficient: 0.99056 Slope: 0.00909
 Intercept : 0.00022

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 03/03/2010
 Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0172	0.0198	10:25:54	No
2			0.0172	0.0198	10:26:29	No
Mean:			0.0172			
SD :			0.0000			
%RSD:						

[Hg] Standard number 3 applied. [2.000]

Correlation Coefficient: 0.99928
Intercept : 0.00035

Slope: 0.00846

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 03/03/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0427	0.0453	10:27:54	No
2			0.0425	0.0451	10:28:29	No
Mean:			0.0426			
SD :			0.0001			
%RSD:			0.2618			

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99990 Slope: 0.00845
Intercept : 0.00036

=====

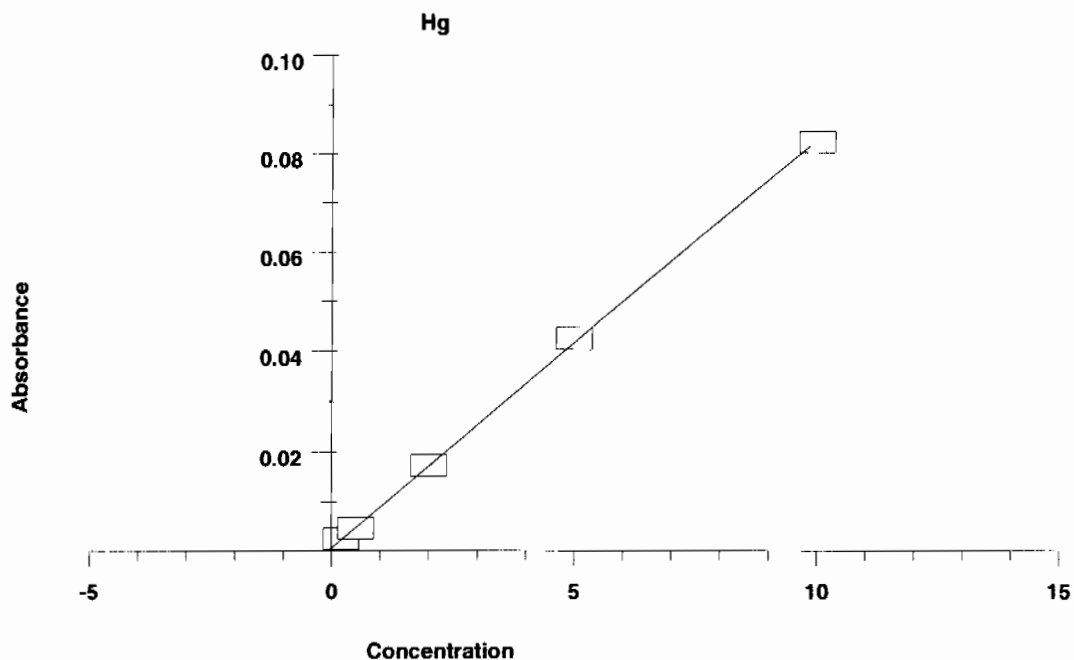
Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 03/03/2010
Sample ID: S10

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1			0.0828	0.0854	10:29:56	No
2			0.0826	0.0852	10:30:30	No
Mean:			0.0827			
SD :			0.0002			
%RSD:			0.1991			

[Hg] Standard number 5 applied. [10.00]
Correlation Coefficient: 0.99989 Slope: 0.00825
Intercept : 0.00058

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0026	---	---	---	---
S0.2	0.0024	0.200	0.221	0.0000	0.6
S0.5	0.0046	0.500	0.490	0.0000	0.8
S2.0	0.0172	2.000	2.018	0.0000	---
S5.0	0.0426	5.000	5.091	0.0001	0.3
S10	0.0827	10.000	9.951	0.0002	0.2
Correlation Coefficient: 0.99989		Slope:	0.00825	Intercept:	0.0006



=====
 Element: Hg Seq. No.: 7 AS Loc.: 9 Date: 03/03/2010
 Sample ID: ICV

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	5.070	5.070	0.0424	0.0450	10:31:59	No
2	4.988	4.988	0.0417	0.0443	10:32:34	No
Mean:	5.029	5.029	0.0421			
SD :	0.0585	0.0585	0.0005			
%RSD:	1.2	1.2	1.1480			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 8 AS Loc.: 10 Date: 03/03/2010
 Sample ID: ICB

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	-0.028	-0.028	0.0003	0.0030	10:33:56	No
2	-0.045	-0.045	0.0002	0.0028	10:34:30	No
Mean:	-0.037	-0.037	0.0003			
SD :	0.0123	0.0123	0.0001			
%RSD:	33.4	33.4	36.8006			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 9 AS Loc.: 11 Date: 03/03/2010
 Sample ID: CRDL

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Height	Time	Peak Stored
1	0.161	0.161	0.0019	0.0045	10:35:52	No
2	0.151	0.151	0.0018	0.0044	10:36:26	No
Mean:	0.156	0.156	0.0019			
SD :	0.0070	0.0070	0.0001			
%RSD:	4.5	4.5	3.1073			

QC value within specified limits.

=====

Element: Hg Seq. No.: 10 AS Loc.: 7 Date: 03/03/2010

Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.122	5.122	0.0428	0.0455	10:37:51	No
2	5.126	5.126	0.0429	0.0455	10:38:25	No
Mean:	5.124	5.124	0.0429			
SD :	0.0022	0.0022	0.0000			
%RSD:						

QC value within specified limits.

=====

Element: Hg Seq. No.: 11 AS Loc.: 8 Date: 03/03/2010

Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.052	0.052	0.0010	0.0036	10:39:53	No
2	0.052	0.052	0.0010	0.0036	10:40:29	No
Mean:	0.052	0.052	0.0010			
SD :	0.0001	0.0001	0.0000			
%RSD:	0.2	0.2	0.1002			

QC value within specified limits.

=====

Element: Hg Seq. No.: 12 AS Loc.: 12 Date: 03/03/2010

Sample ID: 1202055838|i||958584|MB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.008	-0.008	0.0005	0.0031	10:41:55	No
2	-0.008	-0.008	0.0005	0.0031	10:42:30	No
Mean:	-0.008	-0.008	0.0005			
SD :	0.0002	0.0002	0.0000			
%RSD:	2.6	2.6	0.3497			

=====

Element: Hg Seq. No.: 13 AS Loc.: 13 Date: 03/03/2010

Sample ID: 1202055839|i||LCS

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	2.091	2.091	0.0178	0.0204	10:43:54	No
2	2.081	2.081	0.0177	0.0204	10:44:29	No
Mean:	2.086	2.086	0.0178			
SD :	0.0067	0.0067	0.0001			
%RSD:	0.3	0.3	0.3123			

=====

Element: Hg Seq. No.: 14 AS Loc.: 14 Date: 03/03/2010

Sample ID: 248019001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.016	-0.016	0.0004	0.0031	10:45:55	No
2	-0.023	-0.023	0.0004	0.0030	10:46:30	No
Mean:	-0.020	-0.020	0.0004			
SD :	0.0050	0.0050	0.0000			
%RSD:	25.5	25.5	10.0274			

=====

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 03/03/2010

Sample ID: 1202055840|i|||DUP

%RSD: 4.2 4.2 3.4173

=====
 Element: Hg Seq. No.: 21 AS Loc.: 21 Date: 03/03/2010
 Sample ID: 248024003|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.011	0.011	0.0007	0.0033	10:59:45	No
2	-0.001	-0.001	0.0006	0.0032	11:00:20	No
Mean:	0.005	0.005	0.0006			
SD :	0.0088	0.0088	0.0001			
%RSD:	177.4	177.4	11.7519			

=====
 Element: Hg Seq. No.: 22 AS Loc.: 7 Date: 03/03/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	5.429	5.429	0.0454	0.0480	11:01:45	No
2	5.389	5.389	0.0450	0.0476	11:02:20	No
Mean:	5.409	5.409	0.0452			
SD :	0.0290	0.0290	0.0002			
%RSD:	0.5	0.5	0.5284			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 23 AS Loc.: 8 Date: 03/03/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.066	0.066	0.0011	0.0037	11:03:49	No
2	0.056	0.056	0.0010	0.0036	11:04:24	No
Mean:	0.061	0.061	0.0011			
SD :	0.0069	0.0069	0.0001			
%RSD:	11.4	11.4	5.3134			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 03/03/2010
 Sample ID: 248024004|i|||

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	-0.011	-0.011	0.0005	0.0031	11:05:50	No
2	-0.016	-0.016	0.0004	0.0030	11:06:25	No
Mean:	-0.014	-0.014	0.0005			
SD :	0.0040	0.0040	0.0000			
%RSD:	29.6	29.6	7.1605			

=====
 Element: Hg Seq. No.: 25 AS Loc.: 23 Date: 03/03/2010
 Sample ID: 1202056223|i||958777|MB

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Height	Time	Peak Stored
1	0.030	0.030	0.0008	0.0034	11:07:49	No
2	0.011	0.011	0.0007	0.0033	11:08:24	No
Mean:	0.021	0.021	0.0007			
SD :	0.0133	0.0133	0.0001			
%RSD:	64.4	64.4	14.7019			

=====
 Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 03/03/2010
 Sample ID: 1202056224|i||LCS

```

-----
Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      2.254      2.254      0.0192    0.0218    11:09:48  No
2      2.233      2.233      0.0190    0.0216    11:10:23  No
Mean:   2.243      2.243      0.0191
SD :    0.0151      0.0151      0.0001
%RSD:   0.7        0.7        0.6517
-----

```

```

=====
Element: Hg      Seq. No.: 27      AS Loc.: 25      Date: 03/03/2010
Sample ID: 247771001|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      0.023      0.023      0.0008    0.0034    11:11:47  No
2      -0.004      -0.004      0.0005    0.0032    11:12:22  No
Mean:   0.010      0.010      0.0007
SD :    0.0195      0.0195      0.0002
%RSD:  201.3       201.3      24.4399
-----

```

```

=====
Element: Hg      Seq. No.: 28      AS Loc.: 26      Date: 03/03/2010
Sample ID: 1202056225|i|||DUP
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      -0.009      -0.009      0.0005    0.0031    11:13:47  No
2      -0.036      -0.036      0.0003    0.0029    11:14:23  No
Mean:  -0.022      -0.022      0.0004
SD :    0.0187      0.0187      0.0002
%RSD:   83.6       83.6      39.4014
-----

```

```

=====
Element: Hg      Seq. No.: 29      AS Loc.: 27      Date: 03/03/2010
Sample ID: 1202056226|i|||MS
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      2.164      2.164      0.0184    0.0210    11:15:49  No
2      2.194      2.194      0.0187    0.0213    11:16:24  No
Mean:   2.179      2.179      0.0186
SD :    0.0212      0.0212      0.0002
%RSD:   1.0        1.0        0.9420
-----

```

```

=====
Element: Hg      Seq. No.: 30      AS Loc.: 28      Date: 03/03/2010
Sample ID: 1202056227|i|5||SDILT
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      -0.062      -0.062      0.0001    0.0027    11:17:50  No
2      -0.082      -0.082      -0.0001    0.0025    11:18:25  No
Mean:  -0.072      -0.072      0.0000
SD :    0.0141      0.0141      0.0001
%RSD:   19.5       19.5      703.1558
-----

```

```

=====
Element: Hg      Seq. No.: 31      AS Loc.: 29      Date: 03/03/2010
Sample ID: 247780001|i|||
-----

```

```

Repl  SampleConc  StndConc  BlnkCorr  Peak      Time  Peak
#      ug/L      ug/L      Signal    Height    Stored
1      0.095      0.095      0.0014    0.0040    11:19:51  No
2      0.061      0.061      0.0011    0.0037    11:20:26  No
Mean:   0.078      0.078      0.0012
SD :    0.0240      0.0240      0.0002
-----

```

%RSD: 30.6 30.6 16.1709

=====
 Element: Hg Seq. No.: 32 AS Loc.: 30 Date: 03/03/2010
 Sample ID: 247793001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.101	-0.101	-0.0003	0.0024	11:21:52	No
2	-0.098	-0.098	-0.0002	0.0024	11:22:27	No
Mean:	-0.100	-0.100	-0.0002			
SD :	0.0017	0.0017	0.0000			
%RSD:	1.7	1.7	5.6988			

=====
 Element: Hg Seq. No.: 33 AS Loc.: 31 Date: 03/03/2010
 Sample ID: 247807001|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.067	-0.067	0.0000	0.0026	11:23:54	No
2	-0.065	-0.065	0.0000	0.0026	11:24:29	No
Mean:	-0.066	-0.066	0.0000			
SD :	0.0016	0.0016	0.0000			
%RSD:	2.5	2.5	41.3786			

=====
 Element: Hg Seq. No.: 34 AS Loc.: 7 Date: 03/03/2010
 Sample ID: CCV

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	5.157	5.157	0.0431	0.0457	11:25:56	No
2	5.122	5.122	0.0428	0.0455	11:26:31	No
Mean:	5.140	5.140	0.0430			
SD :	0.0245	0.0245	0.0002			
%RSD:	0.5	0.5	0.4696			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 35 AS Loc.: 8 Date: 03/03/2010
 Sample ID: CCB

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	0.071	0.071	0.0012	0.0038	11:28:00	No
2	0.060	0.060	0.0011	0.0037	11:28:35	No
Mean:	0.065	0.065	0.0011			
SD :	0.0080	0.0080	0.0001			
%RSD:	12.2	12.2	5.8743			

QC value within specified limits.

=====
 Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 03/03/2010
 Sample ID: 247807002|i|||

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Height	Time	Peak Stored
1	-0.029	-0.029	0.0003	0.0029	11:29:59	No
2	-0.039	-0.039	0.0003	0.0029	11:30:33	No
Mean:	-0.034	-0.034	0.0003			
SD :	0.0069	0.0069	0.0001			
%RSD:	20.1	20.1	19.1857			

=====
 Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 03/03/2010
 Sample ID: 247807003|i|||

Miscellaneous

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Analyst: Barry Audain
Method: SW846 3005A
Lab SOP: GL-MA-E-006 REV# 9
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053054	Metals Spike Mix I	U1100205-01	.25	mL
LCS	1202053054	Metals Spike Mix II	U1100205-06	.25	mL
MS	1202053056	Metals Spike Mix I	U1100205-01	.25	mL
MS	1202053056	Metals Spike Mix II	U1100205-06	.25	mL

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202053053 MB	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053054 LCS	01-MAR-2010 18:38:00	Water	50	50	1	<2
247771001	01-MAR-2010 18:38:00	Water	50	50	1	<2
247793001	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807001	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807002	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807003	01-MAR-2010 18:38:00	Water	50	50	1	<2
247807004	01-MAR-2010 18:38:00	Water	50	50	1	<2
247830002	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053055 DUP (247830002)	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053056 MS (247830002)	01-MAR-2010 18:38:00	Water	50	50	1	<2
1202053057 SDILT (247830002)	01-MAR-2010 18:38:00	Water	50	50	1	<2
247836001	01-MAR-2010 18:38:00	Water	50	50	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1274969	Nitric Acid CONC.	1 mL	
1274973	HYDROCHLORIC ACID	2.5 mL	

GEL Laboratories LLC

Prep Logbook

Acid Digestion of Total Recoverable or Dissolved Metals in Surface and Groundwater Samples for Analysis by ICP or ICP-MS

Batch ID: 957493.0
Analyst: Francena Armstrong
Method: SW846 3005A
Lab SOP: GL-MA-E-006 REV# 9
Instrument: Sartorius Balance B-001

Verified by:

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check	Serial Number	Spike Amount	Spike Units
1202053058 MB	02-MAR-2010 14:30:00	Water	50	50	1	<2	U1100205-A	.5	mL
1202053059 LCS	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247771001	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247793001	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247807001	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247807002	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247807003	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247807004	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247830002	02-MAR-2010 14:30:00	Water	50	50	1	<2			
1202053060 DUP (247830002)	02-MAR-2010 14:30:00	Water	50	50	1	<2			
1202053061 MS (247830002)	02-MAR-2010 14:30:00	Water	50	50	1	<2			
1202053062 SDILT (247830002)	02-MAR-2010 14:30:00	Water	50	50	1	<2			
247836001	02-MAR-2010 14:30:00	Water	50	50	1	<2			

Comments:

Reagent/Solvent Lot ID	Description	Amount
1274969	Nitric Acid CONC.	1 mL
1274973	HYDROCHLORIC ACID	2.5 mL

Analytical Logbook version 11-04-2002

GEL Laboratories LLC

Prep Logbook

Mercury Analysis Using the Perkin Elmer Automated Mercury Analyzer

Batch ID: 958775.0
Analyst: Tara Griffin
Method: SW846 7470A Prep
Lab SOP: GL-MA-E-010 REV# 23
Instrument: No analytical instrument

Verified by: _____
 Type: _____
 Sample Id: _____
 Description: _____
 Serial Number: _____
 Spike Amount: _____
 Spike Units: _____

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202056223 MB	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056224 LCS	02-MAR-2010 13:05:00	Water	20	20	1	<2
247771001	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056225 DUP (247771001)	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056226 MS (247771001)	02-MAR-2010 13:05:00	Water	20	20	1	<2
1202056227 SDILT (247771001)	02-MAR-2010 13:05:00	Water	20	20	1	<2
247780001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247793001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807002	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807003	02-MAR-2010 13:05:00	Water	20	20	1	<2
247807004	02-MAR-2010 13:05:00	Water	20	20	1	<2
247812001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247830002	02-MAR-2010 13:05:00	Water	20	20	1	<2
247836001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247908001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247908002	02-MAR-2010 13:05:00	Water	20	20	1	<2
247908003	02-MAR-2010 13:05:00	Water	20	20	1	<2
247919001	02-MAR-2010 13:05:00	Water	20	20	1	<2
247919002	02-MAR-2010 13:05:00	Water	20	20	1	<2

Reagent/Solvent Lot ID	Description	Amount	Comments:
1176183	Sulfuric Acid, Concentrated	1 mL	Digestion Start Date: 02-MAR-10 13:05
1255532-C	Hg reducing agent	1 mL	Digestion End Date: 02-MAR-10 15:05
1274391-1	NITRIC ACID	.5 mL	
1276435-C	5% Potassium Persulfate	1.5 mL	
1277238-C	5% KMnO4 solution	3 mL	

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

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% IN 5% HNO3
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	5000 mg/L	Calcium	5000 mg/L
Iron	2000 mg/L	Magnesium	5000 mg/L

Standard Logbook

Serial ID: UI090612-02 **Opened:** 12-JUN-09 **Catalog Number :** 060074-06-01
Name: ICPMS Tungsten - 10mg/L **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: O2SI
Description: ICPMS CRDL Master Soln #1
Comments: None

Analyte	Concentration	Analyte	Concentration
Aluminum	15 mg/L	Arsenic	5 mg/L
Barium	2 mg/L	Beryllium	.5 mg/L
Boron	15 mg/L	Cadmium	1 mg/L
Calcium	100 mg/L	Chromium	3 mg/L
Cobalt	1 mg/L	Copper	1 mg/L
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: O2SI
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 :** H2O/tr HF
Supplier: ENVIRONMENTAL EXPRESS
Description: SILICON 1000mg/L H2O/tr HF
Comments: None

Analyte	Concentration	Analyte	Concentration
Silica	2139 mg/L	Silicon	1000 mg/L

Serial ID: 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

Standard Logbook

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: 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

Standard Logbook

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

Serial ID: UI100310-48 **Opened:** 19-MAR-10 **Amount :** 1000 mL
Name: Trace ICP ICESA **Received:** 12-MAR-10 **Catalog Number :** 160005-02
Type: Source Material **Expires:** 19-MAR-11 **Lot Number :** 1019141
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: 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% in 2% HNO3
Supplier: O2SI
Description: ICP HIGH RANGE STD SOLUTION A
Comments: None

Analyte	Concentration	Analyte	Concentration
Antimony	10000 ug/L	Arsenic	10000 ug/L
Barium	15000 ug/L	Beryllium	3000 ug/L
Boron	5000 ug/L	Cadmium	10000 ug/L
Chromium	25000 ug/L	Cobalt	10000 ug/L
Copper	20000 ug/L	Lead	25000 ug/L
Manganese	10000 ug/L	Molybdenum	10000 ug/L
Nickel	10000 ug/L	Phosphorous	15000 ug/L
Potassium	300000 ug/L	Selenium	10000 ug/L
Silica	107000 ug/L	Silicon	50000 ug/L
Silver	1000 ug/L	Strontium	10000 ug/L
Sulfur	50000 ug/L	Thallium	10000 ug/L
Tin	10000 ug/L	Titanium	10000 ug/L

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100317-06 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master A **Received:** 17-MAR-10 **Catalog Number :** 160055-01
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019161
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: UI100317-07 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS ICV/CCV Master B **Received:** 17-MAR-10 **Catalog Number :** 160054-02
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019162
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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
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: UI100317-08 **Opened:** 17-MAR-10 **Amount :** 250 mL
Name: ICP-MS IGV/CCV Master C **Received:** 17-MAR-10 **Catalog Number :** 160054-03
Type: Source Material **Expires:** 17-MAR-11 **Lot Number :** 1019163
Employee: Paul Boyd **Solvent :** +/- 0.5% in 5% HNO3 100 cm2
Supplier: 02SI
Description: ICPMS IGV/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: UI100405-12 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master B **Received:** 05-APR-10 **Catalog Number :** 160033-02
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019466
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: UI100405-13 **Opened:** 05-APR-10 **Amount :** 250 mL
Name: ICP-MS ICSAB Master C **Received:** 05-APR-10 **Catalog Number :** 160033-03
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019467
Employee: Paul Boyd **Solvent :** +/- 0.5% in 2% HNO3
Supplier: 02SI

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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: UI100405-60 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
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: UI100405-61 **Opened:** 05-APR-10 **Amount :** .5 mL
Name: ICPMS High Range Standard **Received:** 05-APR-10 **Catalog Number :** 160212-02-01
Type: Source Material **Expires:** 05-APR-11 **Lot Number :** 1019464
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

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Serial ID: UI100415-11 **Opened:** 15-APR-10 **Amount :** 1000 mL
Name: ICP-MS ICSA Master A **Received:** 15-APR-10 **Catalog Number :** 160013-01-01L
Type: Source Material **Expires:** 15-APR-11 **Lot Number :** 1018321
Employee: Paul Boyd **Solvent :** 2% HNO3
Supplier: Q2SI
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: UMS100415-01 **Opened:** 15-APR-10 **Amount :** 250 mL
Name: ICPMSCaSPIKEB **Received:** 15-APR-10 **Catalog Number :** ZGEL-100-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-20JB
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: UMS100415-02 **Opened:** 15-APR-10 **Catalog Number :** ZGEL-102-250
Name: ICPMSCaSPIKEA **Received:** 15-APR-10 **Lot Number :** 22-21JB
Type: Source Material **Expires:** 28-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

Standard Logbook

Analyte	Concentration	Analyte	Concentration
Iron	1000 mg/L	Magnesium	1000 mg/L
Phosphorous	1000 mg/L	Potassium	1000 mg/L
Sodium	1000 mg/L		

Serial ID: UMS100415-03 **Opened:** 15-APR-11 **Amount :** 250 ml
Name: ICPMSCaSPIKEC **Received:** 15-APR-10 **Catalog Number :** ZGEL-101-250
Type: Source Material **Expires:** 28-FEB-11 **Lot Number :** 22-22JB
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: IHG100302-01 **Opened:** 02-MAR-10 **Instrument Id :** Mercury
Name: MHGINTER1 **Received:** 02-MAR-10 **Pipet Id :** Minou1
Type: Intermediate **Expires:** 03-MAR-10 **Solvent :** 1mL HNO3 + TypeI 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: IHG100302-02 **Opened:** 02-MAR-10 **Pipet Id :** Minou1
Name: MHGINTER2 **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Intermediate **Expires:** 03-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

Serial ID: WHG100302-01a **Opened:** 02-MAR-10 **Pipet Id :** Hg1289245
Name: MHGWORKCAL0.2CRA **Received:** 02-MAR-10 **Solvent :** 2% HNO3-1274391
Type: Working **Expires:** 09-MAR-10
Employee: Tara Griffin
Supplier: GEL

Standard Logbook

Description: Mercury Working 1st Source CAL 0.2/CRA

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	20 uL	20 mL	.2 ug/L

Serial ID: WHG100302-02 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL0.5 Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-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.
IHG100302-01	Mercury	200 ug/L	50 uL	20 mL	.5 ug/L

Serial ID: WHG100302-03 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL2.0 Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-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.
IHG100302-01	Mercury	200 ug/L	200 uL	20 mL	2 ug/L

Serial ID: WHG100302-04 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL5.0CCV Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-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.
IHG100302-01	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100302-05 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORKCAL10.0 Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-10
 Employee: Tara Griffin Verified: 20-JUL-07
 Supplier: GEL
 Description: Mercury Working 1st Source CAL 10.0

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
IHG100302-01	Mercury	200 ug/L	1 mL	20 mL	10 ug/L

Serial ID: WHG100302-06 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGWORK5.0ICV Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-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.
IHG100302-02	Mercury	200 ug/L	500 uL	20 mL	5 ug/L

Serial ID: WHG100302-13 Opened: 02-MAR-10 Pipet Id : Hg1289245
 Name: MHGLIQLCSMSSPIKE Received: 02-MAR-10 Solvent : 2% HNO3-1274391
 Type: Working Expires: 09-MAR-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: WI100319-42 Opened: 19-MAR-10 Balance Id : 216
 Name: TRACE ICP 0.1 PPM STD. Received: 02-NOV-09 Pipet Id : 3581809
 Type: Working Expires: 20-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.
WI100319-44	Aluminum	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Antimony	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Arsenic	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Barium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Beryllium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Boron	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cadmium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Calcium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Chromium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Cobalt	1000 ug/L	10 mL	100 mL	100 ug/L

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Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WI100319-44	Copper	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Iron	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Lead	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Magnesium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Manganese	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Molybdenum	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Nickel	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Phosphorous	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Potassium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Selenium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Silica	10698 ug/L	10 mL	100 mL	1069 ug/L
WI100319-44	Silicon	5000 ug/L	10 mL	100 mL	500 ug/L
WI100319-44	Silver	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sodium	10000 ug/L	10 mL	100 mL	1000 ug/L
WI100319-44	Strontium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Sulfur	2000 ug/L	10 mL	100 mL	200 ug/L
WI100319-44	Thallium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Tin	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Titanium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Uranium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Vanadium	1000 ug/L	10 mL	100 mL	100 ug/L
WI100319-44	Zinc	1000 ug/L	10 mL	100 mL	100 ug/L

Serial ID: WI100319-43 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP 0.5/CCV STD. **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100319-44 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP SCAL 1.0 **Received:** 02-NOV-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100319-45 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: TRACE ICP S-10 STD **Received:** 22-APR-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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: WI100319-46 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: ICP TRACE ICV **Received:** 25-SEP-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-MAR-10 **Solvent :** 3%HCL AND 1%HNO3-1285629
Employee: Helen Camello
Supplier: GEL
Description: Initial Calibration Verification ICP Trace Metals
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090925-40	Aluminum	1000 mg/L	2.5 mL	500 mL	5000 ug/L
UI090925-40	Arsenic	100 mg/L	2.5 mL	500 mL	500 ug/L
UI090925-40	Barium	100 mg/L	2.5 mL	500 mL	500 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WI100319-47 **Opened:** 19-MAR-10 **Balance Id :** 216
Name: PQL Working Standard **Received:** 30-JUN-09 **Pipet Id :** 3581809
Type: Working **Expires:** 20-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
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

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100420-04 **Opened:** 20-APR-10 **Amount :** 50 mL
Name: ICPMS Cal Standard 100 **Received:** 20-APR-10 **Balance Id :** 4025216
Type: Working **Expires:** 21-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl-1303289
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
UMS100415-01	Arsenic	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Barium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Beryllium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Boron	20 mg/L	.5 mL	50 mL	200 ug/l
UMS100415-01	Cadmium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Chromium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Cobalt	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Copper	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Lead	10 mg/L	.5 mL	50 mL	100 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UMS100415-01	Lithium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Manganese	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Nickel	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Selenium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Silver	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Strontium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thallium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Thorium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Uranium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Vanadium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-01	Zinc	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-02	Aluminum	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Calcium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Iron	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Magnesium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Phosphorous	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Potassium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-02	Sodium	1000 mg/L	.5 mL	50 mL	10000 ug/l
UMS100415-03	Antimony	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Molybdenum	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Tin	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Titanium	10 mg/L	.5 mL	50 mL	100 ug/l
UMS100415-03	Zirconium	10 mg/L	.5 mL	50 mL	100 ug/l

Serial ID: WMS100420-04A **Opened:** 20-APR-10 **Balance Id :** 4025216
Name: ICPMS Cal Standard 10 **Received:** 20-APR-10 **Pipet Id :** 3541598
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS Calibration Standard (10 ppb)
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100420-04	Aluminum	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Antimony	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Arsenic	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Barium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Beryllium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Boron	200 ug/l	5 mL	50 mL	20 ug/l
WMS100420-04	Cadmium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Calcium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Chromium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Cobalt	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Copper	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Iron	10000 ug/l	5 mL	50 mL	1000 ug/l

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
WMS100420-04	Lead	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Lithium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Magnesium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Manganese	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Molybdenum	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Nickel	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Phosphorous	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Potassium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Selenium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Silver	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Sodium	10000 ug/l	5 mL	50 mL	1000 ug/l
WMS100420-04	Strontium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Thallium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Thorium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Tin	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Titanium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Tungsten	100 ug/L	5 mL	50 mL	10 ug/L
WMS100420-04	Uranium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Vanadium	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Zinc	100 ug/l	5 mL	50 mL	10 ug/l
WMS100420-04	Zirconium	100 ug/l	5 mL	50 mL	10 ug/l

Serial ID: WMS100420-05

Name: ICPMS ICV

Type: Working

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS ICV

Comments: None

Opened: 20-APR-10

Received: 20-APR-10

Expires: 21-APR-10

Balance Id : 40245216

Pipet Id : 3541598

Solvent : 2%HNO3/1%HCl - 1303289

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-06	Aluminum	2020 mg/L	.125 mL	50 mL	5050 ug/L
UI100317-06	Calcium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Iron	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Magnesium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Phosphorous	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Potassium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-06	Sodium	2000 mg/L	.125 mL	50 mL	5000 ug/L
UI100317-07	Arsenic	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Barium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Beryllium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Boron	40 mg/L	.125 mL	50 mL	100 ug/L
UI100317-07	Cadmium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Chromium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Cobalt	20 mg/L	.125 mL	50 mL	50 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100317-07	Copper	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lead	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Lithium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Manganese	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Nickel	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Selenium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Strontium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thallium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Thorium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Uranium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Vanadium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-07	Zinc	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Antimony	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Molybdenum	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Silver	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tin	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Titanium	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Tungsten	20 mg/L	.125 mL	50 mL	50 ug/L
UI100317-08	Zirconium	20 mg/L	.125 mL	50 mL	50 ug/L

Serial ID: WMS100420-06

Name: ICPMS CRDL

Type: Working

Employee: Paul Boyd

Supplier: GEL

Description: ICPMS CRDL

Comments: None

Opened: 20-APR-10

Received: 20-APR-10

Expires: 21-APR-10

Balance Id :

40245216

Pipet Id :

3820544

Solvent :

2%HNO3/1%HCl - 1303289

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI090701-09	Aluminum	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Arsenic	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Barium	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Beryllium	.5 mg/L	.05 mL	50 mL	.5 ug/L
UI090701-09	Boron	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Cadmium	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Calcium	100 mg/L	.05 mL	50 mL	100 ug/L
UI090701-09	Chromium	3 mg/L	.05 mL	50 mL	3 ug/L
UI090701-09	Cobalt	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Copper	1 mg/L	.05 mL	50 mL	1 ug/L
UI090701-09	Iron	25 mg/L	.05 mL	50 mL	25 ug/L
UI090701-09	Lead	2 mg/L	.05 mL	50 mL	2 ug/L
UI090701-09	Lithium	10 mg/L	.05 mL	50 mL	10 ug/L
UI090701-09	Magnesium	15 mg/L	.05 mL	50 mL	15 ug/L
UI090701-09	Manganese	5 mg/L	.05 mL	50 mL	5 ug/L
UI090701-09	Nickel	2 mg/L	.05 mL	50 mL	2 ug/L

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
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: WMS100420-07 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSA **Received:** 20-APR-10 **Lot Number :** 1010773
Type: Working **Expires:** 21-APR-10 **Pipet Id :** 3541598
Employee: Paul Boyd **Solvent :** 2%HNO3/1%HCl - 1303289
Supplier: GEL
Description: ICPMS ICSA
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100420-08 **Opened:** 20-APR-10 **Balance Id :** 40245216
Name: ICPMS ICSAB **Received:** 20-APR-10 **Pipet Id :** 1758088
Type: Working **Expires:** 21-APR-10 **Solvent :** 2%HNO3/1%HCl - 1303289
Employee: Paul Boyd
Supplier: GEL
Description: ICPMS ICSAB

Standard Logbook

Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-12	Arsenic	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Barium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Beryllium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Boron	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Cadmium	2 mg/L	.5 mL	50 mL	20.2 ug/L
UI100405-12	Chromium	2 mg/L	.5 mL	50 mL	22.2 ug/L
UI100405-12	Cobalt	2 mg/L	.5 mL	50 mL	20.4 ug/L
UI100405-12	Copper	2 mg/L	.5 mL	50 mL	23.4 ug/L
UI100405-12	Lead	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Lithium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Manganese	2 mg/L	.5 mL	50 mL	22.7 ug/L
UI100405-12	Nickel	2 mg/L	.5 mL	50 mL	22.4 ug/L
UI100405-12	Selenium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Strontium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thallium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Thorium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Uranium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Vanadium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-12	Zinc	2 mg/L	.5 mL	50 mL	27 ug/L
UI100405-13	Antimony	2 mg/L	.5 mL	50 mL	20.5 ug/L
UI100405-13	Silver	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tin	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Tungsten	2 mg/L	.5 mL	50 mL	20 ug/L
UI100405-13	Zirconium	2 mg/L	.5 mL	50 mL	20 ug/L
UI100415-11	Aluminum	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Calcium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Chloride	10000 mg/L	5 mL	50 mL	1000000 ug/L
UI100415-11	Iron	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Magnesium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Molybdenum	20 mg/L	5 mL	50 mL	2000 ug/L
UI100415-11	Phosphorous	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Potassium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sodium	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Sulfur	1000 mg/L	5 mL	50 mL	100000 ug/L
UI100415-11	Titanium	20 mg/L	5 mL	50 mL	2000 ug/L

Serial ID: WMS100420-70 Opened: 20-APR-10 Balance Id : 40245216
 Name: ICPMS LINEAR RANGE ST Received: 20-APR-10 Pipet Id : 1758088
 Type: Working Expires: 21-APR-10 Solvent : 2%HNO3/1%HCl - 1303289
 Employee: Paul Boyd
 Supplier: 02SI
 Description: ICPMS LINEAR RANGE STANDARD
 Comments: None

Standard Logbook

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
UI100405-60	Aluminum	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Arsenic	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Barium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Beryllium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cadmium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Calcium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Chromium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Cobalt	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Copper	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Iron	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Lead	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Lithium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Magnesium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Manganese	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Nickel	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Phosphorous	2500 mg/L	.5 mL	50 mL	25000 ug/L
UI100405-60	Potassium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Selenium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Sodium	5000 mg/L	.5 mL	50 mL	50000 ug/L
UI100405-60	Strontium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Thallium	50 mg/L	.5 mL	50 mL	500 ug/L
UI100405-60	Thorium	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-60	Uranium	500 mg/L	.5 mL	50 mL	5000 ug/L
UI100405-60	Vanadium	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-60	Zinc	250 mg/L	.5 mL	50 mL	2500 ug/L
UI100405-61	Antimony	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Molybdenum	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Silver	25 mg/L	.5 mL	50 mL	250 ug/L
UI100405-61	Tin	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Tungsten	100 mg/L	.5 mL	50 mL	1000 ug/L
UI100405-61	Zirconium	50 mg/L	.5 mL	50 mL	500 ug/L

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

Standard Logbook

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

Serial ID: 1228372-A **Opened:** 12-NOV-09 **Lot Number :** 49215936
Name: B-NH2OH.HCl-MER **Received:** 12-NOV-09
Type: Reagent/Solvent **Expires:** 12-NOV-10
Employee: Tara Griffin
Supplier: Fisher Scientific
Description: Hydroxylamine Hydrochloride
Comments: None

Serial ID: 1255532-C **Opened:** 15-JAN-10 **Balance Id :** BAL-002
Name: B-NaCl.NH2OH.HCl-MER **Received:** 15-JAN-10
Type: Reagent/Solvent **Expires:** 15-JUL-10
Employee: Tara Griffin
Supplier: GEL
Description: Hg reducing agent
Comments: None

Parent Material	Analyte	Parent Conc.	Aliquot	Final Vol.	Final Conc.
1228372-A	B-NH2OH.HCl-MER	N/A	120 g	1000 mL	N/A

Serial ID: 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

Standard Logbook

Serial ID: 1274969 **Opened:** 24-FEB-10 **Lot Number :** J 04043 L
Name: I-HNO3 **Received:** 24-FEB-10
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1274973 **Opened:** 24-FEB-10 **Lot Number :** J02039
Name: I-HCL **Received:** 24-FEB-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 24-FEB-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID
Comments: None

Serial ID: 1276435-C **Opened:** 28-FEB-10 **Balance Id :** BAL-002
Name: B-K2S2O8-MER **Received:** 28-FEB-10
Type: Reagent/Solvent **Expires:** 28-AUG-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: 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: 1277916 **Opened:** 02-MAR-10 **Lot Number :** J02039
Name: I-HCL **Received:** 02-MAR-10 **Preservative_Id :** 5 none
Type: Reagent/Solvent **Expires:** 02-MAR-11
Employee: Francena Armstrong
Supplier: J.T. BAKER
Description: HYDROCHLORIC ACID

Standard Logbook

Comments: None

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

Serial ID: 1291278 **Opened:** 25-MAR-10 **Lot Number :** J 08035 L
Name: I-HNO3 **Received:** 25-MAR-10
Type: Reagent/Solvent **Expires:** 25-MAR-11
Employee: Anthony Green
Supplier: BAKER
Description: Nitric Acid CONC.
Comments: None

Serial ID: 1303289 **Opened:** 19-APR-10 **Solvent :** Type I Water
Name: B-2%HNO3/1%HCl-ICPMS **Received:** 19-APR-10
Type: Reagent/Solvent **Expires:** 26-APR-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.
1277916	I-HCL	36.5-38.0	90 mL	9 l	N/A
1291278	I-HNO3	69.0-70.0	180 mL	9 l	N/A

General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1973**

Method/Analysis Information

Product: **Cyanide, Total**

Analytical Batch: 956938, 957567 and 957569 **Method:** SW9012A Cyanide and Total

Prep Batch : 956937, 957566 and 957568 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247770001	RE15-10-8259
247770002	RE15-10-8261
247770003	RE15-10-8257
247770004	RE15-10-8260
247770005	RE15-10-8258
247770006	RE15-10-8263
247770007	RE15-10-8255
247770008	RE15-10-8256
247770009	RE15-10-8262
247770010	RE15-10-8265
247770011	RE15-10-8269
1202051801	Method Blank (MB)
1202051802	247539004(CAPU-10-12522) Sample Duplicate (DUP)
1202051803	247539005(CAPU-10-12529) Sample Duplicate (DUP)
1202051804	247539004(CAPU-10-12522) Matrix Spike (MS)
1202051805	247539005(CAPU-10-12529) Matrix Spike (MS)
1202051806	247539004(CAPU-10-12522) Matrix Spike Duplicate (MSD)
1202051807	247539005(CAPU-10-12529) Matrix Spike Duplicate (MSD)
1202051808	Laboratory Control Sample (LCS)
1202053255	Method Blank (MB)
1202053256	247781001(RE11-10-1566) Sample Duplicate (DUP)
1202053257	247781002(RE11-10-1560) Sample Duplicate (DUP)
1202053258	247781001(RE11-10-1566) Matrix Spike (MS)
1202053259	247781002(RE11-10-1560) Matrix Spike (MS)
1202053260	247781001(RE11-10-1566) Matrix Spike Duplicate (MSD)
1202053261	247781002(RE11-10-1560) Matrix Spike Duplicate (MSD)
1202053262	Laboratory Control Sample (LCS)
1202053263	Method Blank (MB)
1202053264	247770008(RE15-10-8256) Sample Duplicate (DUP)
1202053265	247770009(RE15-10-8262) Sample Duplicate (DUP)
1202053266	247770008(RE15-10-8256) Matrix Spike (MS)
1202053267	247770009(RE15-10-8262) Matrix Spike (MS)
1202053268	247770008(RE15-10-8256) Matrix Spike Duplicate (MSD)
1202053269	247770009(RE15-10-8262) Matrix Spike Duplicate (MSD)
1202053270	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 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) Designation

The following samples were selected for QC analysis: 247539004 (CAPU-10-12522), 247539005 (CAPU-10-12529)- Batch 956938, 247781001 (RE11-10-1566), 247781002 (RE11-10-1560)- Batch 957567, 247770008 (RE15-10-8256) and 247770009 (RE15-10-8262)- Batch 957569.

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202051802 (CAPU-10-12522)- Batch 956938.

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 samples in this sample group were diluted due to high concentration: 1202051808 (LCS)- Batch 956938, 1202053262 (LCS)- Batch 957567 and 1202053270 (LCS)- Batch 957569.

Sample Re-analysis

The following samples were re-analyzed due to CCV failure: 247770001 (RE15-10-8259) and 247770002 (RE15-10-8261)- Batch 956938.

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

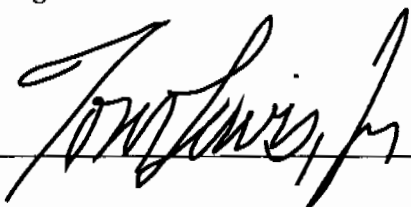
Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

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: _____

19Mar10

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: 10-1973 GEL Work Order: 247770

The Qualifiers in this report are defined as follows:

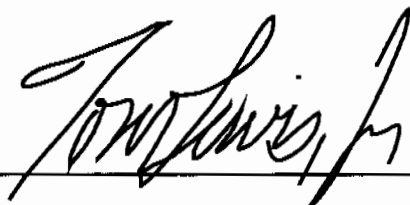
- * Indicates that a quality control analyte recovery is outside of specified acceptance criteria.
- ** Indicates the analyte is a surrogate compound.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

The designation ND, if present, appears in the result column when the analyte concentration is not detected above the detection limit.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Valerie Davis.

Reviewed by

A handwritten signature in black ink, appearing to read "Tom Davis, Jr.", is written over a horizontal line.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8259
Sample ID: 247770001
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 2.72%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	68.5	252	ug/kg	1	AXC2	03/02/10	1500	956938	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/01/10	1255	956937

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8261
Sample ID: 247770002
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.65%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	69.1	254	ug/kg	1	AXC2	03/02/10	1501	956938	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/01/10	1255	956937

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8257
Sample ID: 247770003
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.29%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	61.5	226	ug/kg	1	AXC2	03/02/10	1613	957567	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Certificate of Analysis

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

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8260
Sample ID: 247770004
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.56%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.4	244	ug/kg	1	AXC2	03/02/10	1614	957567	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8258
Sample ID: 247770005
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.69%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	61.8	227	ug/kg	1	AXC2	03/02/10	1614	957567	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8263
Sample ID: 247770006
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.85%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	66.6	245	ug/kg	1	AXC2	03/02/10	1615	957567	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

The following Analytical Methods were performed

Method	Description	Analyst Comments
J	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: LANL ER Project

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8255
Sample ID: 247770007
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.2%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	60.4	222	ug/kg	1	AXC2	03/02/10	1616	957567	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	SXJ1	03/02/10	1300	957566

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8256
Sample ID: 247770008
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 2.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	70.0	257	ug/kg	1	AXC2	03/02/10	1649	957569	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8262
Sample ID: 247770009
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.78%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	65.3	240	ug/kg	1	AXC2	03/02/10	1652	957569	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

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 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8265
Sample ID: 247770010
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.8%

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "Dry Weight Corrected"</i>											
Cyanide, Total	U	ND	64.1	236	ug/kg	1	AXC2	03/02/10	1656	957569	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

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Contact: Ms. Joylene Valdez
Project: LANLER Project

Report Date: March 15, 2010

Client SDG: 10-1973

Client Sample ID: RE15-10-8269
Sample ID: 247770011
Matrix: R
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client
Moisture: 1.86%

Project: LANL01004
Client ID: LANL010

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

SW9012A Cyanide, Total "Dry Weight Corrected"

Cyanide, Total	U	ND	59.7	220	ug/kg	1	AXC2	03/02/10	1700	957569	1
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The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1528	957568

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	

Quality Control Summary

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QC Summary

Report Date: March 15, 2010

Page 1 of 3

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

Workorder: 247770

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	956938										
QC1202051802	247539004	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	03/02/10	14:13
QC1202051803	247539005	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			03/02/10	14:17
QC1202051808	LCS										
Cyanide, Total	67900				56800	ug/kg	83.6	(32%-157%)		03/02/10	14:11
QC1202051801	MB										
Cyanide, Total			U	250	ug/kg					03/02/10	14:10
QC1202051804	247539004	MS									
Cyanide, Total	5060	U	ND		5110	ug/kg	101	(26%-158%)		03/02/10	14:14
QC1202051805	247539005	MS									
Cyanide, Total	5470	U	ND		5530	ug/kg	101	(26%-158%)		03/02/10	14:17
QC1202051806	247539004	MSD									
Cyanide, Total	5250	U	ND		5350	ug/kg	4.69	102	(0%-30%)	03/02/10	14:15
QC1202051807	247539005	MSD									
Cyanide, Total	5260	U	ND		5420	ug/kg	1.96	103	(0%-30%)	03/02/10	14:18
Batch	957567										
QC1202053256	247781001	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	03/02/10	16:18
QC1202053257	247781002	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			03/02/10	16:25
QC1202053262	LCS										
Cyanide, Total	67900				38800	ug/kg	57.1	(32%-157%)		03/02/10	16:12
QC1202053255	MB										
Cyanide, Total			U	250	ug/kg					03/02/10	16:11
QC1202053258	247781001	MS									
Cyanide, Total	5410	U	ND		5270	ug/kg	97.5	(26%-158%)		03/02/10	16:22
QC1202053259	247781002	MS									
Cyanide, Total	6400	U	ND		7040	ug/kg	110	(26%-158%)		03/02/10	16:26
QC1202053260	247781001	MSD									
Cyanide, Total	5810	U	ND		6110	ug/kg	14.7	105	(0%-30%)	03/02/10	16:23
QC1202053261	247781002	MSD									
Cyanide, Total	6400	U	ND		6650	ug/kg	5.61	104	(0%-30%)	03/02/10	16:27
Batch	957569										
QC1202053264	247770008	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A		AXC2	03/02/10	16:49
QC1202053265	247770009	DUP									
Cyanide, Total		U	ND	U	ND	ug/kg	N/A			03/02/10	16:53
QC1202053270	LCS										
Cyanide, Total	67900				71000	ug/kg	105	(32%-157%)		03/02/10	16:48
QC1202053263	MB										
Cyanide, Total			U	250	ug/kg					03/02/10	16:43
QC1202053266	247770008	MS									

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QC Summary

Workorder: 247770

Page 2 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	957569										
Cyanide, Total	5040	U	ND	5350	ug/kg		106	(26%-158%)		03/02/10	16:50
QC1202053267 247770009 MS											
Cyanide, Total	4890	U	ND	5920	ug/kg		121	(26%-158%)	AXC2	03/02/10	16:54
QC1202053268 247770008 MSD											
Cyanide, Total	5040	U	ND	5500	ug/kg	2.79	109	(0%-30%)		03/02/10	16:51
QC1202053269 247770009 MSD											
Cyanide, Total	4710	U	ND	4900	ug/kg	18.9	104	(0%-30%)		03/02/10	16:55

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 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
- UJ Gamma Spectroscopy--Uncertain identification
- X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

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QC Summary

Workorder: 247770

Page 3 of 3

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ 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: 15-MAR-2010 11:02

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1973

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	02-MAR-2010 08:53:45	OM_3-2-2010_08-43-10	144	150	96	(90%-110%)	Yes
CCV	02-MAR-2010 14:07:11	OM_3-2-2010_14-03-45	101	100	101	(90%-110%)	Yes
CCV	02-MAR-2010 14:19:40	OM_3-2-2010_14-03-45	106	100	106	(90%-110%)	Yes
CCV	02-MAR-2010 14:51:53	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 15:04:18	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 16:06:46	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 16:19:18	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 16:31:55	OM_3-2-2010_14-50-22	105	100	105	(90%-110%)	Yes
CCV	02-MAR-2010 16:44:28	OM_3-2-2010_14-50-22	104	100	104	(90%-110%)	Yes
CCV	02-MAR-2010 16:57:04	OM_3-2-2010_14-50-22	105	100	105	(90%-110%)	Yes
CCV	02-MAR-2010 17:09:44	OM_3-2-2010_14-50-22	106	100	106	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	02-MAR-2010 08:55:35	OM_3-2-2010_08-43-10	-1.14	10	Yes
CCB	02-MAR-2010 14:09:02	OM_3-2-2010_14-03-45	-2.71	10	Yes
CCB	02-MAR-2010 14:21:30	OM_3-2-2010_14-03-45	-2.56	10	Yes
CCB	02-MAR-2010 14:53:44	OM_3-2-2010_14-50-22	-1.63	10	Yes
CCB	02-MAR-2010 15:06:08	OM_3-2-2010_14-50-22	-2.56	10	Yes
CCB	02-MAR-2010 16:08:37	OM_3-2-2010_14-50-22	-1.91	10	Yes
CCB	02-MAR-2010 16:21:08	OM_3-2-2010_14-50-22	-2.72	10	Yes
CCB	02-MAR-2010 16:33:45	OM_3-2-2010_14-50-22	-2.09	10	Yes
CCB	02-MAR-2010 16:46:19	OM_3-2-2010_14-50-22	-1.95	10	Yes
CCB	02-MAR-2010 16:58:55	OM_3-2-2010_14-50-22	-2.55	10	Yes
CCB	02-MAR-2010 17:11:35	OM_3-2-2010_14-50-22	-1.98	10	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID:	957566.0	Verified by:			
Analyst:	Stephanie Jackson				
Method:	SW846 9010B Prep				
Lab SOP:	GL-GC-E-067 REV# 13				
Instrument:	Sartorius Balance B-001				
Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053262	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202053258	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MS	1202053259	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MSD	1202053260	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
MSD	1202053261	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202053255 MB	02-MAR-2010 13:00:00	Soil	0.5	25	50	<12
1202053262 LCS	02-MAR-2010 13:00:00	Soil	0.25	25	100	<12
247770003	02-MAR-2010 13:00:00	Soil	0.56	25	44.64286	<12
247770004	02-MAR-2010 13:00:00	Soil	0.52	25	48.07692	<12
247770005	02-MAR-2010 13:00:00	Soil	0.56	25	44.64286	<12
247770006	02-MAR-2010 13:00:00	Soil	0.52	25	48.07692	<12
247770007	02-MAR-2010 13:00:00	Soil	0.57	25	43.85965	<12
247781001	02-MAR-2010 13:00:00	Soil	0.54	25	46.2963	<12
1202053256 DUP (247781001)	02-MAR-2010 13:00:00	Soil	0.55	25	45.45455	<12
1202053258 MS (247781001)	02-MAR-2010 13:00:00	Soil	0.57	25	43.85965	<12
1202053260 MSD (247781001)	02-MAR-2010 13:00:00	Soil	0.53	25	47.16981	<12
247781002	02-MAR-2010 13:00:00	Soil	0.56	25	44.64286	<12
1202053257 DUP (247781002)	02-MAR-2010 13:00:00	Soil	0.58	25	43.10345	<12
1202053259 MS (247781002)	02-MAR-2010 13:00:00	Soil	0.5	25	50	<12
1202053261 MSD (247781002)	02-MAR-2010 13:00:00	Soil	0.5	25	50	<12
247781003	02-MAR-2010 13:00:00	Soil	0.5	25	50	<12
247781004	02-MAR-2010 13:00:00	Soil	0.56	25	44.64286	<12
247781005	02-MAR-2010 13:00:00	Soil	0.54	25	46.2963	<12
247781006	02-MAR-2010 13:00:00	Soil	0.54	25	46.2963	<12
247781007	02-MAR-2010 13:00:00	Soil	0.58	25	43.10345	<12
247781008	02-MAR-2010 13:00:00	Soil	0.58	25	43.10345	<12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 957566.0
Analyst: Stephanie Jackson
Method: SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-001

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202053262	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202053258	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202053259	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053260	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053261	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
247781009	02-MAR-2010 13:00:00	Soil	0.56	25	44.64286	<12
247781010	02-MAR-2010 13:00:00	Soil	0.51	25	49.01961	<12
247781011	02-MAR-2010 13:00:00	Soil	0.57	25	43.85965	<12
247781012	02-MAR-2010 13:00:00	Soil	0.53	25	47.16981	<12
247781013	02-MAR-2010 13:00:00	Soil	0.58	25	43.10345	<12
247781014	02-MAR-2010 13:00:00	Soil	0.51	25	49.01961	<12
247781015	02-MAR-2010 13:00:00	Soil	0.52	25	48.07692	<12

Reagent/Solvent Lot ID	Description	Amount	Comments:
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	
1273851-C	0.25N Sodium Hydroxide Solution	25 mL	

Prep Logbook

Cyanide Sample Distillation

Batch ID:	956937.0	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Alan Stanley			LCS	1202051808	Total Cyanide Solid LCS	URF1200957-01	.25	g
Method:	SW846 9010C Distillation	SW846 9010B Prep		MS	1202051804	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
Lab SOP:	GL-GC-E-067 REV# 13			MS	1202051805	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
Instrument:	Sartorius Balance B-007			MSD	1202051806	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
				MSD	1202051807	MS, ICV Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL

Sample ID	Run Date	Matrix	Initial Weight (g)	Final Volume (mL)	Prep Factor (mL/g)	pH Check 1
1202051801 MB	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
1202051808 LCS	01-MAR-2010 12:55:00	Soil	0.25	25	100	>12
247539004	01-MAR-2010 12:55:00	Soil	0.58	25	43.10345	>12
1202051802 DUP (247539004)	01-MAR-2010 12:55:00	Soil	0.58	25	43.10345	>12
1202051804 MS (247539004)	01-MAR-2010 12:55:00	Soil	0.55	25	45.45455	>12
1202051806 MSD (247539004)	01-MAR-2010 12:55:00	Soil	0.53	25	47.16981	>12
247539005	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
1202051803 DUP (247539005)	01-MAR-2010 12:55:00	Soil	0.57	25	43.85965	>12
1202051805 MS (247539005)	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
1202051807 MSD (247539005)	01-MAR-2010 12:55:00	Soil	0.52	25	48.07692	>12
247539006	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
247539007	01-MAR-2010 12:55:00	Soil	0.55	25	45.45455	>12
247539008	01-MAR-2010 12:55:00	Soil	0.54	25	46.2963	>12
247539009	01-MAR-2010 12:55:00	Soil	0.55	25	45.45455	>12
247539010	01-MAR-2010 12:55:00	Soil	0.51	25	49.01961	>12
247539011	01-MAR-2010 12:55:00	Soil	0.55	25	45.45455	>12
247544001	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
247544002	01-MAR-2010 12:55:00	Soil	0.53	25	47.16981	>12
247544003	01-MAR-2010 12:55:00	Soil	0.55	25	45.45455	>12
247544004	01-MAR-2010 12:55:00	Soil	0.52	25	48.07692	>12
247546001	01-MAR-2010 12:55:00	Soil	0.57	25	43.85965	>12

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GEL Laboratories LLC

Prep Logbook

Batch ID: 956937.0
Analyst: Alan Stanley
Method: SW846 9010C Distillation SW846 9010B Prep
Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

Verified by:

Type	Sample id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202051808	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202051804	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202051805	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202051806	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202051807	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
247546002	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
247546003	01-MAR-2010 12:55:00	Soil	0.52	25	48.07692	>12
247546004	01-MAR-2010 12:55:00	Soil	0.55	25	45.45455	>12
247550001	01-MAR-2010 12:55:00	Soil	0.51	25	49.01961	>12
247770001	01-MAR-2010 12:55:00	Soil	0.51	25	49.01961	>12
247770002	01-MAR-2010 12:55:00	Soil	0.5	25	50	>12
247831001	01-MAR-2010 12:55:00	Solid	0.57	25	43.85965	>12

Reagent/Solvent Lot ID	Description	Amount	Comments:
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	
1273851-C	0.25N Sodium Hydroxide Solution	25 mL	
WCN100302-07	150 ppb CN Distilled ICV Standard	.0375 mL	

Prep Logbook

Cyanide Sample Distillation

Batch ID:	957568.0	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	1202053270	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202053266	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202053267	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053268	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053269	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
1202053263 MB	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
1202053270 LCS	02-MAR-2010 15:28:00	Soil	0.25	25	100	>12
247770008	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
1202053264 DUP (247770008)	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
1202053266 MS (247770008)	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
1202053268 MSD (247770008)	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247770009	02-MAR-2010 15:28:00	Soil	0.53	25	47.16981	>12
1202053265 DUP (247770009)	02-MAR-2010 15:28:00	Soil	0.55	25	45.45455	>12
1202053267 MS (247770009)	02-MAR-2010 15:28:00	Soil	0.52	25	48.07692	>12
1202053269 MSD (247770009)	02-MAR-2010 15:28:00	Soil	0.54	25	46.2963	>12
247770010	02-MAR-2010 15:28:00	Soil	0.54	25	46.2963	>12
247770011	02-MAR-2010 15:28:00	Soil	0.58	25	43.10345	>12
247784002	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247790002	02-MAR-2010 15:28:00	Soil	0.56	25	44.64286	>12
247790003	02-MAR-2010 15:28:00	Soil	0.57	25	43.85965	>12
247794001	02-MAR-2010 15:28:00	Soil	0.52	25	48.07692	>12
247794002	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247794003	02-MAR-2010 15:28:00	Soil	0.56	25	44.64286	>12
247794004	02-MAR-2010 15:28:00	Soil	0.55	25	45.45455	>12
247794005	02-MAR-2010 15:28:00	Soil	0.57	25	43.85965	>12
247806001	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12

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GEL Laboratories LLC

Prep Logbook

Batch ID: 957568.0
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	1202053270	Total Cyanide Solid LCS	URF1200957-01	.25	g
MS	1202053266	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202053267	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053268	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053269	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
247806002	02-MAR-2010 15:28:00	Soil	0.53	25	47.16981	>12
247806003	02-MAR-2010 15:28:00	Soil	0.52	25	48.07692	>12
247806004	02-MAR-2010 15:28:00	Soil	0.53	25	47.16981	>12
247806005	02-MAR-2010 15:28:00	Soil	0.51	25	49.01961	>12
247806006	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
247855002	02-MAR-2010 15:28:00	Soil	0.5	25	50	>12
247902001	02-MAR-2010 15:28:00	Misc Solid	0.53	25	47.16981	>12

Reagent/Solvent Lot ID	Description	Amount	Comments:
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	
1273851-C	0.25N Sodium Hydroxide Solution	25 mL	
WCN100302-07	150 ppb CN Distilled ICV Standard	.0375 mL	

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/2/2010 8:46:36	OM_3-2-2010_08-43-10
150 ppb		1	axc2	3/2/2010 8:47:27	OM_3-2-2010_08-43-10
100 ppb		1	axc2	3/2/2010 8:48:20	OM_3-2-2010_08-43-10
50 ppb		1	axc2	3/2/2010 8:49:13	OM_3-2-2010_08-43-10
10 ppb		1	axc2	3/2/2010 8:50:06	OM_3-2-2010_08-43-10
CRDL 5.0 ppb		1	axc2	3/2/2010 8:51:00	OM_3-2-2010_08-43-10
ICAL-00		1	axc2	3/2/2010 8:51:54	OM_3-2-2010_08-43-10
ICV		1	axc2	3/2/2010 8:53:45	OM_3-2-2010_08-43-10
ICB		1	axc2	3/2/2010 8:55:35	OM_3-2-2010_08-43-10
CRDL		1	axc2	3/2/2010 8:57:25	OM_3-2-2010_08-43-10
1202053271	957571	1	axc2	3/2/2010 8:59:13	OM_3-2-2010_08-43-10
1202053278*	957571	25	axc2	3/2/2010 9:00:05	OM_3-2-2010_08-43-10
247806007	957571	1	axc2	3/2/2010 9:00:59	OM_3-2-2010_08-43-10
1202053272	957571	1	axc2	3/2/2010 9:01:53	OM_3-2-2010_08-43-10
1202053274	957571	1	axc2	3/2/2010 9:02:46	OM_3-2-2010_08-43-10
1202053276	957571	1	axc2	3/2/2010 9:03:40	OM_3-2-2010_08-43-10
247806008	957571	1	axc2	3/2/2010 9:04:33	OM_3-2-2010_08-43-10
1202053273	957571	1	axc2	3/2/2010 9:05:26	OM_3-2-2010_08-43-10
1202053275	957571	1	axc2	3/2/2010 9:06:19	OM_3-2-2010_08-43-10
1202053277	957571	1	axc2	3/2/2010 9:07:12	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:08:05	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:09:55	OM_3-2-2010_08-43-10
1202053278	957571	25	axc2	3/2/2010 9:11:42	OM_3-2-2010_08-43-10
247806009	957571	1	axc2	3/2/2010 9:12:35	OM_3-2-2010_08-43-10
247806010	957571	1	axc2	3/2/2010 9:13:28	OM_3-2-2010_08-43-10
247806011	957571	1	axc2	3/2/2010 9:14:20	OM_3-2-2010_08-43-10
247806012	957571	1	axc2	3/2/2010 9:15:13	OM_3-2-2010_08-43-10
247822001	957571	1	axc2	3/2/2010 9:16:04	OM_3-2-2010_08-43-10
247822002	957571	1	axc2	3/2/2010 9:16:57	OM_3-2-2010_08-43-10
247822003	957571	1	axc2	3/2/2010 9:17:49	OM_3-2-2010_08-43-10
247822004	957571	1	axc2	3/2/2010 9:18:43	OM_3-2-2010_08-43-10
247822005	957571	1	axc2	3/2/2010 9:19:37	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:20:30	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:22:20	OM_3-2-2010_08-43-10
247822006	957571	1	axc2	3/2/2010 9:24:10	OM_3-2-2010_08-43-10
247840001	957571	1	axc2	3/2/2010 9:25:03	OM_3-2-2010_08-43-10
247840002	957571	1	axc2	3/2/2010 9:25:56	OM_3-2-2010_08-43-10
247840003	957571	1	axc2	3/2/2010 9:26:50	OM_3-2-2010_08-43-10
247842001	957571	1	axc2	3/2/2010 9:27:43	OM_3-2-2010_08-43-10
247842002	957571	1	axc2	3/2/2010 9:28:37	OM_3-2-2010_08-43-10
247842003	957571	1	axc2	3/2/2010 9:29:29	OM_3-2-2010_08-43-10
247842004	957571	1	axc2	3/2/2010 9:30:22	OM_3-2-2010_08-43-10
247905001	957571	1	axc2	3/2/2010 9:31:14	OM_3-2-2010_08-43-10
1202053252	957563	1	axc2	3/2/2010 9:32:07	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:32:59	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:34:51	OM_3-2-2010_08-43-10
1202053254	957563	1	axc2	3/2/2010 9:36:38	OM_3-2-2010_08-43-10
247831001	957563	1	axc2	3/2/2010 9:37:31	OM_3-2-2010_08-43-10
1202053253	957563	1	axc2	3/2/2010 9:38:22	OM_3-2-2010_08-43-10
247840001	957563	1	axc2	3/2/2010 9:39:17	OM_3-2-2010_08-43-10
247840002	957563	1	axc2	3/2/2010 9:40:12	OM_3-2-2010_08-43-10
247840003	957563	1	axc2	3/2/2010 9:41:05	OM_3-2-2010_08-43-10
247842001	957563	1	axc2	3/2/2010 9:41:59	OM_3-2-2010_08-43-10
247842002	957563	1	axc2	3/2/2010 9:42:53	OM_3-2-2010_08-43-10
247842003	957563	1	axc2	3/2/2010 9:43:46	OM_3-2-2010_08-43-10
247842004	957563	1	axc2	3/2/2010 9:44:39	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:45:32	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:47:22	OM_3-2-2010_08-43-10

247902001	957563	1	axc2	3/2/2010	9:49:11	OM_3-2-2010_08-43-10
247905001	957563	1	axc2	3/2/2010	9:50:04	OM_3-2-2010_08-43-10
1202054733	958153	1	axc2	3/2/2010	9:50:57	OM_3-2-2010_08-43-10
1202054740	958153	25	axc2	3/2/2010	9:51:50	OM_3-2-2010_08-43-10
247838002	958153	1	axc2	3/2/2010	9:52:42	OM_3-2-2010_08-43-10
248037001	958153	1	axc2	3/2/2010	9:53:36	OM_3-2-2010_08-43-10
1202054734	958153	1	axc2	3/2/2010	9:54:28	OM_3-2-2010_08-43-10
1202054736	958153	1	axc2	3/2/2010	9:55:20	OM_3-2-2010_08-43-10
1202054738	958153	1	axc2	3/2/2010	9:56:14	OM_3-2-2010_08-43-10
248037002	958153	1	axc2	3/2/2010	9:57:09	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	9:58:00	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	9:59:51	OM_3-2-2010_08-43-10
1202054735	958153	1	axc2	3/2/2010	10:01:42	OM_3-2-2010_08-43-10
1202054737	958153	1	axc2	3/2/2010	10:02:36	OM_3-2-2010_08-43-10
1202054739	958153	1	axc2	3/2/2010	10:03:30	OM_3-2-2010_08-43-10
248037003	958153	1	axc2	3/2/2010	10:04:24	OM_3-2-2010_08-43-10
248037004	958153	1	axc2	3/2/2010	10:05:18	OM_3-2-2010_08-43-10
248037005	958153	1	axc2	3/2/2010	10:06:10	OM_3-2-2010_08-43-10
248037006	958153	1	axc2	3/2/2010	10:07:03	OM_3-2-2010_08-43-10
248037007	958153	1	axc2	3/2/2010	10:07:56	OM_3-2-2010_08-43-10
248037008	958153	1	axc2	3/2/2010	10:08:50	OM_3-2-2010_08-43-10
248037009	958153	1	axc2	3/2/2010	10:09:42	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:10:35	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	10:12:25	OM_3-2-2010_08-43-10
248037010*	958153	1	axc2	3/2/2010	10:14:13	OM_3-2-2010_08-43-10
248037011*	958153	1	axc2	3/2/2010	10:15:06	OM_3-2-2010_08-43-10
248037012*	958153	1	axc2	3/2/2010	10:15:59	OM_3-2-2010_08-43-10
248037013*	958153	1	axc2	3/2/2010	10:16:53	OM_3-2-2010_08-43-10
248037014*	958153	1	axc2	3/2/2010	10:17:48	OM_3-2-2010_08-43-10
248037015*	958153	1	axc2	3/2/2010	10:18:42	OM_3-2-2010_08-43-10
248037016*	958153	1	axc2	3/2/2010	10:19:36	OM_3-2-2010_08-43-10
248037017*	958153	1	axc2	3/2/2010	10:20:31	OM_3-2-2010_08-43-10
248037018*	958153	1	axc2	3/2/2010	10:21:26	OM_3-2-2010_08-43-10
248037019*	958153	1	axc2	3/2/2010	10:22:19	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:23:11	OM_3-2-2010_08-43-10

Original Run Filename: OM_3-2-2010_08-43-10.OMN created 3/2/2010 08:43:10
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_08-43-10.OMN last modified 3/2/2010 10:24:17
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1 TCYANIDE		Detection Time	ADF	MDF	Description
			Conc. (ug/L)	Area (Vs)				
WCN100302-01	1	S1	200	9.17	3/2/2010@08:46:36			200 ppb
WCN100302-02	1	S2	150	7.02	3/2/2010@08:47:27			150 ppb
WCN100302-03	1	S3	100	4.67	3/2/2010@08:48:20			100 ppb
WCN100302-04	1	S4	50.0	2.38	3/2/2010@08:49:13			50 ppb
WCN100302-05	1	S5	10.0	0.547	3/2/2010@08:50:06			10 ppb
WCN100302-06	1	S6	5.00	0.398	3/2/2010@08:51:00			CRDL 5.0 ppb
WCN100302-08	1	S7	0.00	0.0805	3/2/2010@08:51:54			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99991 > 0.99500					
Message			Pass					
Action			Continue					
WCN100302-07	1	S8	144	6.68	3/2/2010@08:53:45			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100302-08	1	S7	-1.14	0.0645	3/2/2010@08:55:35			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.14 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.14 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100302-06	1	S6	4.39	0.316	3/2/2010@08:57:25			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			4.39 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.39 > 2.50					
Message			Pass					
Action			None					
1202053271|957571|MB	1	29	-1.73	0.0380	3/2/2010@08:59:13			
1202053278|LCS	1	30	491	22.5	3/2/2010@09:00:05		25.00	
247806007	1	31	-1.20	0.0620	3/2/2010@09:00:59			
1202053272|DUP	1	32	0.127	0.122	3/2/2010@09:01:53			
1202053274|MS	1	33	89.2	4.18	3/2/2010@09:02:46			
1202053276|MSD	1	34	73.9	3.48	3/2/2010@09:03:40			
247806008	1	35	2.38	0.225	3/2/2010@09:04:33			
1202053273|DUP	1	36	2.16	0.215	3/2/2010@09:05:26			
1202053275|MS	1	37	51.3	2.45	3/2/2010@09:06:19			
1202053277|MSD	1	38	45.8	2.20	3/2/2010@09:07:12			
WCN100302-03	1	S3	106	4.92	3/2/2010@09:08:05			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.6 < 10.0					

		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	5.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100302-08	1	S7	-1.95	0.0279	3/2/2010@09:09:55		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-1.95 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-1.95 > -5.00				
		Message	CCB Passed				
		Action	Continue				
1202053278|LCS	1	30	19.6	1.01	3/2/2010@09:11:42	25.00	
247806009	1	39	-1.05	0.0686	3/2/2010@09:12:35		
247806010	1	40	-0.889	0.0760	3/2/2010@09:13:28		
247806011	1	41	-1.37	0.0543	3/2/2010@09:14:20		
247806012	1	42	-2.58	-8.78e-4	3/2/2010@09:15:13		
247822001	1	43	-1.79	0.0348	3/2/2010@09:16:04		
247822002	1	44	-2.00	0.0255	3/2/2010@09:16:57		
247822003	1	45	-1.52	0.0472	3/2/2010@09:17:49		
247822004	1	46	-2.00	0.0252	3/2/2010@09:18:43		
247822005	1	47	-2.01	0.0252	3/2/2010@09:19:37		
WCN100302-03	1	S3	106	4.92	3/2/2010@09:20:30		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	5.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	5.6 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100302-08	1	S7	-2.66	-0.00455	3/2/2010@09:22:20		CCB
		Known Conc:	0.00				
DQM Test: > + Concentration Limit							
		Result:	-2.66 < 5.00				
		Message	CCB Passed				
		Action	Continue				
DQM Test: < - Concentration Limit							
		Result:	-2.66 > -5.00				
		Message	CCB Passed				
		Action	Continue				
247822006	1	48	-0.812	0.0795	3/2/2010@09:24:10		
247840001	1	49	-0.505	0.0935	3/2/2010@09:25:03		
247840002	1	50	-1.81	0.0341	3/2/2010@09:25:56		
247840003	1	51	-0.808	0.0797	3/2/2010@09:26:50		
247842001	1	52	-0.181	0.108	3/2/2010@09:27:43		
247842002	1	53	3.80	0.289	3/2/2010@09:28:37		
247842003	1	54	-0.365	0.0999	3/2/2010@09:29:29		
247842004	1	55	0.0716	0.120	3/2/2010@09:30:22		
247905001	1	56	1.52e+3	69.3	3/2/2010@09:31:14		
1202053252|957563|MB	1	57	0.312	0.131	3/2/2010@09:32:07		
WCN100302-03	1	S3	107	5.00	3/2/2010@09:32:59		CCV
		Known Conc:	100				
DQM Test: > + Percent Relative Difference							
		Result:	7.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
DQM Test: < - Percent Relative Difference							
		Result:	7.2 < 10.0				
		Message	CCV Passed				
		Action	Continue				
WCN100302-08	1	S7	-2.71	-0.00706	3/2/2010@09:34:51		CCB
		Known Conc:	0.00				

DQM Test: > + Concentration Limit						
Result:		-2.71 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.71 > -5.00				
Message		CCB Passed				
Action		Continue				
1202053254||LCS	1	58	-1.30	0.0574	3/2/2010@09:36:38	
247831001	1	59	21.5	1.10	3/2/2010@09:37:31	
1202053253||DUP	1	60	18.0	0.935	3/2/2010@09:38:22	
247840001	1	61	18.8	0.974	3/2/2010@09:39:17	
247840002	1	62	-0.323	0.102	3/2/2010@09:40:12	
247840003	1	63	18.0	0.935	3/2/2010@09:41:05	
247842001	1	64	20.6	1.06	3/2/2010@09:41:59	
247842002	1	65	19.2	0.992	3/2/2010@09:42:53	
247842003	1	66	14.2	0.761	3/2/2010@09:43:46	
247842004	1	67	20.6	1.05	3/2/2010@09:44:39	
WCN100302-03	1	S3	107	4.99	3/2/2010@09:45:32	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.56	-1.26e-4	3/2/2010@09:47:22	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.56 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.56 > -5.00				
Message		CCB Passed				
Action		Continue				
247902001	1	68	1.41e+3	64.1	3/2/2010@09:49:11	
247905001	1	69	1.23e+3	56.2	3/2/2010@09:50:04	
1202054733|958153|MB	1	70	-0.200	0.107	3/2/2010@09:50:57	
1202054740||LCS	1	71	17.4	0.907	3/2/2010@09:51:50	25.00
247838002	1	72	-0.972	0.0723	3/2/2010@09:52:42	
248037001	1	73	-1.62	0.0428	3/2/2010@09:53:36	
1202054734||DUP	1	74	-1.80	0.0346	3/2/2010@09:54:28	
1202054736||MS	1	75	107	4.98	3/2/2010@09:55:20	
1202054738||MSD	1	76	104	4.83	3/2/2010@09:56:14	
248037002	1	77	-0.939	0.0738	3/2/2010@09:57:09	
WCN100302-03	1	S3	107	5.00	3/2/2010@09:58:00	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.55	3.95e-4	3/2/2010@09:59:51	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.55 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.55 > -5.00				
Message		CCB Passed				
Action		Continue				

1202054735	DUP	1	78	-1.07	0.0678	3/2/2010@10:01:42		
1202054737	MS	1	79	98.6	4.61	3/2/2010@10:02:36		
1202054739	MSD	1	80	96.1	4.49	3/2/2010@10:03:30		
248037003		1	81	0.707	0.149	3/2/2010@10:04:24		
248037004		1	82	1.09	0.166	3/2/2010@10:05:18		
248037005		1	83	0.359	0.133	3/2/2010@10:06:10		
248037006		1	84	0.328	0.131	3/2/2010@10:07:03		
248037007		1	85	0.0201	0.117	3/2/2010@10:07:56		
248037008		1	86	-2.66	-0.00454	3/2/2010@10:08:50		
248037009		1	87	-2.26	0.0136	3/2/2010@10:09:42		
WCN100302-03		1	S3	108	5.03	3/2/2010@10:10:35		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				7.8 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				7.8 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100302-08		1	S7	-2.63	-0.00301	3/2/2010@10:12:25		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				-2.63 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				-2.63 > -5.00				
Message				CCB Passed				
Action				Continue				
248037010		1	88	0.394	0.134	3/2/2010@10:14:13		
248037011		1	89	0.366	0.133	3/2/2010@10:15:06		
248037012		1	90	-2.34	0.00976	3/2/2010@10:15:59		
248037013		1	91	-1.30	0.0573	3/2/2010@10:16:53		
248037014		1	92	1.83	0.200	3/2/2010@10:17:48		
248037015		1	93	0.0806	0.120	3/2/2010@10:18:42		
248037016		1	94	-1.39	0.0532	3/2/2010@10:19:36		
248037017		1	95	0.328	0.131	3/2/2010@10:20:31		
248037018		1	96	-1.63	0.0424	3/2/2010@10:21:26		
248037019		1	97	-0.215	0.107	3/2/2010@10:22:19		
WCN100302-03		1	S3	118	5.48	3/2/2010@10:23:11		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				17.8 > 10.0				
Message				CCV Failed				
Action				Stop Run				
DQM Test: < - Percent Relative Difference								
Result:				17.8 > 10.0				
Message				CCV Passed				
Action				Continue				

Analyte Properties Table for OM_3-2-2010_08-43-10.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Chromatogram showing detector response (Volts) versus Time (s). The plot displays numerous peaks, with the most prominent ones labeled with sample IDs and concentrations. Key peaks include WCN100302-03|MB at 1.52e+3 ug/L, WCN100302-03|LCS at 1.23e+3 ug/L, and WCN100302-03|LCS at 1.23e+3 ug/L. The x-axis ranges from 0.4 to 6008.7 seconds, and the y-axis ranges from 0.00 to 6.13 Volts.

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Peak Area(V.s)

9.17

0.00

TCYANIDE concentration, ug/L

200

Area = 0.0455 * Conc + 0.117
Conc = 22.0 * Area - 2.56
Correlation Coefficient (r) = 0.99991

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/2/2010 14:07:11	OM_3-2-2010_14-03-45
CCB		1	axc2	3/2/2010 14:09:02	OM_3-2-2010_14-03-45
1202051801	956938	1	axc2	3/2/2010 14:10:52	OM_3-2-2010_14-03-45
1202051808	956938	25	axc2	3/2/2010 14:11:45	OM_3-2-2010_14-03-45
247539004	956938	1	axc2	3/2/2010 14:12:38	OM_3-2-2010_14-03-45
1202051802	956938	1	axc2	3/2/2010 14:13:31	OM_3-2-2010_14-03-45
1202051804	956938	1	axc2	3/2/2010 14:14:25	OM_3-2-2010_14-03-45
1202051806	956938	1	axc2	3/2/2010 14:15:17	OM_3-2-2010_14-03-45
247539005	956938	1	axc2	3/2/2010 14:16:10	OM_3-2-2010_14-03-45
1202051803	956938	1	axc2	3/2/2010 14:17:02	OM_3-2-2010_14-03-45
1202051805	956938	1	axc2	3/2/2010 14:17:55	OM_3-2-2010_14-03-45
1202051807	956938	1	axc2	3/2/2010 14:18:47	OM_3-2-2010_14-03-45
CCV		1	axc2	3/2/2010 14:19:40	OM_3-2-2010_14-03-45
CCB		1	axc2	3/2/2010 14:21:30	OM_3-2-2010_14-03-45
247539006	956938	1	axc2	3/2/2010 14:23:18	OM_3-2-2010_14-03-45
247539007	956938	1	axc2	3/2/2010 14:24:10	OM_3-2-2010_14-03-45
247539008	956938	1	axc2	3/2/2010 14:25:02	OM_3-2-2010_14-03-45
247539009	956938	1	axc2	3/2/2010 14:25:54	OM_3-2-2010_14-03-45
247539010	956938	1	axc2	3/2/2010 14:26:45	OM_3-2-2010_14-03-45
247539011*	956938	1	axc2	3/2/2010 14:27:39	OM_3-2-2010_14-03-45
247544001	956938	1	axc2	3/2/2010 14:28:33	OM_3-2-2010_14-03-45
247544002	956938	1	axc2	3/2/2010 14:29:26	OM_3-2-2010_14-03-45
247544003	956938	1	axc2	3/2/2010 14:30:20	OM_3-2-2010_14-03-45
247544004	956938	1	axc2	3/2/2010 14:31:12	OM_3-2-2010_14-03-45
CCV		1	axc2	3/2/2010 14:32:05	OM_3-2-2010_14-03-45
CCB		1	axc2	3/2/2010 14:33:56	OM_3-2-2010_14-03-45
247539011*	956938	1	axc2	3/2/2010 14:35:46	OM_3-2-2010_14-03-45
247546001*	956938	1	axc2	3/2/2010 14:36:38	OM_3-2-2010_14-03-45
247546002*	956938	1	axc2	3/2/2010 14:37:31	OM_3-2-2010_14-03-45
247546003*	956938	1	axc2	3/2/2010 14:38:24	OM_3-2-2010_14-03-45
247546004*	956938	1	axc2	3/2/2010 14:39:17	OM_3-2-2010_14-03-45
247550001*	956938	1	axc2	3/2/2010 14:40:09	OM_3-2-2010_14-03-45
247770001*	956938	1	axc2	3/2/2010 14:41:01	OM_3-2-2010_14-03-45
247770002*	956938	1	axc2	3/2/2010 14:41:54	OM_3-2-2010_14-03-45
247831001*	956938	1	axc2	3/2/2010 14:42:46	OM_3-2-2010_14-03-45
247546004*	956938	1	axc2	3/2/2010 14:43:38	OM_3-2-2010_14-03-45
CCV		1	axc2	3/2/2010 14:44:31	OM_3-2-2010_14-03-45

Original Run Filename: OM_3-2-2010_14-03-45.OMN created 3/2/2010 14:03:45
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_14-03-45.OMN last modified 3/2/2010 14:45:35
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE	Area				
			Conc. (ug/L)	(Vs)				
WCN100302-03	1	S3	101	4.73	3/2/2010@14:07:11			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			1.3 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			1.3 < 10.0					
Message			CCV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100302-08	1	S7	-2.71	-0.00666	3/2/2010@14:09:02			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.71 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.71 > -5.00					
Message			CCB Passed					
Action			Continue					
1202051801|956938|MB	1	1	-1.65	0.0415	3/2/2010@14:10:52			
1202051808|LCS	1	2	22.7	1.15	3/2/2010@14:11:45		25.00	
247539004	1	3	-0.636	0.0876	3/2/2010@14:12:38			
1202051802|DUP	1	4	-0.0672	0.113	3/2/2010@14:13:31			
1202051804|MS	1	5	101	4.70	3/2/2010@14:14:25			
1202051806|MSD	1	6	102	4.78	3/2/2010@14:15:17			
247539005	1	7	-1.37	0.0543	3/2/2010@14:16:10			
1202051803|DUP	1	8	-1.51	0.0477	3/2/2010@14:17:02			
1202051805|MS	1	9	101	4.72	3/2/2010@14:17:55			
1202051807|MSD	1	10	103	4.80	3/2/2010@14:18:47			
WCN100302-03	1	S3	106	4.93	3/2/2010@14:19:40			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.81e-4	3/2/2010@14:21:30			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
247539006	1	11	-0.401	0.0982	3/2/2010@14:23:18			
247539007	1	12	-1.65	0.0413	3/2/2010@14:24:10			
247539008	1	13	-0.157	0.109	3/2/2010@14:25:02			
247539009	1	14	-2.28	0.0129	3/2/2010@14:25:54			
247539010	1	15	-1.79	0.0349	3/2/2010@14:26:45			

247539011	1	16	-12.1	-0.434	3/2/2010@14:27:39		
247544001	1	17	-1.85	0.0323	3/2/2010@14:28:33		
247544002	1	18	-1.49	0.0486	3/2/2010@14:29:26		
247544003	1	19	-1.88	0.0310	3/2/2010@14:30:20		
247544004	1	20	-1.60	0.0436	3/2/2010@14:31:12		
WCN100302-03	1	S3	108	5.03	3/2/2010@14:32:05		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			7.8 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			7.8 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.77	0.0361	3/2/2010@14:33:56		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.77 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.77 > -5.00				
Message			CCB Passed				
Action			Continue				
247539011	1	16	-0.0785	0.113	3/2/2010@14:35:46		
247546001	1	21	-2.56	-1.11e-4	3/2/2010@14:36:38		
247546002	1	22	-2.00	0.0255	3/2/2010@14:37:31		
247546003	1	23	-1.47	0.0494	3/2/2010@14:38:24		
247546004	1	24	-5.64	-0.140	3/2/2010@14:39:17		
247550001	1	25	-3.03	-0.0215	3/2/2010@14:40:09		
247770001	1	26	-2.95	-0.0180	3/2/2010@14:41:01		
247770002	1	27	-2.55	3.72e-4	3/2/2010@14:41:54		
247831001	1	28	-0.914	0.0749	3/2/2010@14:42:46		
247546004	1	24	-2.70	-0.00622	3/2/2010@14:43:38		
WCN100302-03	1	S3	111	5.19	3/2/2010@14:44:31		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			11.3 > 10.0				
Message			CCV Failed				
Action			Stop Run				
DQM Test: < - Percent Relative Difference							
Result:			11.3 > 10.0				
Message			CCV Passed				
Action			Continue				

Analyte Properties Table for OM_3-2-2010_14-03-45.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

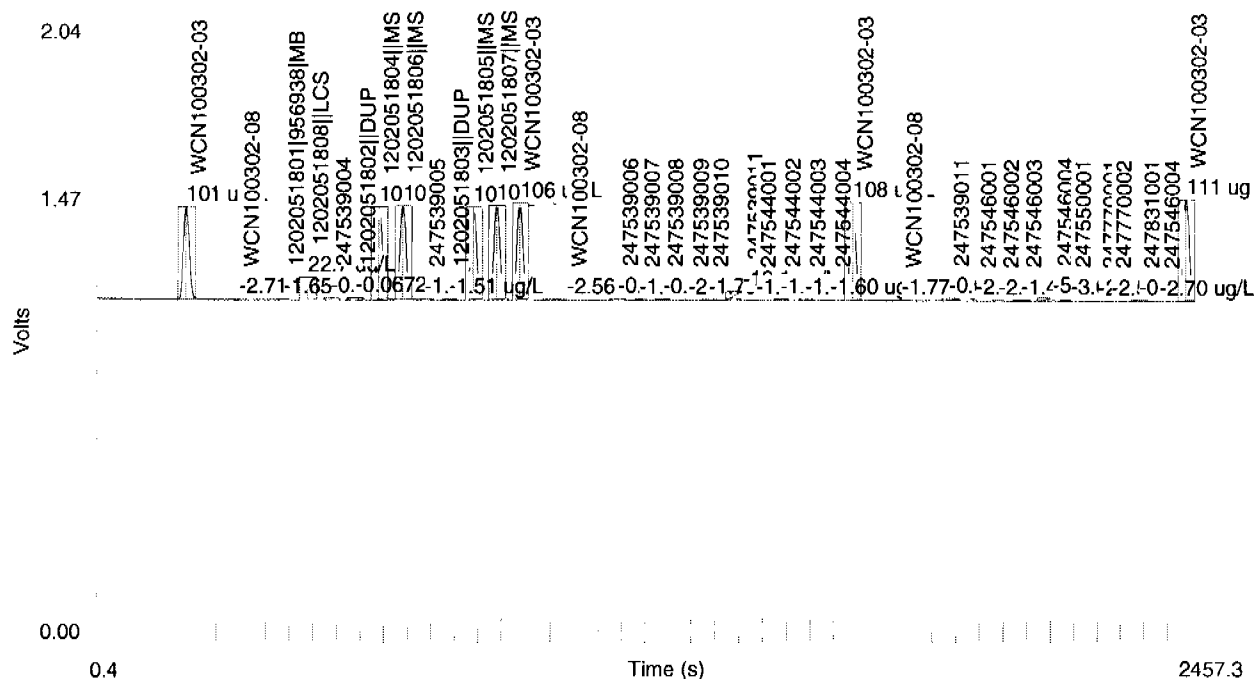
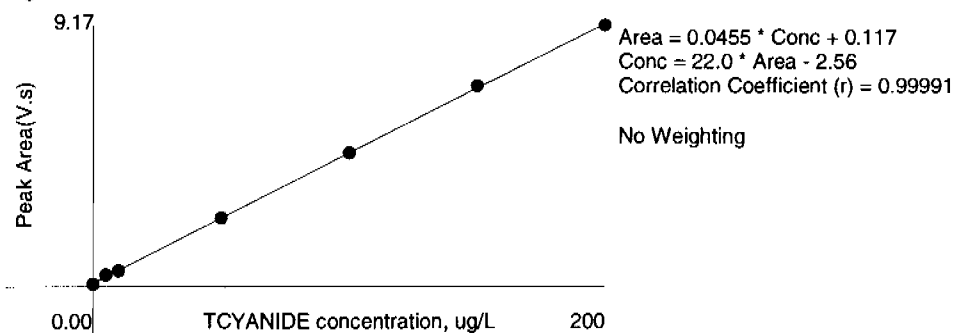


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Figure 1: TCYANIDE



This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/2/2010 14:51:53	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 14:53:44	OM_3-2-2010_14-50-22
247539011	956938	1	axc2	3/2/2010 14:55:33	OM_3-2-2010_14-50-22
247546001	956938	1	axc2	3/2/2010 14:56:26	OM_3-2-2010_14-50-22
247546002	956938	1	axc2	3/2/2010 14:57:19	OM_3-2-2010_14-50-22
247546003	956938	1	axc2	3/2/2010 14:58:12	OM_3-2-2010_14-50-22
247546004	956938	1	axc2	3/2/2010 14:59:05	OM_3-2-2010_14-50-22
247550001	956938	1	axc2	3/2/2010 14:59:57	OM_3-2-2010_14-50-22
247770001	956938	1	axc2	3/2/2010 15:00:49	OM_3-2-2010_14-50-22
247770002	956938	1	axc2	3/2/2010 15:01:42	OM_3-2-2010_14-50-22
247831001	956938	1	axc2	3/2/2010 15:02:33	OM_3-2-2010_14-50-22
1202049763*	955994	1	axc2	3/2/2010 15:03:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:04:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:06:08	OM_3-2-2010_14-50-22
1202049763	955994	1	axc2	3/2/2010 15:07:57	OM_3-2-2010_14-50-22
1202049770	955994	25	axc2	3/2/2010 15:08:48	OM_3-2-2010_14-50-22
247321007	955994	1	axc2	3/2/2010 15:09:43	OM_3-2-2010_14-50-22
1202049764	955994	1	axc2	3/2/2010 15:10:37	OM_3-2-2010_14-50-22
1202049766	955994	1	axc2	3/2/2010 15:11:30	OM_3-2-2010_14-50-22
1202049768	955994	1	axc2	3/2/2010 15:12:23	OM_3-2-2010_14-50-22
247325001	955994	1	axc2	3/2/2010 15:13:17	OM_3-2-2010_14-50-22
1202049765	955994	1	axc2	3/2/2010 15:14:10	OM_3-2-2010_14-50-22
1202049767	955994	1	axc2	3/2/2010 15:15:03	OM_3-2-2010_14-50-22
1202049769	955994	1	axc2	3/2/2010 15:15:56	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:16:48	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:18:39	OM_3-2-2010_14-50-22
247456001	955994	1	axc2	3/2/2010 15:20:27	OM_3-2-2010_14-50-22
247456002	955994	1	axc2	3/2/2010 15:21:20	OM_3-2-2010_14-50-22
247456003	955994	1	axc2	3/2/2010 15:22:12	OM_3-2-2010_14-50-22
247456004	955994	1	axc2	3/2/2010 15:23:05	OM_3-2-2010_14-50-22
247456005	955994	1	axc2	3/2/2010 15:23:57	OM_3-2-2010_14-50-22
247456006	955994	1	axc2	3/2/2010 15:24:49	OM_3-2-2010_14-50-22
247463001	955994	1	axc2	3/2/2010 15:25:41	OM_3-2-2010_14-50-22
247463002	955994	1	axc2	3/2/2010 15:26:35	OM_3-2-2010_14-50-22
247463003	955994	1	axc2	3/2/2010 15:27:29	OM_3-2-2010_14-50-22
247463004	955994	1	axc2	3/2/2010 15:28:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:29:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:31:06	OM_3-2-2010_14-50-22
247463005	955994	1	axc2	3/2/2010 15:32:56	OM_3-2-2010_14-50-22
247463006	955994	1	axc2	3/2/2010 15:33:49	OM_3-2-2010_14-50-22
247469001	955994	1	axc2	3/2/2010 15:34:42	OM_3-2-2010_14-50-22
247469002	955994	1	axc2	3/2/2010 15:35:36	OM_3-2-2010_14-50-22
247469003*	955994	1	axc2	3/2/2010 15:36:28	OM_3-2-2010_14-50-22
247539001	955994	1	axc2	3/2/2010 15:37:21	OM_3-2-2010_14-50-22
247539002	955994	1	axc2	3/2/2010 15:38:14	OM_3-2-2010_14-50-22
247539003	955994	1	axc2	3/2/2010 15:39:07	OM_3-2-2010_14-50-22
1202051809	956940	1	axc2	3/2/2010 15:39:59	OM_3-2-2010_14-50-22
1202051813	956940	1	axc2	3/2/2010 15:40:51	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:41:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:43:34	OM_3-2-2010_14-50-22
247771001	956940	1	axc2	3/2/2010 15:45:22	OM_3-2-2010_14-50-22
1202053279	956940	1	axc2	3/2/2010 15:46:14	OM_3-2-2010_14-50-22
1202053280	956940	1	axc2	3/2/2010 15:47:08	OM_3-2-2010_14-50-22
1202053281	956940	1	axc2	3/2/2010 15:48:02	OM_3-2-2010_14-50-22
247780001	956940	1	axc2	3/2/2010 15:48:57	OM_3-2-2010_14-50-22
247793001	956940	1	axc2	3/2/2010 15:49:50	OM_3-2-2010_14-50-22
247807001	956940	1	axc2	3/2/2010 15:50:43	OM_3-2-2010_14-50-22
247807002	956940	1	axc2	3/2/2010 15:51:37	OM_3-2-2010_14-50-22

247807003	956940	1	axc2	3/2/2010	15:52:31	OM_3-2-2010_14-50-22
247807004	956940	1	axc2	3/2/2010	15:53:24	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	15:54:17	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	15:56:06	OM_3-2-2010_14-50-22
247817002	956940	1	axc2	3/2/2010	15:57:55	OM_3-2-2010_14-50-22
1202051810	956940	1	axc2	3/2/2010	15:58:48	OM_3-2-2010_14-50-22
1202051811	956940	1	axc2	3/2/2010	15:59:41	OM_3-2-2010_14-50-22
1202051812	956940	1	axc2	3/2/2010	16:00:34	OM_3-2-2010_14-50-22
247819001	956940	1	axc2	3/2/2010	16:01:26	OM_3-2-2010_14-50-22
247858001	956940	1	axc2	3/2/2010	16:02:19	OM_3-2-2010_14-50-22
247858002	956940	1	axc2	3/2/2010	16:03:11	OM_3-2-2010_14-50-22
247858003	956940	1	axc2	3/2/2010	16:04:05	OM_3-2-2010_14-50-22
247858004	956940	1	axc2	3/2/2010	16:05:00	OM_3-2-2010_14-50-22
247858005	956940	1	axc2	3/2/2010	16:05:54	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:06:46	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:08:37	OM_3-2-2010_14-50-22
247858006	956940	1	axc2	3/2/2010	16:10:27	OM_3-2-2010_14-50-22
1202053255	957567	1	axc2	3/2/2010	16:11:21	OM_3-2-2010_14-50-22
1202053262	957567	25	axc2	3/2/2010	16:12:15	OM_3-2-2010_14-50-22
247770003	957567	1	axc2	3/2/2010	16:13:08	OM_3-2-2010_14-50-22
247770004	957567	1	axc2	3/2/2010	16:14:01	OM_3-2-2010_14-50-22
247770005	957567	1	axc2	3/2/2010	16:14:54	OM_3-2-2010_14-50-22
247770006	957567	1	axc2	3/2/2010	16:15:47	OM_3-2-2010_14-50-22
247770007	957567	1	axc2	3/2/2010	16:16:41	OM_3-2-2010_14-50-22
247781001	957567	1	axc2	3/2/2010	16:17:34	OM_3-2-2010_14-50-22
1202053256	957567	1	axc2	3/2/2010	16:18:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:19:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:21:08	OM_3-2-2010_14-50-22
1202053258	957567	1	axc2	3/2/2010	16:22:57	OM_3-2-2010_14-50-22
1202053260	957567	1	axc2	3/2/2010	16:23:49	OM_3-2-2010_14-50-22
247781002	957567	1	axc2	3/2/2010	16:24:44	OM_3-2-2010_14-50-22
1202053257	957567	1	axc2	3/2/2010	16:25:38	OM_3-2-2010_14-50-22
1202053259	957567	1	axc2	3/2/2010	16:26:32	OM_3-2-2010_14-50-22
1202053261	957567	1	axc2	3/2/2010	16:27:27	OM_3-2-2010_14-50-22
247781003	957567	1	axc2	3/2/2010	16:28:21	OM_3-2-2010_14-50-22
247781004	957567	1	axc2	3/2/2010	16:29:15	OM_3-2-2010_14-50-22
247781005	957567	1	axc2	3/2/2010	16:30:09	OM_3-2-2010_14-50-22
247781006	957567	1	axc2	3/2/2010	16:31:03	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:31:55	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:33:45	OM_3-2-2010_14-50-22
247781007	957567	1	axc2	3/2/2010	16:35:34	OM_3-2-2010_14-50-22
247781008	957567	1	axc2	3/2/2010	16:36:28	OM_3-2-2010_14-50-22
247781009	957567	1	axc2	3/2/2010	16:37:21	OM_3-2-2010_14-50-22
247781010	957567	1	axc2	3/2/2010	16:38:14	OM_3-2-2010_14-50-22
247781011	957567	1	axc2	3/2/2010	16:39:07	OM_3-2-2010_14-50-22
247781012	957567	1	axc2	3/2/2010	16:40:00	OM_3-2-2010_14-50-22
247781013	957567	1	axc2	3/2/2010	16:40:52	OM_3-2-2010_14-50-22
247781014	957567	1	axc2	3/2/2010	16:41:47	OM_3-2-2010_14-50-22
247781015	957567	1	axc2	3/2/2010	16:42:42	OM_3-2-2010_14-50-22
1202053263	957569	1	axc2	3/2/2010	16:43:36	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:44:28	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:46:19	OM_3-2-2010_14-50-22
1202053270	957569	25	axc2	3/2/2010	16:48:09	OM_3-2-2010_14-50-22
247770008	957569	1	axc2	3/2/2010	16:49:03	OM_3-2-2010_14-50-22
1202053264	957569	1	axc2	3/2/2010	16:49:57	OM_3-2-2010_14-50-22
1202053266	957569	1	axc2	3/2/2010	16:50:51	OM_3-2-2010_14-50-22
1202053268	957569	1	axc2	3/2/2010	16:51:45	OM_3-2-2010_14-50-22
247770009	957569	1	axc2	3/2/2010	16:52:39	OM_3-2-2010_14-50-22
1202053265	957569	1	axc2	3/2/2010	16:53:32	OM_3-2-2010_14-50-22
1202053267	957569	1	axc2	3/2/2010	16:54:26	OM_3-2-2010_14-50-22

1202053269	957569	1	axc2	3/2/2010	16:55:19	OM_3-2-2010_14-50-22
247770010	957569	1	axc2	3/2/2010	16:56:12	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:57:04	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:58:55	OM_3-2-2010_14-50-22
247770011	957569	1	axc2	3/2/2010	17:00:44	OM_3-2-2010_14-50-22
247784002	957569	1	axc2	3/2/2010	17:01:37	OM_3-2-2010_14-50-22
247790002	957569	1	axc2	3/2/2010	17:02:32	OM_3-2-2010_14-50-22
247790003	957569	1	axc2	3/2/2010	17:03:26	OM_3-2-2010_14-50-22
247794001	957569	1	axc2	3/2/2010	17:04:21	OM_3-2-2010_14-50-22
247794002	957569	1	axc2	3/2/2010	17:05:15	OM_3-2-2010_14-50-22
247794003	957569	1	axc2	3/2/2010	17:06:10	OM_3-2-2010_14-50-22
247794004	957569	1	axc2	3/2/2010	17:07:04	OM_3-2-2010_14-50-22
247794005	957569	1	axc2	3/2/2010	17:07:58	OM_3-2-2010_14-50-22
247806001	957569	1	axc2	3/2/2010	17:08:52	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:09:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:11:35	OM_3-2-2010_14-50-22
247806002	957569	1	axc2	3/2/2010	17:13:25	OM_3-2-2010_14-50-22
247806003	957569	1	axc2	3/2/2010	17:14:18	OM_3-2-2010_14-50-22
247806004	957569	1	axc2	3/2/2010	17:15:12	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:16:06	OM_3-2-2010_14-50-22
247806006	957569	1	axc2	3/2/2010	17:16:59	OM_3-2-2010_14-50-22
247855002	957569	1	axc2	3/2/2010	17:17:52	OM_3-2-2010_14-50-22
247902001	957569	1	axc2	3/2/2010	17:18:45	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:19:38	OM_3-2-2010_14-50-22
247858001	956940	2	axc2	3/2/2010	17:20:31	OM_3-2-2010_14-50-22
247858002	956940	2	axc2	3/2/2010	17:21:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:22:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:24:05	OM_3-2-2010_14-50-22
247469003	955994	1	axc2	3/2/2010	17:25:55	OM_3-2-2010_14-50-22
247902001	957569	50	axc2	3/2/2010	17:26:48	OM_3-2-2010_14-50-22
247806005	957569	1	axc2	3/2/2010	17:27:41	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:28:34	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:30:24	OM_3-2-2010_14-50-22

Original Run Filename: OM_3-2-2010_14-50-22.OMN created 3/2/2010 14:50:22
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_14-50-22.OMN last modified 3/2/2010 17:31:29
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100302-03	1	S3	107	4.98	3/2/2010@14:51:53			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@14:53:44			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.63 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.63 > -5.00					
Message			CCB Passed					
Action			Continue					
247539011|956938|	1	16	-0.875	0.0767	3/2/2010@14:55:33			
247546001	1	21	-2.72	-0.00747	3/2/2010@14:56:26			
247546002	1	22	-1.55	0.0460	3/2/2010@14:57:19			
247546003	1	23	-2.56	0.00	3/2/2010@14:58:12			
247546004	1	24	-2.51	0.00213	3/2/2010@14:59:05			
247550001	1	25	-1.50	0.0482	3/2/2010@14:59:57			
247770001	1	26	-2.55	3.43e-4	3/2/2010@15:00:49			
247770002	1	27	-2.56	-1.49e-4	3/2/2010@15:01:42			
247831001	1	28	-0.925	0.0744	3/2/2010@15:02:33			
1202049763|955994|MB	1	29	6.09	0.394	3/2/2010@15:03:26			
WCN100302-03	1	S3	107	4.97	3/2/2010@15:04:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.64e-4	3/2/2010@15:06:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
1202049763|955994|MB	1	29	-1.20	0.0618	3/2/2010@15:07:57			
1202049770|LCS	1	30	26.0	1.30	3/2/2010@15:08:48		25.00	
247321007	1	31	-0.848	0.0779	3/2/2010@15:09:43			
1202049764|DUP	1	32	-1.10	0.0663	3/2/2010@15:10:37			
1202049766|MS	1	33	38.7	1.88	3/2/2010@15:11:30			
1202049768|MSD	1	34	55.0	2.62	3/2/2010@15:12:23			

247325001	1	35	2.97	0.252	3/2/2010@15:13:17		
1202049765|DUP	1	36	-1.44	0.0511	3/2/2010@15:14:10		
1202049767|MS	1	37	105	4.89	3/2/2010@15:15:03		
1202049769|MSD	1	38	100	4.68	3/2/2010@15:15:56		
WCN100302-03	1	S3	106	4.94	3/2/2010@15:16:48		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.9 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.9 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@15:18:39		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.63 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.63 > -5.00				
Message			CCB Passed				
Action			Continue				
247456001	1	39	-1.60	0.0434	3/2/2010@15:20:27		
247456002	1	40	5.61	0.372	3/2/2010@15:21:20		
247456003	1	41	-0.655	0.0867	3/2/2010@15:22:12		
247456004	1	42	0.189	0.125	3/2/2010@15:23:05		
247456005	1	43	-1.49	0.0487	3/2/2010@15:23:57		
247456006	1	44	-2.76	-0.00917	3/2/2010@15:24:49		
247463001	1	45	3.46	0.274	3/2/2010@15:25:41		
247463002	1	46	-1.67	0.0403	3/2/2010@15:26:35		
247463003	1	47	-1.52	0.0473	3/2/2010@15:27:29		
247463004	1	48	-1.35	0.0551	3/2/2010@15:28:23		
WCN100302-03	1	S3	107	4.97	3/2/2010@15:29:15		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			6.6 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			6.6 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-2.57	-4.02e-4	3/2/2010@15:31:06		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.57 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.57 > -5.00				
Message			CCB Passed				
Action			Continue				
247463005	1	49	-1.35	0.0551	3/2/2010@15:32:56		
247463006	1	50	-2.56	0.00	3/2/2010@15:33:49		
247469001	1	51	-3.03	-0.0213	3/2/2010@15:34:42		
247469002	1	52	-1.91	0.0295	3/2/2010@15:35:36		
247469003	1	53	12.1	0.667	3/2/2010@15:36:28		
247539001	1	54	2.67	0.238	3/2/2010@15:37:21		
247539002	1	55	-1.81	0.0340	3/2/2010@15:38:14		
247539003	1	56	-1.67	0.0406	3/2/2010@15:39:07		
1202051809|956940|MB	1	57	-1.40	0.0526	3/2/2010@15:39:59		
1202051813|LCS	1	58	54.8	2.61	3/2/2010@15:40:51		
WCN100302-03	1	S3	107	5.00	3/2/2010@15:41:44		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			7.3 < 10.0				

		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100302-08	1	S7	-0.884	0.0763	3/2/2010@15:43:34			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-0.884 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-0.884 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247771001	1	59	-1.58	0.0446	3/2/2010@15:45:22			
1202053279	1	60	-2.56	-2.17e-4	3/2/2010@15:46:14			
1202053280	1	61	117	5.44	3/2/2010@15:47:08			
1202053281	1	62	115	5.35	3/2/2010@15:48:02			
247780001	1	63	-2.82	-0.0117	3/2/2010@15:48:57			
247793001	1	64	-2.05	0.0233	3/2/2010@15:49:50			
247807001	1	65	-2.55	3.61e-4	3/2/2010@15:50:43			
247807002	1	66	-2.09	0.0216	3/2/2010@15:51:37			
247807003	1	67	-2.55	3.04e-4	3/2/2010@15:52:31			
247807004	1	68	-2.56	-1.55e-4	3/2/2010@15:53:24			
WCN100302-03	1	S3	106	4.96	3/2/2010@15:54:17			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	6.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	6.3 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100302-08	1	S7	-2.36	0.00888	3/2/2010@15:56:06			CCB
		Known Conc:	0.00					
DQM Test: > + Concentration Limit								
		Result:	-2.36 < 5.00					
		Message	CCB Passed					
		Action	Continue					
DQM Test: < - Concentration Limit								
		Result:	-2.36 > -5.00					
		Message	CCB Passed					
		Action	Continue					
247817002	1	69	-1.44	0.0509	3/2/2010@15:57:55			
1202051810	1	70	-2.52	0.00194	3/2/2010@15:58:48			
1202051811	1	71	114	5.31	3/2/2010@15:59:41			
1202051812	1	72	105	4.92	3/2/2010@16:00:34			
247819001	1	73	31.6	1.55	3/2/2010@16:01:26			
247858001	1	74	209	9.63	3/2/2010@16:02:19			
247858002	1	75	209	9.62	3/2/2010@16:03:11			
247858003	1	76	18.8	0.973	3/2/2010@16:04:05			
247858004	1	77	80.7	3.79	3/2/2010@16:05:00			
247858005	1	78	45.1	2.17	3/2/2010@16:05:54			
WCN100302-03	1	S3	107	5.00	3/2/2010@16:06:46			CCV
		Known Conc:	100					
DQM Test: > + Percent Relative Difference								
		Result:	7.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
DQM Test: < - Percent Relative Difference								
		Result:	7.2 < 10.0					
		Message	CCV Passed					
		Action	Continue					
WCN100302-08	1	S7	-1.91	0.0295	3/2/2010@16:08:37			CCB
		Known Conc:	0.00					

DQM Test: > + Concentration Limit									
Result:		-1.91 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.91 > -5.00							
Message		CCB Passed							
Action		Continue							
247858006	1	79	-0.616	0.0885	3/2/2010@16:10:27				
1202053255|957567|MB	1	80	-2.57	-3.76e-4	3/2/2010@16:11:21				
1202053262||LCS	1	81	15.5	0.824	3/2/2010@16:12:15	25.00			
247770003	1	82	-2.10	0.0209	3/2/2010@16:13:08				
247770004	1	83	-2.01	0.0248	3/2/2010@16:14:01				
247770005	1	84	-2.68	-0.00534	3/2/2010@16:14:54				
247770006	1	85	-2.55	2.76e-4	3/2/2010@16:15:47				
247770007	1	86	-2.45	0.00519	3/2/2010@16:16:41				
247781001	1	87	-0.808	0.0797	3/2/2010@16:17:34				
1202053256||DUP	1	88	-0.969	0.0724	3/2/2010@16:18:26				
WCN100302-03	1	S3	107	5.00	3/2/2010@16:19:18			CCV	
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		7.2 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		7.2 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100302-08	1	S7	-2.72	-0.00736	3/2/2010@16:21:08			CCB	
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-2.72 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-2.72 > -5.00							
Message		CCB Passed							
Action		Continue							
1202053258||MS	1	89	97.5	4.56	3/2/2010@16:22:57				
1202053260||MSD	1	90	105	4.92	3/2/2010@16:23:49				
247781002	1	91	-2.75	-0.00887	3/2/2010@16:24:44				
1202053257||DUP	1	92	-2.62	-0.00284	3/2/2010@16:25:38				
1202053259||MS	1	93	110	5.13	3/2/2010@16:26:32				
1202053261||MSD	1	94	104	4.86	3/2/2010@16:27:27				
247781003	1	95	-1.94	0.0281	3/2/2010@16:28:21				
247781004	1	96	-2.57	-3.51e-4	3/2/2010@16:29:15				
247781005	1	97	4.38	0.316	3/2/2010@16:30:09				
247781006	1	98	-2.66	-0.00478	3/2/2010@16:31:03				
WCN100302-03	1	S3	105	4.91	3/2/2010@16:31:55			CCV	
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		5.2 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		5.2 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100302-08	1	S7	-2.09	0.0214	3/2/2010@16:33:45			CCB	
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-2.09 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-2.09 > -5.00							
Message		CCB Passed							
Action		Continue							

247781007	1	99	-2.56	1.11e-4	3/2/2010@16:35:34		
247781008	1	100	-2.55	3.30e-4	3/2/2010@16:36:28		
247781009	1	101	-2.12	0.0202	3/2/2010@16:37:21		
247781010	1	102	0.184	0.125	3/2/2010@16:38:14		
247781011	1	103	-0.587	0.0898	3/2/2010@16:39:07		
247781012	1	104	11.5	0.639	3/2/2010@16:40:00		
247781013	1	105	-2.62	-0.00267	3/2/2010@16:40:52		
247781014	1	106	2.25	0.219	3/2/2010@16:41:47		
247781015	1	107	-1.14	0.0648	3/2/2010@16:42:42		
1202053263|957569|MB	1	108	-2.86	-0.0138	3/2/2010@16:43:36		
WCN100302-03	1	S3	104	4.87	3/2/2010@16:44:28		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.95	0.0280	3/2/2010@16:46:19		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.95 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.95 > -5.00				
Message			CCB Passed				
Action			Continue				
1202053270|LCS	1	109	28.4	1.41	3/2/2010@16:48:09	25.00	
247770008	1	110	-1.72	0.0381	3/2/2010@16:49:03		
1202053264|DUP	1	111	-1.87	0.0315	3/2/2010@16:49:57		
1202053266|MS	1	112	106	4.96	3/2/2010@16:50:51		
1202053268|MSD	1	113	109	5.07	3/2/2010@16:51:45		
247770009	1	114	-2.46	0.00432	3/2/2010@16:52:39		
1202053265|DUP	1	115	-2.01	0.0249	3/2/2010@16:53:32		
1202053267|MS	1	116	121	5.63	3/2/2010@16:54:26		
1202053269|MSD	1	117	104	4.87	3/2/2010@16:55:19		
247770010	1	118	-1.54	0.0462	3/2/2010@16:56:12		
WCN100302-03	1	S3	105	4.90	3/2/2010@16:57:04		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				
WCN100302-08	1	S7	-2.55	3.56e-4	3/2/2010@16:58:55		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.55 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.55 > -5.00				
Message			CCB Passed				
Action			Continue				
247770011	1	119	-2.56	-1.49e-4	3/2/2010@17:00:44		
247784002	1	120	-1.29	0.0576	3/2/2010@17:01:37		
247790002	1	121	-2.12	0.0200	3/2/2010@17:02:32		
247790003	1	122	-2.56	0.00	3/2/2010@17:03:26		
247794001	1	123	-2.56	-1.49e-4	3/2/2010@17:04:21		
247794002	1	124	-2.55	3.61e-4	3/2/2010@17:05:15		
247794003	1	125	-2.72	-0.00709	3/2/2010@17:06:10		
247794004	1	126	-2.78	-0.00991	3/2/2010@17:07:04		

247794005	1	127	-1.86	0.0318	3/2/2010@17:07:58		
Calibration:			Table/Fig. 1				
247806001	1	128	-1.31	0.0567	3/2/2010@17:08:52		
WCN100302-03	1	S3	106	4.93	3/2/2010@17:09:44		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.7 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.7 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.98	0.0263	3/2/2010@17:11:35		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.98 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.98 > -5.00				
Message			CCB Passed				
Action			Continue				
247806002	1	129	-2.57	-6.55e-4	3/2/2010@17:13:25		
247806003	1	130	-1.47	0.0495	3/2/2010@17:14:18		
247806004	1	131	-1.86	0.0317	3/2/2010@17:15:12		
247806005	1	132	8.20	0.490	3/2/2010@17:16:06		
247806006	1	133	-0.684	0.0854	3/2/2010@17:16:59		
247855002	1	134	-2.09	0.0216	3/2/2010@17:17:52		
247902001	1	135	1.78e+3	81.4	3/2/2010@17:18:45		
247806005	1	132	6.30	0.403	3/2/2010@17:19:38		
247858001|956940|	1	74	125	5.79	3/2/2010@17:20:31	2.00	
247858002	1	75	103	4.82	3/2/2010@17:21:23	2.00	
WCN100302-03	1	S3	106	4.94	3/2/2010@17:22:15		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.8 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.8 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-2.56	-1.85e-4	3/2/2010@17:24:05		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.56 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.56 > -5.00				
Message			CCB Passed				
Action			Continue				
247469003|955994	1	53	-1.40	0.0528	3/2/2010@17:25:55		
247902001|957569	1	135	66.2	3.13	3/2/2010@17:26:48	50.00	
247806005	1	132	-1.46	0.0501	3/2/2010@17:27:41		
WCN100302-03	1	S3	106	4.94	3/2/2010@17:28:34		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			6.0 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			6.0 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-0.316	0.102	3/2/2010@17:30:24		CCB
Known Conc:			0.00				

DQM Test: > + Concentration Limit					
Result:	-0.316 < 5.00				
Message	CCB Passed				
Action	Continue				
DQM Test: < - Concentration Limit					
Result:	-0.316 > -5.00				
Message	CCB Passed				
Action	Continue				

Analyte Properties Table for OM_3-2-2010_14-50-22.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

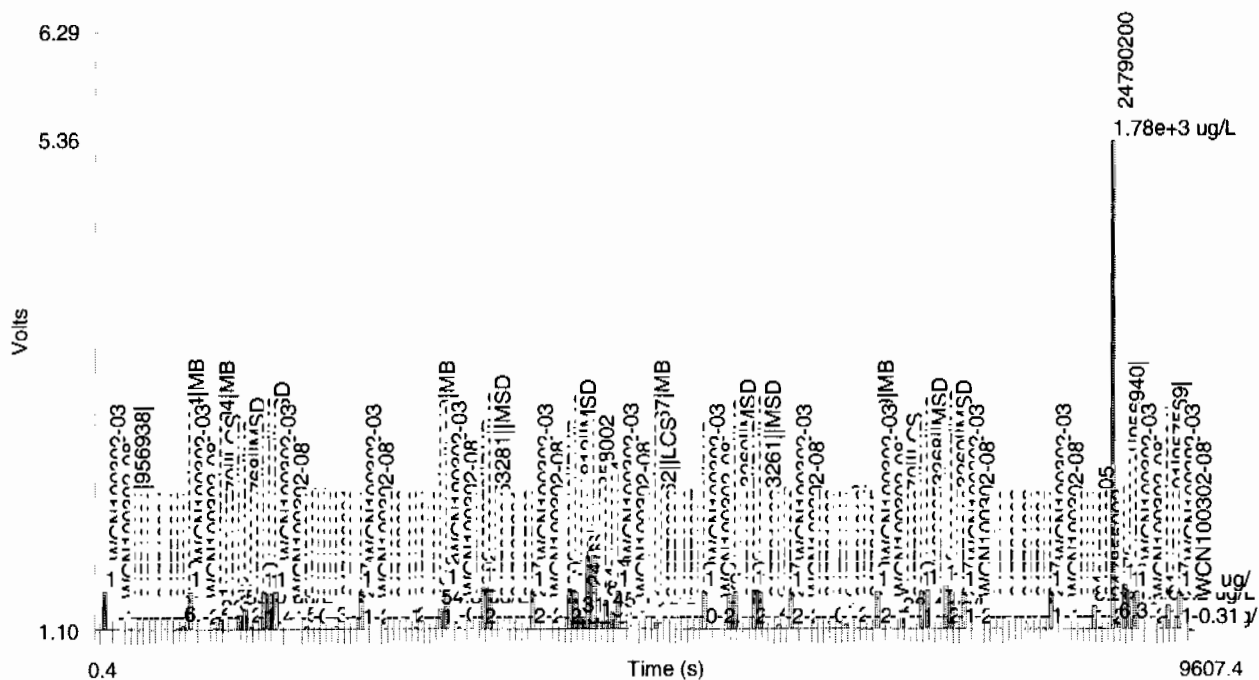
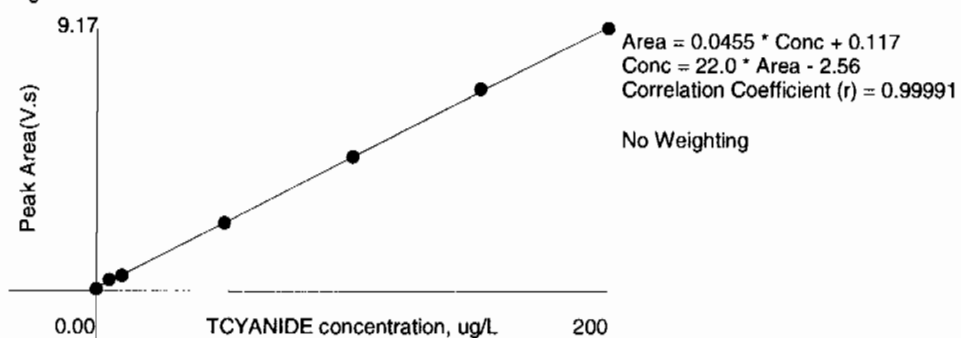


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Figure 1: TCYANIDE



General Chemistry Analysis

Case Narrative

**General Chemistry Narrative
Los Alamos National Laboratory (LANL)
SDG 10-1973-1**

Method/Analysis Information

Product: Cyanide, Total

Analytical Batch: 956940 **Method:** SW9012A Cyanide and Total

Prep Batch : 956939 **Method:** SSW846 9010B Prep

Sample Analysis

The following samples were analyzed using the analytical protocol as established in SW846 9012A:

Sample ID	Client ID
247771001	RE15-10-8272
1202051809	Method Blank (MB)
1202051810	247817002(CAPA-10-13095) Sample Duplicate (DUP)
1202051811	247817002(CAPA-10-13095) Matrix Spike (MS)
1202051812	247817002(CAPA-10-13095) Matrix Spike Duplicate (MSD)
1202051813	Laboratory Control Sample (LCS)
1202053279	247771001(RE15-10-8272) Sample Duplicate (DUP)
1202053280	247771001(RE15-10-8272) Matrix Spike (MS)
1202053281	247771001(RE15-10-8272) Matrix Spike Duplicate (MSD)

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: 247771001 (RE15-10-8272) and 247817002 (CAPA-10-13095).

Matrix Spike (MS)/Post Spike (PS) Recovery Statement

The MS/PS recoveries for this sample set were within the required acceptance limits.

Matrix Spike Duplicate (MSD) Recovery Statement

The MSD recoveries for this sample set were within the required acceptance limits.

MS/MSD Relative Percent Difference (RPD) Statement

The RPDs between the spike and spike duplicate met the acceptance limits.

Duplicate Relative Percent Difference (RPD) Statement

The values for the sample and duplicate are less than the Practical Quantitation Limit (PQL); therefore, the RPD is not applicable. 1202051810 (CAPA-10-13095), 1202053279 (RE15-10-8272) and 247771001 (RE15-10-8272).

Technical Information

GEL assigns holding times based on the date and time of sample collection. Those holding times expressed in hours are calculated in the AlphaLims system by hours. Those holding times expressed as days expire at midnight on the day of expiration.

Holding Times

All samples in this SDG met the specified holding time.

Sample Preservation/Integrity

All the samples from this sample group met the preservation and integrity requirements of the method.

Sample Dilutions

The samples in this SDG did not require dilutions.

Sample Re-analysis

The samples in this SDG did not require re-analysis.

Miscellaneous Information

Data Exception (DER) Documentation

A DER was not required for this SDG.

Additional Comments

Additional comments were not required for this SDG.

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted:

Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. The data validator will always sign and date the case narrative. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

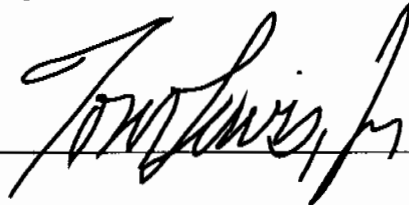
Certification Statement

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

Review Validation:

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

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

Reviewer:  Date: 20Mar10

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: 10-1973-1 GEL Work Order: 247771

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 15, 2010

Client SDG: 10-1973-1

Client Sample ID: RE15-10-8272
Sample ID: 247771001
Matrix: W
Collect Date: 16-FEB-10 12:00
Receive Date: 23-FEB-10
Collector: Client

Project: LANL01004
Client ID: LANL010

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Flow Injection Analysis											
<i>SW9012A Cyanide, Total "As Received"</i>											
Cyanide, Total	U	ND	1.66	5.00	ug/L	1	AXC2	03/02/10	1545	956940	1

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/02/10	1321	956939

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 15, 2010

Page 1 of 2

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

Contact:

Workorder: 247771

Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Flow Injection Analysis											
Batch	956940										
QC1202051810	247817002	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A		AXC2	03/02/10	15:58
QC1202053279	247771001	DUP									
Cyanide, Total		U	ND	U	ND	ug/L	N/A			03/02/10	15:46
QC1202051813	LCS										
Cyanide, Total	50.0				54.8	ug/L	110	(90%-110%)		03/02/10	15:40
QC1202051809	MB										
Cyanide, Total			U		5.00	ug/L				03/02/10	15:39
QC1202051811	247817002	MS									
Cyanide, Total	100	U	ND		114	ug/L	114	(60%-144%)		03/02/10	15:59
QC1202053280	247771001	MS									
Cyanide, Total	100	U	ND		117	ug/L	117	(60%-144%)		03/02/10	15:47
QC1202051812	247817002	MSD									
Cyanide, Total	100	U	ND		105	ug/L	8.22	105	(0%-20%)	03/02/10	16:00
QC1202053281	247771001	MSD									
Cyanide, Total	100	U	ND		115	ug/L	1.72	115	(0%-20%)	03/02/10	15:48

Notes:

RER is calculated at the 95% confidence level (2-sigma).

The Qualifiers in this report are defined as follows:

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

GEL LABORATORIES LLC

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QC Summary

Workorder: 247771

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Parmname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
ND	Analyte concentration is not detected above the detection limit										
NJ	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
P	Organics--The concentrations between the primary and confirmation columns/detectors is >40% different. For HPLC, difference is also <70%										
R	Sample results are rejected										
U	Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.										
X	Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier										
Y	QC Samples were not spiked with this compound										
Z	Paint Filter Test--Particulates passed through the filter, however no free liquids were observed.										
^	RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.										
d	5-day BOD--The 2:1 depletion requirement was not met for this sample										
h	Preparation or preservation holding time was exceeded										

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Instrument QC Data Summary

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Report Run On: 15-MAR-2010 11:01

GEL Laboratories LLC

Contract: LANL01004

SDG #: 10-1973-1

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	02-MAR-2010 08:53:45	OM_3-2-2010_08-43-10	144	150	96	(90%-110%)	Yes
CCV	02-MAR-2010 15:29:15	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 15:41:44	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes
CCV	02-MAR-2010 15:54:17	OM_3-2-2010_14-50-22	106	100	106	(90%-110%)	Yes
CCV	02-MAR-2010 16:06:46	OM_3-2-2010_14-50-22	107	100	107	(90%-110%)	Yes

Sample Type	Run Date	Data File	Result	Limits	Within Limits
ICB	02-MAR-2010 08:55:35	OM_3-2-2010_08-43-10	-1.14	10	Yes
CCB	02-MAR-2010 15:31:06	OM_3-2-2010_14-50-22	-2.57	10	Yes
CCB	02-MAR-2010 15:43:34	OM_3-2-2010_14-50-22	-0.884	10	Yes
CCB	02-MAR-2010 15:56:06	OM_3-2-2010_14-50-22	-2.36	10	Yes
CCB	02-MAR-2010 16:08:37	OM_3-2-2010_14-50-22	-1.91	10	Yes

Cyanide, Total

Prep Logbook

Cyanide Sample Distillation

Batch ID:	956939.0	Verified by:		Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
Analyst:	Alan Stanley			LCS	1202051813	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.0125	mL
Method:	SW846 9010C Distillation	SW846 9010B Prep	E	MS	1202051811	MS, ICV			
			P	MS	1202053280	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
			A	MS	1202053280	MS, ICV			
			33	MSD	1202051812	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL
			5.	MSD	1202053281	MS, ICV			
			4	MSD	1202053281	Secondary source standard for CN and phenol. Used to spike LCS.	URF1269274-02	.025	mL

Lab SOP: GL-GC-E-067 REV# 13

Instrument: Sartorius Balance B-007

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
1202051809 MB	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051813 LCS	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247771001	02-MAR-2010 13:21:00	Water	25	25	1	>12
1202053279 DUP (247771001)	02-MAR-2010 13:21:00	Water	25	25	1	>12
1202053280 MS (247771001)	02-MAR-2010 13:21:00	Water	25	25	1	>12
1202053281 MSD (247771001)	02-MAR-2010 13:21:00	Water	25	25	1	>12
247780001	02-MAR-2010 13:21:00	Water	25	25	1	>12
247793001	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807001	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807002	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807003	02-MAR-2010 13:21:00	Water	25	25	1	>12
247807004	02-MAR-2010 13:21:00	Water	25	25	1	>12
247817002	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051810 DUP (247817002)	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051811 MS (247817002)	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
1202051812 MSD (247817002)	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247819001	02-MAR-2010 13:21:00	Misc Liquid	25	25	1	>12
247858001	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858002	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858003	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12

Analytical Logbook version 1 11-04-2002

GEL Laboratories LLC

Prep Logbook

Batch ID: 956939.0
Analyst: Alan Stanley
Method: SW846 9010C Distillation SW846 9010B Prep

Type	Sample Id	Description	Serial Number	Spike Amount	Spike Units
LCS	1202051813	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.0125	mL
MS	1202051811	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MS	1202053280	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202051812	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL
MSD	1202053281	Secondary source standard for CN and phenol. Used to spike LCS, MS, ICV	URF1269274-02	.025	mL

Lab SOP: GL-GC-E-067 REV# 13
Instrument: Sartorius Balance B-007

Sample ID	Run Date	Matrix	Initial Volume (mL)	Final Volume (mL)	Prep Factor (mL/mL)	pH Check
247858004	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858005	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12
247858006	02-MAR-2010 13:21:00	Ground Water	25	25	1	>12

Comments:

Reagent/Solvent Lot ID	Description	Amount
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
1273851-C	0.25N Sodium Hydroxide Solution	25 mL
WCN100302-07	150 ppb CN Distilled ICV Standard	.0375 mL

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
200 ppb		1	axc2	3/2/2010 8:46:36	OM_3-2-2010_08-43-10
150 ppb		1	axc2	3/2/2010 8:47:27	OM_3-2-2010_08-43-10
100 ppb		1	axc2	3/2/2010 8:48:20	OM_3-2-2010_08-43-10
50 ppb		1	axc2	3/2/2010 8:49:13	OM_3-2-2010_08-43-10
10 ppb		1	axc2	3/2/2010 8:50:06	OM_3-2-2010_08-43-10
CRDL 5.0 ppb		1	axc2	3/2/2010 8:51:00	OM_3-2-2010_08-43-10
ICAL-00		1	axc2	3/2/2010 8:51:54	OM_3-2-2010_08-43-10
ICV		1	axc2	3/2/2010 8:53:45	OM_3-2-2010_08-43-10
ICB		1	axc2	3/2/2010 8:55:35	OM_3-2-2010_08-43-10
CRDL		1	axc2	3/2/2010 8:57:25	OM_3-2-2010_08-43-10
1202053271	957571	1	axc2	3/2/2010 8:59:13	OM_3-2-2010_08-43-10
1202053278*	957571	25	axc2	3/2/2010 9:00:05	OM_3-2-2010_08-43-10
247806007	957571	1	axc2	3/2/2010 9:00:59	OM_3-2-2010_08-43-10
1202053272	957571	1	axc2	3/2/2010 9:01:53	OM_3-2-2010_08-43-10
1202053274	957571	1	axc2	3/2/2010 9:02:46	OM_3-2-2010_08-43-10
1202053276	957571	1	axc2	3/2/2010 9:03:40	OM_3-2-2010_08-43-10
247806008	957571	1	axc2	3/2/2010 9:04:33	OM_3-2-2010_08-43-10
1202053273	957571	1	axc2	3/2/2010 9:05:26	OM_3-2-2010_08-43-10
1202053275	957571	1	axc2	3/2/2010 9:06:19	OM_3-2-2010_08-43-10
1202053277	957571	1	axc2	3/2/2010 9:07:12	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:08:05	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:09:55	OM_3-2-2010_08-43-10
1202053278	957571	25	axc2	3/2/2010 9:11:42	OM_3-2-2010_08-43-10
247806009	957571	1	axc2	3/2/2010 9:12:35	OM_3-2-2010_08-43-10
247806010	957571	1	axc2	3/2/2010 9:13:28	OM_3-2-2010_08-43-10
247806011	957571	1	axc2	3/2/2010 9:14:20	OM_3-2-2010_08-43-10
247806012	957571	1	axc2	3/2/2010 9:15:13	OM_3-2-2010_08-43-10
247822001	957571	1	axc2	3/2/2010 9:16:04	OM_3-2-2010_08-43-10
247822002	957571	1	axc2	3/2/2010 9:16:57	OM_3-2-2010_08-43-10
247822003	957571	1	axc2	3/2/2010 9:17:49	OM_3-2-2010_08-43-10
247822004	957571	1	axc2	3/2/2010 9:18:43	OM_3-2-2010_08-43-10
247822005	957571	1	axc2	3/2/2010 9:19:37	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:20:30	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:22:20	OM_3-2-2010_08-43-10
247822006	957571	1	axc2	3/2/2010 9:24:10	OM_3-2-2010_08-43-10
247840001	957571	1	axc2	3/2/2010 9:25:03	OM_3-2-2010_08-43-10
247840002	957571	1	axc2	3/2/2010 9:25:56	OM_3-2-2010_08-43-10
247840003	957571	1	axc2	3/2/2010 9:26:50	OM_3-2-2010_08-43-10
247842001	957571	1	axc2	3/2/2010 9:27:43	OM_3-2-2010_08-43-10
247842002	957571	1	axc2	3/2/2010 9:28:37	OM_3-2-2010_08-43-10
247842003	957571	1	axc2	3/2/2010 9:29:29	OM_3-2-2010_08-43-10
247842004	957571	1	axc2	3/2/2010 9:30:22	OM_3-2-2010_08-43-10
247905001	957571	1	axc2	3/2/2010 9:31:14	OM_3-2-2010_08-43-10
1202053252	957563	1	axc2	3/2/2010 9:32:07	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:32:59	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:34:51	OM_3-2-2010_08-43-10
1202053254	957563	1	axc2	3/2/2010 9:36:38	OM_3-2-2010_08-43-10
247831001	957563	1	axc2	3/2/2010 9:37:31	OM_3-2-2010_08-43-10
1202053253	957563	1	axc2	3/2/2010 9:38:22	OM_3-2-2010_08-43-10
247840001	957563	1	axc2	3/2/2010 9:39:17	OM_3-2-2010_08-43-10
247840002	957563	1	axc2	3/2/2010 9:40:12	OM_3-2-2010_08-43-10
247840003	957563	1	axc2	3/2/2010 9:41:05	OM_3-2-2010_08-43-10
247842001	957563	1	axc2	3/2/2010 9:41:59	OM_3-2-2010_08-43-10
247842002	957563	1	axc2	3/2/2010 9:42:53	OM_3-2-2010_08-43-10
247842003	957563	1	axc2	3/2/2010 9:43:46	OM_3-2-2010_08-43-10
247842004	957563	1	axc2	3/2/2010 9:44:39	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010 9:45:32	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010 9:47:22	OM_3-2-2010_08-43-10

247902001	957563	1	axc2	3/2/2010	9:49:11	OM_3-2-2010_08-43-10
247905001	957563	1	axc2	3/2/2010	9:50:04	OM_3-2-2010_08-43-10
1202054733	958153	1	axc2	3/2/2010	9:50:57	OM_3-2-2010_08-43-10
1202054740	958153	25	axc2	3/2/2010	9:51:50	OM_3-2-2010_08-43-10
247838002	958153	1	axc2	3/2/2010	9:52:42	OM_3-2-2010_08-43-10
248037001	958153	1	axc2	3/2/2010	9:53:36	OM_3-2-2010_08-43-10
1202054734	958153	1	axc2	3/2/2010	9:54:28	OM_3-2-2010_08-43-10
1202054736	958153	1	axc2	3/2/2010	9:55:20	OM_3-2-2010_08-43-10
1202054738	958153	1	axc2	3/2/2010	9:56:14	OM_3-2-2010_08-43-10
248037002	958153	1	axc2	3/2/2010	9:57:09	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	9:58:00	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	9:59:51	OM_3-2-2010_08-43-10
1202054735	958153	1	axc2	3/2/2010	10:01:42	OM_3-2-2010_08-43-10
1202054737	958153	1	axc2	3/2/2010	10:02:36	OM_3-2-2010_08-43-10
1202054739	958153	1	axc2	3/2/2010	10:03:30	OM_3-2-2010_08-43-10
248037003	958153	1	axc2	3/2/2010	10:04:24	OM_3-2-2010_08-43-10
248037004	958153	1	axc2	3/2/2010	10:05:18	OM_3-2-2010_08-43-10
248037005	958153	1	axc2	3/2/2010	10:06:10	OM_3-2-2010_08-43-10
248037006	958153	1	axc2	3/2/2010	10:07:03	OM_3-2-2010_08-43-10
248037007	958153	1	axc2	3/2/2010	10:07:56	OM_3-2-2010_08-43-10
248037008	958153	1	axc2	3/2/2010	10:08:50	OM_3-2-2010_08-43-10
248037009	958153	1	axc2	3/2/2010	10:09:42	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:10:35	OM_3-2-2010_08-43-10
CCB		1	axc2	3/2/2010	10:12:25	OM_3-2-2010_08-43-10
248037010*	958153	1	axc2	3/2/2010	10:14:13	OM_3-2-2010_08-43-10
248037011*	958153	1	axc2	3/2/2010	10:15:06	OM_3-2-2010_08-43-10
248037012*	958153	1	axc2	3/2/2010	10:15:59	OM_3-2-2010_08-43-10
248037013*	958153	1	axc2	3/2/2010	10:16:53	OM_3-2-2010_08-43-10
248037014*	958153	1	axc2	3/2/2010	10:17:48	OM_3-2-2010_08-43-10
248037015*	958153	1	axc2	3/2/2010	10:18:42	OM_3-2-2010_08-43-10
248037016*	958153	1	axc2	3/2/2010	10:19:36	OM_3-2-2010_08-43-10
248037017*	958153	1	axc2	3/2/2010	10:20:31	OM_3-2-2010_08-43-10
248037018*	958153	1	axc2	3/2/2010	10:21:26	OM_3-2-2010_08-43-10
248037019*	958153	1	axc2	3/2/2010	10:22:19	OM_3-2-2010_08-43-10
CCV		1	axc2	3/2/2010	10:23:11	OM_3-2-2010_08-43-10

Original Run Filename: OM_3-2-2010_08-43-10.OMN created 3/2/2010 08:43:10
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_08-43-10.OMN last modified 3/2/2010 10:24:17
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE Conc. (ug/L)	Area (Vs)				
WCN100302-01	1	S1	200	9.17	3/2/2010@08:46:36			200 ppb
WCN100302-02	1	S2	150	7.02	3/2/2010@08:47:27			150 ppb
WCN100302-03	1	S3	100	4.67	3/2/2010@08:48:20			100 ppb
WCN100302-04	1	S4	50.0	2.38	3/2/2010@08:49:13			50 ppb
WCN100302-05	1	S5	10.0	0.547	3/2/2010@08:50:06			10 ppb
WCN100302-06	1	S6	5.00	0.398	3/2/2010@08:51:00			CRDL 5.0 ppb
WCN100302-08	1	S7	0.00	0.0805	3/2/2010@08:51:54			0.0 ppb
DQM Test: Minimum Correlation Coefficient								
Result:			0.99991 > 0.99500					
Message			Pass					
Action			Continue					
WCN100302-07	1	S8	144	6.68	3/2/2010@08:53:45			ICV
Known Conc:			150					
DQM Test: > + Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			-3.9 < 10.0					
Message			ICV Passed					
Action			Continue					
Calibration:			Table/Fig. 1					
WCN100302-08	1	S7	-1.14	0.0645	3/2/2010@08:55:35			ICB/CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.14 < 5.01					
Message			ICB/CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.14 > -5.01					
Message			ICB/CCB Passed					
Action			Continue					
WCN100302-06	1	S6	4.39	0.316	3/2/2010@08:57:25			CRDL
Known Conc:			5.00					
DQM Test: > + Concentration Limit								
Result:			4.39 < 7.50					
Message			CRDL Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			4.39 > 2.50					
Message			Pass					
Action			None					
1202053271|957571|MB	1	29	-1.73	0.0380	3/2/2010@08:59:13			
1202053278|LCS	1	30	491	22.5	3/2/2010@09:00:05		25.00	
247806007	1	31	-1.20	0.0620	3/2/2010@09:00:59			
1202053272|DUP	1	32	0.127	0.122	3/2/2010@09:01:53			
1202053274|MS	1	33	89.2	4.18	3/2/2010@09:02:46			
1202053276|MSD	1	34	73.9	3.48	3/2/2010@09:03:40			
247806008	1	35	2.38	0.225	3/2/2010@09:04:33			
1202053273|DUP	1	36	2.16	0.215	3/2/2010@09:05:26			
1202053275|MS	1	37	51.3	2.45	3/2/2010@09:06:19			
1202053277|MSD	1	38	45.8	2.20	3/2/2010@09:07:12			
WCN100302-03	1	S3	106	4.92	3/2/2010@09:08:05			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.6 < 10.0					

		Message		CCV Passed							
		Action		Continue							
DQM Test: < - Percent Relative Difference											
		Result:		5.6 < 10.0							
		Message		CCV Passed							
		Action		Continue							
WCN100302-08		1	S7	-1.95	0.0279	3/2/2010@09:09:55					CCB
		Known Conc:		0.00							
DQM Test: > + Concentration Limit											
		Result:		-1.95 < 5.00							
		Message		CCB Passed							
		Action		Continue							
DQM Test: < - Concentration Limit											
		Result:		-1.95 > -5.00							
		Message		CCB Passed							
		Action		Continue							
1202053278|LCS		1	30	19.6	1.01	3/2/2010@09:11:42			25.00		
247806009		1	39	-1.05	0.0686	3/2/2010@09:12:35					
247806010		1	40	-0.889	0.0760	3/2/2010@09:13:28					
247806011		1	41	-1.37	0.0543	3/2/2010@09:14:20					
247806012		1	42	-2.58	-8.78e-4	3/2/2010@09:15:13					
247822001		1	43	-1.79	0.0348	3/2/2010@09:16:04					
247822002		1	44	-2.00	0.0255	3/2/2010@09:16:57					
247822003		1	45	-1.52	0.0472	3/2/2010@09:17:49					
247822004		1	46	-2.00	0.0252	3/2/2010@09:18:43					
247822005		1	47	-2.01	0.0252	3/2/2010@09:19:37					
WCN100302-03		1	S3	106	4.92	3/2/2010@09:20:30					CCV
		Known Conc:		100							
DQM Test: > + Percent Relative Difference											
		Result:		5.6 < 10.0							
		Message		CCV Passed							
		Action		Continue							
DQM Test: < - Percent Relative Difference											
		Result:		5.6 < 10.0							
		Message		CCV Passed							
		Action		Continue							
WCN100302-08		1	S7	-2.66	-0.00455	3/2/2010@09:22:20					CCB
		Known Conc:		0.00							
DQM Test: > + Concentration Limit											
		Result:		-2.66 < 5.00							
		Message		CCB Passed							
		Action		Continue							
DQM Test: < - Concentration Limit											
		Result:		-2.66 > -5.00							
		Message		CCB Passed							
		Action		Continue							
247822006		1	48	-0.812	0.0795	3/2/2010@09:24:10					
247840001		1	49	-0.505	0.0935	3/2/2010@09:25:03					
247840002		1	50	-1.81	0.0341	3/2/2010@09:25:56					
247840003		1	51	-0.808	0.0797	3/2/2010@09:26:50					
247842001		1	52	-0.181	0.108	3/2/2010@09:27:43					
247842002		1	53	3.80	0.289	3/2/2010@09:28:37					
247842003		1	54	-0.365	0.0999	3/2/2010@09:29:29					
247842004		1	55	0.0716	0.120	3/2/2010@09:30:22					
247905001		1	56	1.52e+3	69.3	3/2/2010@09:31:14					
1202053252|957563|MB		1	57	0.312	0.131	3/2/2010@09:32:07					
WCN100302-03		1	S3	107	5.00	3/2/2010@09:32:59					CCV
		Known Conc:		100							
DQM Test: > + Percent Relative Difference											
		Result:		7.2 < 10.0							
		Message		CCV Passed							
		Action		Continue							
DQM Test: < - Percent Relative Difference											
		Result:		7.2 < 10.0							
		Message		CCV Passed							
		Action		Continue							
WCN100302-08		1	S7	-2.71	-0.00706	3/2/2010@09:34:51					CCB
		Known Conc:		0.00							

DQM Test: > + Concentration Limit						
Result:		-2.71 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.71 > -5.00				
Message		CCB Passed				
Action		Continue				
1202053254||LCS	1	58	-1.30	0.0574	3/2/2010@09:36:38	
247831001	1	59	21.5	1.10	3/2/2010@09:37:31	
1202053253||DUP	1	60	18.0	0.935	3/2/2010@09:38:22	
247840001	1	61	18.8	0.974	3/2/2010@09:39:17	
247840002	1	62	-0.323	0.102	3/2/2010@09:40:12	
247840003	1	63	18.0	0.935	3/2/2010@09:41:05	
247842001	1	64	20.6	1.06	3/2/2010@09:41:59	
247842002	1	65	19.2	0.992	3/2/2010@09:42:53	
247842003	1	66	14.2	0.761	3/2/2010@09:43:46	
247842004	1	67	20.6	1.05	3/2/2010@09:44:39	
WCN100302-03	1	S3	107	4.99	3/2/2010@09:45:32	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.1 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.56	-1.26e-4	3/2/2010@09:47:22	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.56 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.56 > -5.00				
Message		CCB Passed				
Action		Continue				
247902001	1	68	1.41e+3	64.1	3/2/2010@09:49:11	
247905001	1	69	1.23e+3	56.2	3/2/2010@09:50:04	
1202054733|958153|MB	1	70	-0.200	0.107	3/2/2010@09:50:57	
1202054740||LCS	1	71	17.4	0.907	3/2/2010@09:51:50	25.00
247838002	1	72	-0.972	0.0723	3/2/2010@09:52:42	
248037001	1	73	-1.62	0.0428	3/2/2010@09:53:36	
1202054734||DUP	1	74	-1.80	0.0346	3/2/2010@09:54:28	
1202054736||MS	1	75	107	4.98	3/2/2010@09:55:20	
1202054738||MSD	1	76	104	4.83	3/2/2010@09:56:14	
248037002	1	77	-0.939	0.0738	3/2/2010@09:57:09	
WCN100302-03	1	S3	107	5.00	3/2/2010@09:58:00	CCV
Known Conc:		100				
DQM Test: > + Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
DQM Test: < - Percent Relative Difference						
Result:		7.2 < 10.0				
Message		CCV Passed				
Action		Continue				
WCN100302-08	1	S7	-2.55	3.95e-4	3/2/2010@09:59:51	CCB
Known Conc:		0.00				
DQM Test: > + Concentration Limit						
Result:		-2.55 < 5.00				
Message		CCB Passed				
Action		Continue				
DQM Test: < - Concentration Limit						
Result:		-2.55 > -5.00				
Message		CCB Passed				
Action		Continue				

1202054735	DUP	1	78	-1.07	0.0678	3/2/2010@10:01:42		
1202054737	MS	1	79	98.6	4.61	3/2/2010@10:02:36		
1202054739	MSD	1	80	96.1	4.49	3/2/2010@10:03:30		
248037003		1	81	0.707	0.149	3/2/2010@10:04:24		
248037004		1	82	1.09	0.166	3/2/2010@10:05:18		
248037005		1	83	0.359	0.133	3/2/2010@10:06:10		
248037006		1	84	0.328	0.131	3/2/2010@10:07:03		
248037007		1	85	0.0201	0.117	3/2/2010@10:07:56		
248037008		1	86	-2.66	-0.00454	3/2/2010@10:08:50		
248037009		1	87	-2.26	0.0136	3/2/2010@10:09:42		
WCN100302-03		1	S3	108	5.03	3/2/2010@10:10:35		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				7.8 < 10.0				
Message				CCV Passed				
Action				Continue				
DQM Test: < - Percent Relative Difference								
Result:				7.8 < 10.0				
Message				CCV Passed				
Action				Continue				
WCN100302-08		1	S7	-2.63	-0.00301	3/2/2010@10:12:25		CCB
Known Conc:				0.00				
DQM Test: > + Concentration Limit								
Result:				-2.63 < 5.00				
Message				CCB Passed				
Action				Continue				
DQM Test: < - Concentration Limit								
Result:				-2.63 > -5.00				
Message				CCB Passed				
Action				Continue				
248037010		1	88	0.394	0.134	3/2/2010@10:14:13		
248037011		1	89	0.366	0.133	3/2/2010@10:15:06		
248037012		1	90	-2.34	0.00976	3/2/2010@10:15:59		
248037013		1	91	-1.30	0.0573	3/2/2010@10:16:53		
248037014		1	92	1.83	0.200	3/2/2010@10:17:48		
248037015		1	93	0.0806	0.120	3/2/2010@10:18:42		
248037016		1	94	-1.39	0.0532	3/2/2010@10:19:36		
248037017		1	95	0.328	0.131	3/2/2010@10:20:31		
248037018		1	96	-1.63	0.0424	3/2/2010@10:21:26		
248037019		1	97	-0.215	0.107	3/2/2010@10:22:19		
WCN100302-03		1	S3	118	5.48	3/2/2010@10:23:11		CCV
Known Conc:				100				
DQM Test: > + Percent Relative Difference								
Result:				17.8 > 10.0				
Message				CCV Failed				
Action				Stop Run				
DQM Test: < - Percent Relative Difference								
Result:				17.8 > 10.0				
Message				CCV Passed				
Action				Continue				

Analyte Properties Table for OM_3-2-2010_08-43-10.OMN

Property	Channel 1 TCYANIDE
Concentration Units	ug/L
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

[illegible]

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Peak Area(V.s)

9.17

0.00

TCYANIDE concentration, ug/L

200

Area = 0.0455 * Conc + 0.117
 Conc = 22.0 * Area - 2.56
 Correlation Coefficient (r) = 0.99991

No Weighting

This is runlog Lachat1

Sample ID	Batch	Dilution	Analyst	Runtime	Dataset
CCV		1	axc2	3/2/2010 14:51:53	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 14:53:44	OM_3-2-2010_14-50-22
247539011	956938	1	axc2	3/2/2010 14:55:33	OM_3-2-2010_14-50-22
247546001	956938	1	axc2	3/2/2010 14:56:26	OM_3-2-2010_14-50-22
247546002	956938	1	axc2	3/2/2010 14:57:19	OM_3-2-2010_14-50-22
247546003	956938	1	axc2	3/2/2010 14:58:12	OM_3-2-2010_14-50-22
247546004	956938	1	axc2	3/2/2010 14:59:05	OM_3-2-2010_14-50-22
247550001	956938	1	axc2	3/2/2010 14:59:57	OM_3-2-2010_14-50-22
247770001	956938	1	axc2	3/2/2010 15:00:49	OM_3-2-2010_14-50-22
247770002	956938	1	axc2	3/2/2010 15:01:42	OM_3-2-2010_14-50-22
247831001	956938	1	axc2	3/2/2010 15:02:33	OM_3-2-2010_14-50-22
1202049763*	955994	1	axc2	3/2/2010 15:03:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:04:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:06:08	OM_3-2-2010_14-50-22
1202049763	955994	1	axc2	3/2/2010 15:07:57	OM_3-2-2010_14-50-22
1202049770	955994	25	axc2	3/2/2010 15:08:48	OM_3-2-2010_14-50-22
247321007	955994	1	axc2	3/2/2010 15:09:43	OM_3-2-2010_14-50-22
1202049764	955994	1	axc2	3/2/2010 15:10:37	OM_3-2-2010_14-50-22
1202049766	955994	1	axc2	3/2/2010 15:11:30	OM_3-2-2010_14-50-22
1202049768	955994	1	axc2	3/2/2010 15:12:23	OM_3-2-2010_14-50-22
247325001	955994	1	axc2	3/2/2010 15:13:17	OM_3-2-2010_14-50-22
1202049765	955994	1	axc2	3/2/2010 15:14:10	OM_3-2-2010_14-50-22
1202049767	955994	1	axc2	3/2/2010 15:15:03	OM_3-2-2010_14-50-22
1202049769	955994	1	axc2	3/2/2010 15:15:56	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:16:48	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:18:39	OM_3-2-2010_14-50-22
247456001	955994	1	axc2	3/2/2010 15:20:27	OM_3-2-2010_14-50-22
247456002	955994	1	axc2	3/2/2010 15:21:20	OM_3-2-2010_14-50-22
247456003	955994	1	axc2	3/2/2010 15:22:12	OM_3-2-2010_14-50-22
247456004	955994	1	axc2	3/2/2010 15:23:05	OM_3-2-2010_14-50-22
247456005	955994	1	axc2	3/2/2010 15:23:57	OM_3-2-2010_14-50-22
247456006	955994	1	axc2	3/2/2010 15:24:49	OM_3-2-2010_14-50-22
247463001	955994	1	axc2	3/2/2010 15:25:41	OM_3-2-2010_14-50-22
247463002	955994	1	axc2	3/2/2010 15:26:35	OM_3-2-2010_14-50-22
247463003	955994	1	axc2	3/2/2010 15:27:29	OM_3-2-2010_14-50-22
247463004	955994	1	axc2	3/2/2010 15:28:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:29:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:31:06	OM_3-2-2010_14-50-22
247463005	955994	1	axc2	3/2/2010 15:32:56	OM_3-2-2010_14-50-22
247463006	955994	1	axc2	3/2/2010 15:33:49	OM_3-2-2010_14-50-22
247469001	955994	1	axc2	3/2/2010 15:34:42	OM_3-2-2010_14-50-22
247469002	955994	1	axc2	3/2/2010 15:35:36	OM_3-2-2010_14-50-22
247469003*	955994	1	axc2	3/2/2010 15:36:28	OM_3-2-2010_14-50-22
247539001	955994	1	axc2	3/2/2010 15:37:21	OM_3-2-2010_14-50-22
247539002	955994	1	axc2	3/2/2010 15:38:14	OM_3-2-2010_14-50-22
247539003	955994	1	axc2	3/2/2010 15:39:07	OM_3-2-2010_14-50-22
1202051809	956940	1	axc2	3/2/2010 15:39:59	OM_3-2-2010_14-50-22
1202051813	956940	1	axc2	3/2/2010 15:40:51	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010 15:41:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010 15:43:34	OM_3-2-2010_14-50-22
247771001	956940	1	axc2	3/2/2010 15:45:22	OM_3-2-2010_14-50-22
1202053279	956940	1	axc2	3/2/2010 15:46:14	OM_3-2-2010_14-50-22
1202053280	956940	1	axc2	3/2/2010 15:47:08	OM_3-2-2010_14-50-22
1202053281	956940	1	axc2	3/2/2010 15:48:02	OM_3-2-2010_14-50-22
247780001	956940	1	axc2	3/2/2010 15:48:57	OM_3-2-2010_14-50-22
247793001	956940	1	axc2	3/2/2010 15:49:50	OM_3-2-2010_14-50-22
247807001	956940	1	axc2	3/2/2010 15:50:43	OM_3-2-2010_14-50-22
247807002	956940	1	axc2	3/2/2010 15:51:37	OM_3-2-2010_14-50-22

247807003	956940	1	axc2	3/2/2010	15:52:31	OM_3-2-2010_14-50-22
247807004	956940	1	axc2	3/2/2010	15:53:24	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	15:54:17	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	15:56:06	OM_3-2-2010_14-50-22
247817002	956940	1	axc2	3/2/2010	15:57:55	OM_3-2-2010_14-50-22
1202051810	956940	1	axc2	3/2/2010	15:58:48	OM_3-2-2010_14-50-22
1202051811	956940	1	axc2	3/2/2010	15:59:41	OM_3-2-2010_14-50-22
1202051812	956940	1	axc2	3/2/2010	16:00:34	OM_3-2-2010_14-50-22
247819001	956940	1	axc2	3/2/2010	16:01:26	OM_3-2-2010_14-50-22
247858001	956940	1	axc2	3/2/2010	16:02:19	OM_3-2-2010_14-50-22
247858002	956940	1	axc2	3/2/2010	16:03:11	OM_3-2-2010_14-50-22
247858003	956940	1	axc2	3/2/2010	16:04:05	OM_3-2-2010_14-50-22
247858004	956940	1	axc2	3/2/2010	16:05:00	OM_3-2-2010_14-50-22
247858005	956940	1	axc2	3/2/2010	16:05:54	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:06:46	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:08:37	OM_3-2-2010_14-50-22
247858006	956940	1	axc2	3/2/2010	16:10:27	OM_3-2-2010_14-50-22
1202053255	957567	1	axc2	3/2/2010	16:11:21	OM_3-2-2010_14-50-22
1202053262	957567	25	axc2	3/2/2010	16:12:15	OM_3-2-2010_14-50-22
247770003	957567	1	axc2	3/2/2010	16:13:08	OM_3-2-2010_14-50-22
247770004	957567	1	axc2	3/2/2010	16:14:01	OM_3-2-2010_14-50-22
247770005	957567	1	axc2	3/2/2010	16:14:54	OM_3-2-2010_14-50-22
247770006	957567	1	axc2	3/2/2010	16:15:47	OM_3-2-2010_14-50-22
247770007	957567	1	axc2	3/2/2010	16:16:41	OM_3-2-2010_14-50-22
247781001	957567	1	axc2	3/2/2010	16:17:34	OM_3-2-2010_14-50-22
1202053256	957567	1	axc2	3/2/2010	16:18:26	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:19:18	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:21:08	OM_3-2-2010_14-50-22
1202053258	957567	1	axc2	3/2/2010	16:22:57	OM_3-2-2010_14-50-22
1202053260	957567	1	axc2	3/2/2010	16:23:49	OM_3-2-2010_14-50-22
247781002	957567	1	axc2	3/2/2010	16:24:44	OM_3-2-2010_14-50-22
1202053257	957567	1	axc2	3/2/2010	16:25:38	OM_3-2-2010_14-50-22
1202053259	957567	1	axc2	3/2/2010	16:26:32	OM_3-2-2010_14-50-22
1202053261	957567	1	axc2	3/2/2010	16:27:27	OM_3-2-2010_14-50-22
247781003	957567	1	axc2	3/2/2010	16:28:21	OM_3-2-2010_14-50-22
247781004	957567	1	axc2	3/2/2010	16:29:15	OM_3-2-2010_14-50-22
247781005	957567	1	axc2	3/2/2010	16:30:09	OM_3-2-2010_14-50-22
247781006	957567	1	axc2	3/2/2010	16:31:03	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:31:55	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:33:45	OM_3-2-2010_14-50-22
247781007	957567	1	axc2	3/2/2010	16:35:34	OM_3-2-2010_14-50-22
247781008	957567	1	axc2	3/2/2010	16:36:28	OM_3-2-2010_14-50-22
247781009	957567	1	axc2	3/2/2010	16:37:21	OM_3-2-2010_14-50-22
247781010	957567	1	axc2	3/2/2010	16:38:14	OM_3-2-2010_14-50-22
247781011	957567	1	axc2	3/2/2010	16:39:07	OM_3-2-2010_14-50-22
247781012	957567	1	axc2	3/2/2010	16:40:00	OM_3-2-2010_14-50-22
247781013	957567	1	axc2	3/2/2010	16:40:52	OM_3-2-2010_14-50-22
247781014	957567	1	axc2	3/2/2010	16:41:47	OM_3-2-2010_14-50-22
247781015	957567	1	axc2	3/2/2010	16:42:42	OM_3-2-2010_14-50-22
1202053263	957569	1	axc2	3/2/2010	16:43:36	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:44:28	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:46:19	OM_3-2-2010_14-50-22
1202053270	957569	25	axc2	3/2/2010	16:48:09	OM_3-2-2010_14-50-22
247770008	957569	1	axc2	3/2/2010	16:49:03	OM_3-2-2010_14-50-22
1202053264	957569	1	axc2	3/2/2010	16:49:57	OM_3-2-2010_14-50-22
1202053266	957569	1	axc2	3/2/2010	16:50:51	OM_3-2-2010_14-50-22
1202053268	957569	1	axc2	3/2/2010	16:51:45	OM_3-2-2010_14-50-22
247770009	957569	1	axc2	3/2/2010	16:52:39	OM_3-2-2010_14-50-22
1202053265	957569	1	axc2	3/2/2010	16:53:32	OM_3-2-2010_14-50-22
1202053267	957569	1	axc2	3/2/2010	16:54:26	OM_3-2-2010_14-50-22

1202053269	957569	1	axc2	3/2/2010	16:55:19	OM_3-2-2010_14-50-22
247770010	957569	1	axc2	3/2/2010	16:56:12	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	16:57:04	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	16:58:55	OM_3-2-2010_14-50-22
247770011	957569	1	axc2	3/2/2010	17:00:44	OM_3-2-2010_14-50-22
247784002	957569	1	axc2	3/2/2010	17:01:37	OM_3-2-2010_14-50-22
247790002	957569	1	axc2	3/2/2010	17:02:32	OM_3-2-2010_14-50-22
247790003	957569	1	axc2	3/2/2010	17:03:26	OM_3-2-2010_14-50-22
247794001	957569	1	axc2	3/2/2010	17:04:21	OM_3-2-2010_14-50-22
247794002	957569	1	axc2	3/2/2010	17:05:15	OM_3-2-2010_14-50-22
247794003	957569	1	axc2	3/2/2010	17:06:10	OM_3-2-2010_14-50-22
247794004	957569	1	axc2	3/2/2010	17:07:04	OM_3-2-2010_14-50-22
247794005	957569	1	axc2	3/2/2010	17:07:58	OM_3-2-2010_14-50-22
247806001	957569	1	axc2	3/2/2010	17:08:52	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:09:44	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:11:35	OM_3-2-2010_14-50-22
247806002	957569	1	axc2	3/2/2010	17:13:25	OM_3-2-2010_14-50-22
247806003	957569	1	axc2	3/2/2010	17:14:18	OM_3-2-2010_14-50-22
247806004	957569	1	axc2	3/2/2010	17:15:12	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:16:06	OM_3-2-2010_14-50-22
247806006	957569	1	axc2	3/2/2010	17:16:59	OM_3-2-2010_14-50-22
247855002	957569	1	axc2	3/2/2010	17:17:52	OM_3-2-2010_14-50-22
247902001	957569	1	axc2	3/2/2010	17:18:45	OM_3-2-2010_14-50-22
247806005*	957569	1	axc2	3/2/2010	17:19:38	OM_3-2-2010_14-50-22
247858001	956940	2	axc2	3/2/2010	17:20:31	OM_3-2-2010_14-50-22
247858002	956940	2	axc2	3/2/2010	17:21:23	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:22:15	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:24:05	OM_3-2-2010_14-50-22
247469003	955994	1	axc2	3/2/2010	17:25:55	OM_3-2-2010_14-50-22
247902001	957569	50	axc2	3/2/2010	17:26:48	OM_3-2-2010_14-50-22
247806005	957569	1	axc2	3/2/2010	17:27:41	OM_3-2-2010_14-50-22
CCV		1	axc2	3/2/2010	17:28:34	OM_3-2-2010_14-50-22
CCB		1	axc2	3/2/2010	17:30:24	OM_3-2-2010_14-50-22

Original Run Filename: OM_3-2-2010_14-50-22.OMN created 3/2/2010 14:50:22
 Original Run Author's Signature: [axc2]
 Current Run Filename: OM_3-2-2010_14-50-22.OMN last modified 3/2/2010 17:31:29
 Current Run Author's Signature: [axc2]
 Description: GL-GC-E-095 EPA 335.1, 335.3, 335.4, 9012A, CLP335.2-M
 Liquid LCS nominal 50 ug/L

Sample	Rep.	Cup No.	Channel 1		Detection Time	ADF	MDF	Description
			TCYANIDE	Area (Vs)				
WCN100302-03	1	S3	107	4.98	3/2/2010@14:51:53			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.9 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@14:53:44			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.63 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.63 > -5.00					
Message			CCB Passed					
Action			Continue					
247539011|956938|	1	16	-0.875	0.0767	3/2/2010@14:55:33			
247546001	1	21	-2.72	-0.00747	3/2/2010@14:56:26			
247546002	1	22	-1.55	0.0460	3/2/2010@14:57:19			
247546003	1	23	-2.56	0.00	3/2/2010@14:58:12			
247546004	1	24	-2.51	0.00213	3/2/2010@14:59:05			
247550001	1	25	-1.50	0.0482	3/2/2010@14:59:57			
247770001	1	26	-2.55	3.43e-4	3/2/2010@15:00:49			
247770002	1	27	-2.56	-1.49e-4	3/2/2010@15:01:42			
247831001	1	28	-0.925	0.0744	3/2/2010@15:02:33			
1202049763|955994|MB	1	29	6.09	0.394	3/2/2010@15:03:26			
WCN100302-03	1	S3	107	4.97	3/2/2010@15:04:18			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.64e-4	3/2/2010@15:06:08			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
1202049763|955994|MB	1	29	-1.20	0.0618	3/2/2010@15:07:57			
1202049770|LCS	1	30	26.0	1.30	3/2/2010@15:08:48		25.00	
247321007	1	31	-0.848	0.0779	3/2/2010@15:09:43			
1202049764|DUP	1	32	-1.10	0.0663	3/2/2010@15:10:37			
1202049766|MS	1	33	38.7	1.88	3/2/2010@15:11:30			
1202049768|MSD	1	34	55.0	2.62	3/2/2010@15:12:23			

247325001	1	35	2.97	0.252	3/2/2010@15:13:17		
1202049765|DUP	1	36	-1.44	0.0511	3/2/2010@15:14:10		
1202049767|MS	1	37	105	4.89	3/2/2010@15:15:03		
1202049769|MSD	1	38	100	4.68	3/2/2010@15:15:56		
WCN100302-03	1	S3	106	4.94	3/2/2010@15:16:48		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			5.9 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			5.9 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.63	0.0424	3/2/2010@15:18:39		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.63 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.63 > -5.00				
Message			CCB Passed				
Action			Continue				
247456001	1	39	-1.60	0.0434	3/2/2010@15:20:27		
247456002	1	40	5.61	0.372	3/2/2010@15:21:20		
247456003	1	41	-0.655	0.0867	3/2/2010@15:22:12		
247456004	1	42	0.189	0.125	3/2/2010@15:23:05		
247456005	1	43	-1.49	0.0487	3/2/2010@15:23:57		
247456006	1	44	-2.76	-0.00917	3/2/2010@15:24:49		
247463001	1	45	3.46	0.274	3/2/2010@15:25:41		
247463002	1	46	-1.67	0.0403	3/2/2010@15:26:35		
247463003	1	47	-1.52	0.0473	3/2/2010@15:27:29		
247463004	1	48	-1.35	0.0551	3/2/2010@15:28:23		
WCN100302-03	1	S3	107	4.97	3/2/2010@15:29:15		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			6.6 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			6.6 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-2.57	-4.02e-4	3/2/2010@15:31:06		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.57 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.57 > -5.00				
Message			CCB Passed				
Action			Continue				
247463005	1	49	-1.35	0.0551	3/2/2010@15:32:56		
247463006	1	50	-2.56	0.00	3/2/2010@15:33:49		
247469001	1	51	-3.03	-0.0213	3/2/2010@15:34:42		
247469002	1	52	-1.91	0.0295	3/2/2010@15:35:36		
247469003	1	53	12.1	0.667	3/2/2010@15:36:28		
247539001	1	54	2.67	0.238	3/2/2010@15:37:21		
247539002	1	55	-1.81	0.0340	3/2/2010@15:38:14		
247539003	1	56	-1.67	0.0406	3/2/2010@15:39:07		
1202051809|956940|MB	1	57	-1.40	0.0526	3/2/2010@15:39:59		
1202051813|LCS	1	58	54.8	2.61	3/2/2010@15:40:51		
WCN100302-03	1	S3	107	5.00	3/2/2010@15:41:44		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			7.3 < 10.0				

			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	7.3 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100302-08	1	S7		-0.884	0.0763	3/2/2010@15:43:34		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-0.884 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-0.884 > -5.00				
			Message	CCB Passed				
			Action	Continue				
247771001	1	59		-1.58	0.0446	3/2/2010@15:45:22		
1202053279	1	60	DUP	-2.56	-2.17e-4	3/2/2010@15:46:14		
1202053280	1	61	MS	117	5.44	3/2/2010@15:47:08		
1202053281	1	62	MSD	115	5.35	3/2/2010@15:48:02		
247780001	1	63		-2.82	-0.0117	3/2/2010@15:48:57		
247793001	1	64		-2.05	0.0233	3/2/2010@15:49:50		
247807001	1	65		-2.55	3.61e-4	3/2/2010@15:50:43		
247807002	1	66		-2.09	0.0216	3/2/2010@15:51:37		
247807003	1	67		-2.55	3.04e-4	3/2/2010@15:52:31		
247807004	1	68		-2.56	-1.55e-4	3/2/2010@15:53:24		
WCN100302-03	1	S3		106	4.96	3/2/2010@15:54:17		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	6.3 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	6.3 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100302-08	1	S7		-2.36	0.00888	3/2/2010@15:56:06		CCB
			Known Conc:	0.00				
DQM Test: > + Concentration Limit								
			Result:	-2.36 < 5.00				
			Message	CCB Passed				
			Action	Continue				
DQM Test: < - Concentration Limit								
			Result:	-2.36 > -5.00				
			Message	CCB Passed				
			Action	Continue				
247817002	1	69		-1.44	0.0509	3/2/2010@15:57:55		
1202051810	1	70	DUP	-2.52	0.00194	3/2/2010@15:58:48		
1202051811	1	71	MS	114	5.31	3/2/2010@15:59:41		
1202051812	1	72	MSD	105	4.92	3/2/2010@16:00:34		
247819001	1	73		31.6	1.55	3/2/2010@16:01:26		
247858001	1	74		209	9.63	3/2/2010@16:02:19		
247858002	1	75		209	9.62	3/2/2010@16:03:11		
247858003	1	76		18.8	0.973	3/2/2010@16:04:05		
247858004	1	77		80.7	3.79	3/2/2010@16:05:00		
247858005	1	78		45.1	2.17	3/2/2010@16:05:54		
WCN100302-03	1	S3		107	5.00	3/2/2010@16:06:46		CCV
			Known Conc:	100				
DQM Test: > + Percent Relative Difference								
			Result:	7.2 < 10.0				
			Message	CCV Passed				
			Action	Continue				
DQM Test: < - Percent Relative Difference								
			Result:	7.2 < 10.0				
			Message	CCV Passed				
			Action	Continue				
WCN100302-08	1	S7		-1.91	0.0295	3/2/2010@16:08:37		CCB
			Known Conc:	0.00				

DQM Test: > + Concentration Limit									
Result:		-1.91 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-1.91 > -5.00							
Message		CCB Passed							
Action		Continue							
247858006	1	79	-0.616	0.0885	3/2/2010@16:10:27				
1202053255|957567|MB	1	80	-2.57	-3.76e-4	3/2/2010@16:11:21				
1202053262||LCS	1	81	15.5	0.824	3/2/2010@16:12:15		25.00		
247770003	1	82	-2.10	0.0209	3/2/2010@16:13:08				
247770004	1	83	-2.01	0.0248	3/2/2010@16:14:01				
247770005	1	84	-2.68	-0.00534	3/2/2010@16:14:54				
247770006	1	85	-2.55	2.76e-4	3/2/2010@16:15:47				
247770007	1	86	-2.45	0.00519	3/2/2010@16:16:41				
247781001	1	87	-0.808	0.0797	3/2/2010@16:17:34				
1202053256||DUP	1	88	-0.969	0.0724	3/2/2010@16:18:26				
WCN100302-03	1	S3	107	5.00	3/2/2010@16:19:18				CCV
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		7.2 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		7.2 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100302-08	1	S7	-2.72	-0.00736	3/2/2010@16:21:08				CCB
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-2.72 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-2.72 > -5.00							
Message		CCB Passed							
Action		Continue							
1202053258|MS	1	89	97.5	4.56	3/2/2010@16:22:57				
1202053260|MSD	1	90	105	4.92	3/2/2010@16:23:49				
247781002	1	91	-2.75	-0.00887	3/2/2010@16:24:44				
1202053257||DUP	1	92	-2.62	-0.00284	3/2/2010@16:25:38				
1202053259|MS	1	93	110	5.13	3/2/2010@16:26:32				
1202053261|MSD	1	94	104	4.86	3/2/2010@16:27:27				
247781003	1	95	-1.94	0.0281	3/2/2010@16:28:21				
247781004	1	96	-2.57	-3.51e-4	3/2/2010@16:29:15				
247781005	1	97	4.38	0.316	3/2/2010@16:30:09				
247781006	1	98	-2.66	-0.00478	3/2/2010@16:31:03				
WCN100302-03	1	S3	105	4.91	3/2/2010@16:31:55				CCV
Known Conc:			100						
DQM Test: > + Percent Relative Difference									
Result:		5.2 < 10.0							
Message		CCV Passed							
Action		Continue							
DQM Test: < - Percent Relative Difference									
Result:		5.2 < 10.0							
Message		CCV Passed							
Action		Continue							
WCN100302-08	1	S7	-2.09	0.0214	3/2/2010@16:33:45				CCB
Known Conc:			0.00						
DQM Test: > + Concentration Limit									
Result:		-2.09 < 5.00							
Message		CCB Passed							
Action		Continue							
DQM Test: < - Concentration Limit									
Result:		-2.09 > -5.00							
Message		CCB Passed							
Action		Continue							

247781007	1	99	-2.56	1.11e-4	3/2/2010@16:35:34		
247781008	1	100	-2.55	3.30e-4	3/2/2010@16:36:28		
247781009	1	101	-2.12	0.0202	3/2/2010@16:37:21		
247781010	1	102	0.184	0.125	3/2/2010@16:38:14		
247781011	1	103	-0.587	0.0898	3/2/2010@16:39:07		
247781012	1	104	11.5	0.639	3/2/2010@16:40:00		
247781013	1	105	-2.62	-0.00267	3/2/2010@16:40:52		
247781014	1	106	2.25	0.219	3/2/2010@16:41:47		
247781015	1	107	-1.14	0.0648	3/2/2010@16:42:42		
1202053263|957569|MB	1	108	-2.86	-0.0138	3/2/2010@16:43:36		
WCN100302-03	1	S3	104	4.87	3/2/2010@16:44:28		CCV
Known Conc:			100				
DQM Test: > + Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
DQM Test: < - Percent Relative Difference							
Result:			4.4 < 10.0				
Message			CCV Passed				
Action			Continue				
WCN100302-08	1	S7	-1.95	0.0280	3/2/2010@16:46:19		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-1.95 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-1.95 > -5.00				
Message			CCB Passed				
Action			Continue				
1202053270|LCS	1	109	28.4	1.41	3/2/2010@16:48:09	25.00	
247770008	1	110	-1.72	0.0381	3/2/2010@16:49:03		
1202053264|DUP	1	111	-1.87	0.0315	3/2/2010@16:49:57		
1202053266|MS	1	112	106	4.96	3/2/2010@16:50:51		
1202053268|MSD	1	113	109	5.07	3/2/2010@16:51:45		
247770009	1	114	-2.46	0.00432	3/2/2010@16:52:39		
1202053265|DUP	1	115	-2.01	0.0249	3/2/2010@16:53:32		
1202053267|MS	1	116	121	5.63	3/2/2010@16:54:26		
1202053269|MSD	1	117	104	4.87	3/2/2010@16:55:19		
247770010	1	118	-1.54	0.0462	3/2/2010@16:56:12		
WCN100302-03	1	S3	105	4.90	3/2/2010@16:57:04		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				
WCN100302-08	1	S7	-2.55	3.56e-4	3/2/2010@16:58:55		CCB
Known Conc:			0.00				
DQM Test: > + Concentration Limit							
Result:			-2.55 < 5.00				
Message			CCB Passed				
Action			Continue				
DQM Test: < - Concentration Limit							
Result:			-2.55 > -5.00				
Message			CCB Passed				
Action			Continue				
247770011	1	119	-2.56	-1.49e-4	3/2/2010@17:00:44		
247784002	1	120	-1.29	0.0576	3/2/2010@17:01:37		
247790002	1	121	-2.12	0.0200	3/2/2010@17:02:32		
247790003	1	122	-2.56	0.00	3/2/2010@17:03:26		
247794001	1	123	-2.56	-1.49e-4	3/2/2010@17:04:21		
247794002	1	124	-2.55	3.61e-4	3/2/2010@17:05:15		
247794003	1	125	-2.72	-0.00709	3/2/2010@17:06:10		
247794004	1	126	-2.78	-0.00991	3/2/2010@17:07:04		

247794005	1	127	-1.86	0.0318	3/2/2010@17:07:58			
Calibration:			Table/Fig. 1					
247806001	1	128	-1.31	0.0567	3/2/2010@17:08:52			
WCN100302-03	1	S3	106	4.93	3/2/2010@17:09:44			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.7 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.7 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-1.98	0.0263	3/2/2010@17:11:35			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-1.98 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-1.98 > -5.00					
Message			CCB Passed					
Action			Continue					
247806002	1	129	-2.57	-6.55e-4	3/2/2010@17:13:25			
247806003	1	130	-1.47	0.0495	3/2/2010@17:14:18			
247806004	1	131	-1.86	0.0317	3/2/2010@17:15:12			
247806005	1	132	8.20	0.490	3/2/2010@17:16:06			
247806006	1	133	-0.684	0.0854	3/2/2010@17:16:59			
247855002	1	134	-2.09	0.0216	3/2/2010@17:17:52			
247902001	1	135	1.78e+3	81.4	3/2/2010@17:18:45			
247806005	1	132	6.30	0.403	3/2/2010@17:19:38			
247858001|956940|	1	74	125	5.79	3/2/2010@17:20:31		2.00	
247858002	1	75	103	4.82	3/2/2010@17:21:23		2.00	
WCN100302-03	1	S3	106	4.94	3/2/2010@17:22:15			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			5.8 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			5.8 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-2.56	-1.85e-4	3/2/2010@17:24:05			CCB
Known Conc:			0.00					
DQM Test: > + Concentration Limit								
Result:			-2.56 < 5.00					
Message			CCB Passed					
Action			Continue					
DQM Test: < - Concentration Limit								
Result:			-2.56 > -5.00					
Message			CCB Passed					
Action			Continue					
247469003|955994|	1	53	-1.40	0.0528	3/2/2010@17:25:55			
247902001|957569|	1	135	66.2	3.13	3/2/2010@17:26:48		50.00	
247806005	1	132	-1.46	0.0501	3/2/2010@17:27:41			
WCN100302-03	1	S3	106	4.94	3/2/2010@17:28:34			CCV
Known Conc:			100					
DQM Test: > + Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
DQM Test: < - Percent Relative Difference								
Result:			6.0 < 10.0					
Message			CCV Passed					
Action			Continue					
WCN100302-08	1	S7	-0.316	0.102	3/2/2010@17:30:24			CCB
Known Conc:			0.00					

DQM Test: > + Concentration Limit				
Result:	-0.316 < 5.00			
Message	CCB Passed			
Action	Continue			
DQM Test: < - Concentration Limit				
Result:	-0.316 > -5.00			
Message	CCB Passed			
Action	Continue			

Analyte Properties Table for OM_3-2-2010_14-50-22.OMN

Property	Channel 1
	TCYANIDE
Concentration Units	ug/l
Calibration Fit Type	First Order
Clear Calibration	True
Force Through Zero	False
Calibration Weighting	None
Auto Dilution Trigger	True
% of High Standard	100
Quik Chem Method	10-204-00-1-A
Chemistry	Direct/Bipolar
Calibration by Height	False
Inject to Peak Start	22
Peak Base Width	39

Channel 1: Current View

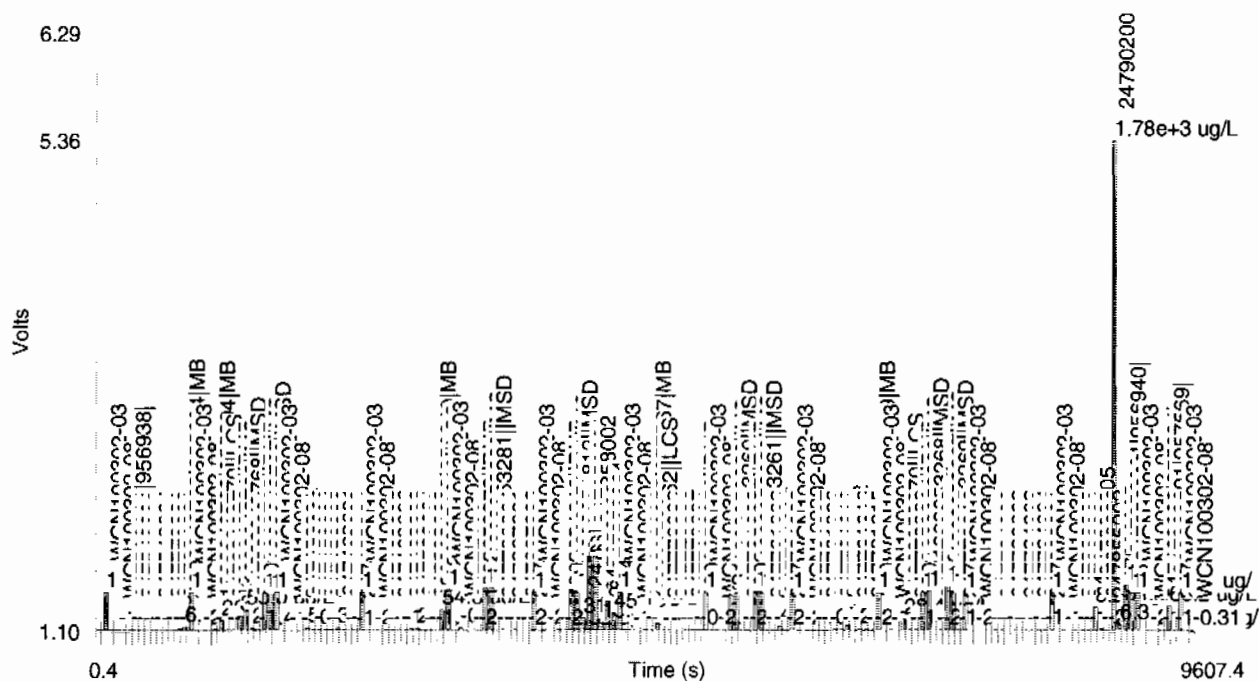


Table 1: TCYANIDE

	Conc. (ug/L)	Rep	Peak Area (Volt-s)	Peak Height (Volts)	% Residual	Detection Date	Detection Time
1	200	1	9.17	0.613	0.6	3/2/2010	08:47:39
2	150	1	7.02	0.465	-1.1	3/2/2010	08:48:31
3	100	1	4.67	0.309	0.1	3/2/2010	08:49:23
4	50.0	1	2.38	0.162	0.5	3/2/2010	08:50:16
5	10.0	1	0.547	0.0492	4.4	3/2/2010	08:51:09
6	5.00	1	0.398	0.0229	-15.5	3/2/2010	08:52:03
7	0.00	1	0.0805	0.00272		3/2/2010	08:52:57

Figure 1: TCYANIDE

