ATL Number:	064235

(EPA 200.8) - INITIAL CALIBRATION

Instrument ID: ICP4

Date(s) Analyzed: 08/13/03

Initial Calibration:

		INTENSITY			
COMPOUND	STD1	STD2	STD3	STD4	r2
CHROMIUM	15965	57027	100767	191573	0.999942

Standard Concentratic	0.5 ppb	5 ppb	10 ppb	20 ppb
Standard ID:	MST030813K	MST030813J	MST030813I	MST030813H

Calibration Acceptance Criteria: > 0.995 Correlation

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number:	064235

(EPA 200.8) - INITIAL CALIBRATION

Instrument ID: ICP4

Date(s) Analyzed: 08/14/03

Initial Calibration:

		INTENSITY			
COMPOUND	STD1	STD2	STD3	STD4	r2
CHROMIUM	16983	62910	113962	211203	0.999911

Standard Concentratic	0.5 ppb	5 ppb	10 ppb	20 ppb
Standard ID:	MST030814E	MST030814D	MST030814C	MST030814B

Calibration Acceptance Criteria: > 0.995 Correlation

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 08/13/2003

	Source:	Standard Code:
Initial Calibration Verification:	LEEMAN LABS	MST030813M
Continuing Calibration Verification:	LEEMAN LABS	MST030813M

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found CCV1	Continuing Calibration %R(1)	Continuing Calibration Found CCV2	Continuing Calibration %R(1)	
Chromium	10.0	9.911	99	10.0	9.423	94	9.500	95	

ICV Limits: 90 -110%

CCV Limits: 85 -115%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 08/13/2003

	Source:	Standard Code:
Initial Calibration Verification:	LEEMAN LABS	MST030813M
Continuing Calibration Verification:	LEEMAN LABS	MST030813M

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found CCV3	Continuing Calibration %R(1)	Continuing Calibration Found CCV4	Continuing Calibration %R(1)	
Chromium	10.0	9.911	99	10.0	9.366	94	9.487	95	

ICV Limits: 90 -110%

CCV Limits: 85 -115%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 08/14/2003

	Source:	Standard Code:
Initial Calibration Verification:	LEEMAN LABS	MST030814G
Continuing Calibration Verification:	LEEMAN LABS	MST030814G

Concentration Units: ug/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found CCV1	Continuing Calibration %R(1)	Continuing Calibration Found CCV2	Continuing Calibration %R(1)	
Chromium	10.0	10.082	101	10.0	10.422	104	10.819	108	

ICV Limits: 90 -110%

CCV Limits: 85 -115%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

(EPA 200.8) BLANK *

Instrument ID: ICP 4
Date Digested: N/A
Digestion Method: N/A

Dilution Factor: 1
Matrix: Water
Date Analyzed: 08/13/2003

QC Batch Number: R30052

Analyte	DLR	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Chromium	1	0.102		0.044		0.012		-0.053		0.043		

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

(EPA 200.8) BLANK *

Instrument ID: ICP 4
Date Digested: N/A
Digestion Method: N/A

Dilution Factor: 1
Matrix: Water
Date Analyzed: 08/13/2003

QC Batch Number: R30053

Analyte	DLR	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Chromium	1	0.102		-0.020						-0.012		

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

(EPA 200.8) BLANK *

Instrument ID: ICP 4
Date Digested: N/A
Digestion Method: N/A

Dilution Factor: 1
Matrix: Water
Date Analyzed: 08/14/2003

QC Batch Number: 14733

Analyte	DLR	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Chromium	1	0.010		0.092		0.004				0.121		

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

Instrument ID: ICP4 Internal Standard ID: MST030606A

Date Analyzed: 08/13/2003 Standard Concentration: 50 ug/L

QC Batch: R30052

		Sc				
		Intensity	% Rec			
	Calibration Blank	583761	---			
Lab ID	Sample Description					
MB-R30052		517868	89			
LCS-R30052		522277	89			
064235-006AMS		686389	118			
064235-006AMSD		680361	117			
064235-001A		604783	104			
064235-002A		579725	99			
064235-003A		595171	102			
064235-004A		526518	90			
064235-006A		643481	110			
064235-007A		616353	106			
064235-008A		621372	106			
064235-009A		653371	112			
064235-010A		657620	113			
064235-011A		674989	116			
064235-012A		668299	114			
064235-013A		516263	88			
064235-014A		597822	102			
064235-015A		631923	108			
064235-017A		636476	109			

* Outside Acceptance Criteria

Acceptance Criteria: 60 - 125%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

Instrument ID: ICP4 Internal Standard ID: MST030606A

Date Analyzed: 08/13/2003 Standard Concentration: 50 ug/L

QC Batch: R30052

		Sc				
		Intensity	% Rec			
	Calibration Blank	583761	---			
Lab ID	Sample Description					
064235-018A		716426	123			
064235-019A		673548	115			
064235-020A		673888	115			
064235-021A		673867	115			
064235-022A		648264	111			
064235-006ADUP		636079	109			
064235-022ADUP		649416	111			

* Outside Acceptance Criteria

Acceptance Criteria: 60 - 125%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

Instrument ID: ICP4 Internal Standard ID: MST030606A

Date Analyzed: 08/13/2003 Standard Concentration: 50 ug/L

QC Batch: R30053

		Sc				
		Intensity	% Rec			
	Calibration Blank	583761	---			
Lab ID	Sample Description					
MB-R30053		568321	97			
LCS-R30053		578104	99			
064235-016AMS		697753	120			
064235-016AMSD		707181	121			
064235-016A		695710	119			
064235-023A		715257	123			
064235-024A		725719	124			
064235-025A		719151	123			
064235-016ADUP		700153	120			

* Outside Acceptance Criteria

Acceptance Criteria: 60 - 125%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

ATL Number: 064235

Instrument ID: ICP4 Internal Standard ID: MST030606A

Date Analyzed: 08/14/2003 Standard Concentration: 50 ug/L

QC Batch: 14733

		Sc				
		Intensity	% Rec			
	Calibration Blank	671409	---			
Lab ID	Sample Description					
MB-14733	MB-14733	660845	98			
LCS-14733	LCS-14733	662011	99			
064235-005AMS		673893	100			
064235-005AMSD		654952	98			
064235-005A		723674	108			
064235-005ADUP		701977	105			

* Outside Acceptance Criteria

Acceptance Criteria: 60 - 125%

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90807 Tel: 562 989-4045 Fax: 562 989-4040

ICP-MS : Turbidity Check and Sample Preparation Log

QC Number: 14733 **Date Read / Digested:** 8-13-03

Method (Circle one):	Turb. Calibration	Matrix (Circle one):		Acid Lot #
(1) 200.8	100 NTU: 10 NTU	1) Drinking Water	4) Soil	Hydrochloric Y12028
2) 3010A	Std Code: SCR-0022	2) Ground Water	5) Solid	Nitric Y13056
3) 3050B	Initials: NJ	3) Liquid	(6) Other water	
4) 3051				

	Sample ID	Turbidity Result *	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
	MS 064235-005A	1.50	40	0.04	10 ppm	MSP030414Q	50	NJ	
	MSD ↓	↓	↓	↓	↓	↓	↓	↓	
	Method Blank	–	↓	–	–	–	↓	↓	
	LCS	–	↓	0.04	10 ppm	MSP030220A	↓	↓	
	Blank MS								
	Blank MSD								
1	064235-005A	1.50	40				50	NJ	
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
DUP	064235-005A	1.50	40				50	NJ	

* Turbidity <1 NTU **DOES NOT** need sample preparation.

Advanced Technology Laboratories, Logbook # 6

ICP-MS : Turbidity Check and Sample Preparation Log

QC Number: R30052 **Date Read / Digested:** 8-13-03

Method (Circle one):	Turb. Calibration	Matrix (Circle one):		Acid Lot #
1) 200.8	100 NTU: 10 NTU	1) Drinking Water	4) Soil	Hydrochloric N/A
2) 3010A	Std Code: SQL-0022	2) Ground Water	5) Solid	Nitric N/A
3) 3050B	Initials: NS	3) Liquid	6) Other water	
4) 3051				

	Sample ID	Turbidity Result *	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
	MS 064235-006A	0.23	5	0.1 ml	1 ppm	MST030813G	10	NS	
	MSD ↓	0.23	↓	↓	↓	↓	↓	↓	
	Method Blank	–	10	–	–	–	↓	↓	
	LCS	–	↓	0.1 ml	1 ppm	MST030813L	↓	↓	
	Blank MS								
	Blank MSD								
1	064235-001A	-0.01	10				10	NS	
2	-002A	-0.06	↓				↓	↓	
3	-003A	-0.13	↓				↓	↓	
4	-004A	-0.13	↓				↓	↓	
5	-006A	0.23	↓				↓	↓	
6	-007A	-0.08	↓				↓	↓	
7	-008A	0.04	↓				↓	↓	
8	-009A	0.09	↓				↓	↓	
9	-010A	-0.04	↓				↓	↓	
10	-011A	-0.09	↓				↓	↓	
11	-012A	-0.13	↓				↓	↓	
12	-013A	-0.12	↓				↓	↓	
13	-014A	0.08	↓				↓	↓	
14	-015A	-0.12	↓				↓	↓	
15	-017A	-0.05	↓				↓	↓	
16	-018A	-0.16	↓				↓	↓	
17	-019A	0.12	↓				↓	↓	
18	-020A	-0.06	↓				↓	↓	
19	-021A	-0.01	↓				↓	↓	
20	-022A	0.74	↓				↓	↓	
DUP	064235-006A / 064235-022A	-0.03	↓				↓	↓	

* Turbidity <1 NTU **DOES NOT** need sample preparation.

Advanced Technology Laboratories, Logbook # 6

ICP-MS : Turbidity Check and Sample Preparation Log

QC Number: R3005 3 **Date Read / Digested:** 8-13-03

Method (Circle one):	**Turb. Calibration**	Matrix (Circle one):		Acid Lot #
1) (200.8)	100 NTU: 10 NTU	1) Drinking Water	4) Soil	Hydrochloric N/A
2) 3010A	Std Code: SCR-0022	2) Ground Water	5) Solid	Nitric N/A
3) 3050B	Initials: NS	3) Liquid	(6) Other water	
4) 3051				

Sample ID	**Turbidity Result ***	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
MS 064235-016A	-0.04	10	0.10 ml	1 ppm	HST030813G	10	NS	
MSD ↓	↓	↓	↓	↓	↓	↓	↓	
Method Blank	—	↓	—	—	—	↓	↓	
LCS	—	↓	0.10 ml	1 ppm	HST030813L	↓	↓	
Blank MS								
Blank MSD								
1 064235-016A	-0.04	10				10	NS	
2 ↓ -023A	0.23	↓				↓	↓	
3 ↓ -024A	0.30	↓				↓	↓	
4 ↓ -025A	0.20	↓				↓	↓	
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
DUP 064235-016A	-0.10	10				10	NS	

* Turbidity <1 NTU **DOES NOT** need sample preparation.

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Advanced Technology Laboratories

PREP BATCH REPORT

Prep Start Date: **08/13/2003 12:20:59**
Prep End Date: **08/13/2003 7:00:10**

Initials/ Date: _____

Prep Factor Units: mL / mL

Prep Batch **14733** Prep Code: **200.8_PR** Technician: **Nancy Sibucao**

Sample ID	Matrix	pH	SampAmt	3 Replicates	Sol Added	Sol Recov	Fin Vol	factor	Clean Up Code	TURB Check
MB-14733	WATER		40	☐	0	0	50	1.250		
LCS-14733	WATER		40	☐	0	0	50	1.250		
064235-005A	Water		40	☐	0	0	50	1.250		
064235-005ADUP	Water		40	☐	0	0	50	1.250		
064235-005AMS	Water		40	☐	0	0	50	1.250		
064235-005AMSD	Water		40	☐	0	0	50	1.250		

Clean Up Code: A = ACID; F = FLORISIL; S = SILICA GEL; M = MERCURY; G = GPC

Number	Reagent Name	LotNo:
481	HYDROCLORIC ACID	Y12028
482	nitric acid	y13056

Spk ID	Spike Name	SampType	AmtAdd (ml)
MSP030220A	CHECKMATE STANDARD 1	LCS	0.04
MSP030414Q	CHECKMATE STANDARD 1	MS	0.04

Metals Working Standard Prep Log

Date	Standard Name	Working Std Code	Stock Info: Stock Std Code	Preparation: Stock Concentration	Preparation: Amount Taken from Stock
06-05-03	ICPM - 10	MST030605 C	MST030605 B	20 ppb	25
	- 5	D	C	10 ppb	25
	- 0.5	E	D	5 ppb	5
	ICPM - LCS,	F	MST021216 D MST021216 B	10 ppm 1000 ppm	5 0.05
	- IW/CW @10	G	~~MS~~ MS 6-5-03 MST030605	1 ppm	0.5
06-06-03	ICPMS - Internal Std.	MST030606 A	MST030217 A Li	1000 ppm	1 ml
			B Ge		
			C Tb		
			D Sc		
			E In		
			F Tm		
06-05-03	Ag - MS/MSD /10 ppm	MSP030605 A	MSP030414 R	1000 ppm	0.5
06-09-03	ICPMS - STD,	MST030609 A	MST030402 A MST030402 B ~~MST030404 A~~	10 ppm 1000 ppm 10 ppm	5 0.05 5
	- 20	B	MST030609 A	1 ppm	1
	- 10	C	B	20 ppb	25
	- 5	D	C	10 ppb	25
	- 0.5	E	D	5 ppb	5
	ICPM - LCS,	F	MST021216 D MST021216 B MST030407 B	10 ppm 1000 ppm 10 ppm	5 0.05 5
	- IW/CW @ 10	G	MST030609 F	1 ppm	0.5
	ICPM - 100	H	MST030609 A	1 ppm	5

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Metals Working Standard Prep Log

Preparation			Expiration Dates			
			Exp Date			
Final Vol. (ml)	Final Conc. (ug/ml)	Diluent Matrix (ie H_2O)	Working STD *	Manufacturer	Comments	Initials
50	10ppb	DI H_2O + 2% HNO_3	09-03-03	Leeman		NS
	5ppb					
	0.5ppb					
	1ppm			Leeman		
	10ppb					
100	10ppm	DI H_2O + 2% HNO_3	09-04-03	High Purity		NS
~~50~~ 100 NS	10ppm	DI H_2O + 2% HNO_3	~~09-04-03~~ ~~09-07-03~~	~~Leeman~~ High Purity	NS 6-6-03	NS
50	10ppm	DI H_2O + 2% HNO_3	09-03-03 ~~09-07-03~~	Leeman ~~High Purity~~	NS 6-11-03	NS
50	1ppm ~~20ppb~~	DI H_2O + 2% HNO_3	09-07-03	Leeman High Purity		
NS 6-9-03	20 ~~10~~ ppb					
	10 ~~5~~ ppb					
	5 ~~0.5~~ ppb					
	0.5 ppb ~~1ppm~~					
	1 ppm ~~10ppb~~			Leeman ENScience		
	10 ppb					
	100 ppb			Leeman High Purity		

Check working std versus all manufacturer's

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Metals Working Standard Prep Log

Date	Standard Name	Working Std Code	Stock Info: Stock Std Code	Preparation: Stock Concentration	Preparation: Amount Taken from Stock
7-11-03	ICPTUS - 5	MST030711 D	MST030711	10 ppb	25
↓	↓ -0.5	↓ E NS 7-11-03	↓	5 ~~ppb~~ ppb NS 7-11-03	5
↓	ICPMS- LCS,	↓ ~~F~~ G	MST021216B MST021216B	1000 ppm 10 ppm	0.05 5
↓	↓ -ICW/CCW @ 10	↓ H	MST030711	1 ppm	0.5
7-15-03	ICPMS Tuning Stock Sol'n.	MST030715 A	MST-010523E Mg	1000 ppm	0.5
↓	↓	↓	MST030414H Cu	↓	↓
↓	↓	↓	MST030217J Rh	↓	↓
↓	↓	↓	MST030414E Cd	↓	↓
↓	↓	↓	MST030414C Ba	↓	↓
↓	↓	↓	MST030217G Ce	↓	↓
↓	↓	↓	MST030414P Pb	↓	↓
↓	↓	↓	MST030414D Be	↓	↓
↓	↓	↓	MST030414G Co	↓	↓
↓	↓	↓	MST030217H Tl	↓	↓
↓	↓	↓	MST030217I U	↓	↓
↓	↓	↓	MST030217E In	↓	↓
7-16-03	10 ppb Tuning Solution	MST030716 A	MST030715A	1 ppm	1.0
7-16-03	ICPMS - STD,	MST030716 B	MST030402A MST030402B	10 ppm 1000 ppm	5 0.05
↓	↓ -20	↓ C	MST030716 B	1 ppm	1
↓	↓ -10	↓ D	↓ C	20 ppb	25

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Metals Working Standard Prep Log

Preparation			Expiration Dates			
			Exp Date			
Final Vol. (ml)	Final Conc. (ug/ml)	Diluent Matrix (ie H_2O)	Working STD *	Manufacturer	Comments	Initials
50	5 ppb	DI H_2O + 2% HNO_3	10-09-03	Leeman		NS
	0.5 ppb					
	1 ppm					
	10 ppb					
~~500~~	1 ppm	DI H_2O + 2% HNO_3	10-13-03	Ultra Scientific High Purity		NS
~~500~~	10 ppb	DI H_2O + 2% HNO_3	10-14-03	Ultra Scientific High Purity		NS
50	1 ppm			Leeman		NS
	20 ppb					
	10 ppb					

* Check working std versus all manufacturer's

Metals Working Standard Prep Log

Date	Standard Name	Working Std Code	Stock Info: Stock Std Code	Preparation: Stock Concentration	Preparation: Amount Taken from Stock
08-11-03	ICPMS - LCS,	MST030811 E	MST021216D MST021216B MST030708E	10 ppm 1000 ppm 10 ppm	5 0.05 5
	⊥ -IW/CW @50	⊥ F	MST030811E	1 ppm	2.5
	ICPMS - 400	G	A	1 ppm	20
	- 200	H	G	400 ppb	25
	⊥ -100	I	H	200 ppb	25
	ICPMS - IW/CW @ 200	J	E	1 ppm	10
08-13-03	ICPMS - STD,	MST030813 G	MST030402A MST030402B	10 ppm 1000 ppm	5 0.05
	-20	H	MST030813G	1 ppm	1
	-10	I	H	20 ppb	25
	-5	J	I	10 ppb	25
	⊥ -0.5	K	J	5 ppb	5
	ICPMS - LCS,	L	MST021216D MST021216B	10 ppm 1000 ppm	5 0.05
	⊥ -IW/CW @10	M	MST030813L	1 ppm	0.5
08-12-03	Ag - MS/MSD /10 ppm	MSP030812A	MSP030414R	1000 ppm	0.5
⊥	Ag - LCS /10 ppm	⊥ B	MSP030407C	⊥	⊥
08-14-03	ICPMS - STD,	MST030814A	MST030402A MST030402B	10 ppm 1000 ppm	5 0.05
	-20	B	MST030814A	1 ppm	1
	-10	C	B	20 ppb	25
	-5	D	C	10 ppb	25
	⊥ -0.5	E	D	5 ppb	5

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Metals Working Standard Prep Log

Preparation			Expiration Dates			
			Exp Date			
Final Vol. (ml)	Final Conc. (ug/ml)	Diluent Matrix (ie H_2O)	Working STD *	Manufacturer	Comments	Initials
50	1ppm	DI H_2O + 2% HNO_3	11-09-03	High Purity Eh Science		NS
↓	50ppb	↓	↓	↓		↓
↓	400ppb	↓	↓	Leeman High Purity		↓
↓	20ppb	↓	↓	↓		↓
↓	100ppb	↓	↓	↓		↓
↓	200ppb	↓	↓	Leeman Eh Science		↓
100	1ppm	DI H_2O + 2% HNO_3	11-11-03	Leeman ↓		NS
↓	20ppb	↓	↓	↓		↓
↓	10ppb	↓	↓	↓		↓
↓	5ppb	↓	↓	↓		↓
↓	0.5ppb	↓	↓	↓		↓
↓	1ppm	↓	↓	Leeman ↓		↓
↓	10ppb	↓	↓	↓		↓
50	10ppm	DI H_2O + 2% HNO_3	11 NS 8-12-03 ~~08~~-10-03	Leeman		NS
↓	↓	↓	11-10-03	↓		↓
50	1ppm	DI H_2O + 2% HNO_3	11-12-03	Leeman		NS
↓	20ppb	↓	↓	↓		↓
↓	10ppb	↓	↓	↓		↓
↓	5ppb	↓	↓	↓		↓
↓	0.5ppb	↓	↓	↓		↓

* Check working std versus all manufacturer's

Metals Working Standard Prep Log

			Stock Info	Preparation	
Date	Standard Name	Working Std Code	Stock Std Code	Stock Concentration	Amount Taken from Stock
08-14-03	ICPMS - LCS,	MST030814 F	MST021216D MST021216B	10 ppm 1000 ppm	5 0.05
↓	↓ - ICV/CCV @ 10	↓ G	MST030814 F	1 ppm	0.5
08-15-03	ICPMS - STD,	MST030815 A	MST030402 A	10 ppm	5
↓	↓ - 10	↓ B	MST030815 A	1 ppm	0.5
	↓ - 7.5	C	↓ B	10 ppb	37.5
	↓ - 5	D	↓ C	7.5 ppb	20
	ICPMS - LCS,	E	MST021216D	10 ppm	5
	↓ - ICV/CCV @ 5	↓ F	MST030815E	1 ppm	0.25
08-15-03	ICPMS - Internal Standard	MST030815 G	MST030217 A Li	1000 ppm	1 ml
↓	↓	↓	↓ B Ge	↓	↓
			C Tb		
			D Sc		
			E In		
			↓ F Tm		

Logbook 3
Page 39A

0190

Metals Working Standard Prep Log

Preparation			Expiration Dates			
			Exp Date			
Final Vol. (ml)	Final Conc. (ug/ml)	Diluent Matrix (ie H_2O)	Working STD *	Manufacturer	Comments	Initials
50	1 ppm	DI H_2O + 2% HNO_3	11-12-03	Leeman		WS
↓	10 ppb	↓	11-13-03	↓		↓
50	1 ppm	DI H_2O + 2% HNO_3	↓	Leeman	Zn	WS
↓	10 ppb	↓	↓	↓	↓	↓
↓	7.5 ppb	↓	↓	↓	↓	↓
30	5 ppb	↓	↓	↓	↓	↓
50	1 ppm	↓	↓	Leeman	↓	↓
↓	5 ppb	↓	↓	↓	↓	↓
100 ml	10 ppm	DI H_2O + 2% HNO_3	11-13-03	High Purity		WS
↓	↓	↓	↓	↓	↓	↓
↓	↓	↓	↓	↓	↓	↓
↓	↓	↓	↓	↓	↓	↓
↓	↓	↓	↓	↓	↓	↓

* Check working std versus all manufacturer's

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

APCL Analytical Report

Submitted to:
GEOFON, Inc.
Attention: Brad Shojaee
22632 Golden Spring Dr Ste 270
Diamond Bar 91765
Tel: (909)396-7662 Fax: (909)396-1455

Service ID #: 801-034445
Collected by:
Collected on: 07/29-31/03

Received: 07/31/03
Extracted: N/A
Tested: N/A
Reported: 08/19/03

Sample Description: Water
Project Description: JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result DUPE-2-3-Q03 03-04445-1	EB-1-7-29-03 03-04445-2	EB-3-7-31-03 03-04445-3	MW-3-2 03-04445-4
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-3-3 03-04445-5	MW-3-4 03-04445-6	MW-17-2 03-04445-7	MW-17-3 03-04445-8
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-17-4 03-04445-9	MW-20-1 03-04445-10	MW-20-2 03-04445-11	MW-20-3 03-04445-12
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-20-4 03-04445-13	MW-20-5 03-04445-14	MW-21-1 03-04445-15	MW-21-2 03-04445-16
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-21-3 03-04445-17	MW-21-4 03-04445-18	MW-21-5 03-04445-19
CHROMIUM [a]						

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0
[a] Subcontracted to Advanced Technology Laboratories Inc. See attached.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

GEOFON INCORPORATED

22632 GOLDEN SPRINGS DR., SUITE 270
DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-21 0041

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909) 396-7662	LAB COORDINATOR'S FAX: (909) 396-1455	LABORATORY SERVICE ID: —	LABORATORY CONTACT: Kenny Chan	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: JPL GW MON-3Q03	PROJECT LOCATION: MW-21 (Hahamonga Park)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX: (909) 590-1455	RECIPIENT NAME: Tony Ford
PROJECT CONTACT: ~~Tony Forde~~ S. Robinson 7/29	PROJECT PHONE NUMBER: ~~(909)~~ 9208729	PROJECT FAX: (909) 396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave		ADDRESS: 22632 Golden Springs Dr #270
PROJECT ADDRESS: 4800 Oakhaven Dr 7.29.03	CITY, STATE AND ZIPCODE: Pasadena, CA.	CLIENT: US NAVY SWDIV	CITY, STATE AND ZIPCODE: Chino, CA. 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA. 91765
PROJECT MANAGER: Asrar Faheem	PROJECT MANAGER'S PHONE: (909) 396-7662	PROJECT MANAGER'S FAX: (909) 396 1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	524.2 (VOCs)	314.0 (Perchlorate)	7196 (Hex Chrome)	200.8 (Total Chrome)					Comments
1	MW-21-5	H_2O	7/29/03	1149	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X					
2	MW-21-4	↓	↓	1221	↓	↓	↓	↓	X	X	X	X					
3	MW-21-3	↓	↓	1250	↓	↓	↓	↓	X	X	X	X					4445
4	MW-21-2	↓	↓	1327	↓	↓	↓	↓	X	X	X	X					
5	MW-21-1	↓	↓	1355	↓	↓	↓	↓	X	X	X	X					
6							7.29.03										
7	TB-1-7-29-03	H_2O	7/29/03	—	HCl	3	III	NORMAL	X								
8	EB-1-7-29-03	↓	↓	1230	HCl NONE HNO3	3+1+1	↓	↓	X	X	X	X					
9																	
10							7.29.03										

SAMPLES COLLECTED BY: Leo W. Williamson

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME
Leo W. Williamson	G. Rushton	7/29/03	14:35
G. Rushton	[illegible]	7/29	16:45

SAMPLE'S CONDITION UPON RECEIPT

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

GEOFON INCORPORATED

22632 GOLDEN SPRINGS DR., SUITE 270
DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-3 0043

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909) 396-7662	LAB COORDINATOR'S FAX: (909) 396-1455	LABORATORY SERVICE ID: —	LABORATORY CONTACT: Kenny Chan	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: JPL GW MON-3Q03	PROJECT LOCATION: MW-3 (Settling Ponds)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX: (909) 590-1498	RECIPIENT NAME: Tony Ford
PROJECT CONTACT: J. Robinson	PROJECT PHONE NUMBER: (714) 920-8729	PROJECT FAX: (909) 396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave.		ADDRESS: 22632 Golden Springs Dr. #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena, CA.	CLIENT: US NAVY EnDIV	CITY, STATE AND ZIPCODE: Chino, CA. 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA. 91765
PROJECT MANAGER: Asran Faheem	PROJECT MANAGER'S PHONE: (909) 396-7662	PROJECT MANAGER'S FAX: (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: 524.2 VOC(s)	314.0 (Perchlorate)	7196 (Hex Chrome)	200.8 (Total Chrome)					Comments
1	MW-3-4	H_2O	7/30/03	1005	HCl HNO_3 NONE	3+1+1	III	NORMAL	X	X	X	X					
2	MW-3-3	↓	↓	1026	↓	↓	↓	↓	X	X	X	X					
3	MW-3-2	↓	↓	1040	↓	↓	↓	↓	X	X	X	X					
4																	1445
5																	
6																	
7																	
8																	
9						7.30.03											
10																	

SAMPLES COLLECTED BY: Leo W. Williamson

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

SAMPLE'S CONDITION UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME
Leo W. Williamson	[signature]	7-30-03	12:57
[signature]	[signature]	7-30-03	12:45

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

GEOFON INCORPORATED

22632 GOLDEN SPRINGS DR., SUITE 270
DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-17 0045

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909) 396-7662	LAB COORDINATOR'S FAX: (909) 396-1455	LABORATORY SERVICE ID: —	LABORATORY CONTACT: Kenny Chen	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: JPL GW MON-3Q03	PROJECT LOCATION: MW-17 (Harriet & Casitas)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX: (909) 590-1498	RECIPIENT NAME: Tony Ford
PROJECT CONTACT: J. Robinson	PROJECT PHONE NUMBER: (714) 920-8729	PROJECT FAX: (909) 396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave.		ADDRESS: 22632 Golden Springs Dr. #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena, CA.	CLIENT: US NAVY SWDIV	CITY, STATE AND ZIPCODE: Chino, CA 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA. 91765
PROJECT MANAGER: Asrar Faheem	PROJECT MANAGER'S PHONE: (909) 396-7662	PROJECT MANAGER'S FAX: (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	624.2 (VOCs)	314.0 (Perchlorate)	7196 (Hex. Chrome)	200.8 (Total Chromium)					Comments
1	MW-17-4	H_2O	7/30/03	1128	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X					
2	MW-17-3	↓	↓	1154	↓	↓	↓	↓	X	X	X	X					
3	MW-17-2	↓	↓	1215	↓	↓	↓	↓	X	X	X	X					
4																	1445
5																	
6																	
7																	
8																	
9																	
10																	

SAMPLES COLLECTED BY: Leo W. Williamson

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME
Leo W. Williamson	S. Brightbill	7-30-03	12:57
S. Brightbill	[illegible]	7-30-03	14:45

SAMPLE'S CONDITION UPON RECEIPT

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

GEOFON INCORPORATED
22632 GOLDEN SPRINGS DR., SUITE 270
DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-20 0045

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909) 396-7662	LAB COORDINATOR'S FAX: (909) 396-1455	LABORATORY SERVICE ID: –	LABORATORY CONTACT: Kenny Chan	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: JPL GW MON. 3Q03	PROJECT LOCATION: MW-20 (Linden & Mt. View)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX: (909) 590-1498	RECIPIENT NAME: Tony Ford
PROJECT CONTACT: J. Robinson	PROJECT PHONE NUMBER: (714) 920-8729	PROJECT FAX: (909) 396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave		ADDRESS: 22632 Golden Springs Dr #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena, CA.	CLIENT: US NAVY SWDIV	CITY, STATE AND ZIPCODE: Chino, CA. 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA. 91765
PROJECT MANAGER: Asrar Faheem	PROJECT MANAGER'S PHONE: (909) 396-7662	PROJECT MANAGER'S FAX: (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	Analyses: 524.2 (VOCs)	314.0 (Perchlorate)	7196 (Hex Chrome)	200.8 (Total Chrome)					Comments
1	MW-20-5	H_2O	7/31/03	0832	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X					
2	MW-20-4			0935					X	X	X	X					2nd MS/MSD
3	MW-20-3			1113					X	X	X	X					4445
4	MW-20-2			1203					X	X	X	X					
5	MW-20-1			1230					X	X	X	X					314.0+7196 bottle 3/4 full
6	~~MW-20~~ Dupe-2-3-Q03			1138			VI		X	X	X	X					
7	TB-3-7-31-03			–		~~3~~ 1	III		X								
8	EB-3-7-31-03			0849		5			X	X	X	X					
9																	
10									7-7.31.03								

SAMPLES COLLECTED BY: Leo W. Williamson

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Leo W. Williamson	S. [signature]	7-31-03	17:51	
S. [signature]	[signature]	7-31-03	17:55	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

Applied P & Ch Laboratories
Project: #4445, JPL

ATL Work Order: 064234

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Table of Contents

ATL Work Order: 064234

Item	Pages
Cover Letter	0001 - 0004
Sample Receiving Items	0005 - 0008
Analytical Result Reports	0009 - 0027
Quality Control Reports	0028 - 0030
Raw Data:	
Method 200.8	0031 - 0138

Advanced Technology Laboratories 3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT: Applied P & Ch Laboratories
Project: #4445, JPL
Lab Order: 064234

CASE NARRATIVE

Results were J-Flag. "J" is used to flag those results that are between the PQL (Practical Quantitation Limit) and the calculated MDL (Method Detection Limit). Results that are "J" flagged are estimated values since it becomes difficult to accurately quantitate the analyte near the MDL.

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Subcontract Chain of Custody

Please Print in pen

Subcontract Lab: ATL
Contact: Puri
Tel #: (562) 989-4045 Fax #: (562) 989-4040
Address: 3275 Walnut Ave
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #4445
APCL Contact: Kenny Chan
Project Name/Code JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: J. Robinson

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Cr hg 200.8	Remarks
MW-21-5		7/29/03	1149			1	X	
MW-21-4			1221					
MW-21-3			1250					
MW-21-2			1327					
MW-21-1			1355					
EB-1-7-29-03			1230					Level 4 pkg
MW-3-4		7/30/03	1005					+EDD
MW-3-3			1026					
MW-3-2			1040					
MW-17-4			1128					
MW-17-3			1154					
MW-17-2			1215					
MW-20-5		7/31/03	0832					
MW-20-4			0935			2		← MS/MSD
MW-20-3			1113			1		

QC Requirement: ☐ Regular; ☐ QA/QC Report; ☐ WIP; ☐ Raw Data; ☐ Extended Raw Data ☐ CLP; ☐ ACE ☐ AFCEE ☐ NEESA ___ (E, C or D); ☐ Other _____ (Please specify)

Sample Disposal: ☐ Return ☐ Disposal by APCL ☐ Hold for _____ days after receiving date. If not specified, samples will be discarded 45 days after samples are received.

Sample Conditions: ☐ Intact; ☐ Broken. Cooler Seal: ☐ Intact; ☐ Broken; ☐ None. Tag # _____ Temperature: ☐ Room ☐ Cold (___ °C).

Relinquished by [signature] Date/Time 8/11/03 / 1700 Received by John Flippin Date/Time 8/12/03 / 1300

Relinquished by John Flippin Date/Time 8/12/03 / 1445 Received by [signature] Date/Time 8/12/03 / 2:42 5-2°

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Subcontract Chain of Custody

Please Print in pen

Subcontract Lab: ATL
Contact: Puri
Tel #: (562) 989-4045
Fax #: (562) 989-4040
Address: 3215 Walnut Ave
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #4445
APCL Contact: Kenny Chan
Project Name/Code
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: J. Robinson

Analysis Items: Cr by 218.8

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Cr by 218.8	Remarks
MW-20-2		7/31/03	1203			1	X	
MW-20-1		↓	1230			↓	↓	Level 4 pkg
Dupe-2-3-203			1138					+EDD
EB-3-7-31-03		↓	0849			↓	↓	

White – With report
Yellow – Lab copy
Pink – Originator

QC Requirement: ☐ Regular; ☐ QA/QC Report; ☐ WIP; ☐ Raw Data; ☐ Extended Raw Data ☐ CLP; ☐ ACE ☐ AFCEE ☐ NEESA ___ (E, C or D); ☐ Other _____ (Please specify)

Sample Disposal: ☐ Return ☐ Disposal by APCL ☐ Hold for _____ days after receiving date. **If not specified, samples will be discarded 45 days after samples are received.**

Sample Conditions: ☐ Intact; ☐ Broken. Cooler Seal: ☐ Intact; ☐ Broken; ☐ None. Tag # _____ Temperature: ☐ Room ☐ Cold (___ °C).

Relinquished by [signature] Date/Time 8/11/03 1700 Received by John Flippin Date/Time 8/12/03 1300

Relinquished by John Flippin Date/Time 8/12/03 1445 Received by [signature] Date/Time 8/12/03 2:56

APCL USE ONLY Service # Note:

Clients understand that all terms described in the proposals, quotations for this project, and/or the general terms provided in the current APCL price schedules will be followed. APCL reserves the right to terminate its service or withhold delivery of any reports, if in APCL's sole discretion the terms of the project have been broken.

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT: Applied P & Ch Laboratories
Project: #4445, JPL
Lab Order: 064234
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
064234-001A	MW-21-5	Water	7/29/2003	8/12/2003	8/19/2003
064234-002A	MW-21-4	Water	7/29/2003	8/12/2003	8/19/2003
064234-003A	MW-21-3	Water	7/29/2003	8/12/2003	8/19/2003
064234-004A	MW-21-2	Water	7/29/2003	8/12/2003	8/19/2003
064234-005A	MW-21-1	Water	7/29/2003	8/12/2003	8/19/2003
064234-006A	EB-1-7-29-03	Water	7/29/2003	8/12/2003	8/19/2003
064234-007A	MW-3-4	Water	7/30/2003	8/12/2003	8/19/2003
064234-008A	MW-3-3	Water	7/30/2003	8/12/2003	8/19/2003
064234-009A	MW-3-2	Water	7/30/2003	8/12/2003	8/19/2003
064234-010A	MW-17-4	Water	7/30/2003	8/12/2003	8/19/2003
064234-011A	MW-17-3	Water	7/30/2003	8/12/2003	8/19/2003
064234-012A	MW-17-2	Water	7/30/2003	8/12/2003	8/19/2003
064234-013A	MW-20-5	Water	7/31/2003	8/12/2003	8/19/2003
064234-014A	MW-20-4	Water	7/31/2003	8/12/2003	8/19/2003
064234-015A	MW-20-3	Water	7/31/2003	8/12/2003	8/19/2003
064234-016A	MW-20-2	Water	7/31/2003	8/12/2003	8/19/2003
064234-017A	MW-20-1	Water	7/31/2003	8/12/2003	8/19/2003
064234-018A	Dupe-2-3-Q03	Water	7/31/2003	8/12/2003	8/19/2003
064234-019A	EB-3-7-31-03	Water	7/31/2003	8/12/2003	8/19/2003

Advanced Technology Laboratories
3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-21-5
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/29/2003 11:49:00 AM
Lab ID:	064234-001A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A QC Batch: R30051			PrepDate:				
Chromium	2.9		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-21-4
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/29/2003 12:21:00 PM
Lab ID:	064234-002A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	4.0		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-21-3
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/29/2003 12:50:00 PM
Lab ID:	064234-003A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A QC Batch: R30051			PrepDate:				
Chromium	3.7		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-21-2
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/29/2003 1:27:00 PM
Lab ID:	064234-004A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	4.2		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-21-1
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/29/2003 1:55:00 PM
Lab ID:	064234-005A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	3.8		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	EB-1-7-29-03
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/29/2003 12:30:00 PM
Lab ID:	064234-006A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**				Analyst: **NS**
RunID: ICP4_030813A	QC Batch: R30051			PrepDate:			
Chromium	ND		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-3-4
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/30/2003 10:05:00 AM
Lab ID:	064234-007A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	1.8		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-3-3
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/30/2003 10:26:00 AM
Lab ID:	064234-008A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	2.0		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-3-2
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/30/2003 10:40:00 AM
Lab ID:	064234-009A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**				Analyst: **NS**
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	2.4		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-17-4
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/30/2003 11:28:00 AM
Lab ID:	064234-010A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**				Analyst: **NS**
RunID: ICP4_030813A	QC Batch: R30051			PrepDate:			
Chromium	1.9		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-17-3
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/30/2003 11:54:00 AM
Lab ID:	064234-011A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	4.0		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-17-2
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/30/2003 12:15:00 PM
Lab ID:	064234-012A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	2.6		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

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Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-20-5
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 8:32:00 AM
Lab ID:	064234-013A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	1.6		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories *3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040*

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-20-4
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 9:35:00 AM
Lab ID:	064234-014A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051			PrepDate:			
Chromium	1.9		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-20-3
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 11:13:00 AM
Lab ID:	064234-015A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	4.0		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-20-2
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 12:03:00 PM
Lab ID:	064234-016A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051			PrepDate:			
Chromium	1.5		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	MW-20-1
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 12:30:00 PM
Lab ID:	064234-017A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A	QC Batch: R30051		PrepDate:				
Chromium	1.8		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	Dupe-2-3-Q03
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 11:38:00 AM
Lab ID:	064234-018A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**			Analyst: **NS**	
RunID: ICP4_030813A QC Batch: R30051			PrepDate:				
Chromium	4.0		0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90755 Tel: 562 989-4045 Fax: 562 989-4040

Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT:	Applied P & Ch Laboratories	**Client Sample ID:**	EB-3-7-31-03
Lab Order:	064234	**Tag Number:**	
Project:	#4445, JPL	**Collection Date:**	7/31/2003 8:49:00 AM
Lab ID:	064234-019A	**Matrix:**	WATER

Analyte	Result	Qual	MDL	PQL	Units	DF	Date Analyzed
ICP-MS METALS			**EPA 200.8**				Analyst: **NS**
RunID: ICP4_030813A QC Batch: R30051			PrepDate:				
Chromium	0.2	J	0.11	1.0	µg/L	1	8/13/2003

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H-Samples exceed holding time

Results are wet unless otherwise specified

Advanced Technology Laboratories

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Advanced Technology Laboratories

Date: *19-Aug-03*

CLIENT: Applied P & Ch Laboratories
Work Order: 064234
Project: #4445, JPL

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: **MB-R30051** SampType: **MBLK** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030813A**
Client ID: **ZZZZZ** Batch ID: **R30051** TestNo: **EPA 200.8** Analysis Date: **8/13/2003** SeqNo: **450953**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.115	1.0									J

Sample ID: **LCS-R30051** SampType: **LCS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030813A**
Client ID: **ZZZZZ** Batch ID: **R30051** TestNo: **EPA 200.8** Analysis Date: **8/13/2003** SeqNo: **450952**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.976	1.0	10	0	99.8	85	115	0	0		

Sample ID: **064234-014AMS** SampType: **MS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030813A**
Client ID: **MW-20-4** Batch ID: **R30051** TestNo: **EPA 200.8** Analysis Date: **8/13/2003** SeqNo: **450945**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.889	1.0	10	1.896	79.9	80	120	0	0		S

Sample ID: **064234-014AMSD** SampType: **MSD** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030813A**
Client ID: **MW-20-4** Batch ID: **R30051** TestNo: **EPA 200.8** Analysis Date: **8/13/2003** SeqNo: **450946**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10	1.0	10	1.896	81	80	120	9.889	1.13	20	

Sample ID: **064234-010ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030813A**
Client ID: **MW-17-4** Batch ID: **R30051** TestNo: **EPA 200.8** Analysis Date: **8/13/2003** SeqNo: **450954**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	1.831	1.0	0	0	0	0	0	1.919	4.69	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

0028

CLIENT: Applied P & Ch Laboratories
Work Order: 064234
Project: #4445, JPL

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: **064234-014ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030813A**
Client ID: **MW-20-4** Batch ID: **R30051** TestNo: **EPA 200.8** Analysis Date: **8/13/2003** SeqNo: **450981**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.085	1.0	0	0	0	0	0	1.896	9.50	30	

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
R - RPD outside accepted recovery limits
S - Spike Recovery outside accepted recovery limits
B - Analyte detected in the associated Method Blank
Calculations are based on raw values
DO- Surrogate dilute out
H - Sample exceeded holding time

Advanced Technology Laboratories
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0029

Advanced Technology Laboratories

Date: 19-Aug-03

Test Code: 200.8_W
Test Number: EPA 200.8
Test Name: ICPMS METALS
Matrix: Aqueous **Units:** µg/L

METHOD DETECTION / REPORTING LIMITS

Updated: 13-Feb-03

Type	Analyte	MDL	PQL
A	Aluminum	1.66	10
A	Antimony	0.0309	0.5
A	Arsenic	0.0309	1
A	Barium	0.0638	1
A	Beryllium	0.0349	0.5
A	Cadmium	0.0319	0.5
A	Calcium	10.5	50
A	Chromium	0.111	0.5
A	Cobalt	0.0353	0.5
A	Copper	0.0785	1
A	Iron	4.73	10
A	Lead	0.134	1
A	Magnesium	7.09	50
A	Manganese	0.216	1
A	Mercury	0.467	1
A	Molybdenum	0.0409	0.5
A	Nickel	0.0711	1
A	Potassium	8.66	50
A	Selenium	0.188	0.5
A	Silver	0.0377	0.5
A	Sodium	9.70	50
A	Thallium	0.0304	0.5
A	Tin	5.00	10
A	Vanadium	0.0606	1
A	Zinc	3.34	10

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Method 200.8

Sample/Batch Report

User Name: Nancy
Computer Name: ICPMS PE 6100
Sample File: D:\ELAN\Sample\2003\August\081303.sam
Report Date/Time: Wednesday, August 13, 2003 16:23:58

A/S Loc.	Batch ID	Sample ID	Description	Sample Type	Init. Quant.	Prep. Vol.	Aliquot Vol.	Diluted Vol.	Solids Ratio
7		ICV							
1		ICB							
9		MB							
10		LCS							
11		064234-001A							
12		064234-002A							
13		064234-003A							
14		064234-004A							
15		064234-005A							
16		064234-006A							
17		064234-007A							
18		064234-008A							
7		CCV							
8		CCB							
19		064234-009A							
20		064234-010A							
21		064234-010ADUP							
22		064234-011A							
23		064234-012A							
24		064234-013A							
25		064234-014A							
26		064234-014ADUP							
27		064234-014AMS							
28		064234-014AMSD							
7		CCV							
8		CCB							
29		064234-015A							
30		064234-016A							
31		064234-017A							
32		064234-018A							
33		064234-019A							
7		CCV							
8		CCB							
34		MB-							
35		LCS-							
36		064235-001A							
37		064235-002A							
38		064235-003A							
39		064235-004A							
40		064235-006A							
41		064235-006ADUP							
42		064235-006AMS							
43		064235-006AMSD							
7		CCV							
8		CCB							
44		064235-007A							
45		064235-008A							
46		064235-009A							
47		064235-010A							

R30051

R30052

CAL: MST030813 H/20
I/10
J/5
K/0.5

IW/CW: MST030813 M
LCS: MST030813 L
MS/MSD: MST030813 G

ICP4
NS, 8/13/03

0032

48	064235-011A
49	064235-012A
50	064235-013A
51	064235-014A
52	064235-015A
53	064235-017A
7	CCV
8	CCB
54	064235-018A
55	064235-019A
56	064235-020A
57	064235-021A
58	064235-022A
59	064235-022ADUP
7	CCV
8	CCB
60	MB- > R30053
61	LCS-
62	064235-016A
63	064235-016ADUP
64	064235-016AMS
65	064235-016AMSD
66	064235-023A
67	064235-024A
68	064235-025A
7	CCV
8	CCB
69	064235-006AMSD
70	064235-006AMS 2X
71	064235-006AMSD 2X
7	CCV
8	CCB

ELAN Instrument Control Session

File Edit Analysis Options Window Help

Date Only Method - c:\elandata\Method\ATL-TUNING250.mth

Timing | Processing | Equation | Calibration | Sampling

Sweeps / Reading: 35 — Est. Reading Time: 0:00:28.175

Readings / Replicate: 1 — Est. Replicate Time: 0:00:28.175

Replicates: 6 — Est. Sample Time: 0:02:49.050

Tuning File: default.tun — Select...

Optimization File: default.dac — Select... — Enable Short

	Analyte [1]	Begin Mass [amu]	End Mass [amu]	Scan Mode [1]	MCA Channels	Dwell Time per AMU [ms]	Int
1		5	10	Scanning	20	20	
2		22	26	Scanning	20	20	
3		102	104	Scanning	20	20	
4		139	141	Scanning	20	20	
5		206	209	Scanning	20	20	

Tuning - D:\ELAN\TUNING\2003\August\030813.tun

Tune Mass Spec. — Peak Width Only

Peak Search Window [amu]: 1 — Resolution DAC: 2040 — for Analyte: B

	Analyte	Mass [amu]	Measured Mass [amu]	Mass Calibration DAC Value	Resolution DAC Value	Meas Wid
1	Be	9.0122	8.976	2046	2040	
2	Mg	23.985	23.9785	5690	2020	
3	Rh	102.905	102.879	24961	1955	
4	Ce	139.905	139.878	33971	2010	
5	Pb	207.977	207.979	50441	2270	
6	U	238.05	238.025	57652	2435	

Instrument Tuning Report

File Name: 030813.tun
File Path: D:\ELAN\TUNING\2003\August

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.976	2046	2040	0.727	
Mg	23.985	23.979	5690	2020	0.726	
Rh	102.905	102.879	24961	1955	0.772	
Ce	139.905	139.878	33971	2010	0.787	
Pb	207.977	207.979	50441	2270	0.756	
U	238.050	238.025	57652	2435	0.770	

Daily Performance Report

Sample ID: 030813-daily
Sample Date/Time: Wednesday, August 13, 2003 12:03:12
Sample Description:
Method File: c:\elandata\Method\Daily.mth
Dataset File: d:\elan\daily performance\2003\august\030813-daily.009
Tuning File: c:\elandata\Tuning\default.tun
Optimization File: c:\elandata\Optimize\default.dac
Dual Detector Mode: Pulse

Acq. Dead Time(ns): 35
Current Dead Time (ns): 35

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	64316.1	64316.059	418.219	0.7
	Rh	102.9	212269.0	212268.959	1793.626	0.8
	In	114.9	269583.1	269583.075	2872.000	1.1
	Pb	208.0	101219.1	101219.064	1672.944	1.7
⌈>	Ba	137.9	199027.9	199027.860	2714.614	1.4
⌊	Ba++	69.0	4649.0	0.023	0.000	0.8
⌈>	Ce	139.9	243147.3	243147.305	2781.064	1.1
⌊	CeO	155.9	7245.1	0.030	0.000	1.0
	Bkgd	220.0	5.2	5.167	0.943	18.2

Current Optimization File Data

Current Value	Description
0.86	Nebulizer Gas Flow
6.00	Lens Voltage
1100.00	ICP RF Power
-1875.00	Analog Stage Voltage
2000.00	Pulse Stage Voltage
85.00	Discriminator Threshold
-1.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	6.0	5741.8
Co	59	9	6.5	101484.9
In	115	9	7.0	218284.7

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 12:46:30
Dataset File: D:\ELAN\Dataset\2003\August\081303\Blank.001
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Blank
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7		139893	0.5			ug/L	%
	Ge	72		130073	0.5			ug/L	%
⌈>	**Sc-1**	45		583761	0.5			ug/L	%
⌊	**Cr**	52		9324	2.0			ug/L	%
	In	115		1182963	0.6			ug/L	%
	Tb	159		1290637	1.1			ug/L	%
	Sc	45		583761	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 12:48:59
Dataset File: D:\ELAN\Dataset\2003\August\081303\Standard 1.002
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 1
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	140715	0.9			ug/L	%
	Ge	72	130073	132314	1.0			ug/L	%
⌈>	**Sc-1**	45	583761	589315	0.2			ug/L	%
⌊	**Cr**	52	9324	15965	0.6	**0.500**	0.009	ug/L	1.8 %
	In	115	1182963	1204942	0.5			ug/L	%
	Tb	159	1290637	1320341	1.4			ug/L	%
	Sc	45	583761	589315	0.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 12:51:43
Dataset File: D:\ELAN\Dataset\2003\August\081303\Standard 2.003
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 2
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141987	0.3			ug/L	%
	Ge	72	130073	131945	0.5			ug/L	%
⌈>	**Sc-1**	45	583761	595976	0.5			ug/L	%
⌊	**Cr**	52	9324	57027	0.8	**4.981**	0.045	ug/L	0.9 %
	In	115	1182963	1200853	0.7			ug/L	%
	Tb	159	1290637	1329180	1.3			ug/L	%
	Sc	45	583761	595976	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 12:54:29
Dataset File: D:\ELAN\Dataset\2003\August\081303\Standard 3.004
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 3
Sample Type:

Summary

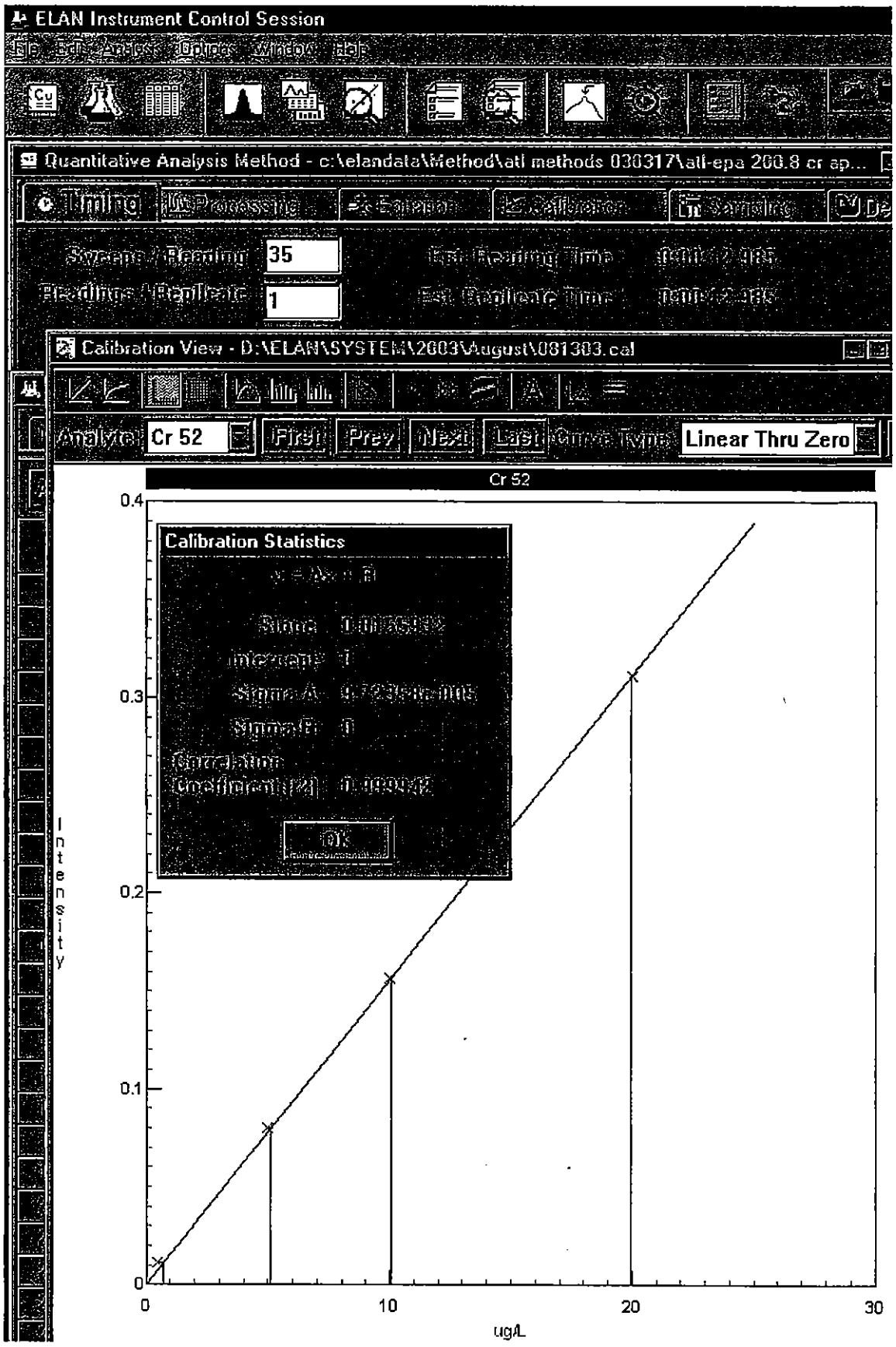
	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	140026	0.9			ug/L	%
	Ge	72	130073	130392	0.5			ug/L	%
⌈>	**Sc-1**	45	583761	584576	1.0			ug/L	%
⌊	**Cr**	52	9324	100767	0.9	**9.953**	0.051	ug/L	0.5 %
	In	115	1182963	1198973	1.4			ug/L	%
	Tb	159	1290637	1308854	0.7			ug/L	%
	Sc	45	583761	584576	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 12:57:16
Dataset File: D:\ELAN\Dataset\2003\August\081303\Standard 4.005
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 4
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141562	0.9			ug/L	%
	Ge	72	130073	130333	1.4			ug/L	%
[>	**Sc-1**	45	583761	585727	0.6			ug/L	%
[	**Cr**	52	9324	191573	0.1	**19.951**	0.121	ug/L	0.6 %
	In	115	1182963	1197170	1.3			ug/L	%
	Tb	159	1290637	1307883	0.5			ug/L	%
	Sc	45	583761	585727	0.6			ug/L	%


ELAN Instrument Control Session
Quantitative Analysis Method - c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr ap...
Timing
Processing
Equation
Calibration
Sampling
Sweeps / Reading
35
Readings / Replicate
1
Calibration View - D:\ELAN\SYSTEM\2003\August\081303.cal
Analyte
Cr 52
First
Prev
Next
Last
Curve Type
Linear Thru Zero
Cr 52
Calibration Statistics
Intercept
Sigma A
Sigma B
Correlation Coefficient(r2)
OK
Intensity
0.4
0.3
0.2
0.1
0
0
10
20
30
ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:00:04
Dataset File: D:\ELAN\Dataset\2003\August\081303\ICV.006
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: ICV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	139028	1.6			ug/L	%
	Ge	72	130073	130100	1.5			ug/L	%
⌈>	Sc-1	45	583761	585616	1.4			ug/L	%
⌊	Cr	52	9324	99853	0.9	9.911	0.083	ug/L	0.8 %
	In	115	1182963	1186335	1.8			ug/L	%
	Tb	159	1290637	1309122	1.6			ug/L	%
	Sc	45	583761	585616	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:02:35
Dataset File: D:\ELAN\Dataset\2003\August\081303\ICB.007
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: ICB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	139819	1.8			ug/L	%
	Ge	72	130073	129669	0.9			ug/L	%
⌈>	**Sc-1**	45	583761	584295	1.3			ug/L	%
⌊	**Cr**	52	9324	10258	0.9	**0.102**	0.006	ug/L	5.9 %
	In	115	1182963	1188846	0.6			ug/L	%
	Tb	159	1290637	1299568	1.1			ug/L	%
	Sc	45	583761	584295	1.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:07:22
Dataset File: D:\ELAN\Dataset\2003\August\081303\MB.008
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB - IL30051 NS 8-13-03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	138249	0.3			ug/L	%
	Ge	72	130073	128576	0.8			ug/L	%
⌈>	**Sc-1**	45	583761	579250	0.9			ug/L	%
⌊	**Cr**	52	9324	10288	0.2	**0.115**	0.011	ug/L	9.6 %
	In	115	1182963	1178717	0.7			ug/L	%
	Tb	159	1290637	1296486	0.6			ug/L	%
	Sc	45	583761	579250	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:09:50
Dataset File: D:\ELAN\Dataset\2003\August\081303\LCS.009
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: LCS - IL 30051 NJ 8-13-03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	140394	1.1			ug/L	%
	Ge	72	130073	129940	0.2			ug/L	%
[>	**Sc-1**	45	583761	579846	0.3			ug/L	%
[	**Cr**	52	9324	99461	0.3	**9.976**	0.061	ug/L	0.6 %
	In	115	1182963	1182728	0.5			ug/L	%
	Tb	159	1290637	1287060	0.3			ug/L	%
	Sc	45	583761	579846	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:14:14
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-001A.010
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-001A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141067	1.3			ug/L	%
	Ge	72	130073	132491	0.9			ug/L	%
[>	**Sc-1**	45	583761	703103	0.7			ug/L	%
[	**Cr**	52	9324	43545	2.3	**2.947**	0.081	ug/L	2.7 %
	In	115	1182963	1177958	0.8			ug/L	%
	Tb	159	1290637	1299142	1.3			ug/L	%
	Sc	45	583761	703103	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:16:43
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-002A.011
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-002A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	139361	0.9			ug/L	%
	Ge	72	130073	125545	0.2			ug/L	%
⌈>	**Sc-1**	45	583761	668646	1.4			ug/L	%
⌊	**Cr**	52	9324	52353	0.3	**3.997**	0.059	ug/L	1.5 %
	In	115	1182963	1131688	0.4			ug/L	%
	Tb	159	1290637	1253191	0.5			ug/L	%
	Sc	45	583761	668646	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:19:12
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-003A.012
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-003A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	137522	0.6			ug/L	%
	Ge	72	130073	119361	0.9			ug/L	%
[>	**Sc-1**	45	583761	651279	0.5			ug/L	%
[	**Cr**	52	9324	47668	0.7	**3.669**	0.022	ug/L	0.6 %
	In	115	1182963	1080590	0.9			ug/L	%
	Tb	159	1290637	1208498	0.8			ug/L	%
	Sc	45	583761	651279	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:21:42
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-004A.013
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-004A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	139234	0.5			ug/L	%
	Ge	72	130073	115085	0.3			ug/L	%
⌈>	**Sc-1**	45	583761	632763	0.3			ug/L	%
⌊	**Cr**	52	9324	52795	1.3	**4.326**	0.060	ug/L	1.4 %
	In	115	1182963	1057815	0.6			ug/L	%
	Tb	159	1290637	1176152	0.8			ug/L	%
	Sc	45	583761	632763	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:24:13
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-005A.014
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-005A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	135816	0.6			ug/L	%
	Ge	72	130073	111927	0.5			ug/L	%
[>	**Sc-1**	45	583761	653270	0.4			ug/L	%
[	**Cr**	52	9324	49093	1.2	**3.795**	0.072	ug/L	1.9 %
	In	115	1182963	1027607	0.8			ug/L	%
	Tb	159	1290637	1160962	1.2			ug/L	%
	Sc	45	583761	653270	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:26:44
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-006A.015
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-006A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	135803	0.2			ug/L	%
	Ge	72	130073	111792	0.5			ug/L	%
⌈>	**Sc-1**	45	583761	504940	0.5			ug/L	%
L	**Cr**	52	9324	6695	3.9	**-0.174**	0.031	ug/L	17.8 %
	In	115	1182963	1036676	0.4			ug/L	%
	Tb	159	1290637	1172998	0.2			ug/L	%
	Sc	45	583761	504940	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:29:15
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-007A.016
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-007A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	143659	0.6			ug/L	%
	Ge	72	130073	118797	1.1			ug/L	%
>	**Sc-1**	45	583761	580156	0.6			ug/L	%
	Cr	52	9324	25930	1.4	**1.842**	0.032	ug/L	1.7 %
	In	115	1182963	1072872	0.9			ug/L	%
	Tb	159	1290637	1206247	1.3			ug/L	%
	Sc	45	583761	580156	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:31:47
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-008A.017
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-008A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	142540	0.4			ug/L	%
	Ge	72	130073	119413	0.7			ug/L	%
[>	**Sc-1**	45	583761	592207	0.3			ug/L	%
[	**Cr**	52	9324	27664	0.2	**1.971**	0.012	ug/L	0.6 %
	In	115	1182963	1085109	1.3			ug/L	%
	Tb	159	1290637	1215068	1.2			ug/L	%
	Sc	45	583761	592207	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:34:20
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.018
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	135018	1.2			ug/L	%
	Ge	72	130073	110158	1.1			ug/L	%
⌈>	Sc-1	45	583761	504124	0.4			ug/L	%
⌊	Cr	52	9324	83312	1.3	**9.574**	0.090	ug/L	0.9 %
	In	115	1182963	1037419	1.0			ug/L	%
	Tb	159	1290637	1171884	1.2			ug/L	%
	Sc	45	583761	504124	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:36:55
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.019
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	134960	1.2			ug/L	%
	Ge	72	130073	109521	0.5			ug/L	%
>	**Sc-1**	45	583761	506761	1.2			ug/L	%
	Cr	52	9324	8807	2.8	**0.090**	0.028	ug/L	30.7 %
	In	115	1182963	1027094	0.9			ug/L	%
	Tb	159	1290637	1163535	1.2			ug/L	%
	Sc	45	583761	506761	1.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:39:28
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-009A.020
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-009A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	140782	0.8			ug/L	%
	Ge	72	130073	117565	0.5			ug/L	%
>	**Sc-1**	45	583761	594323	0.6			ug/L	%
	Cr	52	9324	31607	1.0	**2.387**	0.057	ug/L	2.4 %
	In	115	1182963	1073303	1.2			ug/L	%
	Tb	159	1290637	1191978	0.9			ug/L	%
	Sc	45	583761	594323	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:42:01
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-010A.021
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-010A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	146914	1.1			ug/L	%
	Ge	72	130073	118509	0.2			ug/L	%
⌈>	**Sc-1**	45	583761	599088	0.6			ug/L	%
⌊	**Cr**	52	9324	27493	0.9	**1.919**	0.033	ug/L	1.7 %
	In	115	1182963	1073873	1.7			ug/L	%
	Tb	159	1290637	1201834	0.5			ug/L	%
	Sc	45	583761	599088	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:44:35
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-010ADUP.022
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-010ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	147581	1.0			ug/L	%
	Ge	72	130073	119669	1.8			ug/L	%
>	**Sc-1**	45	583761	600922	0.3			ug/L	%
	Cr	52	9324	26753	1.6	**1.831**	0.055	ug/L	3.0 %
	In	115	1182963	1083698	1.2			ug/L	%
	Tb	159	1290637	1206225	1.2			ug/L	%
	Sc	45	583761	600922	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:47:09
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-011A.023
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-011A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	140635	0.4			ug/L	%
	Ge	72	130073	118583	0.7			ug/L	%
⌈>	**Sc-1**	45	583761	617068	0.4			ug/L	%
⌊	**Cr**	52	9324	47879	0.5	**3.952**	0.025	ug/L	0.6 %
	In	115	1182963	1078365	0.9			ug/L	%
	Tb	159	1290637	1197148	0.5			ug/L	%
	Sc	45	583761	617068	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:49:43
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-012A.024
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-012A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	139090	1.2			ug/L	%
	Ge	72	130073	115831	0.5			ug/L	%
>	**Sc-1**	45	583761	593110	0.9			ug/L	%
	Cr	52	9324	33438	1.7	**2.592**	0.082	ug/L	3.2 %
	In	115	1182963	1062478	1.0			ug/L	%
	Tb	159	1290637	1179977	0.8			ug/L	%
	Sc	45	583761	593110	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:52:14
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-013A.025
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-013A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	151441	1.7			ug/L	%
	Ge	72	130073	118404	2.8			ug/L	%
⌈>	**Sc-1**	45	583761	605949	2.0			ug/L	%
⌊	**Cr**	52	9324	24736	1.2	**1.594**	0.040	ug/L	2.5 %
	In	115	1182963	1078408	3.3			ug/L	%
	Tb	159	1290637	1210128	3.1			ug/L	%
	Sc	45	583761	605949	2.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:54:41
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-014A.026
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-014A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	138193	4.4			ug/L	%
	Ge	72	130073	117405	2.2			ug/L	%
⌈>	**Sc-1**	45	583761	589081	3.4			ug/L	%
⌊	**Cr**	52	9324	26821	2.4	**1.896**	0.030	ug/L	1.6 %
	In	115	1182963	1068388	3.4			ug/L	%
	Tb	159	1290637	1197019	3.3			ug/L	%
	Sc	45	583761	589081	3.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:57:09
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-014ADUP.027
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-014ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	144272	1.0			ug/L	%
	Ge	72	130073	119260	0.2			ug/L	%
>	**Sc-1**	45	583761	598526	1.0			ug/L	%
	Cr	52	9324	29018	1.0	**2.085**	0.055	ug/L	2.6 %
	In	115	1182963	1087340	0.6			ug/L	%
	Tb	159	1290637	1226658	1.6			ug/L	%
	Sc	45	583761	598526	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 13:59:37
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-014AMS.028
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-014AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	149025	3.0			ug/L	%
	Ge	72	130073	123485	2.7			ug/L	%
⌈>	**Sc-1**	45	583761	624163	3.7			ug/L	%
⌊	**Cr**	52	9324	106187	2.7	**9.889**	0.119	ug/L	1.2 %
	In	115	1182963	1137746	3.5			ug/L	%
	Tb	159	1290637	1270212	4.1			ug/L	%
	Sc	45	583761	624163	3.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:04:37
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.030
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152993	0.6			ug/L	%
	Ge	72	130073	118586	1.6			ug/L	%
⌈>	**Sc-1**	45	583761	552318	1.2			ug/L	%
⌊	**Cr**	52	9324	90001	2.0	**9.425**	0.100	ug/L	1.1 %
	In	115	1182963	1136346	1.2			ug/L	%
	Tb	159	1290637	1289819	0.9			ug/L	%
	Sc	45	583761	552318	1.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:07:12
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.031
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152440	0.7			ug/L	%
	Ge	72	130073	118772	0.4			ug/L	%
[>	**Sc-1**	45	583761	550597	1.3			ug/L	%
[	**Cr**	52	9324	8883	3.2	**0.010**	0.021	ug/L	208.1 %
	In	115	1182963	1150730	0.6			ug/L	%
	Tb	159	1290637	1300946	1.0			ug/L	%
	Sc	45	583761	550597	1.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:09:44
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-015A.032
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-015A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	160601	0.1			ug/L	%
	Ge	72	130073	125837	1.2			ug/L	%
⌈>	**Sc-1**	45	583761	658142	0.7			ug/L	%
⌊	**Cr**	52	9324	51976	1.5	**4.041**	0.096	ug/L	2.4 %
	In	115	1182963	1189643	1.6			ug/L	%
	Tb	159	1290637	1321119	0.7			ug/L	%
	Sc	45	583761	658142	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:12:14
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-016A.033
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-016A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	160576	1.1			ug/L	%
	Ge	72	130073	129615	1.1			ug/L	%
>	**Sc-1**	45	583761	696586	1.0			ug/L	%
	Cr	52	9324	27292	0.8	**1.489**	0.045	ug/L	3.0 %
	In	115	1182963	1223615	0.8			ug/L	%
	Tb	159	1290637	1363293	1.1			ug/L	%
	Sc	45	583761	696586	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:14:44
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-017A.034
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-017A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	151959	3.6			ug/L	%
	Ge	72	130073	122754	3.8			ug/L	%
>	**Sc-1**	45	583761	635411	3.8			ug/L	%
	Cr	52	9324	27775	3.0	**1.780**	0.026	ug/L	1.4 %
	In	115	1182963	1153071	4.6			ug/L	%
	Tb	159	1290637	1300839	4.3			ug/L	%
	Sc	45	583761	635411	3.8			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:17:15
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-018A.035
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-018A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152991	1.0			ug/L	%
	Ge	72	130073	120993	1.7			ug/L	%
[>	**Sc-1**	45	583761	621749	1.5			ug/L	%
[	**Cr**	52	9324	48425	1.0	**3.971**	0.089	ug/L	2.2 %
	In	115	1182963	1125616	3.0			ug/L	%
	Tb	159	1290637	1264841	1.6			ug/L	%
	Sc	45	583761	621749	1.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:19:46
Dataset File: D:\ELAN\Dataset\2003\August\081303\064234-019A.036
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064234-019A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	145687	2.8			ug/L	%
	Ge	72	130073	116201	2.8			ug/L	%
>	**Sc-1**	45	583761	531833	1.9			ug/L	%
	Cr	52	9324	9790	5.6	**0.157**	0.082	ug/L	52.2 %
	In	115	1182963	1096884	3.2			ug/L	%
	Tb	159	1290637	1231737	1.9			ug/L	%
	Sc	45	583761	531833	1.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:22:19
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.037
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	138192	0.7			ug/L	%
	Ge	72	130073	108559	0.4			ug/L	%
[>	**Sc-1**	45	583761	501927	0.5			ug/L	%
[	**Cr**	52	9324	81817	0.8	**9.429**	0.053	ug/L	0.6 %
	In	115	1182963	1027622	0.2			ug/L	%
	Tb	159	1290637	1162107	1.5			ug/L	%
	Sc	45	583761	501927	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:24:53
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.038
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	139113	0.5			ug/L	%
	Ge	72	130073	111207	1.2			ug/L	%
>	**Sc-1**	45	583761	512600	0.4			ug/L	%
	Cr	52	9324	8417	3.7	**0.029**	0.035	ug/L	122.2 %
	In	115	1182963	1049463	1.4			ug/L	%
	Tb	159	1290637	1194268	1.1			ug/L	%
	Sc	45	583761	512600	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:27:27
Dataset File: D:\ELAN\Dataset\2003\August\081303\MB-.039
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB- R300552 NS 8-13-03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141584	0.9			ug/L	%
	Ge	72	130073	111558	0.6			ug/L	%
⌈>	**Sc-1**	45	583761	517868	1.0			ug/L	%
L	**Cr**	52	9324	8622	3.0	**0.043**	0.022	ug/L	51.1 %
	In	115	1182963	1056210	1.5			ug/L	%
	Tb	159	1290637	1196362	0.9			ug/L	%
	Sc	45	583761	517868	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:29:59
Dataset File: D:\ELAN\Dataset\2003\August\081303\LCS-.040
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: LCS- R30052 NS 8-13-03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	142988	0.7			ug/L	%
	Ge	72	130073	113618	0.7			ug/L	%
[>	**Sc-1**	45	583761	522277	1.4			ug/L	%
[	**Cr**	52	9324	86199	0.9	**9.561**	0.080	ug/L	0.8 %
	In	115	1182963	1081868	0.4			ug/L	%
	Tb	159	1290637	1215069	1.4			ug/L	%
	Sc	45	583761	522277	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:32:32
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-001A.041
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-001A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	144677	0.6			ug/L	%
	Ge	72	130073	119021	1.0			ug/L	%
⌈>	**Sc-1**	45	583761	604783	0.6			ug/L	%
⌊	**Cr**	52	9324	34931	0.7	**2.680**	0.031	ug/L	1.2 %
	In	115	1182963	1093276	0.6			ug/L	%
	Tb	159	1290637	1212124	0.4			ug/L	%
	Sc	45	583761	604783	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:35:05
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-002A.042
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-002A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	138223	0.4			ug/L	%
	Ge	72	130073	114009	1.0			ug/L	%
>	**Sc-1**	45	583761	579725	0.9			ug/L	%
	Cr	52	9324	62548	1.3	**5.895**	0.053	ug/L	0.9 %
	In	115	1182963	1050667	0.9			ug/L	%
	Tb	159	1290637	1176551	0.6			ug/L	%
	Sc	45	583761	579725	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:37:38
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-003A.043
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-003A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141845	1.4			ug/L	%
	Ge	72	130073	115835	1.7			ug/L	%
⌈>	**Sc-1**	45	583761	595171	1.9			ug/L	%
⌊	**Cr**	52	9324	28622	0.5	**2.060**	0.048	ug/L	2.4 %
	In	115	1182963	1066641	2.2			ug/L	%
	Tb	159	1290637	1191716	1.8			ug/L	%
	Sc	45	583761	595171	1.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:40:12
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-004A.044
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-004A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	142257	0.7			ug/L	%
	Ge	72	130073	114821	1.3			ug/L	%
⌈>	**Sc-1**	45	583761	526518	1.1			ug/L	%
⌊	**Cr**	52	9324	6073	1.8	**-0.285**	0.011	ug/L	3.7 %
	In	115	1182963	1074109	0.4			ug/L	%
	Tb	159	1290637	1204089	1.1			ug/L	%
	Sc	45	583761	526518	1.1			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:42:43
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006A.045
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	143846	3.1			ug/L	%
	Ge	72	130073	114064	3.3			ug/L	%
>	**Sc-1**	45	583761	643481	3.8			ug/L	%
	Cr	52	9324	62361	1.9	**5.194**	0.114	ug/L	2.2 %
	In	115	1182963	1062738	3.8			ug/L	%
	Tb	159	1290637	1196297	3.7			ug/L	%
	Sc	45	583761	643481	3.8			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:45:10
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006ADUP.046
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	144262	0.7			ug/L	%
	Ge	72	130073	113110	1.1			ug/L	%
⌈>	**Sc-1**	45	583761	636079	0.6			ug/L	%
⌊	**Cr**	52	9324	62338	1.3	**5.261**	0.057	ug/L	1.1 %
	In	115	1182963	1054831	1.3			ug/L	%
	Tb	159	1290637	1191873	0.9			ug/L	%
	Sc	45	583761	636079	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:47:38
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006AMS.047
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	147051	3.5			ug/L	%
	Ge	72	130073	115370	3.9			ug/L	%
⌈>	**Sc-1**	45	583761	651711	3.9			ug/L	%
⌊	**Cr**	52	9324	141715	3.9	**12.921**	0.068	ug/L	0.5 %
	In	115	1182963	1076532	3.0			ug/L	%
	Tb	159	1290637	1214027	4.2			ug/L	%
	Sc	45	583761	651711	3.9			ug/L	%

not reported

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:50:06
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006AMSD.048
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	164133	1.7			ug/L	%
	Ge	72	130073	129197	2.7			ug/L	%
⌈>	**Sc-1**	45	583761	741207	3.0			ug/L	%
⌊	**Cr**	52	9324	156126	2.3	**12.486**	0.168	ug/L	1.3 %
	In	115	1182963	1232874	2.5			ug/L	%
	Tb	159	1290637	1396046	2.5			ug/L	%
	Sc	45	583761	741207	3.0			ug/L	%

not reported
for re-run

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:52:37
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.049
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	145057	1.3			ug/L	%
	Ge	72	130073	112190	1.6			ug/L	%
>	**Sc-1**	45	583761	522057	0.9			ug/L	%
	Cr	52	9324	85047	2.0	**9.423**	0.161	ug/L	1.7 %
	In	115	1182963	1074488	1.6			ug/L	%
	Tb	159	1290637	1231220	1.5			ug/L	%
	Sc	45	583761	522057	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:55:11
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.050
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	144361	1.3			ug/L	%
	Ge	72	130073	113902	0.5			ug/L	%
⌈>	**Sc-1**	45	583761	526977	0.2			ug/L	%
L	**Cr**	52	9324	8778	1.7	**0.044**	0.018	ug/L	40.1 %
	In	115	1182963	1089197	0.9			ug/L	%
	Tb	159	1290637	1241928	1.3			ug/L	%
	Sc	45	583761	526977	0.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 14:57:43
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-007A.051
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-007A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	149664	0.8			ug/L	%
	Ge	72	130073	122411	0.4			ug/L	%
[>	**Sc-1**	45	583761	616353	1.0			ug/L	%
[	**Cr**	52	9324	36050	1.8	**2.727**	0.094	ug/L	3.4 %
	In	115	1182963	1141919	0.3			ug/L	%
	Tb	159	1290637	1277792	0.2			ug/L	%
	Sc	45	583761	616353	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:00:12
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-008A.052
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-008A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	150546	0.5			ug/L	%
	Ge	72	130073	123408	0.4			ug/L	%
>	**Sc-1**	45	583761	621372	0.5			ug/L	%
	Cr	52	9324	34194	1.1	**2.505**	0.033	ug/L	1.3 %
	In	115	1182963	1147906	0.9			ug/L	%
	Tb	159	1290637	1291930	1.3			ug/L	%
	Sc	45	583761	621372	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:02:42
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-009A.053
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-009A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	156468	0.6			ug/L	%
	Ge	72	130073	126322	1.1			ug/L	%
⌈>	**Sc-1**	45	583761	653371	0.3			ug/L	%
⌊	**Cr**	52	9324	37185	0.6	**2.626**	0.015	ug/L	0.6 %
	In	115	1182963	1175347	0.8			ug/L	%
	Tb	159	1290637	1319302	0.8			ug/L	%
	Sc	45	583761	653371	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:05:12
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-010A.054
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-010A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	151045	0.8			ug/L	%
	Ge	72	130073	124498	0.6			ug/L	%
>	**Sc-1**	45	583761	657620	0.4			ug/L	%
	Cr	52	9324	46585	0.7	**3.519**	0.036	ug/L	1.0 %
	In	115	1182963	1148030	0.7			ug/L	%
	Tb	159	1290637	1288653	0.6			ug/L	%
	Sc	45	583761	657620	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:07:42
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-011A.055
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-011A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	147586	0.8			ug/L	%
	Ge	72	130073	121503	1.9			ug/L	%
[>	**Sc-1**	45	583761	674989	0.3			ug/L	%
[	**Cr**	52	9324	52090	1.4	**3.925**	0.061	ug/L	1.6 %
	In	115	1182963	1137003	1.4			ug/L	%
	Tb	159	1290637	1285295	1.7			ug/L	%
	Sc	45	583761	674989	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:10:13
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-012A.056
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-012A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	145724	3.2			ug/L	%
	Ge	72	130073	118295	3.4			ug/L	%
⌈>	**Sc-1**	45	583761	668299	3.7			ug/L	%
⌊	**Cr**	52	9324	54461	1.7	**4.205**	0.128	ug/L	3.0 %
	In	115	1182963	1101994	4.4			ug/L	%
	Tb	159	1290637	1254576	4.2			ug/L	%
	Sc	45	583761	668299	3.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:12:45
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-013A.057
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-013A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141534	0.5			ug/L	%
	Ge	72	130073	113418	0.7			ug/L	%
>	**Sc-1**	45	583761	516263	0.7			ug/L	%
	Cr	52	9324	7701	2.4	**-0.068**	0.018	ug/L	27.1 %
	In	115	1182963	1061277	0.5			ug/L	%
	Tb	159	1290637	1194729	1.0			ug/L	%
	Sc	45	583761	516263	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:15:17
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-014A.058
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-014A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	145964	0.6			ug/L	%
	Ge	72	130073	117020	0.8			ug/L	%
[>	**Sc-1**	45	583761	597822	0.7			ug/L	%
[	**Cr**	52	9324	24263	0.4	**1.579**	0.020	ug/L	1.3 %
	In	115	1182963	1077077	0.5			ug/L	%
	Tb	159	1290637	1199264	1.0			ug/L	%
	Sc	45	583761	597822	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:17:49
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-015A.059
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-015A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	141126	1.1			ug/L	%
	Ge	72	130073	119091	1.0			ug/L	%
⌈>	**Sc-1**	45	583761	631923	0.5			ug/L	%
⌊	**Cr**	52	9324	45185	0.6	**3.561**	0.016	ug/L	0.5 %
	In	115	1182963	1094126	0.6			ug/L	%
	Tb	159	1290637	1223652	1.1			ug/L	%
	Sc	45	583761	631923	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:20:22
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-017A.060
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-017A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	135878	0.2			ug/L	%
	Ge	72	130073	114733	0.9			ug/L	%
⌈>	**Sc-1**	45	583761	636476	0.9			ug/L	%
L	**Cr**	52	9324	48993	0.3	**3.912**	0.053	ug/L	1.4 %
	In	115	1182963	1057468	1.1			ug/L	%
	Tb	159	1290637	1188553	0.5			ug/L	%
	Sc	45	583761	636476	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:22:55
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.061
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152703	0.9			ug/L	%
	Ge	72	130073	120533	1.2			ug/L	%
[>	**Sc-1**	45	583761	555906	1.3			ug/L	%
[	**Cr**	52	9324	91231	2.3	**9.500**	0.101	ug/L	1.1 %
	In	115	1182963	1160142	1.3			ug/L	%
	Tb	159	1290637	1330669	0.4			ug/L	%
	Sc	45	583761	555906	1.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:25:30
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.062
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152302	1.1			ug/L	%
	Ge	72	130073	122155	1.5			ug/L	%
⌈>	Sc-1	45	583761	569518	0.7			ug/L	%
⌊	Cr	52	9324	9200	3.4	**0.012**	0.033	ug/L	284.7 %
	In	115	1182963	1176725	1.3			ug/L	%
	Tb	159	1290637	1346753	1.0			ug/L	%
	Sc	45	583761	569518	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:28:04
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-018A.063
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-018A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	157606	0.6			ug/L	%
	Ge	72	130073	131753	0.6			ug/L	%
⌈>	**Sc-1**	45	583761	716426	1.1			ug/L	%
⌊	**Cr**	52	9324	49114	0.8	**3.372**	0.012	ug/L	0.4 %
	In	115	1182963	1245477	1.3			ug/L	%
	Tb	159	1290637	1382716	0.3			ug/L	%
	Sc	45	583761	716426	1.1			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:30:34
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-019A.064
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-019A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	156623	0.9			ug/L	%
	Ge	72	130073	134436	0.9			ug/L	%
[>	**Sc-1**	45	583761	673548	1.6			ug/L	%
[	**Cr**	52	9324	34594	0.9	**2.270**	0.048	ug/L	2.1 %
	In	115	1182963	1250582	0.8			ug/L	%
	Tb	159	1290637	1388831	1.9			ug/L	%
	Sc	45	583761	673548	1.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:33:01
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-020A.065
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-020A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	156999	0.5			ug/L	%
	Ge	72	130073	133467	1.1			ug/L	%
>	**Sc-1**	45	583761	673888	0.6			ug/L	%
	Cr	52	9324	26260	1.3	**1.475**	0.047	ug/L	3.2 %
	In	115	1182963	1251592	1.5			ug/L	%
	Tb	159	1290637	1404511	0.6			ug/L	%
	Sc	45	583761	673888	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:35:27
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-021A.066
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-021A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	159133	0.8			ug/L	%
	Ge	72	130073	132209	1.4			ug/L	%
⌈>	**Sc-1**	45	583761	673867	1.0			ug/L	%
⌊	**Cr**	52	9324	31857	1.3	**2.008**	0.052	ug/L	2.6 %
	In	115	1182963	1239268	0.8			ug/L	%
	Tb	159	1290637	1379591	2.0			ug/L	%
	Sc	45	583761	673867	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:37:55
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-022A.067
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-022A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	159703	0.7			ug/L	%
	Ge	72	130073	132324	1.3			ug/L	%
>	**Sc-1**	45	583761	648264	1.0			ug/L	%
	Cr	52	9324	17830	1.3	**0.740**	0.031	ug/L	4.2 %
	In	115	1182963	1231275	0.4			ug/L	%
	Tb	159	1290637	1376966	0.4			ug/L	%
	Sc	45	583761	648264	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:40:23
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-022ADUP.068
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-022ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	159200	0.3			ug/L	%
	Ge	72	130073	133502	1.1			ug/L	%
>	**Sc-1**	45	583761	649416	0.4			ug/L	%
	Cr	52	9324	17706	1.2	**0.724**	0.017	ug/L	2.3 %
	In	115	1182963	1232089	1.3			ug/L	%
	Tb	159	1290637	1381365	1.7			ug/L	%
	Sc	45	583761	649416	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:42:54
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.069
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	151376	0.9			ug/L	%
	Ge	72	130073	124080	0.6			ug/L	%
[>	**Sc-1**	45	583761	573499	0.5			ug/L	%
[	**Cr**	52	9324	92911	1.0	**9.366**	0.147	ug/L	1.6 %
	In	115	1182963	1193520	0.7			ug/L	%
	Tb	159	1290637	1348498	0.2			ug/L	%
	Sc	45	583761	573499	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:45:28
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.070
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	150132	0.5			ug/L	%
	Ge	72	130073	122624	1.3			ug/L	%
>	**Sc-1**	45	583761	566809	1.0			ug/L	%
	Cr	52	9324	8586	3.8	**-0.053**	0.029	ug/L	55.6 %
	In	115	1182963	1170714	0.7			ug/L	%
	Tb	159	1290637	1324818	1.3			ug/L	%
	Sc	45	583761	566809	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:48:00
Dataset File: D:\ELAN\Dataset\2003\August\081303\MB-.071
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB- L300553 NS 8-13-03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	149844	1.0			ug/L	%
	Ge	72	130073	122340	1.3			ug/L	%
>	**Sc-1**	45	583761	568321	1.1			ug/L	%
	Cr	52	9324	8974	4.0	**-0.012**	0.030	ug/L	248.3 %
	In	115	1182963	1171852	1.1			ug/L	%
	Tb	159	1290637	1328910	0.9			ug/L	%
	Sc	45	583761	568321	1.1			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:50:29
Dataset File: D:\ELAN\Dataset\2003\August\081303\LCS-.072
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: LCS- PL 30053 NS 8-13-03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	153835	0.4			ug/L	%
	Ge	72	130073	124464	0.4			ug/L	%
[>	**Sc-1**	45	583761	578104	0.7			ug/L	%
[	**Cr**	52	9324	95523	0.3	**9.573**	0.105	ug/L	1.1 %
	In	115	1182963	1189395	1.6			ug/L	%
	Tb	159	1290637	1357275	0.1			ug/L	%
	Sc	45	583761	578104	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:52:58
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-016A.073
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-016A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152709	1.5			ug/L	%
	Ge	72	130073	125569	1.3			ug/L	%
[>	**Sc-1**	45	583761	695710	1.3			ug/L	%
[	**Cr**	52	9324	31707	0.2	**1.899**	0.040	ug/L	2.1 %
	In	115	1182963	1166858	1.9			ug/L	%
	Tb	159	1290637	1340887	1.6			ug/L	%
	Sc	45	583761	695710	1.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:55:28
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-016ADUP.074
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-016ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	154155	0.3			ug/L	%
	Ge	72	130073	126546	1.6			ug/L	%
>	**Sc-1**	45	583761	700153	0.8			ug/L	%
	Cr	52	9324	30748	1.0	**1.792**	0.036	ug/L	2.0 %
	In	115	1182963	1191160	1.5			ug/L	%
	Tb	159	1290637	1354312	1.5			ug/L	%
	Sc	45	583761	700153	0.8			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 15:57:58
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-016AMS.075
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-016AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	155265	1.3			ug/L	%
	Ge	72	130073	127021	0.4			ug/L	%
[>	**Sc-1**	45	583761	697753	0.8			ug/L	%
[	**Cr**	52	9324	119840	1.1	**9.990**	0.054	ug/L	0.5 %
	In	115	1182963	1204981	0.5			ug/L	%
	Tb	159	1290637	1359529	0.8			ug/L	%
	Sc	45	583761	697753	0.8			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:00:29
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-016AMSD.076
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-016AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	157160	0.9			ug/L	%
	Ge	72	130073	129369	0.5			ug/L	%
⌈>	**Sc-1**	45	583761	707181	0.9			ug/L	%
⌊	**Cr**	52	9324	121496	0.2	**9.994**	0.087	ug/L	0.9 %
	In	115	1182963	1222064	0.9			ug/L	%
	Tb	159	1290637	1385070	0.8			ug/L	%
	Sc	45	583761	707181	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:03:00
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-023A.077
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-023A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	167332	0.6			ug/L	%
	Ge	72	130073	136241	0.9			ug/L	%
>	Sc-1	45	583761	715257	0.5			ug/L	%
	Cr	52	9324	26416	1.1	**1.344**	0.026	ug/L	1.9 %
	In	115	1182963	1270184	0.6			ug/L	%
	Tb	159	1290637	1428611	0.3			ug/L	%
	Sc	45	583761	715257	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:05:32
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-024A.078
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-024A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	168213	0.5			ug/L	%
	Ge	72	130073	139718	0.7			ug/L	%
⌈>	**Sc-1**	45	583761	725719	0.3			ug/L	%
⌊	**Cr**	52	9324	34056	1.0	**1.985**	0.027	ug/L	1.4 %
	In	115	1182963	1293440	0.7			ug/L	%
	Tb	159	1290637	1431524	0.7			ug/L	%
	Sc	45	583761	725719	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:08:04
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-025A.079
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-025A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	162356	1.2			ug/L	%
	Ge	72	130073	139027	0.4			ug/L	%
>	**Sc-1**	45	583761	719151	1.1			ug/L	%
	Cr	52	9324	45295	0.5	**3.015**	0.064	ug/L	2.1 %
	In	115	1182963	1306293	1.4			ug/L	%
	Tb	159	1290637	1444083	1.4			ug/L	%
	Sc	45	583761	719151	1.1			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:10:37
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.080
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	156028	1.6			ug/L	%
	Ge	72	130073	130316	0.6			ug/L	%
⌈>	**Sc-1**	45	583761	596146	0.7			ug/L	%
⌊	**Cr**	52	9324	97710	0.6	**9.487**	0.065	ug/L	0.7 %
	In	115	1182963	1245094	2.0			ug/L	%
	Tb	159	1290637	1426391	1.7			ug/L	%
	Sc	45	583761	596146	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:13:12
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.081
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	157645	1.8			ug/L	%
	Ge	72	130073	131214	1.9			ug/L	%
>	**Sc-1**	45	583761	606349	1.9			ug/L	%
	Cr	52	9324	9494	3.9	**-0.020**	0.021	ug/L	101.5 %
	In	115	1182963	1258061	1.7			ug/L	%
	Tb	159	1290637	1430729	2.0			ug/L	%
	Sc	45	583761	606349	1.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:17:06
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006AMSD.082
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	153615	4.2			ug/L	%
	Ge	72	130073	129830	3.8			ug/L	%
[>	**Sc-1**	45	583761	735004	4.4			ug/L	%
[	**Cr**	52	9324	161291	3.8	**13.051**	0.085	ug/L	0.7 %
	In	115	1182963	1219890	5.0			ug/L	%
	Tb	159	1290637	1373191	4.1			ug/L	%
	Sc	45	583761	735004	4.4			ug/L	%

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for µ-µm

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:25:19
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006AMS 2X.083
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006AMS 2X
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	**Conc. Mean**	Conc. SD		Conc. RSD
	Li	7	139893	155823	1.3			ug/L	%
	Ge	72	130073	133493	0.3			ug/L	%
⌈>	**Sc-1**	45	583761	686389	0.3			ug/L	%
⌊	**Cr**	52	9324	77102	1.1	**6.180**	0.097	ug/L	1.6 %
	In	115	1182963	1255476	0.7			ug/L	%
	Tb	159	1290637	1411743	0.3			ug/L	%
	Sc	45	583761	686389	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:28:31
Dataset File: D:\ELAN\Dataset\2003\August\081303\064235-006AMSD 2X.084
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 064235-006AMSD 2X
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	153855	1.6			ug/L	%
	Ge	72	130073	133624	1.1			ug/L	%
[>	**Sc-1**	45	583761	680361	1.7			ug/L	%
[	**Cr**	52	9324	76629	1.6	**6.199**	0.097	ug/L	1.6 %
	In	115	1182963	1240445	1.1			ug/L	%
	Tb	159	1290637	1389316	1.4			ug/L	%
	Sc	45	583761	680361	1.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:31:01
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCV.085
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152323	0.8			ug/L	%
	Ge	72	130073	128407	1.2			ug/L	%
⌈>	**Sc-1**	45	583761	590216	1.2			ug/L	%
⌊	**Cr**	52	9324	95909	0.6	**9.398**	0.107	ug/L	1.1 %
	In	115	1182963	1228345	1.3			ug/L	%
	Tb	159	1290637	1386193	1.1			ug/L	%
	Sc	45	583761	590216	1.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Wednesday, August 13, 2003 16:33:35
Dataset File: D:\ELAN\Dataset\2003\August\081303\CCB.086
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 cr apcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	139893	152525	0.5			ug/L	%
	Ge	72	130073	129638	1.3			ug/L	%
[>	**Sc-1**	45	583761	595393	0.9			ug/L	%
[	**Cr**	52	9324	9414	2.1	**-0.010**	0.014	ug/L	139.7 %
	In	115	1182963	1225397	1.7			ug/L	%
	Tb	159	1290637	1381476	2.2			ug/L	%
	Sc	45	583761	595393	0.9			ug/L	%