APCL Project: #2931

ATL #: 062725

001

Advanced Technology Laboratories

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

Table of Contents:

ATL #: 062725
APCL #: **#2931**

Section	Pages
Case Narrative	003-006
Sample Receiving Items	007-0013
EPA 200.8	014-122

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
062725-001A	MW-4-5	Water	4/21/2003	5/9/2003	5/16/2003
062725-002A	MW-4-4	Water	4/21/2003	5/9/2003	5/16/2003
062725-003A	MW-4-3	Water	4/21/2003	5/9/2003	5/16/2003
062725-004A	MW-4-2	Water	4/21/2003	5/9/2003	5/16/2003
062725-005A	MW-4-1	Water	4/21/2003	5/9/2003	5/16/2003
062725-006A	EB-2-4/21/03	Water	4/21/2003	5/9/2003	5/16/2003
062725-007A	Dupe-1-2Q03	Water	4/21/2003	5/9/2003	5/16/2003
062725-008A	Source-2Q03	Water	4/21/2003	5/9/2003	5/16/2003
062725-009A	MW-19-5	Water	4/22/2003	5/9/2003	5/16/2003
062725-010A	MW-19-4	Water	4/22/2003	5/9/2003	5/16/2003
062725-011A	MW-19-3	Water	4/22/2003	5/9/2003	5/16/2003
062725-012A	MW-19-2	Water	4/22/2003	5/9/2003	5/16/2003
062725-013A	MW-19-1	Water	4/22/2003	5/9/2003	5/16/2003
062725-014A	EB-3-4/22/03	Water	4/22/2003	5/9/2003	5/16/2003
062725-015A	MW-14-5	Water	4/23/2003	5/9/2003	5/16/2003
062725-016A	MW-14-4	Water	4/23/2003	5/9/2003	5/16/2003
062725-017A	MW-14-3	Water	4/23/2003	5/9/2003	5/16/2003
062725-018A	MW-14-2	Water	4/23/2003	5/9/2003	5/16/2003
062725-019A	MW-14-1	Water	4/23/2003	5/9/2003	5/16/2003
062725-020A	EB-4-4/23/03	Water	4/23/2003	5/9/2003	5/16/2003
062725-021A	Dupe-2-2Q03	Water	4/23/2003	5/9/2003	5/16/2003
062725-022A	MW-20-5	Water	4/24/2003	5/9/2003	5/16/2003
062725-023A	MW-20-4	Water	4/24/2003	5/9/2003	5/16/2003
062725-024A	MW-20-3	Water	4/24/2003	5/9/2003	5/16/2003
062725-025A	MW-20-2	Water	4/24/2003	5/9/2003	5/16/2003
062725-026A	MW-20-1	Water	4/24/2003	5/9/2003	5/16/2003
062725-027A	EB-5-4/24/03	Water	4/24/2003	5/9/2003	5/16/2003
062725-028A	Dupe-3-2Q03	Water	4/24/2003	5/9/2003	5/16/2003
062725-029A	MW-21-5	Water	4/17/2003	5/9/2003	5/16/2003

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CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725
Contract No:

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received	Date Reported
062725-030A	MW-21-4	Water	4/17/2003	5/9/2003	5/16/2003
062725-031A	MW-21-3	Water	4/17/2003	5/9/2003	5/16/2003
062725-032A	MW-21-2	Water	4/17/2003	5/9/2003	5/16/2003
062725-033A	MW-21-1	Water	4/17/2003	5/9/2003	5/16/2003
062725-034A	EB-1-4/17/03	Water	4/17/2003	5/9/2003	5/16/2003

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Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

CASE NARRATIVE

Analytical Comments for EPA 200.8 (ICP-MS Metals)

QC Batch Number R27306: Chromium Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

QC Batch Number R27309: Chromium Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are outside recovery criteria; however, the analytical batch was validated by the Laboratory Control Sample (LCS).

Advanced Technology Laboratories
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Sample Receiving Items

Advanced Technology Laboratories

3275 Walnut Avenue Signal Hill, CA 90807 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 Avenue
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #2931
APCL Contact: Kenny Chan
Project Name/Code: JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: Leo Williamson

Analysis Items

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Cr 2008	Pb 2008	Remarks
MW-4-5		4/21/03	0810	W	HNO_3	1	X	X	Level 4 pkg.
MW-4-4			0930				X	X	and EDD
MW-4-3			1015				X	X	
MW-4-2			1140			2	X	X	← MS/MSD
MW-4-1			1330			1	X	X	
EB-2-4/21/03			–				X	X	
Dupe-1-2Q03			–				X	X	
Source-2Q03			1405				X	X	
MW-19-5		4/22/03	0920				X	X	
MW-19-4			1025				X	X	
MW-19-3			1130				X	X	
MW-19-2			1300			2	X	X	← MS/MSD
MW-19-1			1410			1	X	X	
EB-3-4/22/03			1140				X	X	
MW-14-5		4/23/03	0835				X	X	

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 (2.8 °C).

Relinquished by Date/Time / Received by Date/Time /

Relinquished by Date/Time / Received by Date/Time /

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: 3275 Walnut Avenue
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #2931
APCL Contact: Penny Chan
Project Name/Code: JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ____ days ____ hours
Sampled by: Leo Williamson

White – With report
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Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Cr 200.8	Pb 200.8										Remarks
MW-14-4		4/23/03	0935	W	HNO3	1	X	X										Level 4 pkg and EDD
MW-14-3			1110				X	X										
MW-14-2			1220				X	X										
MW-14-1			1320				X	X										
EB-4-4/23/03			1125				X	X										
Dupe-2-2Q03			—				X	X										
MW-20-5		4/24/03	0805				X	X										
MW-20-4			0850				X	X										
MW-20-3			1000				X	X										
MW-20-2			1040				X	X										
MW-20-1			1145				X	X										
EB-5-4/24/03			0905				X	X										
Dupe-3-2Q03			—				X	X										
MW-21-5		4/17/03	0900				X	X										
MW-21-4			1000				X	X										

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 (2.8 °C).

Relinquished by Date/Time / Received by Date/Time /

Relinquished by Date/Time / Received by Date/Time /

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Subcontract Chain of Custody

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Subcontract Lab: ATL
Contact: Puri
Tel #: (562) 989-4045
Fax #: (562) 989-4040
Address: 3275 Walnut Avenue
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #2931
APCL Contact: Kenny Chan
Project Name/Code: JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: Leo Williamson

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items: Cr 2008	Analysis Items: Pb 2008	Remarks
MW-21-3		4/17/03	1110	W	HNO_3	1	X	X	Level 4 pkg. and EDD
MW-21-2		↓	1205	↓	↓	↓	X	X	
MW-21-1		↓	1250	↓	↓	↓	X	X	
EB-1-4/17/03		↓	1215	↓	↓	↓	X	X	

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 (2.8 °C).

Relinquished by Date/Time / Received by Date/Time /

Relinquished by Date/Time / Received by Date/Time /

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Subcontract Chain of Custody

Please Print in pen

Subcontract Lab: ATL
Contact: Puri
Tel #: (562) 989-4045 Fax #: (562) 989-4040
Address: 3275 Walnut Avenue
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #2931
APCL Contact: Kenny Chan
Project Name/Code: JPL
Job #:
BILL TO APCL
Sub Quotation #:
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: Leo Williamson

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items: Cr 2003	Pb 2003	Remarks
MW-4-5		4/21/03	0810	W	HNO3	1	X	X	Level 4 pkg. and EDD
MW-4-4			0930				X	X	
MW-4-3			1015				X	X	
MW-4-2			1140			2	X	X	← MS/MSD
MW-4-1			1330			1	X	X	
EB-2-4/21/03			–				X	X	
Dupe-1-2Q03			–				X	X	
Source-2Q03			1405				X	X	
MW-19-5		4/22/03	0920				X	X	
MW-19-4			1025				X	X	
MW-19-3			1130				X	X	
MW-19-2			1300			2	X	X	← MS/MSD
MW-19-1			1410			1	X	X	
EB-3-4/22/03			1140				X	X	
MW-14-5		4/23/03	0835				X	X	

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 (2.8 °C).

Relinquished by [signature] Date/Time 5/8/03 / 1700 Received by BETH M. ALPANTE Date/Time 050903 / 8:45am

Relinquished by Date/Time / Received by Date/Time /

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.

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Subcontract Chain of Custody

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Subcontract Lab: ATL
Contact: Puri
Tel #: (562) 989-4045 Fax #: (562) 989-4040
Address: 3275 Walnut Avenue
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #2931
APCL Contact: Penny Chan
Project Name/Code: JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: Leo Williamson

White – With report
Yellow – Lab copy
Pink – Originator

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items: Cr 200.8	Cr 220.8	Remarks
MW-14-4		4/29/03	0935	W	HNO3	1	X	X	Level 4 pkg and EDD
MW-14-3			1110				X	X	
MW-14-2			1220				X	X	
MW-14-1			1320				X	X	
EB-4-4/23/03			1125				X	X	
Dupe-2-2003			—				X	X	
MW-20-5		4/24/03	0805				X	X	
MW-20-4			0850				X	X	
MW-20-3			1000				X	X	
MW-20-2			1040				X	X	
MW-20-1			1145				X	X	
EB-5-4/24/03			0905				X	X	
Dupe-3-2003			—				X	X	
MW-21-5		4/11/03	0900				X	X	
MW-21-4			1000				X	X	

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 (2.8 °C).

Relinquished by [signature] Date/Time 5/8/03 / 1700 Received by BETH M. ALPANTE Date/Time 050903 / 8:45 am

Relinquished by Date/Time / Received by Date/Time /

APCL USE ONLY Service # Note:

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APCL Form 4-101, Ver. 4.0, Jan. 17, 2003.

210 10

Applied P & Ch Laboratory

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

Subcontract Chain of Custody

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Subcontract Lab: ATL
Contact: Puri
Tel #: (562) 989-4045
Fax #: (562) 989-4040
Address: 3275 Walnut Avenue
City: Signal Hill
State: CA
Zip code: 90807
APCL Client: #2931
APCL Contact: Kenny Chan
Project Name/Code: JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by: Leo Williamson

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Analysis Items: Cr 2008	Analysis Items: Pb 2008											Remarks
MW-21-3		4/17/03	1110	W	HNO_3	1	X	X											Level 4 pkg. and EDD
MW-21-2		↓	1205	↓	↓	↓	X	X											
MW-21-1		↓	1250	↓	↓	↓	X	X											
EB-1-4/17/03		↓	1215	↓	↓	↓	X	X											

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 (2.8 °C).

Relinquished by [signature] Date/Time 5/8/03 / 1700 Received by BETH M. ALPANTE Date/Time 050903 / 1845 am

Relinquished by Date/Time / Received by Date/Time /

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INORGANICS COMPLETE INVENTORY SHEET

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: #2931

Laboratory Name: Advanced Technology Laboratories
Laboratory Address: 3275 Walnut Avenue, Signal Hill, CA 90807

ATL Number: 062725
Date Sampled: 04/21/03
Date Received: 05/09/03

Method 200.8 (Metals)

	Topic	Page(s)
Sample Data	Inorganic Data Result Sheet	015-026
Standards Data	Initial Calibration	027
	Initial Calibration Verification and Continuing Calibration Verification/External Reference Standard	028-030
	Tune File	031-032
	Internal Standard Table	033-034
Raw QC Data	Blank Report Sheet	035-036
	Spike Sample Recovery	037
	Laboratory Control Spike Report	037
	Duplicate Report Sheet	038
	Holding Times Summary Sheet	040-041
Miscellaneous Items	Preparation Log	042-043
	Analysis Run Log	044-045
	Standards Log	046-053
	List of Method Detection Limits	054
Raw Data Package	Standards Data Sample Data QC Data	055-122

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-001
Client Sample ID: MW-4-5
Collection Date: 4/21/2003 8:10:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	3.0	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-002
Client Sample ID: MW-4-4
Collection Date: 4/21/2003 9:30:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	3.5	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-003
Client Sample ID: MW-4-3
Collection Date: 4/21/2003 10:15:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	3.8	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-004
Client Sample ID: MW-4-2
Collection Date: 4/21/2003 11:40:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	6.4	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-005
Client Sample ID: MW-4-1
Collection Date: 4/21/2003 1:30:00 PM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	3.4	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-006
Client Sample ID: EB-2-4/21/03
Collection Date: 4/21/2003
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	ND	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-007
Collection Date: 4/21/2003
Client Sample ID: Dupe-1-2Q03
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	2.8	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-008
Collection Date: 4/21/2003 2:05:00 PM
Client Sample ID: Source-2Q03
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	ND	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-009
Collection Date: 4/22/2003 9:20:00 AM
Client Sample ID: MW-19-5
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	2.5	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

A17

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-010 **Collection Date:** 4/22/2003 10:25:00 AM
Client Sample ID: MW-19-4 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	2.4	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-011 **Collection Date:** 4/22/2003 11:30:00 AM
Client Sample ID: MW-19-3 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	5.0	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-012 **Collection Date:** 4/22/2003 1:00:00 PM
Client Sample ID: MW-19-2 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	4.2	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-013
Collection Date: 4/22/2003 2:10:00 PM
Client Sample ID: MW-19-1
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	1.7	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-014
Collection Date: 4/22/2003 11:40:00 AM
Client Sample ID: EB-3-4/22/03
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	ND	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-015
Collection Date: 4/23/2003 8:35:00 AM
Client Sample ID: MW-14-5
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	2.1	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-016
Client Sample ID: MW-14-4
Collection Date: 4/23/2003 9:35:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	3.8	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-017
Client Sample ID: MW-14-3
Collection Date: 4/23/2003 11:10:00 AM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	3.2	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-018
Client Sample ID: MW-14-2
Collection Date: 4/23/2003 12:20:00 PM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	4.4	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-019 **Collection Date:** 4/23/2003 1:20:00 PM
Client Sample ID: MW-14-1 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	4.6	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-020 **Collection Date:** 4/23/2003 11:25:00 AM
Client Sample ID: EB-4-4/23/03 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	ND	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-021 **Collection Date:** 4/23/2003
Client Sample ID: Dupe-2-2Q03 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512A	QC Batch: R27306			PrepDate:		Analyst: **NS**
Chromium	2.6	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-022
Collection Date: 4/24/2003 8:05:00 AM
Client Sample ID: MW-20-5
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	1.7	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-023
Collection Date: 4/24/2003 8:50:00 AM
Client Sample ID: MW-20-4
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	2.2	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-024
Collection Date: 4/24/2003 10:00:00 AM
Client Sample ID: MW-20-3
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	4.2	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-025
Collection Date: 4/24/2003 10:40:00 AM
Client Sample ID: MW-20-2
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	2.1	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-026
Collection Date: 4/24/2003 11:45:00 AM
Client Sample ID: MW-20-1
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	2.4	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-027
Collection Date: 4/24/2003 9:05:00 AM
Client Sample ID: EB-5-4/24/03
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	ND	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-028 **Collection Date:** 4/24/2003
Client Sample ID: Dupe-3-2Q03 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	2.1	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-029 **Collection Date:** 4/17/2003 9:00:00 AM
Client Sample ID: MW-21-5 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	2.7	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-030 **Collection Date:** 4/17/2003 10:00:00 AM
Client Sample ID: MW-21-4 **Matrix:** WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	3.8	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL
Lab Order: 062725

Lab ID: 062725-031
Collection Date: 4/17/2003 11:10:00 AM
Client Sample ID: MW-21-3
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	3.7	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-032
Collection Date: 4/17/2003 12:05:00 PM
Client Sample ID: MW-21-2
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	4.8	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

Lab ID: 062725-033
Collection Date: 4/17/2003 12:50:00 PM
Client Sample ID: MW-21-1
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
				EPA 200.8		
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	3.5	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Project: #2931, JPL

Lab Order: 062725

Lab ID: 062725-034
Client Sample ID: EB-1-4/17/03

Collection Date: 4/17/2003 12:15:00 PM
Matrix: WATER

Analyte	Result	PQL	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
			EPA 200.8			
RunID: ICP4_030512B	QC Batch: R27309			PrepDate:		Analyst: **NS**
Chromium	ND	1.0		µg/L	1	5/12/2003
Lead	ND	1.0		µg/L	1	5/12/2003

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-Sample exceding holding time

Results are wet unless othewise specified

026

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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062725
Date Received: 05/09/03

(EPA 200.8) - INITIAL CALIBRATION

Instrument ID: ICP4
Date(s) Analyzed: 05/12/03

Initial Calibration:

	INTENSITY				
COMPOUND	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	r2
Chromium	11028	46287	84018	159828	0.9999
Lead	2089	16112	32116	63020	0.9999

Standard Concentration:	0.5 ppb	5 ppb	10 ppb	20 ppb
Standard ID:	MST030512E	MST030512D	MST030512C	MST030512B

Calibration Acceptance Criteria: > 0.995 Correlation

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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062725
Date Received: 05/09/03

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 05/12/2003

	Source:	Standard Code:
Initial Calibration Verification:	Leeman	MST030512G
Continuing Calibration Verification:	Leeman	MST030512G

QC Batch Number: R27306

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)	M
Chromium	10.0	10.17	102	10.0	9.85	99	9.99	100	
Lead	10.0	9.91	99	10.0	10.59	106	10.5	105	

ICV Limits: 90 -110%
CCV Limits: 85 -115%

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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062725
Date Received: 05/09/03

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 05/12/2003

	Source:	Standard Code:
Initial Calibration Verification:	Leeman	MST030512G
Continuing Calibration Verification:	Leeman	MST030512G

QC Batch Number: R27306

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)	M
Chromium	10.0	10.17	102	10.0	9.73	97		0	
Lead	10.0	9.91	99	10.0	10.43	104		0	

ICV Limits: 90 -110%
CCV Limits: 85 -115%

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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062725
Date Received: 05/09/03

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 05/12/2003

	Source:	Standard Code:
Initial Calibration Verification:	Leeman	MST030512G
Continuing Calibration Verification:	Leeman	MST030512G

QC Batch Number: R27309

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)	M
Chromium	10.0	10.17	102	10.0	9.73	97	9.65	97	
Lead	10.0	9.91	99	10.0	10.27	103	10.2	102	

ICV Limits: 90 -110%
CCV Limits: 85 -115%

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

Instrument Tuning Report

File Name: 030512.tun
File Path: D:\ELAN\TUNING\2003\May

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.028	2046	2040	0.724	
Mg	23.985	23.979	5684	2020	0.729	
Rh	102.905	102.878	24975	1955	0.767	
Ce	139.905	139.929	33974	2010	0.788	
Pb	207.977	207.978	50417	2270	0.762	
U	238.050	238.025	57642	2435	0.775	

Daily Performance Report

Sample ID: 030512-daily
Sample Date/Time: Monday, May 12, 2003 10:16:54
Sample Description:
Method File: c:\elandata\Method\Daily.mth
Dataset File: d:\elan\daily performance\2003\may\030512-daily.016
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	47408.8	47408.807	420.806	0.9
	Rh	102.9	155274.2	155274.236	1678.118	1.1
	In	114.9	191689.9	191689.869	1073.182	0.6
	Pb	208.0	78969.8	78969.814	702.917	0.9
⌈>	Ba	137.9	157480.8	157480.808	884.317	0.6
⌊	Ba++	69.0	3592.4	0.023	0.000	0.9
⌈>	Ce	139.9	195549.5	195549.519	1047.221	0.5
⌊	CeO	155.9	5894.1	0.030	0.001	2.6
	Bkgd	220.0	2.6	2.567	0.346	13.5

Current Optimization File Data

Current Value	Description
0.87	Nebulizer Gas Flow
7.00	Lens Voltage
1100.00	ICP RF Power
-1850.00	Analog Stage Voltage
1700.00	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	21	6.2	5638.8
Co	59	21	6.6	122542.0
In	115	21	7.0	284105.2

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062725
Date Received: 03/05/03

Instrument ID: ICP4
Internal Standard ID: MST030307A
Date Analyzed: 05/12/2003
Standard Concentration: 50 ug/L
QC Batch: R27306

			Scandium		Terbium	
			Area	% Rec	Area	% Rec
Calibration Blank			513669	---	1031558	---
Lab ID	Sample Description	APCL Lab ID:				
MB-R27306	---	--	522354	102	1056089	102
LCS-R27306	---	--	519153	101	1051352	102
062725-001A	MW-4-5	--	571083	111	1044058	101
062725-002A	MW-4-4	--	605795	118	1062144	103
062725-003A	MW-4-3	--	597762	116	1086070	105
062725-004A	MW-4-2	--	595669	116	1036833	101
062725-004ADUP	MW-4-2	--	580488	113	1030638	100
062725-004AMS	MW-4-2	--	562332	109	1026310	99
062725-004AMSD	MW-4-2	--	555564	108	1036778	101
062725-005A	MW-4-1	--	504186	98	1046126	101
062725-006A	EB-2-4/21/03	--	449850	88	1027839	100
062725-007A	Dupe-1-2Q03	--	509971	99	1046001	101
062725-008A	Source-2Q03	--	461039	90	1029090	100
062725-009A	MW-19-5	--	493748	96	1034538	100
062725-010A	MW-19-4		541137	105	1051168	102
062725-011A	MW-19-3		558022	109	1045209	101
062725-013A	MW-19-1		527752	103	1055290	102
062725-014A	EB-3-4/22/03		476746	93	1069334	104
062725-015A	MW-14-5		547259	107	1064293	103
062725-016A	MW-14-4		562254	109	1055949	102
062725-017A	MW-14-3		546031	106	1029218	100
062725-018A	MW-14-2		562816	110	1036334	100
062725-019A	MW-14-1		573932	112	1052239	102
062725-020A	EB-4-4/23/03		489527	95	1090577	106
062725-021A	Dupe-2-2Q03		558970	109	1047599	102
062725-021ADUP	Dupe-2-2Q03		566859	110	1061144	103

* 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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062725
Date Received: 05/09/03

Internal Standard ID: MST030124A

Standard Concentration: 50 ug/L

Instrument ID: ICP4

Date Analyzed: 05/12/2003

QC Batch: R27309

			Scandium		Indium	
			Area	% Rec	Area	% Rec
Calibration Blank			513669	---	1031558	---
Lab ID	Sample Description	APCL Lab ID:				
MB-R27309	—	—	464265	90	1038884	101
LCS-R27309	—	—	462965	90	1044292	101
062725-012A	MW-19-2	—	597359	116	1051724	102
062725-012ADUP	MW-19-2	—	603948	118	1069096	104
062725-012AMS	MW-19-2	—	607485	118	1076660	104
062725-012AMSD	MW-19-2	—	606563	118	1098986	107
062725-022A	MW-20-5	—	541017	105	1065689	103
062725-023A	MW-20-4	—	536135	104	1074464	104
062725-024A	MW-20-3	—	559312	109	1080320	105
062725-025A	MW-20-2	—	572516	111	1097022	106
062725-026A	MW-20-1	—	557987	109	1094371	106
062725-027A	EB-5-4/24/03	—	492110	96	1069079	104
062725-028A	Dupe-3-2Q03	—	560797	109	1101068	107
062725-029A	MW-21-5		593340	116	1098015	106
062725-030A	MW-21-4		608002	118	1097905	106
062725-031A	MW-21-3		629235	122	1109752	108
062725-032A	MW-21-2		620161	121	1102938	107
062725-033A	MW-21-1		644711	126	1101695	107
062725-034A	EB-1-4/17/03		53388	10	1104853	107

* 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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL

ATL Number: 062725
Date Received: 05/09/03

(EPA 200.8) METHOD BLANKS *

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

Dilution Factor: 1
Matrix: Water
Date Analyzed: 05/12/2003

QC Batch Number: R27306

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	0.146		0.268		0.291		0.201		0.115		PM
Lead	1	-0.165		-0.173		-0.171		-0.174		-0.170		

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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL

ATL Number: 062725
Date Received: 05/09/03

(EPA 200.8) METHOD BLANKS *

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

Dilution Factor: 1
Matrix: Water
Date Analyzed: 05/12/2003

QC Batch Number: R27309

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	0.146		0.173		0.122				0.209		PM
Lead	1	-0.165		-0.170		-0.190				-0.194		

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

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

Advanced Technology Laboratories

Date: *16-May-03*

CLIENT: Applied P & Ch Laboratories
Work Order: 062725
Project: #2931, JPL

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: **MB-R27306** SampType: **MBLK** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **ZZZZZ** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410879**

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

Sample ID: **MB-R27309** SampType: **MBLK** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512B**
Client ID: **ZZZZZ** Batch ID: **R27309** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410919**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.209	1.0									J
Lead	ND	1.0									

Sample ID: **LCS-R27306** SampType: **LCS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **ZZZZZ** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410878**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	10.23	1.0	10	0	102	85	115	0	0		
Lead	10.04	1.0	10	0	100	85	115	0	0		

Sample ID: **LCS-R27309** SampType: **LCS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512B**
Client ID: **ZZZZZ** Batch ID: **R27309** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410918**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	9.866	1.0	10	0	98.7	85	115	0	0		
Lead	10.28	1.0	10	0	103	85	115	0	0		

Sample ID: **062725-004AMS** SampType: **MS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **MW-4-2** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410860**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

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

137

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

CLIENT: Applied P & Ch Laboratories
Work Order: 062725
Project: #2931, JPL

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: **062725-004AMS** SampType: **MS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **MW-4-2** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410860**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	14.01	1.0	10	6.424	75.8	80	120	0	0		S
Lead	9.651	1.0	10	0	96.5	80	120	0	0		

Sample ID: **062725-012AMS** SampType: **MS** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512B**
Client ID: **MW-19-2** Batch ID: **R27309** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410903**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.76	1.0	10	4.224	75.4	80	120	0	0		S
Lead	9.324	1.0	10	0	93.2	80	120	0	0		

Sample ID: **062725-004AMSD** SampType: **MSD** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **MW-4-2** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410861**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	13.79	1.0	10	6.424	73.6	80	120	14.01	1.57	20	S
Lead	9.558	1.0	10	0	95.6	80	120	9.651	0.968	20	

Sample ID: **062725-012AMSD** SampType: **MSD** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512B**
Client ID: **MW-19-2** Batch ID: **R27309** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410904**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	11.73	1.0	10	4.224	75.1	80	120	11.76	0.281	20	S
Lead	9.266	1.0	10	0	92.7	80	120	9.324	0.624	20	

Sample ID: **062725-004ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **MW-4-2** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410880**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	6.353	1.0	0	0	0	0	0	6.424	1.11	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

138

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

CLIENT: Applied P & Ch Laboratories
Work Order: 062725
Project: #2931, JPL

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.8_W

Sample ID: **062725-004ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **MW-4-2** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410880**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	ND	1.0	0	0	0	0	0	0	0	30	

Sample ID: **062725-021ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512A**
Client ID: **Dupe-2-2Q03** Batch ID: **R27306** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410881**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	2.688	1.0	0	0	0	0	0	2.551	5.23	30	
Lead	ND	1.0	0	0	0	0	0	0	0	30	

Sample ID: **062725-012ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512B**
Client ID: **MW-19-2** Batch ID: **R27309** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410920**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	4.264	1.0	0	0	0	0	0	4.224	0.943	30	
Lead	ND	1.0	0	0	0	0	0	0	0	30	

Sample ID: **062725-034ADUP** SampType: **DUP** TestCode: **200.8_W** Units: **µg/L** Prep Date: Run ID: **ICP4_030512B**
Client ID: **EB-1-4/17/03** Batch ID: **R27309** TestNo: **EPA 200.8** Analysis Date: **5/12/2003** SeqNo: **410921**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	1.0	0	0	0	0	0	0	0	30	
Lead	ND	1.0	0	0	0	0	0	0	0	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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: #2931
ATL Number: 062725
Date Received: 05/09/03

HOLDING TIME SUMMARY _ EPA 200.8

	Lab Sample ID	Client Sample ID	Sample Description	Date Sampled	Date Digested	Contract Holding Time
1	062725-001A	MW-4-5		04/21/2003	N/A	6 Months
2	062725-002A	MW-4-4		04/21/2003	N/A	6 Months
3	062725-003A	MW-4-3		04/21/2003	N/A	6 Months
4	062725-004A	MW-4-2		04/21/2003	N/A	6 Months
5	062725-005A	MW-4-1		04/21/2003	N/A	6 Months
6	062725-006A	EB-2-4/21/03		04/21/2003	N/A	6 Months
7	062725-007A	Dupe-1-2Q03		04/21/2003	N/A	6 Months
8	062725-008A	Source-2Q03		04/21/2003	N/A	6 Months
9	062725-009A	MW-19-5		04/22/2003	N/A	6 Months
10	062725-010A	MW-19-4		04/22/2003	N/A	6 Months
11	062725-011A	MW-19-3		04/22/2003	N/A	6 Months
12	062725-012A	MW-19-2		04/22/2003	N/A	6 Months
13	062725-013A	MW-19-1		04/22/2003	N/A	6 Months
14	062725-014A	EB-3-4/22/03		04/22/2003	N/A	6 Months
15	062725-015A	MW-14-5		04/23/2003	N/A	6 Months
16	062725-016A	MW-14-4		04/23/2003	N/A	6 Months
17	062725-017A	MW-14-3		04/23/2003	N/A	6 Months
18	062725-018A	MW-14-2		04/23/2003	N/A	6 Months
19	062725-019A	MW-14-1		04/23/2003	N/A	6 Months
20	062725-020A	EB-4-4/23/03		04/23/2003	N/A	6 Months
21						

____0____ of _20___ sample(s) were outside of holding time.

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

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: #2931
ATL Number: 062725
Date Received: 05/09/03

HOLDING TIME SUMMARY _ EPA 200.8

	Lab Sample ID	Client Sample ID	Sample Description	Date Sampled	Date Digested	Contract Holding Time
1	062725-021A	Dupe-2-2Q03		04/23/2003	N/A	6 Months
2	062725-022A	MW-20-5		04/24/2003	N/A	6 Months
3	062725-023A	MW-20-4		04/24/2003	N/A	6 Months
4	062725-024A	MW-20-3		04/24/2003	N/A	6 Months
5	062725-025A	MW-20-2		04/24/2003	N/A	6 Months
6	062725-026A	MW-20-1		04/24/2003	N/A	6 Months
7	062725-027A	EB-5-4/24/03		04/24/2003	N/A	6 Months
8	062725-028A	Dupe-3-2Q03		04/24/2003	N/A	6 Months
9	062725-029A	MW-21-5		04/17/2003	N/A	6 Months
10	062725-030A	MW-21-4		04/17/2003	N/A	6 Months
11	062725-031A	MW-21-3		04/17/2003	N/A	6 Months
12	062725-032A	MW-21-2		04/17/2003	N/A	6 Months
13	062725-033A	MW-21-1		04/17/2003	N/A	6 Months
14	062725-034A	EB-1-4/17/03		04/17/2003	N/A	6 Months
15						
16						
17						
18						
19						
20						
21						

____0____ of _14___ sample(s) were outside of holding time.

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

[redacted] Turbidity Check and Sample Preparation Log

Date Read / Digested: 5/12/03

Method (Circle one):
1) 200.8
2) 3010A
3) 3050B
4) 3051

Turb. Calibration
100 NTU: 10 NTU
Std Code: SCPL 1022
Initials: NS

Matrix (Circle one):
1) Drinking Water
2) Ground Water
3) Liquid
4) Soil
5) Solid
6) Other water

Acid Lot #
Hydrochloric N/A
Nitric N/A

	Sample ID	Turbidity Result *	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
	MS 62725-4A	0.14	10	0.1 ml	1 ppm	HST030512A	10	NS	
	MSD ↓	0.14	↓	0.1 ml	↓	↓	↓	↓	
	Method Blank	—	↓	—	—	—	↓	↓	
	LCS	—		0.1 ml	1 ppm	HST030512F			
	Blank MS								
	Blank MSD								
1	62725-1A	0.31	10				10	NS	
2	-2	0.47	↓				↓	↓	
3	-3	0.97							
4	-4	0.14							
5	-5	0.26							
6	-6	0.06							
7	-7	0.06							
8	-8	0.08							
9	-9	0.23							
10	-10	0.10							
11	-11	0.15							
12	-13	0.07							
13	-14	0.13							
14	-15	0.09							
15	-16	0.14							
16	-17	0.14							
17	-18	0.18							
18	-19	0.35							
19	-20	0.01							
20	-21	0.05	↓				↓	↓	
DUP	62725-4A	0.14	↓				↓	↓	
	-21A	0.05							

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

Relinquished by / Date: _____

Received by / Date: _____

Turbidity Check and Sample Preparation Log

Date Read / Digested: 5/12/03

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~~ N/A
2) 3010A	Std Code: 542-0022	2) Ground Water	5) Solid	Nitric N/A
3) 3050B	Initials: NJ	3) Liquid	6) Other water	
4) 3051				

NJ 5/12/03

	Sample ID	Turbidity Result *	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
	MS 6275-12A	0.38	10	0.1 ml	1 ppm	NJ030512A	10	NJ	
	MSD ↓	0.38	↓	↓	↓	↓	↑	↑	
	Method Blank	—	↓	—	—	—	↓	↓	
	LCS	—	↓	0.1	1 ppm	NJ030512F	↓	↓	
	Blank MS								
	Blank MSD								
1	6275-12A	0.38	10				10	NJ	
2	-22	0.29	↓				↓	↓	
3	-23	0.39							
4	-24	0.15							
5	-25	0.10							
6	-26	0.05							
7	-27	0.05							
8	-28	0.10							
9	-29	0.10							
10	-30	0.27							
11	-31	0.16							
12	-32	0.26							
13	-33	0.05							
14	-34	0.04							
15									
16									
17									
18									
19									
20									
DUP	6275-12A ↓ -34A	0.30 0.04	10				10	NJ	

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

Relinquished by / Date: _____

Received by / Date: _____

143

Sample/Batch Report

User Name: Nancy
Computer Name: ICPMS PE 6100
Sample File: D:\ELAN\Sample\2003\May\030512.sam
Report Date/Time: Monday, May 12, 2003 11:04:15

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		062725-001A							
12		062725-002A							
13		062725-003A							
14		062725-004A							
15		062725-004ADUP							
16		062725-004AMS							
17		062725-004AMSD							
18		062725-005A							
7		CCV							
8		CCB							
19		062725-006A							
20		062725-007A							
21		062725-008A							
22		062725-009A							
23		062725-010A							
24		062725-011A							
25		062725-013A							
26		062725-014A							
27		062725-015A							
28		062725-016A							
7		CCV							
8		CCB							
29		062725-017A							
30		062725-018A							
31		062725-019A							
32		062725-020A							
33		062725-021A							
34		062725-021ADUP							
7		CCV							
8		CCB							
35		MB-							
36		LCS-							
37		062725-012A							
38		062725-012ADUP							
39		062725-012AMS							
40		062725-012AMSD							
41		062725-022A							
42		062725-023A							
43		062725-024A							
44		062725-025A							
7		CCV							
8		CCB							
45		062725-026A							
46		062725-027A							
47		062725-028A							

R27306 NJ 5/12/03

R27309 NJ 5/12/03

CAL: MST030512B /20
C /10
D /5
E /0.5

ICV/CCV: MST030512G

MS/MSD: MST030512A

LCS: MST030512F

ICP4
NJ, 5/12/03

044

48	062725-029A
49	062725-030A
50	062725-031A
51	062725-032A
52	062725-033A
53	062725-034A
54	062725-034ADUP
7	CCV
8	CCB

045

Metals Working Standard Prep Log

Date	Standard Name	Working Std Code	Stock Std Code (Stock Info)	Stock Concentration (Preparation)	Amount Taken from Stock (Preparation)
4-16-03	ICPMS – STD,	MST030416A	MST030402 A MST030407 A	10 ppm 10 ppm	5 5
	– 100	B	MST030416A	1 ppm	5
	– 50	C	B	100 ppb	25
	– 10	D	C	50 ppb	10
	– LCS,	E	MST021216D MST030407B	10 ppm 10 ppm	5 5
	– ICV/CCV@50	F	MST030416E	1 ppm	2.5
4-18-03	ICPMS – STD,	MST030418 C	MST030402A	10 ppm	5
	– 20	D	MST030418C	1 ppm	1
	– 10	E	D	20 ppb	25
	– 5	F	E	10 ppb	25
	– 0.5	G	F	5 ppb	5
	– LCS,	H	MST021216D	10 ppm	5
	– ICV/CCV @ 10	I	MST030418H	1 ppm	0.5
	– 100	J	C	1 ppm	5
	– 50	K	J	100 ppb	25
	– 10	L	K	50 ppb	10
	– ICV/CCV@50	M	H	1 ppm	2.5
4-18-03	ICPMS – Internal Std.	MST030418 A	MST030217A Li	1000 ppm	1 ml
			B Ge		
			C Tb		

Logbook 3
Page 21A

046

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
1	50	1 ppm	DI H_2O + 2% HNO_3	7-15-03	Leeman High Purity		NS
		100 ppb					
		50 ppb					
		10 ppb					
5	50	1 ppm	DI H_2O + 2% HNO_3	7-~~17~~ 15-03 NS 4/16/03	Leeman ~~Fascure~~		NS
		10 ppb					
		1 ppm		7-17-03	Leeman		
		20 ppb					
		10 ppb					
10		5 ppb					
		0.5 ppb					
		1 ppm			Leeman		
		10 ppb					
		100 ppb					
15		10 ppb					
		10 ppb					
		50 ppb					
	100 ml	10 ppm	DI H_2O + 2% HNO_3	7-17-03	High Purity		NS
20							

* 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
4-18-03	ICPMS - Internal Std	MST030418 A	MST030217D Sc	1000 ppm	1 ml
↓	↓	↓	↓ E In	↓	↓
↓	↓	↓	↓ F Tm	↓	↓
4-18-03	ICPMS - Tuning Stock Sol'n.	MST030418B	MST-010523E Mg	1000 ppm	0.5 ml
↓	↓	↓	MST-030414H Cu	↓	↓
↓	↓	↓	MST030217J Rh	↓	↓
↓	↓	↓	MST030414E Cd	↓	↓
↓	↓	↓	MST030414C Ba	↓	↓
↓	↓	↓	MST030217G Ce	↓	↓
↓	↓	↓	MST030414P Pb	↓	↓
↓	↓	↓	MST030414D Be	↓	↓
↓	↓	↓	MST030414G Co	↓	↓
↓	↓	↓	MST030217H Tl	↓	↓
↓	↓	↓	MST030217I U	↓	↓
↓	↓	↓	MST030217E In	↓	↓
4-21-03	ICPMS - 10 ppb Tuning Sol'n.	MST030421A	MST030418B	1 ppm	10 ml
4-22-03	ICPMS - STD1	MST030422A	MST030402A MST030402B	10 ppm 1000 ppm	5 ml 0.05
↓	↓ - 20	↓ B	MST030422	1 ppm	1 ml
↓	↓ - 10	↓ C	↓	20 ppb	25
↓	↓ - 5	↓ D	↓	10 ppb	25

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
1	100 ml	10 ppm	DI H_2O + 2% HNO_3	7-17-03	High Purity		NS
	↓	↓	↓	↓	↓		↓
	↓	↓	↓	↓	↓		↓
	500 ml	1 ppm	DI H_2O + 2% HNO_3	7-17-03	Ultra Scientific		NS
5	↓	↓	↓	↓	High Purity		↓
10							
15	↓	↓	↓	↓	↓		↓
	1000 ml	10 ppb	DI H_2O + 2% HNO_3	7-20-03	Ultra Scientific/High Purity		NS
	50	1 ppm	DI H_2O + 2% HNO_3	7-21-03	Leeman		NS
	↓	20 ppb	↓	↓	↓		↓
		10 ppb					
	↓	5 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
05-02-03	ICPMS - STD, (Hg)	MST030502 H	MST030217K	1000 ppm	0.05
	- 5 (Hg)	I	MST030502 H	1 ppm	0.25
	- 2.5 (")	J	I	5 ppb	25
	- 1 (")	K	J	2.5 ppb	20
	- LCS, (Hg)	L	MST030430H	1000 ppm	0.05
	- IW/CCV @ 2.5	M	MST030502	1 ppm	0.125
	ICPMS - STD,	N	MST030402A MST030402B MST030407A	10 ppm 1000 ppm 10 ppm	5 0.05 5
	- 100	O	MST030502N	1 ppm	5
	- 50	P	O	100 ppb	25
	- 10	Q	P	50 ppb	10
	- LCS,	R	MST042216D MST042216B MST030407B	10 ppm 1000 ppm 10 ppm	5 0.05 5
	- IW/CCV @ 50	S	MST030502R	1 ppm	2.5
05-08-03	ICPMS - STD,	MST030508A	MST030402A MST030402B	10 ppm 1000 ppm	5 0.05
	- 20	B	MST030508A	1 ppm	1
	- 10	C	B	20 ppb	25
	- 5	D	C	10 ppb	25
	- 0.5	E	D	5 ppb	5
	- LCS,	F	MST021216D MST021216B	10 ppm 1000 ppm	5 0.05
	- IW/CCV @ 10	G	MST030508F	1 ppm	0.5
05-09-03	ICPMS - STD,	MST030512A	MST030402A	10 ppm	5

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
1	50	1ppm	DI H_2O + 2% HNO_3	7-31-03	High Purity		NJ
		5ppb					
		2.5ppb					
		1ppb					
5		1ppm			Ultra Scientific		
		2.5ppb					
	50	1ppm			Leeman + High Purity		NJ
		100ppb					
		50ppb					
10		10ppb					
		1ppm			Leeman + Ultrascience		
		50ppb					
	50	1ppm	DI H_2O + 2% HNO_3	8-6-03	Leeman		NJ
		20ppb					
15		10ppb					
		1ppb					
		0.5ppb					
		1ppm			Leeman		
		10ppb					
20	50	1ppm	DI H_2O + 2% HNO_3	8-10-03	Leeman		NJ

*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
05-12-03	ICPMS - 20	MST030512B	MST030512A	1 ppm	1
	-10	C	B	20 ppb	25
	-5	D	C	10 ppb	25
	-0.5	E	D	5 ppb	5
	ICPMS-LCS1	F	MST021216D	10 ppm	5
	-IW/CW @10	G	MST030512F	1 ppm	0.5
05-14-03	ICPMS- STD1	MST030514A	MST030402A MST030402B	100 ppm 1000 ppm	5 0.05
	-20	B	MST030514A	1 ppm	1
	-10	C	B	20 ppb	25
	-5	D	C	10 ppb	25
	-0.5	E	D	5 ppb	5
	ICPMS - LCS1	F	MST021216D MST021216B	10 ppm 1000 ppm	5 0.05
	-IW/CW @10	G	MST030514F	1 ppm	0.5

152

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
1	50	20ppb	DI H_2O + 2% HNO_3	8-10-03	Leeman		NS
		10ppb					
		5ppb					
		0.5ppb					
5		1ppm			Leeman		
		10ppb					
	50	1ppm	DI H_2O + 2% HNO_3	8-12-03	Leeman		NS
		20ppb					
		10ppb					
10		5ppb					
		0.5ppb					
		1ppm			Leeman		
		10ppb					
15							

* Check working std versus all manufacturer's

Method Detection Limits

Method:	6020 / 200.8
Date of Analysis:	01/13/2003
Instrument ID:	ICP4
Matrix:	Water

Compound	MDL (ug/L)	DLR (ug/L)
Chromium	0.111	1
Copper	0.078	1
Lead	0.134	1
Nickel	0.071	1
Zinc	3.341	5

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

ELAN Instrument Control Session

File Edit Analysis Options Window Help

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

Dataset - d:\elan\tuning\2003\may\

Reprocess Summary

	Batch ID	Sample ID	Time	
1		030502-tuning	[illegible]	[illegible]
2		030502-tuning	[illegible]	[illegible]
3		030505-tuning	[illegible]	[illegible]
4		030505-tuning	[illegible]	[illegible]
5		030505-tuning	[illegible]	[illegible]
6		030507-tuning	[illegible]	[illegible]
7		030508-tuning	[illegible]	[illegible]
8		030512-tuning	[illegible]	[illegible]
9		030512-tuning	[illegible]	[illegible]
10		030512-tuning	[illegible]	[illegible]
11				

Tuning - D:\ELAN\TUNING\2003\May\030512.tun

Tune Mass Spec Peak Width Only

Peak Search Window (amu): 1 Resolution DAC: 2040 for Analyte

	Analyte	Mass (amu)	Measured Mass (amu)	Mass Calibration DAC Value	Resolution DAC Value	Meas Wid
1	Be	9.0122	9.02775	2046	2040	[illegible]
2	Mg	23.985	23.9787	5684	2020	[illegible]
3	Rh	102.905	102.878	24975	1955	[illegible]
4	Ce	139.905	139.929	33974	2010	[illegible]
5	Pb	207.977	207.978	50417	2270	[illegible]
6	U	238.05	238.025	57642	2435	[illegible]

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:06:17
Dataset File: D:\ELAN\Dataset\2003\May\030512\Blank.001
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
⌈>	**Sc-1**	45		513669	1.6			ug/L	%
|	**Cr**	52		6252	6.2			ug/L	%
|	**Cr**	53		29960	6.7			ug/L	%
|	**Ni**	60		8482	0.9			ug/L	%
|	**Ni**	62		1376	0.7			ug/L	%
|	**Cu**	63		333	25.8			ug/L	%
⌊	**Cu**	65		206	6.0			ug/L	%
⌈>	**Tb**	159		1031558	2.0			ug/L	%
|	**Pb**	207		832	20.2			ug/L	%
⌊	**Pb**	208		3928	20.6			ug/L	%

056

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:08:50
Dataset File: D:\ELAN\Dataset\2003\May\030512\Standard 1.002
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
⌈>	**Sc-1**	45	513669	521139	0.8			ug/L	%
|	**Cr**	52	6252	11028	2.0	**0.500**	0.024	ug/L	4.9 %
|	**Cr**	53	29960	37117	4.8	**0.500**	0.124	ug/L	24.9 %
|	**Ni**	60	8482	8857	1.2	**0.500**	0.355	ug/L	71.0 %
|	**Ni**	62	1376	1426	2.9	**0.500**	0.823	ug/L	164.6 %
|	**Cu**	63	333	2249	2.8	**0.500**	0.021	ug/L	4.1 %
⌊	**Cu**	65	206	1127	0.5	**0.500**	0.008	ug/L	1.5 %
⌈>	**Tb**	159	1031558	1053122	0.7			ug/L	%
|	**Pb**	207	832	2089	1.4	**0.500**	0.017	ug/L	3.4 %
⌊	**Pb**	208	3928	9788	1.4	**0.500**	0.015	ug/L	2.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:11:40
Dataset File: D:\ELAN\Dataset\2003\May\030512\Standard 2.003
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	523154	0.6			ug/L	%
	Cr	52	6252	46287	2.2	**4.991**	0.105	ug/L	2.1 %
	Cr	53	29960	43045	2.7	**4.792**	0.419	ug/L	8.7 %
	Ni	60	8482	15980	1.5	**5.033**	0.233	ug/L	4.6 %
	Ni	62	1376	2399	1.3	**5.035**	0.081	ug/L	1.6 %
	Cu	63	333	18513	0.9	**4.997**	0.068	ug/L	1.4 %
	Cu	65	206	8786	1.2	**4.996**	0.081	ug/L	1.6 %
>	**Tb**	159	1031558	1046956	1.6			ug/L	%
	Pb	207	832	16112	1.4	**5.010**	0.023	ug/L	0.5 %
	Pb	208	3928	75729	1.6	**5.010**	0.027	ug/L	0.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:14:30
Dataset File: D:\ELAN\Dataset\2003\May\030512\Standard 3.004
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	522284	1.0			ug/L	%
	Cr	52	6252	84018	1.7	**9.944**	0.196	ug/L	2.0 %
	Cr	53	29960	47511	4.6	**9.032**	1.070	ug/L	11.8 %
	Ni	60	8482	23375	0.9	**10.026**	0.292	ug/L	2.9 %
	Ni	62	1376	3525	2.4	**10.143**	0.553	ug/L	5.5 %
	Cu	63	333	36616	0.7	**9.998**	0.134	ug/L	1.3 %
	Cu	65	206	17163	0.9	**9.978**	0.085	ug/L	0.9 %
>	**Tb**	159	1031558	1060534	0.4			ug/L	%
	Pb	207	832	32116	2.8	**10.025**	0.294	ug/L	2.9 %
	Pb	208	3928	148830	2.1	**9.996**	0.232	ug/L	2.3 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:17:22
Dataset File: D:\ELAN\Dataset\2003\May\030512\Standard 4.005
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	513849	0.5			ug/L	%
	Cr	52	6252	159828	0.8	**19.997**	0.081	ug/L	0.4 %
	Cr	53	29960	58040	2.7	**18.571**	1.171	ug/L	6.3 %
	Ni	60	8482	38540	0.2	**20.176**	0.105	ug/L	0.5 %
	Ni	62	1376	5780	0.8	**20.307**	0.349	ug/L	1.7 %
	Cu	63	333	71784	0.5	**20.003**	0.204	ug/L	1.0 %
	Cu	65	206	33783	0.8	**20.021**	0.206	ug/L	1.0 %
>	**Tb**	159	1031558	1053083	2.0			ug/L	%
	Pb	207	832	63020	2.2	**20.019**	0.228	ug/L	1.1 %
	Pb	208	3928	292574	1.3	**20.015**	0.204	ug/L	1.0 %

ELAN Instrument Control Session

File Edit Analysis Options Window Help

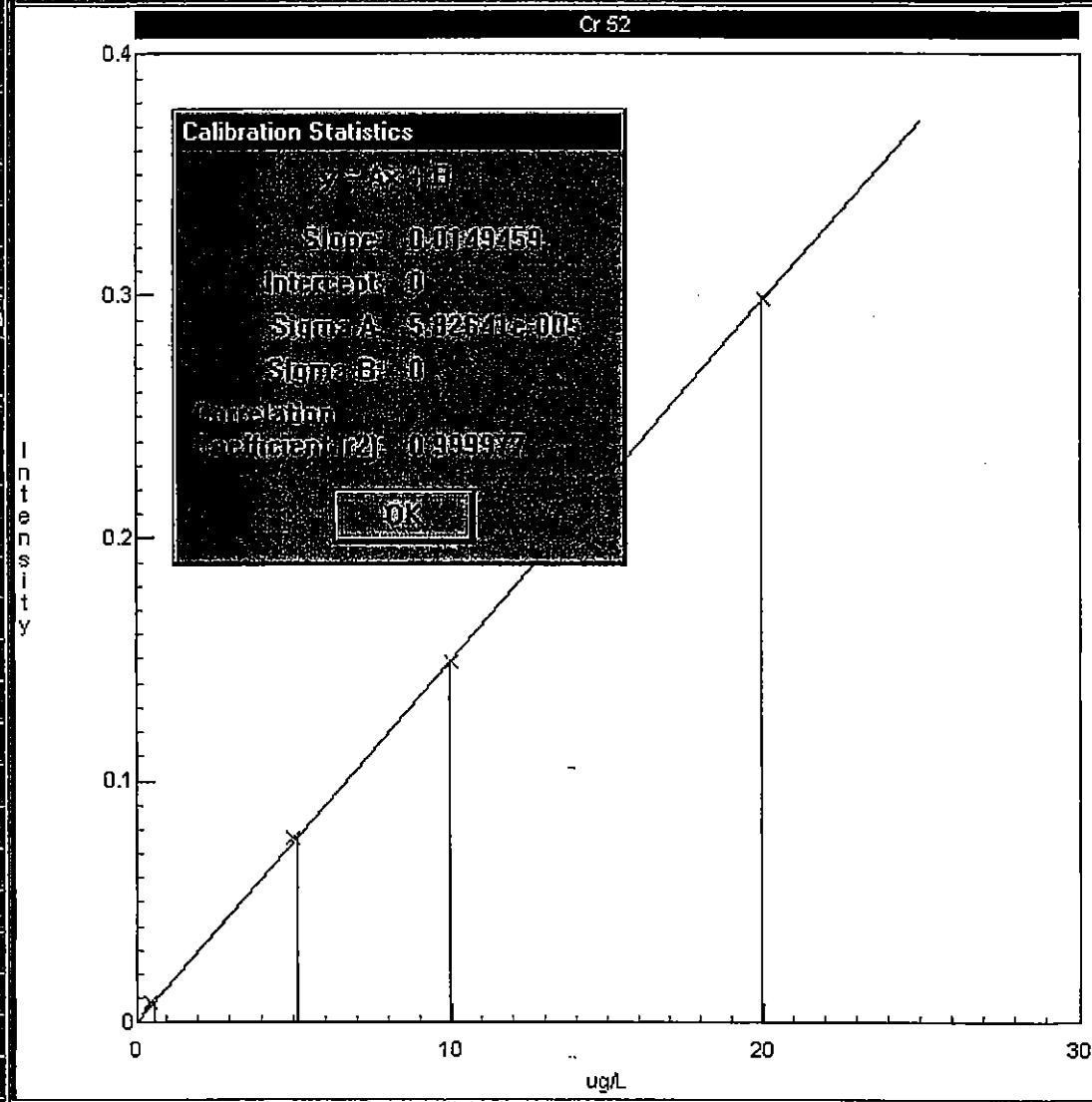
Quantitative Analysis Method - c:\elandata\Method\atl methods 030317\atl-epa...

Timing | Processing | Equation | Calibration | Sampling

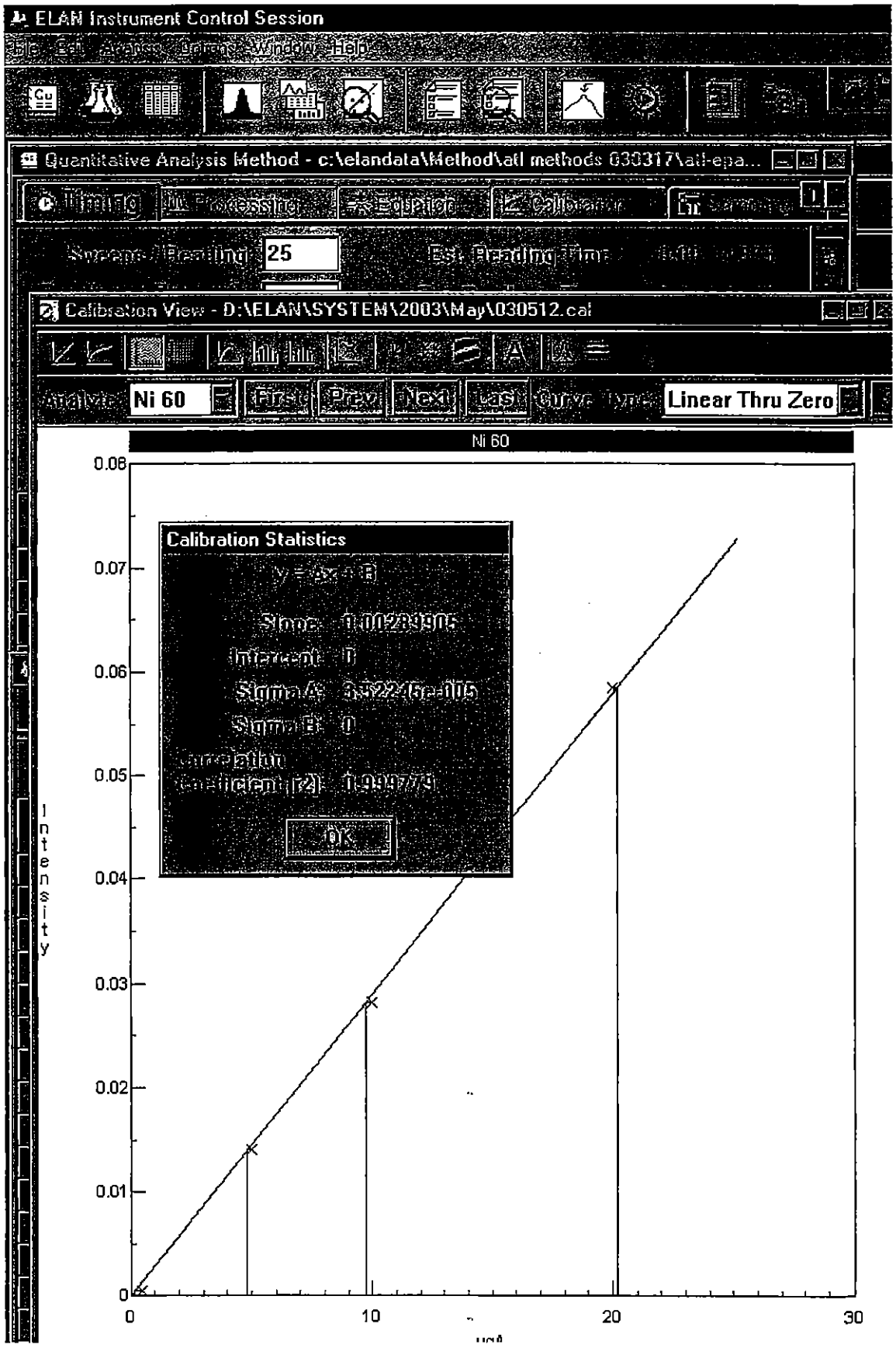
Sweeps / Reading 25 | Est. Reading Time

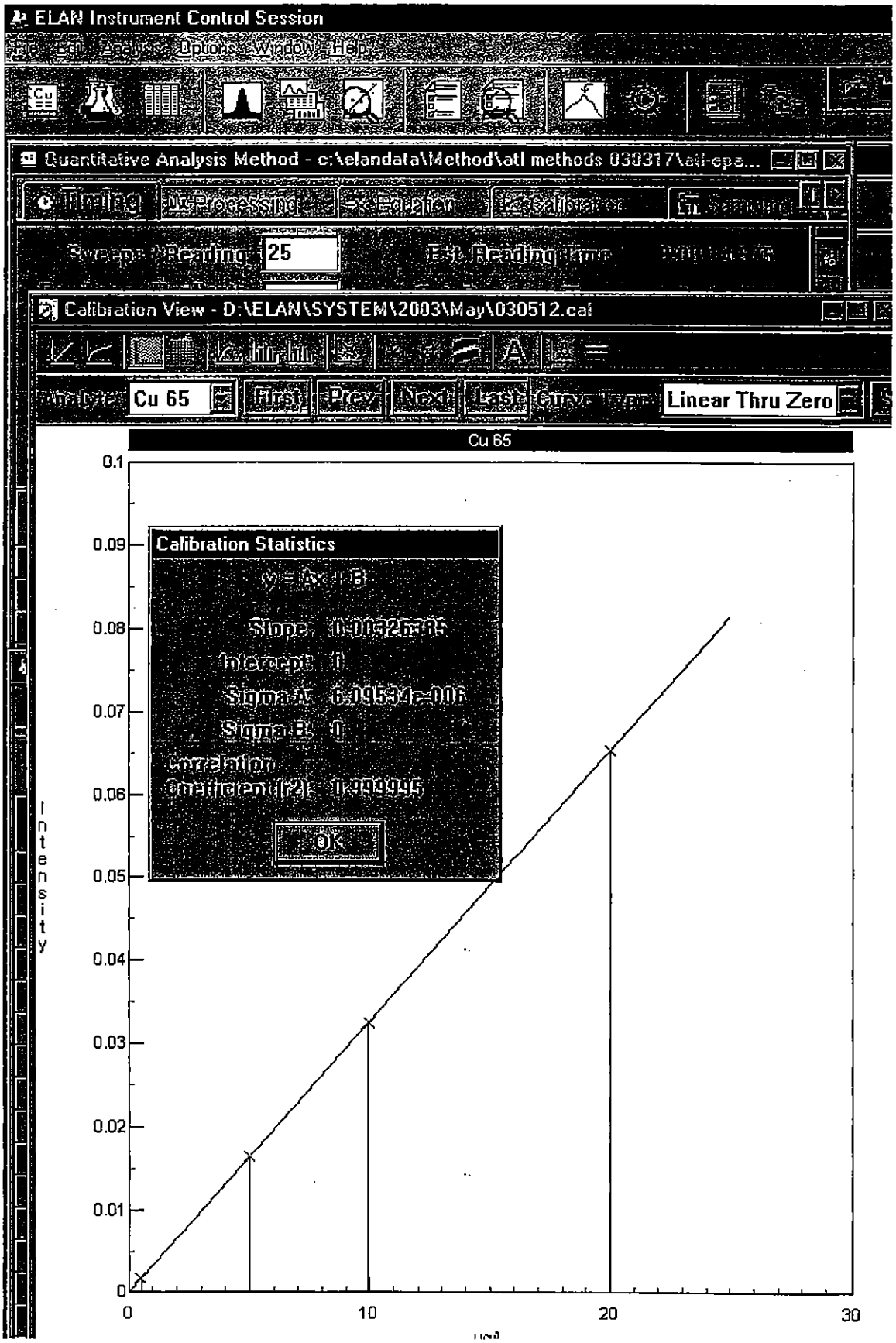
Calibration View - D:\ELAN\SYSTEM\2003\May\030512.cal

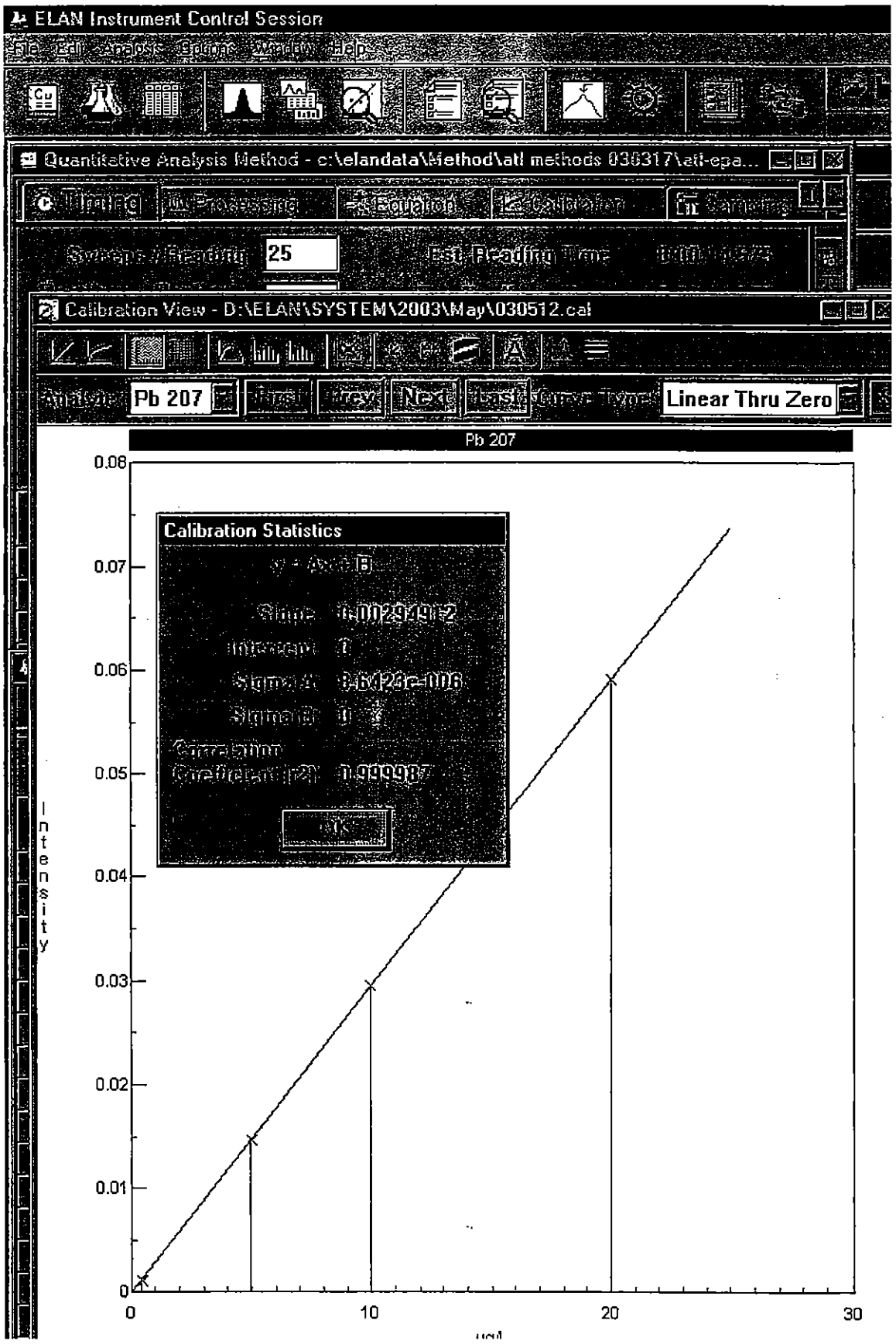
Analyte Cr 52 | First | Prev | Next | Last | Curve Type Linear Thru Zero



14	8		CCB	Run Sample	atl r
15	19		062725-006A	Run Sample	atl r


ELAN Instrument Control Session
Quantitative Analysis Method - c:\elandata\Method\atl methods 030317\atl-epa...
Calibration View - D:\ELAN\SYSTEM\2003\May\030512.cal
Ni 60
Linear Thru Zero
Ni 60
Calibration Statistics
Intercept 0
Sigma B 0
OK
Intensity
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
10
20
30


ELAN Instrument Control Session
Quantitative Analysis Method - c:\elandata\Method\atl methods 030317\atl-epa...
Timing
Process Spec
Equation
Calibration
Sampling
Sweeps / Reading
25
Est. Reading Time
Calibration View - D:\ELAN\SYSTEM\2003\May\030512.cal
Analyte
Cu 65
First
Prev
Next
Last
Curve Type
Linear Thru Zero
Cu 65
Calibration Statistics
y = Ax + B
Slope
Intercept
Sigma A
Sigma B
Correlation
Coefficient (r2)
OK
Intensity
0.1
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
10
20
30


ELAN Instrument Control Session
Quantitative Analysis Method - c:\elandata\Method\all methods 030317\all-epa...
Sweeps / Reading
25
Calibration View - D:\ELAN\SYSTEM\2003\May\030512.cal
Analyte
Pb 207
Next
Curve Type
Linear Thru Zero
Pb 207
Calibration Statistics
y = Ax + B
Slope
Intercept
Correlation
Coefficient (r2)
OK
Intensity
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
10
20
30

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:20:15
Dataset File: D:\ELAN\Dataset\2003\May\030512\ICV.006
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
⌈>	**Sc-1**	45	513669	520403	1.2			ug/L	%
|	**Cr**	52	6252	85419	0.7	**10.169**	0.090	ug/L	0.9 %
|	**Cr**	53	29960	49770	2.0	**12.685**	0.702	ug/L	5.5 %
|	**Ni**	60	8482	22272	1.0	**9.067**	0.048	ug/L	0.5 %
|	**Ni**	62	1376	3360	1.2	**8.953**	0.294	ug/L	3.3 %
|	**Cu**	63	333	37273	1.2	**10.210**	0.060	ug/L	0.6 %
⌊	**Cu**	65	206	17622	0.7	**10.253**	0.144	ug/L	1.4 %
⌈>	**Tb**	159	1031558	1062345	1.3			ug/L	%
|	**Pb**	207	832	31920	1.8	**9.914**	0.059	ug/L	0.6 %
⌊	**Pb**	208	3928	148629	1.7	**9.940**	0.043	ug/L	0.4 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:22:51
Dataset File: D:\ELAN\Dataset\2003\May\030512\ICB.007
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	517265	0.9			ug/L	%
	Cr	52	6252	7429	3.0	**0.146**	0.021	ug/L	14.5 %
	Cr	53	29960	41565	3.9	**7.485**	0.897	ug/L	12.0 %
	Ni	60	8482	6278	1.8	**-1.510**	0.049	ug/L	3.2 %
	Ni	62	1376	1039	2.0	**-1.589**	0.134	ug/L	8.4 %
	Cu	63	333	307	1.8	**-0.008**	0.002	ug/L	25.0 %
	Cu	65	206	219	3.7	**0.006**	0.006	ug/L	92.2 %
>	**Tb**	159	1031558	1048056	2.5			ug/L	%
	Pb	207	832	334	8.8	**-0.165**	0.010	ug/L	6.1 %
	Pb	208	3928	1553	6.2	**-0.170**	0.007	ug/L	4.1 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:26:03
Dataset File: D:\ELAN\Dataset\2003\May\030512\MB.008
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB – R27306 NS 5/12/03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	522354	1.3			ug/L	%
	Cr	52	6252	7259	3.3	**0.115**	0.021	ug/L	18.1 %
	Cr	53	29960	40911	3.3	**6.792**	0.545	ug/L	8.0 %
	Ni	60	8482	7097	3.3	**-1.010**	0.111	ug/L	11.0 %
	Ni	62	1376	1132	3.8	**-1.215**	0.168	ug/L	13.8 %
	Cu	63	333	399	2.6	**0.017**	0.002	ug/L	11.6 %
	Cu	65	206	267	4.1	**0.034**	0.007	ug/L	19.6 %
>	**Tb**	159	1031558	1056089	1.8			ug/L	%
	Pb	207	832	321	0.7	**-0.170**	0.002	ug/L	0.9 %
	Pb	208	3928	1347	4.2	**-0.185**	0.005	ug/L	2.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:29:08
Dataset File: D:\ELAN\Dataset\2003\May\030512\LCS.009
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: LCS - R27306 NS 5/12/03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	519153	1.0			ug/L	%
|	**Cr**	52	6252	85688	0.4	**10.229**	0.073	ug/L	0.7 %
|	**Cr**	53	29960	52716	2.7	**14.691**	0.915	ug/L	6.2 %
|	**Ni**	60	8482	22633	1.3	**9.343**	0.267	ug/L	2.9 %
|	**Ni**	62	1376	3415	1.5	**9.238**	0.286	ug/L	3.1 %
|	**Cu**	63	333	36130	2.8	**9.919**	0.319	ug/L	3.2 %
⌊	**Cu**	65	206	17143	1.7	**9.994**	0.170	ug/L	1.7 %
⌈>	**Tb**	159	1031558	1051352	1.0			ug/L	%
|	**Pb**	207	832	31989	2.1	**10.043**	0.144	ug/L	1.4 %
⌊	**Pb**	208	3928	149512	1.6	**10.108**	0.140	ug/L	1.4 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:31:42
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-001A.010
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-001A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	571083	0.8			ug/L	%
	Cr	52	6252	32516	0.5	**2.995**	0.026	ug/L	0.9 %
	Cr	53	29960	12846	5.6	**-12.177**	0.486	ug/L	4.0 %
	Ni	60	8482	3463	0.7	**-3.604**	0.012	ug/L	0.3 %
	Ni	62	1376	619	3.4	**-3.779**	0.071	ug/L	1.9 %
	Cu	63	333	3249	3.0	**0.725**	0.018	ug/L	2.5 %
	Cu	65	206	993	2.8	**0.409**	0.014	ug/L	3.5 %
>	**Tb**	159	1031558	1044058	1.5			ug/L	%
	Pb	207	832	895	9.1	**0.018**	0.031	ug/L	175.7 %
	Pb	208	3928	4221	11.2	**0.018**	0.038	ug/L	215.9 %

069

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:34:16
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-002A.011
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-002A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	605795	1.7			ug/L	%
	Cr	52	6252	38827	0.9	**3.474**	0.058	ug/L	1.7 %
	Cr	53	29960	8656	3.0	**-14.966**	0.223	ug/L	1.5 %
	Ni	60	8482	2402	2.8	**-4.328**	0.029	ug/L	0.7 %
	Ni	62	1376	426	4.5	**-4.682**	0.065	ug/L	1.4 %
	Cu	63	333	2228	1.8	**0.436**	0.012	ug/L	2.9 %
	Cu	65	206	631	2.4	**0.196**	0.008	ug/L	4.0 %
>	**Tb**	159	1031558	1062144	1.2			ug/L	%
	Pb	207	832	704	4.3	**-0.048**	0.012	ug/L	24.1 %
	Pb	208	3928	3269	2.4	**-0.053**	0.008	ug/L	15.3 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:36:50
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-003A.012
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-003A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	597762	1.1			ug/L	%
|	**Cr**	52	6252	41216	0.5	**3.799**	0.058	ug/L	1.5 %
|	**Cr**	53	29960	6102	2.2	**-16.355**	0.096	ug/L	0.6 %
|	**Ni**	60	8482	2868	3.3	**-4.040**	0.067	ug/L	1.7 %
|	**Ni**	62	1376	427	2.8	**-4.657**	0.052	ug/L	1.1 %
|	**Cu**	63	333	2371	1.6	**0.477**	0.013	ug/L	2.7 %
⌊	**Cu**	65	206	675	2.1	**0.223**	0.004	ug/L	1.7 %
⌈>	**Tb**	159	1031558	1086070	1.3			ug/L	%
|	**Pb**	207	832	862	4.0	**-0.004**	0.014	ug/L	329.3 %
⌊	**Pb**	208	3928	3918	2.6	**-0.015**	0.010	ug/L	71.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:49:46
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-004A.015
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-004A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	595106	1.8			ug/L	%
|	**Cr**	52	6252	64367	0.4	**6.424**	0.134	ug/L	2.1 %
|	**Cr**	53	29960	7173	2.8	**-15.728**	0.080	ug/L	0.5 %
|	**Ni**	60	8482	5498	1.2	**-2.508**	0.073	ug/L	2.9 %
|	**Ni**	62	1376	433	4.7	**-4.623**	0.083	ug/L	1.8 %
|	**Cu**	63	333	1729	2.6	**0.325**	0.007	ug/L	2.1 %
⌊	**Cu**	65	206	1837	2.1	**0.823**	0.026	ug/L	3.2 %
⌈>	**Tb**	159	1031558	1036833	2.2			ug/L	%
|	**Pb**	207	832	754	17.3	**-0.026**	0.048	ug/L	181.4 %
⌊	**Pb**	208	3928	3564	9.9	**-0.027**	0.029	ug/L	110.2 %

072

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:52:21
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-004ADUP.016
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-004ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	580488	0.8			ug/L	%
	Cr	52	6252	62176	1.1	**6.353**	0.127	ug/L	2.0 %
	Cr	53	29960	6845	0.2	**-15.817**	0.026	ug/L	0.2 %
	Ni	60	8482	5474	2.1	**-2.443**	0.092	ug/L	3.8 %
	Ni	62	1376	441	3.4	**-4.549**	0.063	ug/L	1.4 %
	Cu	63	333	1631	2.9	**0.311**	0.014	ug/L	4.6 %
	Cu	65	206	1727	2.3	**0.789**	0.016	ug/L	2.0 %
>	**Tb**	159	1031558	1030638	1.3			ug/L	%
	Pb	207	832	570	5.5	**-0.086**	0.009	ug/L	10.9 %
	Pb	208	3928	2706	1.8	**-0.086**	0.001	ug/L	1.4 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:54:57
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-004AMS.017
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-004AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	562332	0.7			ug/L	%
|	**Cr**	52	6252	124549	1.6	**14.006**	0.320	ug/L	2.3 %
|	**Cr**	53	29960	14263	1.7	**-11.203**	0.196	ug/L	1.7 %
|	**Ni**	60	8482	17974	1.6	**5.331**	0.225	ug/L	4.2 %
|	**Ni**	62	1376	2328	2.3	**3.460**	0.223	ug/L	6.5 %
|	**Cu**	63	333	29969	1.4	**7.573**	0.092	ug/L	1.2 %
⌊	**Cu**	65	206	15068	1.4	**8.087**	0.144	ug/L	1.8 %
⌈>	**Tb**	159	1031558	1026310	2.1			ug/L	%
|	**Pb**	207	832	30037	1.6	**9.651**	0.064	ug/L	0.7 %
⌊	**Pb**	208	3928	140911	1.2	**9.751**	0.086	ug/L	0.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 11:57:33
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-004AMSD.018
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-004AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	555564	1.7			ug/L	%
	Cr	52	6252	121230	0.4	**13.788**	0.200	ug/L	1.5 %
	Cr	53	29960	14110	1.2	**-11.192**	0.120	ug/L	1.1 %
	Ni	60	8482	17722	1.5	**5.308**	0.117	ug/L	2.2 %
	Ni	62	1376	2276	2.4	**3.358**	0.148	ug/L	4.4 %
	Cu	63	333	29611	2.0	**7.574**	0.028	ug/L	0.4 %
	Cu	65	206	14997	0.5	**8.149**	0.111	ug/L	1.4 %
>	**Tb**	159	1031558	1036778	1.5			ug/L	%
	Pb	207	832	30061	2.1	**9.558**	0.077	ug/L	0.8 %
	Pb	208	3928	141071	2.3	**9.659**	0.085	ug/L	0.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:00:10
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-005A.019
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-005A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	504186	1.4			ug/L	%
	Cr	52	6252	31613	0.4	**3.381**	0.060	ug/L	1.8 %
	Cr	53	29960	2639	1.4	**-18.046**	0.048	ug/L	0.3 %
	Ni	60	8482	1871	0.5	**-4.416**	0.021	ug/L	0.5 %
	Ni	62	1376	192	4.8	**-5.447**	0.055	ug/L	1.0 %
	Cu	63	333	2153	1.1	**0.521**	0.004	ug/L	0.8 %
	Cu	65	206	1291	0.6	**0.662**	0.009	ug/L	1.4 %
>	**Tb**	159	1031558	1046126	1.6			ug/L	%
	Pb	207	832	542	3.0	**-0.098**	0.003	ug/L	2.6 %
	Pb	208	3928	2517	2.0	**-0.102**	0.003	ug/L	2.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:02:48
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCV.020
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	427626	1.5			ug/L	%
	Cr	52	6252	68130	1.2	**9.846**	0.043	ug/L	0.4 %
	Cr	53	29960	36887	6.2	**9.482**	1.388	ug/L	14.6 %
	Ni	60	8482	13623	2.7	**5.292**	0.148	ug/L	2.8 %
	Ni	62	1376	2158	2.8	**5.609**	0.190	ug/L	3.4 %
	Cu	63	333	30064	1.1	**10.021**	0.046	ug/L	0.5 %
	Cu	65	206	14463	0.4	**10.240**	0.121	ug/L	1.2 %
>	**Tb**	159	1031558	1016787	2.0			ug/L	%
	Pb	207	832	32570	4.2	**10.585**	0.242	ug/L	2.3 %
	Pb	208	3928	152960	3.7	**10.707**	0.192	ug/L	1.8 %

077

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:05:27
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCB.021
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	425511	1.7			ug/L	%
	Cr	52	6252	6883	3.7	**0.268**	0.039	ug/L	14.5 %
	Cr	53	29960	37153	5.4	**9.856**	1.608	ug/L	16.3 %
	Ni	60	8482	486	8.6	**-5.302**	0.034	ug/L	0.6 %
	Ni	62	1376	220	3.7	**-5.121**	0.064	ug/L	1.3 %
	Cu	63	333	270	0.6	**-0.002**	0.001	ug/L	61.1 %
	Cu	65	206	186	13.8	**0.011**	0.020	ug/L	180.6 %
>	**Tb**	159	1031558	1005501	0.1			ug/L	%
	Pb	207	832	297	7.1	**-0.173**	0.007	ug/L	4.2 %
	Pb	208	3928	1333	3.6	**-0.181**	0.003	ug/L	1.9 %

078

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:08:06
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-006A.022
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-006A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	449850	1.3			ug/L	%
	Cr	52	6252	6553	2.3	**0.160**	0.010	ug/L	6.3 %
	Cr	53	29960	7558	7.4	**-14.110**	0.494	ug/L	3.5 %
	Ni	60	8482	528	9.8	**-5.291**	0.034	ug/L	0.6 %
	Ni	62	1376	205	7.4	**-5.271**	0.066	ug/L	1.2 %
	Cu	63	333	376	3.8	**0.027**	0.006	ug/L	21.4 %
	Cu	65	206	230	3.7	**0.033**	0.008	ug/L	22.8 %
>	**Tb**	159	1031558	1027839	1.5			ug/L	%
	Pb	207	832	590	4.6	**-0.079**	0.006	ug/L	7.6 %
	Pb	208	3928	2748	3.5	**-0.083**	0.005	ug/L	5.6 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:10:44
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-007A.023
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-007A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	509971	1.9			ug/L	%
]	**Cr**	52	6252	27275	1.5	**2.765**	0.082	ug/L	3.0 %
[	**Cr**	53	29960	5553	4.1	**-16.121**	0.224	ug/L	1.4 %
]	**Ni**	60	8482	1993	1.0	**-4.347**	0.016	ug/L	0.4 %
[	**Ni**	62	1376	335	5.1	**-4.792**	0.063	ug/L	1.3 %
]	**Cu**	63	333	1476	2.7	**0.323**	0.006	ug/L	1.9 %
⌊	**Cu**	65	206	495	2.7	**0.174**	0.008	ug/L	4.4 %
⌈>	**Tb**	159	1031558	1046001	1.9			ug/L	%
]	**Pb**	207	832	692	5.5	**-0.049**	0.008	ug/L	16.3 %
⌊	**Pb**	208	3928	3257	5.4	**-0.051**	0.008	ug/L	16.3 %

080

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:13:22
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-008A.024
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-008A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	461039	1.6			ug/L	%
|	**Cr**	52	6252	5505	0.1	**-0.015**	0.013	ug/L	87.5 %
|	**Cr**	53	29960	3470	3.9	**-17.266**	0.140	ug/L	0.8 %
|	**Ni**	60	8482	506	3.9	**-5.317**	0.010	ug/L	0.2 %
|	**Ni**	62	1376	212	6.8	**-5.260**	0.077	ug/L	1.5 %
|	**Cu**	63	333	3308	1.5	**0.939**	0.001	ug/L	0.1 %
⌊	**Cu**	65	206	1606	2.3	**0.944**	0.010	ug/L	1.0 %
⌈>	**Tb**	159	1031558	1029090	1.8			ug/L	%
|	**Pb**	207	832	586	2.0	**-0.080**	0.004	ug/L	4.4 %
⌊	**Pb**	208	3928	2794	0.4	**-0.080**	0.004	ug/L	5.1 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:16:01
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-009A.025
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-009A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	493748	1.3			ug/L	%
	Cr	52	6252	24333	0.4	**2.483**	0.037	ug/L	1.5 %
	Cr	53	29960	4028	3.2	**-17.052**	0.118	ug/L	0.7 %
	Ni	60	8482	2287	9.0	**-4.099**	0.132	ug/L	3.2 %
	Ni	62	1376	293	1.1	**-4.945**	0.005	ug/L	0.1 %
	Cu	63	333	2389	0.8	**0.603**	0.009	ug/L	1.4 %
	Cu	65	206	1522	2.3	**0.821**	0.034	ug/L	4.1 %
>	**Tb**	159	1031558	1034538	1.5			ug/L	%
	Pb	207	832	615	3.7	**-0.072**	0.006	ug/L	7.9 %
	Pb	208	3928	2872	2.8	**-0.075**	0.005	ug/L	6.4 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:18:40
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-010A.026
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-010A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	541437	0.8			ug/L	%
|	**Cr**	52	6252	26084	1.1	**2.409**	0.028	ug/L	1.2 %
|	**Cr**	53	29960	3425	1.1	**-17.675**	0.036	ug/L	0.2 %
|	**Ni**	60	8482	1903	7.6	**-4.484**	0.082	ug/L	1.8 %
|	**Ni**	62	1376	294	7.4	**-5.060**	0.093	ug/L	1.8 %
|	**Cu**	63	333	1725	0.8	**0.365**	0.002	ug/L	0.5 %
⌊	**Cu**	65	206	1008	1.1	**0.447**	0.010	ug/L	2.3 %
⌈>	**Tb**	159	1031558	1051168	2.1			ug/L	%
|	**Pb**	207	832	551	1.2	**-0.096**	0.004	ug/L	4.3 %
⌊	**Pb**	208	3928	2526	2.3	**-0.103**	0.001	ug/L	0.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:21:16
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-011A.027
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-011A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	558022	0.5			ug/L	%
	Cr	52	6252	48725	0.6	**5.028**	0.064	ug/L	1.3 %
	Cr	53	29960	5033	0.6	**-16.759**	0.008	ug/L	0.0 %
	Ni	60	8482	3865	2.0	**-3.307**	0.051	ug/L	1.5 %
	Ni	62	1376	215	2.4	**-5.437**	0.025	ug/L	0.5 %
	Cu	63	333	2882	0.6	**0.650**	0.006	ug/L	0.9 %
	Cu	65	206	2079	2.1	**1.018**	0.021	ug/L	2.1 %
>	**Tb**	159	1031558	1045209	1.0			ug/L	%
	Pb	207	832	460	6.0	**-0.124**	0.008	ug/L	6.7 %
	Pb	208	3928	2160	2.0	**-0.127**	0.002	ug/L	1.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:23:48
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-013A.028
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-013A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	527752	1.2			ug/L	%
	Cr	52	6252	19902	1.4	**1.709**	0.059	ug/L	3.4 %
	Cr	53	29960	2489	1.1	**-18.222**	0.035	ug/L	0.2 %
	Ni	60	8482	1505	15.2	**-4.711**	0.160	ug/L	3.4 %
	Ni	62	1376	213	11.1	**-5.393**	0.106	ug/L	2.0 %
	Cu	63	333	3512	0.7	**0.864**	0.013	ug/L	1.5 %
	Cu	65	206	1856	0.6	**0.954**	0.008	ug/L	0.8 %
>	**Tb**	159	1031558	1055290	0.6			ug/L	%
	Pb	207	832	528	2.1	**-0.104**	0.003	ug/L	3.0 %
	Pb	208	3928	2493	2.4	**-0.106**	0.003	ug/L	3.2 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:26:21
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-014A.029
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-014A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	476746	2.6			ug/L	%
|	**Cr**	52	6252	5912	2.0	**0.016**	0.024	ug/L	153.5 %
|	**Cr**	53	29960	2081	3.8	**-18.340**	0.091	ug/L	0.5 %
|	**Ni**	60	8482	501	4.8	**-5.334**	0.012	ug/L	0.2 %
|	**Ni**	62	1376	218	3.8	**-5.265**	0.024	ug/L	0.4 %
|	**Cu**	63	333	3653	2.8	**1.009**	0.017	ug/L	1.7 %
⌊	**Cu**	65	206	1762	0.8	**1.010**	0.035	ug/L	3.4 %
⌈>	**Tb**	159	1031558	1069334	2.1			ug/L	%
|	**Pb**	207	832	567	6.0	**-0.094**	0.013	ug/L	13.6 %
⌊	**Pb**	208	3928	2543	2.0	**-0.104**	0.005	ug/L	4.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:28:54
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-015A.030
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-015A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	547259	0.8			ug/L	%
	Cr	52	6252	23881	1.2	**2.105**	0.027	ug/L	1.3 %
	Cr	53	29960	2382	3.9	**-18.346**	0.069	ug/L	0.4 %
	Ni	60	8482	951	2.5	**-5.097**	0.019	ug/L	0.4 %
	Ni	62	1376	252	4.0	**-5.256**	0.046	ug/L	0.9 %
	Cu	63	333	2947	0.8	**0.682**	0.013	ug/L	1.9 %
	Cu	65	206	1291	1.2	**0.600**	0.011	ug/L	1.9 %
>	**Tb**	159	1031558	1064293	0.8			ug/L	%
	Pb	207	832	405	3.9	**-0.144**	0.006	ug/L	4.1 %
	Pb	208	3928	1896	3.6	**-0.148**	0.004	ug/L	2.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:31:28
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-016A.031
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-016A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	562254	0.8			ug/L	%
|	**Cr**	52	6252	38671	1.4	**3.787**	0.047	ug/L	1.2 %
|	**Cr**	53	29960	4350	0.6	**-17.195**	0.015	ug/L	0.1 %
|	**Ni**	60	8482	1975	5.7	**-4.484**	0.075	ug/L	1.7 %
|	**Ni**	62	1376	213	3.5	**-5.451**	0.025	ug/L	0.5 %
|	**Cu**	63	333	1827	1.5	**0.374**	0.011	ug/L	2.9 %
⌊	**Cu**	65	206	990	1.6	**0.417**	0.006	ug/L	1.6 %
⌈>	**Tb**	159	1031558	1055949	1.5			ug/L	%
|	**Pb**	207	832	417	2.1	**-0.139**	0.001	ug/L	0.7 %
⌊	**Pb**	208	3928	1936	5.4	**-0.144**	0.006	ug/L	3.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:34:04
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCV.032
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
[>	**Sc-1**	45	513669	429312	0.9			ug/L	%
	Cr	52	6252	69373	1.0	**9.998**	0.093	ug/L	0.9 %
	Cr	53	29960	39204	4.4	**11.210**	1.137	ug/L	10.1 %
	Ni	60	8482	13527	0.8	**5.173**	0.096	ug/L	1.9 %
	Ni	62	1376	2127	0.8	**5.391**	0.051	ug/L	0.9 %
	Cu	63	333	29851	0.3	**9.910**	0.089	ug/L	0.9 %
	Cu	65	206	14256	0.9	**10.051**	0.016	ug/L	0.2 %
[>	**Tb**	159	1031558	1013891	1.0			ug/L	%
	Pb	207	832	32124	1.2	**10.470**	0.052	ug/L	0.5 %
	Pb	208	3928	150783	1.6	**10.583**	0.093	ug/L	0.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:36:44
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCB.033
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	431830	0.3			ug/L	%
	Cr	52	6252	7136	1.8	**0.291**	0.017	ug/L	5.7 %
	Cr	53	29960	39250	3.7	**11.068**	1.074	ug/L	9.7 %
	Ni	60	8482	636	3.9	**-5.188**	0.020	ug/L	0.4 %
	Ni	62	1376	214	3.7	**-5.175**	0.044	ug/L	0.9 %
	Cu	63	333	289	6.0	**0.003**	0.006	ug/L	175.6 %
	Cu	65	206	177	3.0	**0.003**	0.004	ug/L	158.6 %
>	**Tb**	159	1031558	1011041	1.2			ug/L	%
	Pb	207	832	305	3.8	**-0.171**	0.004	ug/L	2.4 %
	Pb	208	3928	1332	3.4	**-0.182**	0.003	ug/L	1.4 %

090

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:39:21
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-017A.034
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-017A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	546031	0.9			ug/L	%
|	**Cr**	52	6252	32642	1.7	**3.186**	0.092	ug/L	2.9 %
|	**Cr**	53	29960	9656	4.2	**-13.813**	0.291	ug/L	2.1 %
|	**Ni**	60	8482	3826	3.0	**-3.279**	0.069	ug/L	2.1 %
|	**Ni**	62	1376	312	5.9	**-4.996**	0.072	ug/L	1.4 %
|	**Cu**	63	333	2998	0.7	**0.697**	0.013	ug/L	1.8 %
⌊	**Cu**	65	206	2420	1.1	**1.235**	0.008	ug/L	0.7 %
⌈>	**Tb**	159	1031558	1029218	1.4			ug/L	%
|	**Pb**	207	832	518	3.6	**-0.103**	0.004	ug/L	3.8 %
⌊	**Pb**	208	3928	2392	4.4	**-0.108**	0.006	ug/L	5.1 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:41:56
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-018A.035
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-018A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
[>	**Sc-1**	45	513669	562816	1.8			ug/L	%
	Cr	52	6252	44124	1.1	**4.432**	0.090	ug/L	2.0 %
	Cr	53	29960	7548	1.4	**-15.266**	0.111	ug/L	0.7 %
	Ni	60	8482	4492	1.8	**-2.942**	0.093	ug/L	3.2 %
	Ni	62	1376	255	3.6	**-5.275**	0.058	ug/L	1.1 %
	Cu	63	333	6170	1.7	**1.484**	0.045	ug/L	3.0 %
	Cu	65	206	4116	1.1	**2.118**	0.046	ug/L	2.2 %
[>	**Tb**	159	1031558	1036334	2.3			ug/L	%
	Pb	207	832	755	3.5	**-0.026**	0.008	ug/L	32.0 %
	Pb	208	3928	3504	3.8	**-0.031**	0.008	ug/L	26.3 %

092

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:44:31
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-019A.036
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-019A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	573932	1.0			ug/L	%
|	**Cr**	52	6252	46654	1.1	**4.625**	0.111	ug/L	2.4 %
|	**Cr**	53	29960	6478	1.8	**-15.988**	0.106	ug/L	0.7 %
|	**Ni**	60	8482	5739	1.4	**-2.246**	0.040	ug/L	1.8 %
|	**Ni**	62	1376	397	10.1	**-4.712**	0.155	ug/L	3.3 %
|	**Cu**	63	333	9549	2.0	**2.300**	0.037	ug/L	1.6 %
⌊	**Cu**	65	206	5791	1.0	**2.969**	0.013	ug/L	0.4 %
⌈>	**Tb**	159	1031558	1052239	2.3			ug/L	%
|	**Pb**	207	832	697	1.8	**-0.049**	0.001	ug/L	2.8 %
⌊	**Pb**	208	3928	3301	2.2	**-0.049**	0.000	ug/L	0.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:47:06
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-020A.037
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-020A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	489527	0.7			ug/L	%
	Cr	52	6252	7358	1.6	**0.191**	0.011	ug/L	5.8 %
	Cr	53	29960	3572	3.0	**-17.344**	0.091	ug/L	0.5 %
	Ni	60	8482	602	2.2	**-5.271**	0.006	ug/L	0.1 %
	Ni	62	1376	225	6.9	**-5.262**	0.068	ug/L	1.3 %
	Cu	63	333	922	1.6	**0.178**	0.003	ug/L	1.4 %
	Cu	65	206	505	3.3	**0.193**	0.012	ug/L	6.4 %
>	**Tb**	159	1031558	1090577	2.0			ug/L	%
	Pb	207	832	652	3.7	**-0.071**	0.004	ug/L	6.0 %
	Pb	208	3928	3291	14.4	**-0.058**	0.027	ug/L	47.2 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:49:43
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-021A.038
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-021A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD.	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	558970	1.3			ug/L	%
|	**Cr**	52	6252	28110	0.9	**2.551**	0.061	ug/L	2.4 %
|	**Cr**	53	29960	4457	2.6	**-17.115**	0.038	ug/L	0.2 %
|	**Ni**	60	8482	3836	4.4	**-3.329**	0.100	ug/L	3.0 %
|	**Ni**	62	1376	294	4.5	**-5.103**	0.060	ug/L	1.2 %
|	**Cu**	63	333	4037	2.1	**0.946**	0.019	ug/L	2.0 %
⌊	**Cu**	65	206	2687	4.4	**1.350**	0.053	ug/L	4.0 %
⌈>	**Tb**	159	1031558	1047599	2.5			ug/L	%
|	**Pb**	207	832	538	6.6	**-0.100**	0.007	ug/L	7.5 %
⌊	**Pb**	208	3928	2471	5.3	**-0.106**	0.005	ug/L	4.6 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:52:19
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-021ADUP.039
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-021ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	566856	0.4			ug/L	%
	Cr	52	6252	29675	1.4	**2.688**	0.049	ug/L	1.8 %
	Cr	53	29960	4280	0.4	**-17.259**	0.011	ug/L	0.1 %
	Ni	60	8482	3882	2.2	**-3.334**	0.043	ug/L	1.3 %
	Ni	62	1376	287	4.5	**-5.147**	0.054	ug/L	1.0 %
	Cu	63	333	4078	1.6	**0.942**	0.020	ug/L	2.1 %
	Cu	65	206	2763	2.7	**1.370**	0.044	ug/L	3.2 %
>	**Tb**	159	1031558	1061144	1.9			ug/L	%
	Pb	207	832	537	4.8	**-0.102**	0.011	ug/L	11.2 %
	Pb	208	3928	2421	1.4	**-0.111**	0.005	ug/L	4.7 %

096

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:55:41
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCV.040
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	470034	0.8			ug/L	%
	Cr	52	6252	74068	2.0	**9.728**	0.127	ug/L	1.3 %
	Cr	53	29960	40215	7.1	**9.248**	1.860	ug/L	20.1 %
	Ni	60	8482	14517	3.3	**4.957**	0.279	ug/L	5.6 %
	Ni	62	1376	2261	3.0	**5.048**	0.254	ug/L	5.0 %
	Cu	63	333	31688	1.0	**9.606**	0.153	ug/L	1.6 %
	Cu	65	206	15496	0.3	**9.978**	0.071	ug/L	0.7 %
>	**Tb**	159	1031558	1050587	1.7			ug/L	%
	Pb	207	832	33144	2.6	**10.426**	0.306	ug/L	2.9 %
	Pb	208	3928	155384	2.4	**10.526**	0.335	ug/L	3.2 %

0. 097

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 12:58:20
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCB.041
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	466196	0.9			ug/L	%
	Cr	52	6252	7073	3.7	**0.201**	0.030	ug/L	14.7 %
	Cr	53	29960	39798	5.6	**9.185**	1.416	ug/L	15.4 %
	Ni	60	8482	618	2.6	**-5.239**	0.013	ug/L	0.2 %
	Ni	62	1376	240	1.3	**-5.127**	0.026	ug/L	0.5 %
	Cu	63	333	299	3.6	**-0.001**	0.004	ug/L	476.9 %
	Cu	65	206	228	2.6	**0.027**	0.005	ug/L	19.6 %
>	**Tb**	159	1031558	1037867	1.8			ug/L	%
	Pb	207	832	305	3.3	**-0.174**	0.002	ug/L	1.0 %
	Pb	208	3928	1387	2.6	**-0.180**	0.002	ug/L	1.2 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:02:00
Dataset File: D:\ELAN\Dataset\2003\May\030512\MB-.042
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB- R273069 NS 5/12/03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	464265	0.9			ug/L	%
|	**Cr**	52	6252	7099	4.7	**0.209**	0.043	ug/L	20.5 %
|	**Cr**	53	29960	40865	5.7	**10.090**	1.583	ug/L	15.7 %
|	**Ni**	60	8482	87	12.9	**-5.631**	0.009	ug/L	0.2 %
|	**Ni**	62	1376	171	8.2	**-5.476**	0.069	ug/L	1.3 %
|	**Cu**	63	333	382	3.1	**0.025**	0.004	ug/L	13.9 %
⌊	**Cu**	65	206	258	1.6	**0.047**	0.002	ug/L	4.0 %
⌈>	**Tb**	159	1031558	1038884	1.9			ug/L	%
|	**Pb**	207	832	243	6.4	**-0.194**	0.004	ug/L	1.8 %
⌊	**Pb**	208	3928	1078	3.9	**-0.202**	0.003	ug/L	1.3 %

099

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:04:38
Dataset File: D:\ELAN\Dataset\2003\May\030512\LCS-.043
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: LCS- R27309 NS 5/12/03
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	462965	1.1			ug/L	%
	Cr	52	6252	73901	1.1	**9.866**	0.010	ug/L	0.1 %
	Cr	53	29960	51837	2.8	**18.229**	0.624	ug/L	3.4 %
	Ni	60	8482	14412	0.4	**5.043**	0.112	ug/L	2.2 %
	Ni	62	1376	2260	1.0	**5.218**	0.146	ug/L	2.8 %
	Cu	63	333	31586	1.0	**9.722**	0.122	ug/L	1.3 %
	Cu	65	206	15241	0.7	**9.963**	0.079	ug/L	0.8 %
>	**Tb**	159	1031558	1044292	2.0			ug/L	%
	Pb	207	832	32500	2.6	**10.279**	0.072	ug/L	0.7 %
	Pb	208	3928	153440	2.2	**10.453**	0.047	ug/L	0.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:07:16
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-012A.044
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-012A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	597359	1.2			ug/L	%
	Cr	52	6252	44977	0.4	**4.224**	0.045	ug/L	1.1 %
	Cr	53	29960	12722	4.6	**-12.583**	0.403	ug/L	3.2 %
	Ni	60	8482	4207	3.1	**-3.266**	0.096	ug/L	2.9 %
	Ni	62	1376	278	4.3	**-5.246**	0.035	ug/L	0.7 %
	Cu	63	333	3400	1.7	**0.726**	0.008	ug/L	1.1 %
	Cu	65	206	2652	1.8	**1.238**	0.041	ug/L	3.3 %
>	**Tb**	159	1031558	1051724	1.7			ug/L	%
	Pb	207	832	603	2.4	**-0.079**	0.007	ug/L	8.6 %
	Pb	208	3928	2815	0.9	**-0.083**	0.005	ug/L	5.8 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:09:54
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-012ADUP.045
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-012ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	603948	1.3			ug/L	%
	Cr	52	6252	45840	0.9	**4.264**	0.018	ug/L	0.4 %
	Cr	53	29960	8934	3.4	**-14.795**	0.237	ug/L	1.6 %
	Ni	60	8482	4215	1.4	**-3.288**	0.047	ug/L	1.4 %
	Ni	62	1376	278	11.5	**-5.258**	0.131	ug/L	2.5 %
	Cu	63	333	3364	2.4	**0.708**	0.021	ug/L	2.9 %
	Cu	65	206	2642	1.3	**1.217**	0.007	ug/L	0.5 %
>	**Tb**	159	1031558	1069096	1.1			ug/L	%
	Pb	207	832	526	7.6	**-0.107**	0.011	ug/L	10.6 %
	Pb	208	3928	2473	4.2	**-0.109**	0.005	ug/L	5.0 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:12:57
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-012AMS.046
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-012AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
[>	**Sc-1**	45	513669	607485	0.5			ug/L	%
	Cr	52	6252	114195	1.1	**11.763**	0.136	ug/L	1.2 %
	Cr	53	29960	15877	1.4	**-10.942**	0.087	ug/L	0.8 %
	Ni	60	8482	18119	1.8	**4.593**	0.237	ug/L	5.2 %
	Ni	62	1376	2351	4.5	**2.822**	0.446	ug/L	15.8 %
	Cu	63	333	33381	0.6	**7.812**	0.083	ug/L	1.1 %
	Cu	65	206	16834	1.3	**8.368**	0.142	ug/L	1.7 %
[>	**Tb**	159	1031558	1076660	1.9			ug/L	%
	Pb	207	832	30470	1.5	**9.324**	0.080	ug/L	0.9 %
	Pb	208	3928	142401	1.8	**9.382**	0.011	ug/L	0.1 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:15:32
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-012AMSD.047
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-012AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	606563	0.6			ug/L	%
	Cr	52	6252	113716	1.1	**11.730**	0.167	ug/L	1.4 %
	Cr	53	29960	15427	0.9	**-11.180**	0.105	ug/L	0.9 %
	Ni	60	8482	18146	3.2	**4.624**	0.359	ug/L	7.8 %
	Ni	62	1376	2322	2.8	**2.724**	0.301	ug/L	11.0 %
	Cu	63	333	33842	1.8	**7.933**	0.152	ug/L	1.9 %
	Cu	65	206	17019	2.6	**8.474**	0.232	ug/L	2.7 %
>	**Tb**	159	1031558	1098986	1.2			ug/L	%
	Pb	207	832	30916	2.0	**9.266**	0.159	ug/L	1.7 %
	Pb	208	3928	143677	2.0	**9.270**	0.099	ug/L	1.1 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:18:04
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-022A.048
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-022A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	541017	1.2			ug/L	%
|	**Cr**	52	6252	20152	0.6	**1.678**	0.038	ug/L	2.3 %
|	**Cr**	53	29960	4300	3.4	**-17.123**	0.120	ug/L	0.7 %
|	**Ni**	60	8482	595	8.4	**-5.317**	0.027	ug/L	0.5 %
|	**Ni**	62	1376	317	1.9	**-4.962**	0.034	ug/L	0.7 %
|	**Cu**	63	333	2184	4.1	**0.488**	0.025	ug/L	5.2 %
⌊	**Cu**	65	206	723	7.0	**0.287**	0.030	ug/L	10.5 %
⌈>	**Tb**	159	1031558	1065689	1.2			ug/L	%
|	**Pb**	207	832	513	1.8	**-0.110**	0.004	ug/L	3.4 %
⌊	**Pb**	208	3928	2374	3.8	**-0.115**	0.005	ug/L	4.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:20:37
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-023A.049
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-023A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	536135	1.6			ug/L	%
|	**Cr**	52	6252	24188	0.8	**2.205**	0.040	ug/L	1.8 %
|	**Cr**	53	29960	3890	3.8	**-17.358**	0.109	ug/L	0.6 %
|	**Ni**	60	8482	909	3.2	**-5.111**	0.025	ug/L	0.5 %
|	**Ni**	62	1376	312	5.7	**-4.969**	0.074	ug/L	1.5 %
|	**Cu**	63	333	1670	0.9	**0.355**	0.010	ug/L	2.9 %
⌊	**Cu**	65	206	975	1.8	**0.434**	0.019	ug/L	4.3 %
⌈>	**Tb**	159	1031558	1074464	2.2			ug/L	%
|	**Pb**	207	832	416	2.8	**-0.142**	0.006	ug/L	4.5 %
⌊	**Pb**	208	3928	1836	2.1	**-0.153**	0.004	ug/L	2.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:23:10
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-024A.050
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-024A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	559312	1.4			ug/L	%
|	**Cr**	52	6252	41810	1.0	**4.187**	0.040	ug/L	1.0 %
|	**Cr**	53	29960	4752	1.9	**-16.937**	0.089	ug/L	0.5 %
|	**Ni**	60	8482	2139	2.9	**-4.377**	0.027	ug/L	0.6 %
|	**Ni**	62	1376	306	7.5	**-5.053**	0.080	ug/L	1.6 %
|	**Cu**	63	333	2069	6.9	**0.439**	0.030	ug/L	6.8 %
⌊	**Cu**	65	206	737	4.1	**0.281**	0.015	ug/L	5.5 %
⌈>	**Tb**	159	1031558	1080320	2.2			ug/L	%
|	**Pb**	207	832	435	3.7	**-0.137**	0.004	ug/L	2.9 %
⌊	**Pb**	208	3928	2048	2.1	**-0.140**	0.002	ug/L	1.3 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:25:43
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-025A.051
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-025A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	572516	0.9			ug/L	%
	Cr	52	6252	24934	1.5	**2.100**	0.042	ug/L	2.0 %
	Cr	53	29960	3244	2.6	**-17.899**	0.067	ug/L	0.4 %
	Ni	60	8482	1537	3.3	**-4.770**	0.023	ug/L	0.5 %
	Ni	62	1376	185	6.1	**-5.584**	0.041	ug/L	0.7 %
	Cu	63	333	963	1.8	**0.149**	0.004	ug/L	2.8 %
	Cu	65	206	676	6.5	**0.239**	0.022	ug/L	9.1 %
>	**Tb**	159	1031558	1097022	1.5			ug/L	%
	Pb	207	832	415	4.5	**-0.145**	0.004	ug/L	3.0 %
	Pb	208	3928	1898	3.2	**-0.152**	0.003	ug/L	1.7 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:28:20
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCV.052
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	478268	1.0			ug/L	%
	Cr	52	6252	75335	0.1	**9.725**	0.111	ug/L	1.1 %
	Cr	53	29960	39646	3.2	**8.349**	0.694	ug/L	8.3 %
	Ni	60	8482	14934	1.4	**5.074**	0.041	ug/L	0.8 %
	Ni	62	1376	2332	0.2	**5.206**	0.137	ug/L	2.6 %
	Cu	63	333	32151	1.5	**9.577**	0.091	ug/L	0.9 %
	Cu	65	206	15676	2.2	**9.919**	0.135	ug/L	1.4 %
>	**Tb**	159	1031558	1069848	1.1			ug/L	%
	Pb	207	832	33278	1.4	**10.274**	0.078	ug/L	0.8 %
	Pb	208	3928	155294	2.1	**10.323**	0.170	ug/L	1.6 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:30:59
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCB.053
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	470425	1.1			ug/L	%
	Cr	52	6252	6942	2.4	**0.173**	0.014	ug/L	8.1 %
	Cr	53	29960	39099	3.9	**8.422**	0.903	ug/L	10.7 %
	Ni	60	8482	626	1.8	**-5.237**	0.013	ug/L	0.3 %
	Ni	62	1376	248	2.3	**-5.100**	0.018	ug/L	0.3 %
	Cu	63	333	321	7.7	**0.005**	0.006	ug/L	127.6 %
	Cu	65	206	216	6.1	**0.018**	0.010	ug/L	56.5 %
>	**Tb**	159	1031558	1062079	0.8			ug/L	%
	Pb	207	832	324	8.0	**-0.170**	0.008	ug/L	4.5 %
	Pb	208	3928	1415	3.6	**-0.181**	0.003	ug/L	1.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:33:36
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-026A.054
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-026A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	557987	1.3			ug/L	%
|	**Cr**	52	6252	26644	3.1	**2.380**	0.061	ug/L	2.6 %
|	**Cr**	53	29960	9991	6.5	**-13.740**	0.362	ug/L	2.6 %
|	**Ni**	60	8482	2162	8.3	**-4.360**	0.094	ug/L	2.2 %
|	**Ni**	62	1376	248	3.3	**-5.295**	0.026	ug/L	0.5 %
|	**Cu**	63	333	4431	1.8	**1.049**	0.018	ug/L	1.7 %
⌊	**Cu**	65	206	2523	3.1	**1.262**	0.040	ug/L	3.2 %
⌈>	**Tb**	159	1031558	1094371	1.6			ug/L	%
|	**Pb**	207	832	495	2.7	**-0.120**	0.005	ug/L	4.4 %
⌊	**Pb**	208	3928	2267	2.6	**-0.127**	0.004	ug/L	3.0 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:36:11
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-027A.055
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-027A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	492110	0.6			ug/L	%
	Cr	52	6252	7059	1.0	**0.145**	0.005	ug/L	3.4 %
	Cr	53	29960	6158	4.4	**-15.571**	0.197	ug/L	1.3 %
	Ni	60	8482	673	1.9	**-5.224**	0.010	ug/L	0.2 %
	Ni	62	1376	238	9.5	**-5.201**	0.104	ug/L	2.0 %
	Cu	63	333	2671	3.0	**0.688**	0.019	ug/L	2.7 %
	Cu	65	206	1323	2.1	**0.701**	0.022	ug/L	3.2 %
>	**Tb**	159	1031558	1069079	1.7			ug/L	%
	Pb	207	832	622	3.1	**-0.076**	0.006	ug/L	8.1 %
	Pb	208	3928	2778	2.6	**-0.088**	0.004	ug/L	4.7 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:38:45
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-028A.056
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-028A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	560797	1.0			ug/L	%
|	**Cr**	52	6252	24634	0.4	**2.125**	0.019	ug/L	0.9 %
|	**Cr**	53	29960	5339	3.8	**-16.588**	0.154	ug/L	0.9 %
|	**Ni**	60	8482	2041	2.8	**-4.440**	0.042	ug/L	0.9 %
|	**Ni**	62	1376	227	8.5	**-5.390**	0.081	ug/L	1.5 %
|	**Cu**	63	333	1216	4.0	**0.219**	0.014	ug/L	6.3 %
⌊	**Cu**	65	206	988	0.6	**0.417**	0.007	ug/L	1.7 %
⌈>	**Tb**	159	1031558	1101068	1.3			ug/L	%
|	**Pb**	207	832	625	2.5	**-0.081**	0.003	ug/L	4.3 %
⌊	**Pb**	208	3928	2823	2.1	**-0.091**	0.002	ug/L	1.7 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:41:21
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-029A.057
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-029A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	593340	1.5			ug/L	%
	Cr	52	6252	31569	0.8	**2.746**	0.024	ug/L	0.9 %
	Cr	53	29960	5692	0.7	**-16.564**	0.034	ug/L	0.2 %
	Ni	60	8482	3071	4.0	**-3.911**	0.046	ug/L	1.2 %
	Ni	62	1376	282	3.0	**-5.221**	0.042	ug/L	0.8 %
	Cu	63	333	2880	1.3	**0.605**	0.005	ug/L	0.9 %
	Cu	65	206	1946	1.9	**0.882**	0.017	ug/L	2.0 %
>	**Tb**	159	1031558	1098015	1.6			ug/L	%
	Pb	207	832	458	2.9	**-0.132**	0.006	ug/L	4.4 %
	Pb	208	3928	2062	4.3	**-0.141**	0.004	ug/L	3.0 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:43:57
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-030A.058
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-030A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	608002	1.3			ug/L	%
|	**Cr**	52	6252	42233	0.7	**3.833**	0.027	ug/L	0.7 %
|	**Cr**	53	29960	5768	1.0	**-16.600**	0.043	ug/L	0.3 %
|	**Ni**	60	8482	2998	4.2	**-3.995**	0.060	ug/L	1.5 %
|	**Ni**	62	1376	263	2.6	**-5.324**	0.040	ug/L	0.8 %
|	**Cu**	63	333	1887	0.9	**0.353**	0.008	ug/L	2.3 %
⌊	**Cu**	65	206	1290	1.3	**0.527**	0.007	ug/L	1.4 %
⌈>	**Tb**	159	1031558	1097905	1.6			ug/L	%
|	**Pb**	207	832	362	8.7	**-0.162**	0.010	ug/L	6.3 %
⌊	**Pb**	208	3928	1653	4.6	**-0.168**	0.005	ug/L	2.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:46:33
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-031A.059
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-031A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	629235	1.1			ug/L	%
	Cr	52	6252	42508	0.8	**3.706**	0.029	ug/L	0.8 %
	Cr	53	29960	4862	0.5	**-17.199**	0.026	ug/L	0.2 %
	Ni	60	8482	4380	2.4	**-3.294**	0.082	ug/L	2.5 %
	Ni	62	1376	281	2.0	**-5.292**	0.014	ug/L	0.3 %
	Cu	63	333	4625	1.2	**0.964**	0.024	ug/L	2.5 %
	Cu	65	206	2918	0.6	**1.298**	0.008	ug/L	0.6 %
>	**Tb**	159	1031558	1109752	1.3			ug/L	%
	Pb	207	832	311	4.2	**-0.178**	0.003	ug/L	1.9 %
	Pb	208	3928	1411	1.3	**-0.185**	0.000	ug/L	0.2 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:49:10
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-032A.060
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-032A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	620161	0.4			ug/L	%
	Cr	52	6252	51661	1.1	**4.759**	0.047	ug/L	1.0 %
	Cr	53	29960	5429	0.8	**-16.850**	0.034	ug/L	0.2 %
	Ni	60	8482	4954	5.4	**-2.941**	0.140	ug/L	4.8 %
	Ni	62	1376	354	7.1	**-4.997**	0.092	ug/L	1.8 %
	Cu	63	333	3622	2.2	**0.747**	0.014	ug/L	1.9 %
	Cu	65	206	2160	2.6	**0.944**	0.023	ug/L	2.4 %
>	**Tb**	159	1031558	1102938	1.7			ug/L	%
	Pb	207	832	351	3.4	**-0.165**	0.005	ug/L	3.3 %
	Pb	208	3928	1580	1.3	**-0.173**	0.001	ug/L	0.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:51:47
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-033A.061
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-033A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
>	**Sc-1**	45	513669	644711	0.8			ug/L	%
	Cr	52	6252	41240	1.1	**3.466**	0.044	ug/L	1.3 %
	Cr	53	29960	5352	1.5	**-17.003**	0.051	ug/L	0.3 %
	Ni	60	8482	4536	4.9	**-3.269**	0.119	ug/L	3.6 %
	Ni	62	1376	289	10.8	**-5.287**	0.123	ug/L	2.3 %
	Cu	63	333	1807	4.9	**0.310**	0.017	ug/L	5.5 %
	Cu	65	206	2005	5.1	**0.830**	0.042	ug/L	5.1 %
>	**Tb**	159	1031558	1101695	1.9			ug/L	%
	Pb	207	832	404	4.5	**-0.149**	0.007	ug/L	4.4 %
	Pb	208	3928	1918	3.5	**-0.151**	0.006	ug/L	4.2 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:54:25
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-034A.062
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-034A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	533388	1.5			ug/L	%
|	**Cr**	52	6252	6988	1.5	**0.062**	0.004	ug/L	6.9 %
|	**Cr**	53	29960	2896	3.3	**-17.980**	0.066	ug/L	0.4 %
|	**Ni**	60	8482	583	3.1	**-5.319**	0.016	ug/L	0.3 %
|	**Ni**	62	1376	230	9.6	**-5.329**	0.088	ug/L	1.6 %
|	**Cu**	63	333	637	1.5	**0.079**	0.001	ug/L	1.3 %
⌊	**Cu**	65	206	350	3.2	**0.078**	0.007	ug/L	9.4 %
⌈>	**Tb**	159	1031558	1104853	2.7			ug/L	%
|	**Pb**	207	832	463	2.9	**-0.131**	0.008	ug/L	5.8 %
⌊	**Pb**	208	3928	2174	1.1	**-0.134**	0.004	ug/L	2.8 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:57:03
Dataset File: D:\ELAN\Dataset\2003\May\030512\062725-034ADUP.063
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 062725-034ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
⌈>	**Sc-1**	45	513669	526451	0.8			ug/L	%
|	**Cr**	52	6252	6187	1.3	**-0.028**	0.004	ug/L	14.5 %
|	**Cr**	53	29960	2575	2.7	**-18.162**	0.057	ug/L	0.3 %
|	**Ni**	60	8482	565	1.3	**-5.326**	0.007	ug/L	0.1 %
|	**Ni**	62	1376	233	3.6	**-5.301**	0.036	ug/L	0.7 %
|	**Cu**	63	333	476	0.3	**0.037**	0.001	ug/L	2.9 %
⌊	**Cu**	65	206	269	1.7	**0.033**	0.002	ug/L	4.9 %
⌈>	**Tb**	159	1031558	1115130	0.3			ug/L	%
|	**Pb**	207	832	418	4.0	**-0.146**	0.005	ug/L	3.7 %
⌊	**Pb**	208	3928	1913	2.2	**-0.153**	0.003	ug/L	1.9 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 13:59:42
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCV.064
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
⌈>	**Sc-1**	45	513669	505086	0.6			ug/L	%
|	**Cr**	52	6252	79003	0.1	**9.651**	0.066	ug/L	0.7 %
|	**Cr**	53	29960	40496	3.3	**7.425**	0.752	ug/L	10.1 %
|	**Ni**	60	8482	15589	1.1	**4.950**	0.053	ug/L	1.1 %
|	**Ni**	62	1376	2437	2.0	**5.085**	0.285	ug/L	5.6 %
|	**Cu**	63	333	33636	1.6	**9.487**	0.201	ug/L	2.1 %
⌊	**Cu**	65	206	16077	1.7	**9.630**	0.200	ug/L	2.1 %
⌈>	**Tb**	159	1031558	1094671	1.8			ug/L	%
|	**Pb**	207	832	33855	1.7	**10.214**	0.044	ug/L	0.4 %
⌊	**Pb**	208	3928	157643	1.4	**10.240**	0.054	ug/L	0.5 %

Quantitative Analysis Summary

Sample Date/Time: Monday, May 12, 2003 14:02:21
Dataset File: D:\ELAN\Dataset\2003\May\030512\CCB.065
Method File: c:\elandata\Method\atl methods 030317\atl-epa 200.8 crcupbniapcl.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
>	**Sc-1**	45	513669	501643	0.8			ug/L	%
	Cr	52	6252	7022	3.5	**0.122**	0.027	ug/L	21.8 %
	Cr	53	29960	40039	4.6	**7.300**	1.046	ug/L	14.3 %
	Ni	60	8482	623	1.1	**-5.267**	0.003	ug/L	0.1 %
	Ni	62	1376	255	2.7	**-5.144**	0.040	ug/L	0.8 %
	Cu	63	333	341	1.8	**0.005**	0.001	ug/L	21.9 %
	Cu	65	206	214	6.5	**0.007**	0.008	ug/L	100.4 %
>	**Tb**	159	1031558	1088543	2.2			ug/L	%
	Pb	207	832	295	2.2	**-0.181**	0.004	ug/L	2.2 %
	Pb	208	3928	1316	3.0	**-0.190**	0.002	ug/L	1.1 %

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: Leo Williamson
22632 Golden Spring Dr Ste 270
Diamond Bar 91765
Tel: (909)396-7662 Fax: (909)396-1455

Service ID #: 801-032811
Collected by:
Collected on: 04/21/03

Received: 04/21/03
Extracted: N/A
Tested: N/A
Reported: 05/28/03

Sample Description: Water
Project Description: 04-4428.10 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result MW-4-1 03-02811-1
NDMA [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 Maxxam Analytics 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-4 0019

GEOFON's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Brad Shojaee	(909) 396-7662	(909) 396-1455	-	Kenny Chan	GEOFON, INC.

PROJECT NAME:	PROJECT LOCATION	PROJECT NUMBER	LABORATORY PHONE	LABORATORY FAX	RECIPIENT NAME
JPL GW MON-2Q03	MW-4 (SE Facility Perimeter)	04-4428.10	(909) 590-1828	(909) 590-1498	Leo W. Williamson

PROJECT CONTACT	PROJECT PHONE NUMBER	PROJECT FAX	LABORATORY ADDRESS	ADDRESS
Leo W. Williamson	(714) 920-8729	(909) 396-1455	13760 ~~Chino~~ Magnolia	22632 Golden Springs Dr. #270

PROJECT ADDRESS	CITY, STATE AND ZIPCODE	CLIENT	CITY, STATE AND ZIPCODE	CITY, STATE AND ZIPCODE
4800 Oak Grove Dr.	Pasadena, CA	US NAVY SWDIV	Chino, CA. 91710	Diamond Bar, CA. 91765

PROJECT MANAGER	PROJECT MANAGER'S PHONE	PROJECT MANAGER'S FAX
Asrar Faheem	(909) 396-7662	(909) 396-1455

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T.	Analyses: 8220SIM (4,4-Dioxane)	Analyses: 1625M (NDMA)							Comments
1	MW-4-1	H_2O	4/21/03	1330	NONE	2L+2L	III	NORMAL	X	X							
2																	
3																	2811
4																	
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	SAMPLE'S CONDITION UPON RECEIPT
Leo W. Williamson	[signature]	4/21/03	14:25	
[signature]	[signature]	4/21/03	17:00	

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

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

Sample Receiving Checklist

APCL ServiceID: 2811 **Client Name/Project:** Geofon

1. Sample Arrival

Date/Time Received 4/21/03 1900 Date/Time Opened 4/21/03 1900 By (name): Paul Kon
Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☑ APCL Empl: Adam Wood

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☑ Client has Copy? ☐ Signed, dated? By:
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold ____ # Received ____
☑ CoC/Docs Zip-Locked under lid? ☐ Compos.#: __ ☑ #Samples OK?
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs):

3. Shipping Container/Cooler

☑ Cooler Used? # of 2 Cooled by: ☑ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 2.9°c 3.8°c
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☐ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ **pH <2** ☐ pH >12
If Not, pH = ____ Preserved by: ☐ Client ☐ APCL ☐ Third Party

5. Holding-time Requirements

☑ pH 24hr ☐ BACT 6/24hr ☑ Cr^{VI} 24hr ☑ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☑ Intact? ☐ Broken? ☐ Documented? Number: ____
Type: ☑ plastic ☑ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☑ Quantity OK? ☐ Leaking? ☐ Anomaly?
☑ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☑ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☑ RUSH TAT: 5day ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☑ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other: ____
☐ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☑ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:____)Date/Time:____
Received/Checked by: Paul K Date: 21 Apr 2003 Time: 7:38 a.m.

*HT: Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: [neal.texfiles]samprcl.tex.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
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Sample Login: Check List

03-02811 (0470_ 129) (2202777_ 129)

04/22/03

Part 1: General Information

☐	Company Information	Name:	*GEOFON, Inc.*
		Address:	*22632 Golden Spring Dr Ste 270 ,Diamond Bar ,CA 91765*
☐	Project Information	Project Description:	*JPL*
		Project #:	*04-4428.10*
☐	Billing Information	P.O. #:	
		Bill Address:	*22632 Golden Spring Dr Ste 270 ,Diamond Bar ,CA 91765*
		Lab Project ID:	
		Client Database #:	*3*
☐	Receiving Information	Who Received Sample?	*Paul Kou*
		Receiving Date/Time:	*04/21/03 1700*
		COC No.	
☐	Shipping Information	Shipping Company	*APCL pick up*
		Packing Information:	*Cooler/Ice Chester*
		Cooler Temperature:	*2.9 3.7 °C*
☐	Container Information	Container Provider:	*Client*
☐	Sampling Information	Sampling Person:	
		Sampling Company:	*Client*
☐	Turn-Around-Time Option:		*Rush 5 working day(s)*
☐	QC Option:		*NEESA D*
☐	Disposal Option:		*Not specify*

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Cont-tainer	Preser-vative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	MW-4-1 ✓	NDMA	03-02811-1	W	G		1000	2	G	042103	N	0	6	☐

Part 3: Analysis Information

Test Items: ☐ Customized-13, Sub-contract

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	CUSTOM	
1	MW-4-1	NDMA	03-02811-1	W	X	☐

Login By En-Yu Paul Kou

Check By PK