Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 12:37:45
Dataset File: c:\elandata\Dataset\default\Blank.103
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Blank
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7		97580	0.9			ug/L	%
	Ge	72		153029	1.5			ug/L	%
[>	**Sc-1**	45		638869	0.9			ug/L	%
[	**Cr**	52		6796	3.8			ug/L	%
	In	115		1278347	1.2			ug/L	%
	Tb	159		1333774	0.5			ug/L	%
	Sc	45		638869	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 12:40:14
Dataset File: c:\elandata\Dataset\default\Standard 1.104
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 1
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	97269	0.6			ug/L	%
	Ge	72	153029	152163	0.8			ug/L	%
>	**Sc-1**	45	638869	636734	1.3			ug/L	%
	Cr	52	6796	12148	0.7	**0.500**	0.012	ug/L	2.4 %
	In	115	1278347	1290154	1.2			ug/L	%
	Tb	159	1333774	1361813	1.0			ug/L	%
	Sc	45	638869	636734	1.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 12:42:58
Dataset File: c:\elandata\Dataset\default\Standard 2.105
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 2
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	97484	1.4			ug/L	%
	Ge	72	153029	151869	1.1			ug/L	%
>	**Sc-1**	45	638869	638697	0.7			ug/L	%
	Cr	52	6796	54466	1.8	**4.994**	0.083	ug/L	1.7 %
	In	115	1278347	1276710	0.8			ug/L	%
	Tb	159	1333774	1348748	1.0			ug/L	%
	Sc	45	638869	638697	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 12:45:44
Dataset File: c:\elandata\Dataset\default\Standard 3.106
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 3
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	96596	0.8			ug/L	%
	Ge	72	153029	153453	0.7			ug/L	%
>	**Sc-1**	45	638869	640019	1.0			ug/L	%
	Cr	52	6796	101350	1.6	**9.976**	0.147	ug/L	1.5 %
	In	115	1278347	1288528	0.7			ug/L	%
	Tb	159	1333774	1343213	1.4			ug/L	%
	Sc	45	638869	640019	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 12:48:31
Dataset File: c:\elandata\Dataset\default\Standard 4.107
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 4
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	95611	1.0			ug/L	%
	Ge	72	153029	150789	1.0			ug/L	%
>	**Sc-1**	45	638869	639853	0.7			ug/L	%
	Cr	52	6796	192862	1.8	**19.912**	0.302	ug/L	1.5 %
	In	115	1278347	1274180	1.3			ug/L	%
	Tb	159	1333774	1340278	0.3			ug/L	%
	Sc	45	638869	639853	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:30:33
Dataset File: c:\elandata\Dataset\default\ICV.118
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: ICV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	91345	0.7			ug/L	%
	Ge	72	153029	151961	0.7			ug/L	%
>	**Sc-1**	45	638869	642972	0.6			ug/L	%
	Cr	52	6796	105493	0.7	**10.507**	0.027	ug/L	0.3 %
	In	115	1278347	1292130	0.7			ug/L	%
	Tb	159	1333774	1350116	1.1			ug/L	%
	Sc	45	638869	642972	0.6			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:33:04
Dataset File: c:\elandata\Dataset\default\ICB.119
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: ICB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	90627	0.4			ug/L	%
	Ge	72	153029	150680	0.7			ug/L	%
>	**Sc-1**	45	638869	631064	1.3			ug/L	%
	Cr	52	6796	10179	0.6	**0.376**	0.021	ug/L	5.5 %
	In	115	1278347	1281762	0.4			ug/L	%
	Tb	159	1333774	1338227	1.6			ug/L	%
	Sc	45	638869	631064	1.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:35:32
Dataset File: c:\elandata\Dataset\default\MB-.120
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB- R253111
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	90612	1.2			ug/L	%
	Ge	72	153029	151357	0.5			ug/L	%
>	**Sc-1**	45	638869	642816	0.7			ug/L	%
	Cr	52	6796	10416	2.9	**0.381**	0.029	ug/L	7.7 %
	In	115	1278347	1291049	0.9			ug/L	%
	Tb	159	1333774	1353329	1.1			ug/L	%
	Sc	45	638869	642816	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:38:00
Dataset File: c:\elandata\Dataset\default\LCS-.121
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: LCS- R25311
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	90007	0.5			ug/L	%
	Ge	72	153029	150175	0.9			ug/L	%
>	**Sc-1**	45	638869	635542	0.3			ug/L	%
	Cr	52	6796	105139	0.5	**10.601**	0.082	ug/L	0.8 %
	In	115	1278347	1284579	0.1			ug/L	%
	Tb	159	1333774	1335162	0.7			ug/L	%
	Sc	45	638869	635542	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:40:28
Dataset File: c:\elandata\Dataset\default\061277-009A.122
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	77258	0.7			ug/L	%
	Ge	72	153029	149033	0.9			ug/L	%
>	**Sc-1**	45	638869	657563	0.9			ug/L	%
	Cr	52	6796	23053	1.4	**1.673**	0.038	ug/L	2.3 %
	In	115	1278347	1269659	0.6			ug/L	%
	Tb	159	1333774	1322626	0.9			ug/L	%
	Sc	45	638869	657563	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:42:57
Dataset File: c:\elandata\Dataset\default\061277-009ADUP.123
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	79575	0.3			ug/L	%
	Ge	72	153029	152682	0.6			ug/L	%
>	**Sc-1**	45	638869	665170	0.8			ug/L	%
	Cr	52	6796	23787	2.3	**1.720**	0.050	ug/L	2.9 %
	In	115	1278347	1287153	0.6			ug/L	%
	Tb	159	1333774	1332802	0.8			ug/L	%
	Sc	45	638869	665170	0.8			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:45:27
Dataset File: c:\elandata\Dataset\default\061277-009AMS.124
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	83305	0.1			ug/L	%
	Ge	72	153029	151150	0.2			ug/L	%
[>	**Sc-1**	45	638869	665308	0.2			ug/L	%
[	**Cr**	52	6796	113894	0.9	**10.995**	0.100	ug/L	0.9 %
	In	115	1278347	1270929	0.7			ug/L	%
	Tb	159	1333774	1327866	0.5			ug/L	%
	Sc	45	638869	665308	0.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:47:57
Dataset File: c:\elandata\Dataset\default\061277-009AMSD.125
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	84102	0.0			ug/L	%
	Ge	72	153029	148797	0.9			ug/L	%
[>	**Sc-1**	45	638869	654961	0.2			ug/L	%
[	**Cr**	52	6796	112563	0.8	**11.041**	0.112	ug/L	1.0 %
	In	115	1278347	1253020	2.0			ug/L	%
	Tb	159	1333774	1315102	0.9			ug/L	%
	Sc	45	638869	654961	0.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:50:29
Dataset File: c:\elandata\Dataset\default\CCV.126
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	94147	0.3			ug/L	%
	Ge	72	153029	146438	0.6			ug/L	%
[>	**Sc-1**	45	638869	615386	1.2			ug/L	%
[	**Cr**	52	6796	99336	0.5	**10.327**	0.118	ug/L	1.1 %
	In	115	1278347	1234119	1.6			ug/L	%
	Tb	159	1333774	1298856	0.3			ug/L	%
	Sc	45	638869	615386	1.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 24, 2003 13:53:04
Dataset File: c:\elandata\Dataset\default\CCB.127
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	97580	94135	0.5			ug/L	%
	Ge	72	153029	145459	0.9			ug/L	%
>	**Sc-1**	45	638869	614394	0.8			ug/L	%
	Cr	52	6796	8410	1.8	**0.209**	0.010	ug/L	4.9 %
	In	115	1278347	1225511	0.9			ug/L	%
	Tb	159	1333774	1289109	0.1			ug/L	%
	Sc	45	638869	614394	0.8			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 14:55:48
Dataset File: D:\ELAN\Dataset\2003\February\030217\Blank.001
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Blank
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7		120146	1.1			ug/L	%
	Ge	72		186629	0.7			ug/L	%
[>	**Sc-1**	45		778618	2.0			ug/L	%
[	**Cr**	52		11529	2.7			ug/L	%
	In	115		1490917	0.5			ug/L	%
	Tb	159		1827927	0.8			ug/L	%
	Sc	45		778618	2.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 14:58:17
Dataset File: D:\ELAN\Dataset\2003\February\030217\Standard 1.002
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 1
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	119534	1.3			ug/L	%
	Ge	72	186629	184337	0.5			ug/L	%
>	**Sc-1**	45	778618	773694	0.9			ug/L	%
	Cr	52	11529	17396	0.6	**0.500**	0.019	ug/L	3.9 %
	In	115	1490917	1476469	0.8			ug/L	%
	Tb	159	1827927	1820572	0.0			ug/L	%
	Sc	45	778618	773694	0.9			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:01:01
Dataset File: D:\ELAN\Dataset\2003\February\030217\Standard 2.003
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 2
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	117205	0.4			ug/L	%
	Ge	72	186629	182212	0.8			ug/L	%
>	**Sc-1**	45	778618	760009	2.2			ug/L	%
	Cr	52	11529	64021	0.6	**4.995**	0.102	ug/L	2.0 %
	In	115	1490917	1449868	0.4			ug/L	%
	Tb	159	1827927	1779276	0.7			ug/L	%
	Sc	45	778618	760009	2.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:03:47
Dataset File: D:\ELAN\Dataset\2003\February\030217\Standard 3.004
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 3
Sample Type:

Summary

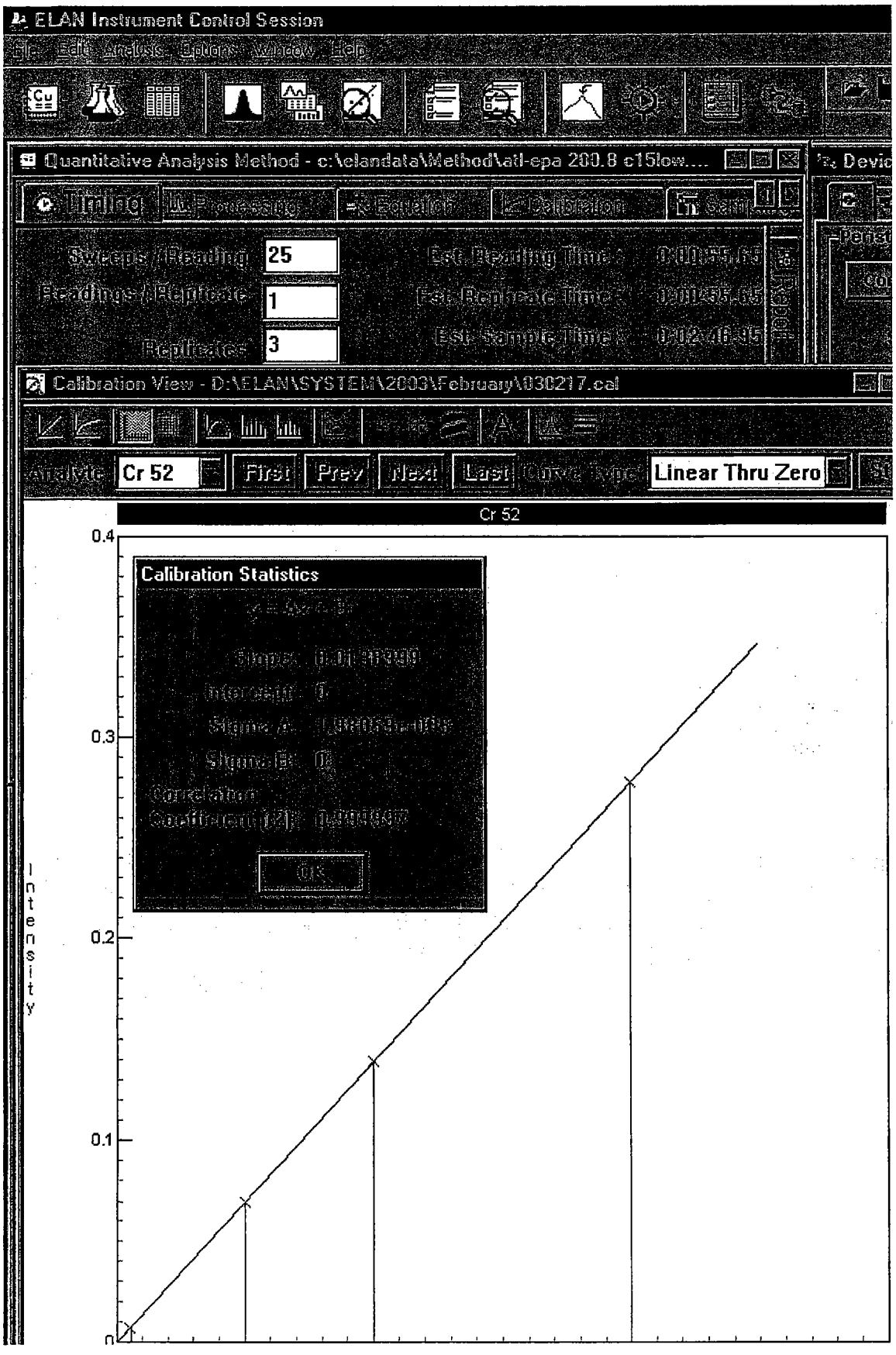
	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	117984	1.5			ug/L	%
	Ge	72	186629	180376	1.2			ug/L	%
>	**Sc-1**	45	778618	760276	0.2			ug/L	%
	Cr	52	11529	117131	0.5	**10.003**	0.057	ug/L	0.6 %
	In	115	1490917	1450893	1.0			ug/L	%
	Tb	159	1827927	1763322	0.5			ug/L	%
	Sc	45	778618	760276	0.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:06:34
Dataset File: D:\ELAN\Dataset\2003\February\030217\Standard 4.005
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: Standard 4
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	117498	0.8			ug/L	%
	Ge	72	186629	180927	2.7			ug/L	%
>	**Sc-1**	45	778618	755363	0.2			ug/L	%
	Cr	52	11529	221077	1.8	**19.990**	0.347	ug/L	1.7 %
	In	115	1490917	1435730	1.0			ug/L	%
	Tb	159	1827927	1760666	0.8			ug/L	%
	Sc	45	778618	755363	0.2			ug/L	%


ELAN Instrument Control Session
File Edit Analysis Options Window Help
Quantitative Analysis Method - c:\elandata\Method\atl-epa 200.8 c15low....
Tuning
Sweeps / Reading
25
Readings / Replicate
1
Replicates
3
Calibration View - D:\ELAN\SYSTEM\2000\February\030217.cal
Analyte
Cr 52
First
Prev
Next
Last
Curve Type
Linear Thru Zero
Cr 52
Calibration Statistics
OK
Intensity
0.4
0.3
0.2
0.1
0

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:09:22
Dataset File: D:\ELAN\Dataset\2003\February\030217\ICV.006
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: ICV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	116653	1.8			ug/L	%
	Ge	72	186629	179768	0.4			ug/L	%
>	**Sc-1**	45	778618	757770	1.4			ug/L	%
	Cr	52	11529	118157	0.4	**10.155**	0.198	ug/L	2.0 %
	In	115	1490917	1430956	1.3			ug/L	%
	Tb	159	1827927	1758617	0.5			ug/L	%
	Sc	45	778618	757770	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:11:53
Dataset File: D:\ELAN\Dataset\2003\February\030217\ICB.007
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: ICB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	120275	1.8			ug/L	%
	Ge	72	186629	182256	0.9			ug/L	%
>	**Sc-1**	45	778618	771445	1.0			ug/L	%
	Cr	52	11529	12823	1.5	**0.131**	0.022	ug/L	16.9 %
	In	115	1490917	1442432	0.8			ug/L	%
	Tb	159	1827927	1789063	0.4			ug/L	%
	Sc	45	778618	771445	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:20:20
Dataset File: D:\ELAN\Dataset\2003\February\030217\MB-.008
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: MB- L030095 WS 2/18
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	118338	1.9			ug/L	%
	Ge	72	186629	185752	0.8			ug/L	%
[>	**Sc-1**	45	778618	777011	0.5			ug/L	%
[	**Cr**	52	11529	13809	2.4	**0.213**	0.031	ug/L	14.4 %
	In	115	1490917	1472259	0.6			ug/L	%
	Tb	159	1827927	1799194	0.5			ug/L	%
	Sc	45	778618	777011	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:22:48
Dataset File: D:\ELAN\Dataset\2003\February\030217\LCS-.009
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3 L25095 NS 2/18
Sample ID: LCS-
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	116121	1.3			ug/L	%
	Ge	72	186629	184416	0.8			ug/L	%
>	**Sc-1**	45	778618	777223	0.4			ug/L	%
	Cr	52	11529	122591	0.7	**10.282**	0.086	ug/L	0.8 %
	In	115	1490917	1451939	0.5			ug/L	%
	Tb	159	1827927	1791583	1.3			ug/L	%
	Sc	45	778618	777223	0.4			ug/L	%

087

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:25:17
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-001A.010
Method File: c:\elandata\Method\1-200.8crapci-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-001A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	113222	0.3			ug/L	%
	Ge	72	186629	172099	0.9			ug/L	%
>	**Sc-1**	45	778618	840547	0.7			ug/L	%
	Cr	52	11529	78729	1.3	**5.674**	0.109	ug/L	1.9 %
	In	115	1490917	1366725	1.3			ug/L	%
	Tb	159	1827927	1708742	0.9			ug/L	%
	Sc	45	778618	840547	0.7			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:27:46
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-002A.011
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-002A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	114728	1.9			ug/L	%
	Ge	72	186629	177852	1.7			ug/L	%
>	**Sc-1**	45	778618	850257	1.4			ug/L	%
	Cr	52	11529	67986	1.1	**4.687**	0.027	ug/L	0.6 %
	In	115	1490917	1404873	1.0			ug/L	%
	Tb	159	1827927	1723551	0.5			ug/L	%
	Sc	45	778618	850257	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:30:15
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-003A.012
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-003A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	118642	1.0			ug/L	%
	Ge	72	186629	183173	1.4			ug/L	%
>	**Sc-1**	45	778618	888735	1.0			ug/L	%
	Cr	52	11529	86418	1.2	**5.931**	0.149	ug/L	2.5 %
	In	115	1490917	1443748	1.5			ug/L	%
	Tb	159	1827927	1770815	0.9			ug/L	%
	Sc	45	778618	888735	1.0			ug/L	%

090

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:32:45
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-004A.013
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-004A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	121646	0.5			ug/L	%
	Ge	72	186629	186651	0.4			ug/L	%
>	**Sc-1**	45	778618	915761	1.6			ug/L	%
	Cr	52	11529	99110	1.2	**6.723**	0.198	ug/L	2.9 %
	In	115	1490917	1479776	0.3			ug/L	%
	Tb	159	1827927	1822654	0.4			ug/L	%
	Sc	45	778618	915761	1.6			ug/L	%

091

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:35:16
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-005A.014
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-005A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	125028	0.7			ug/L	%
	Ge	72	186629	190391	0.0			ug/L	%
>	**Sc-1**	45	778618	926752	1.5			ug/L	%
	Cr	52	11529	72480	1.5	**4.562**	0.058	ug/L	1.3 %
	In	115	1490917	1504078	0.8			ug/L	%
	Tb	159	1827927	1846737	0.3			ug/L	%
	Sc	45	778618	926752	1.5			ug/L	%

092

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:37:47
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-006A.015
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-006A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	116398	1.2			ug/L	%
	Ge	72	186629	180548	0.0			ug/L	%
>	**Sc-1**	45	778618	777865	0.9			ug/L	%
	Cr	52	11529	11991	0.4	**0.044**	0.012	ug/L	27.4 %
	In	115	1490917	1459779	0.6			ug/L	%
	Tb	159	1827927	1786663	1.0			ug/L	%
	Sc	45	778618	777865	0.9			ug/L	%

093

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:40:18
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-007A.016
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-007A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	124245	1.1			ug/L	%
	Ge	72	186629	180238	1.0			ug/L	%
>	**Sc-1**	45	778618	812369	1.4			ug/L	%
	Cr	52	11529	42508	2.3	**2.700**	0.116	ug/L	4.3 %
	In	115	1490917	1406207	1.2			ug/L	%
	Tb	159	1827927	1738148	0.2			ug/L	%
	Sc	45	778618	812369	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:42:50
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-008A.017
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-008A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	116701	0.3			ug/L	%
	Ge	72	186629	184642	0.7			ug/L	%
>	**Sc-1**	45	778618	817629	0.7			ug/L	%
	Cr	52	11529	39748	1.6	**2.432**	0.032	ug/L	1.3 %
	In	115	1490917	1438054	0.4			ug/L	%
	Tb	159	1827927	1763617	0.2			ug/L	%
	Sc	45	778618	817629	0.7			ug/L	%

095

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:45:23
Dataset File: D:\ELAN\Dataset\2003\February\030217\CCV.018
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	119565	1.0			ug/L	%
	Ge	72	186629	180301	1.8			ug/L	%
>	**Sc-1**	45	778618	747181	0.5			ug/L	%
	Cr	52	11529	117737	1.1	**10.271**	0.105	ug/L	1.0 %
	In	115	1490917	1437128	1.6			ug/L	%
	Tb	159	1827927	1754095	0.9			ug/L	%
	Sc	45	778618	747181	0.5			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:47:58
Dataset File: D:\ELAN\Dataset\2003\February\030217\CCB.019
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	119694	0.4			ug/L	%
	Ge	72	186629	180120	0.9			ug/L	%
>	**Sc-1**	45	778618	756450	1.6			ug/L	%
	Cr	52	11529	13514	0.7	**0.220**	0.026	ug/L	12.0 %
	In	115	1490917	1434263	0.7			ug/L	%
	Tb	159	1827927	1752726	0.4			ug/L	%
	Sc	45	778618	756450	1.6			ug/L	%

097

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:50:32
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-009A.020
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	110935	1.1			ug/L	%
	Ge	72	186629	166755	0.5			ug/L	%
>	**Sc-1**	45	778618	766857	1.0			ug/L	%
	Cr	52	11529	35806	0.6	**2.294**	0.048	ug/L	2.1 %
	In	115	1490917	1323917	0.3			ug/L	%
	Tb	159	1827927	1651321	0.5			ug/L	%
	Sc	45	778618	766857	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:58:12
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-009AMS.023
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009AMS
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	113883	1.3			ug/L	%
	Ge	72	186629	173469	0.8			ug/L	%
[>	**Sc-1**	45	778618	802669	0.3			ug/L	%
[	**Cr**	52	11529	133318	0.6	**10.884**	0.030	ug/L	0.3 %
	In	115	1490917	1373116	2.1			ug/L	%
	Tb	159	1827927	1734127	1.5			ug/L	%
	Sc	45	778618	802669	0.3			ug/L	%

099

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:00:46
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-009AMSD.024
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-009AMSD
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	108894	0.8			ug/L	%
	Ge	72	186629	166105	1.7			ug/L	%
>	**Sc-1**	45	778618	781405	1.1			ug/L	%
	Cr	52	11529	131930	0.5	**11.083**	0.179	ug/L	1.6 %
	In	115	1490917	1346971	0.8			ug/L	%
	Tb	159	1827927	1691862	0.5			ug/L	%
	Sc	45	778618	781405	1.1			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 15:53:04
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-010A.021
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-010A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	111437	0.5			ug/L	%
	Ge	72	186629	173752	0.8			ug/L	%
>	**Sc-1**	45	778618	810140	0.3			ug/L	%
	Cr	52	11529	36745	1.8	**2.198**	0.063	ug/L	2.9 %
	In	115	1490917	1377137	1.2			ug/L	%
	Tb	159	1827927	1698753	1.2			ug/L	%
	Sc	45	778618	810140	0.3			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:03:17
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-011A.025
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-011A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	103176	0.8			ug/L	%
	Ge	72	186629	164279	0.4			ug/L	%
>	**Sc-1**	45	778618	762875	0.8			ug/L	%
	Cr	52	11529	40907	1.6	**2.793**	0.067	ug/L	2.4 %
	In	115	1490917	1309439	0.8			ug/L	%
	Tb	159	1827927	1658611	0.3			ug/L	%
	Sc	45	778618	762875	0.8			ug/L	%

102

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:05:44
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-012A.026
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-012A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	97561	1.4			ug/L	%
	Ge	72	186629	152297	0.7			ug/L	%
>	**Sc-1**	45	778618	659831	1.4			ug/L	%
	Cr	52	11529	12561	1.8	**0.304**	0.014	ug/L	4.7 %
	In	115	1490917	1225342	1.5			ug/L	%
	Tb	159	1827927	1548813	1.0			ug/L	%
	Sc	45	778618	659831	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:08:12
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-013A.027
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-013A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	106083	0.7			ug/L	%
	Ge	72	186629	164707	1.2			ug/L	%
[>	**Sc-1**	45	778618	777402	1.3			ug/L	%
[	**Cr**	52	11529	38028	2.1	**2.454**	0.038	ug/L	1.5 %
	In	115	1490917	1320037	0.9			ug/L	%
	Tb	159	1827927	1658555	0.8			ug/L	%
	Sc	45	778618	777402	1.3			ug/L	%

104

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:10:40
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-014A.028
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-014A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	122339	2.6			ug/L	%
	Ge	72	186629	175036	1.8			ug/L	%
[>	**Sc-1**	45	778618	793523	2.6			ug/L	%
[	**Cr**	52	11529	49306	1.6	**3.406**	0.050	ug/L	1.5 %
	In	115	1490917	1409641	1.9			ug/L	%
	Tb	159	1827927	1778601	2.3			ug/L	%
	Sc	45	778618	793523	2.6			ug/L	%

105

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:13:09
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-015A.029
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-015A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	113820	1.1			ug/L	%
	Ge	72	186629	178269	0.8			ug/L	%
[>	**Sc-1**	45	778618	826408	0.6			ug/L	%
[	**Cr**	52	11529	38684	1.5	**2.303**	0.071	ug/L	3.1 %
	In	115	1490917	1423417	1.2			ug/L	%
	Tb	159	1827927	1786044	0.5			ug/L	%
	Sc	45	778618	826408	0.6			ug/L	%

106

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:15:40
Dataset File: D:\ELAN\Dataset\2003\February\030217\CCV.030
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	112155	0.7			ug/L	%
	Ge	72	186629	170831	0.2			ug/L	%
>	**Sc-1**	45	778618	733600	1.0			ug/L	%
	Cr	52	11529	116574	1.2	**10.367**	0.125	ug/L	1.2 %
	In	115	1490917	1389743	0.6			ug/L	%
	Tb	159	1827927	1728055	1.0			ug/L	%
	Sc	45	778618	733600	1.0			ug/L	%

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Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:18:15
Dataset File: D:\ELAN\Dataset\2003\February\030217\CCB.031
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCB
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	114288	1.6			ug/L	%
	Ge	72	186629	172364	1.2			ug/L	%
>	**Sc-1**	45	778618	741810	0.4			ug/L	%
	Cr	52	11529	13617	1.3	**0.255**	0.018	ug/L	7.1 %
	In	115	1490917	1386445	0.8			ug/L	%
	Tb	159	1827927	1745734	0.2			ug/L	%
	Sc	45	778618	741810	0.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:20:47
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-016A.032
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-016A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	123207	0.4			ug/L	%
	Ge	72	186629	174209	0.6			ug/L	%
>	**Sc-1**	45	778618	856526	1.0			ug/L	%
	Cr	52	11529	72911	0.7	**5.059**	0.047	ug/L	0.9 %
	In	115	1490917	1407998	0.2			ug/L	%
	Tb	159	1827927	1812257	0.9			ug/L	%
	Sc	45	778618	856526	1.0			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:23:17
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-017A.033
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-017A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	116676	0.2			ug/L	%
	Ge	72	186629	168527	0.8			ug/L	%
>	**Sc-1**	45	778618	849509	1.1			ug/L	%
	Cr	52	11529	83650	1.1	**6.019**	0.077	ug/L	1.3 %
	In	115	1490917	1363827	0.4			ug/L	%
	Tb	159	1827927	1743145	0.9			ug/L	%
	Sc	45	778618	849509	1.1			ug/L	%

110

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:25:47
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-018A.034
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-018A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	102563	0.9			ug/L	%
	Ge	72	186629	161291	0.6			ug/L	%
>	**Sc-1**	45	778618	753609	0.2			ug/L	%
	Cr	52	11529	38151	1.8	**2.577**	0.062	ug/L	2.4 %
	In	115	1490917	1246767	0.8			ug/L	%
	Tb	159	1827927	1577202	1.1			ug/L	%
	Sc	45	778618	753609	0.2			ug/L	%

111

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:28:18
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-019A.035
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-019A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	98167	1.9			ug/L	%
	Ge	72	186629	153092	1.4			ug/L	%
>	**Sc-1**	45	778618	704268	0.6			ug/L	%
	Cr	52	11529	14434	0.9	**0.409**	0.014	ug/L	3.5 %
	In	115	1490917	1236641	0.1			ug/L	%
	Tb	159	1827927	1559824	1.4			ug/L	%
	Sc	45	778618	704268	0.6			ug/L	%

112

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:30:49
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-020A.036
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-020A
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	99075	1.1			ug/L	%
	Ge	72	186629	153992	1.2			ug/L	%
>	**Sc-1**	45	778618	731697	0.2			ug/L	%
	Cr	52	11529	29665	1.1	**1.851**	0.027	ug/L	1.4 %
	In	115	1490917	1245662	1.3			ug/L	%
	Tb	159	1827927	1570929	1.0			ug/L	%
	Sc	45	778618	731697	0.2			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:33:21
Dataset File: D:\ELAN\Dataset\2003\February\030217\061277-020ADUP.037
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: 061277-020ADUP
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	101110	0.5			ug/L	%
	Ge	72	186629	156768	1.0			ug/L	%
>	**Sc-1**	45	778618	735096	1.4			ug/L	%
	Cr	52	11529	26221	1.1	**1.501**	0.054	ug/L	3.6 %
	In	115	1490917	1275717	2.3			ug/L	%
	Tb	159	1827927	1616738	1.3			ug/L	%
	Sc	45	778618	735096	1.4			ug/L	%

Quantitative Analysis Summary

Sample Date/Time: Monday, February 17, 2003 16:35:54
Dataset File: D:\ELAN\Dataset\2003\February\030217\CCV.038
Method File: c:\elandata\Method\1-200.8crapcl-low.mth
Optimization File: c:\elandata\Optimize\default.dac
Number of Replicates: 3
Sample ID: CCV
Sample Type:

Summary

	Analyte	Mass	Blank Intensity	Meas. Intensity	Int. RSD	Conc. Mean	Conc. SD		Conc. RSD
	Li	7	120146	108328	1.2			ug/L	%
	Ge	72	186629	166226	0.4			ug/L	%
>	**Sc-1**	45	778618	732938	1.5			ug/L	%
	Cr	52	11529	114961	1.1	**10.220**	0.172	ug/L	1.7 %
	In	115	1490917	1373638	1.0			ug/L	%
	Tb	159	1827927	1733721	1.1			ug/L	%
	Sc	45	778618	732938	1.5			ug/L	%

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 CA 91765
Tel: (909)396-7662 Fax: (909)396-1455

Service ID #: 801-031728
Collected by:
Collected on: 02/04-14/03

Received: 02/04-14/03
Extracted: N/A
Tested: N/A
Reported: 04/01/03

Sample Description: Water
Project Description: 04-4428.10 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result DUPE-3-1Q03 03-01728-1	DUPE-4-1Q03 03-01728-2	EB-4-2/4/03 03-01728-3	EB-5-2/5/03 03-01728-4
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result EB-6-2/6/03 03-01728-5	EB-7-2/10/03 03-01728-6	EB-8-2/14/03 03-01728-7	MW-3-2 03-01728-8
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-3-3 03-01728-9	MW-3-4 03-01728-10	MW-4-1 03-01728-11	MW-4-2 03-01728-12
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-4-3 03-01728-13	MW-12-1 03-01728-14	MW-12-2 03-01728-15	MW-12-3 03-01728-16
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-14-1 03-01728-17	MW-14-2 03-01728-18	MW-14-3 03-01728-19	MW-14-4 03-01728-20
CHROMIUM [a]							

Component Analyzed	Method	Unit	PQL	Analysis Result MW-14-5 03-01728-21	MW-17-2 03-01728-22	MW-17-3 03-01728-23	MW-17-4 03-01728-24
CHROMIUM [a]							

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

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-18-2 03-01728-25	MW-18-3 03-01728-26	MW-18-4 03-01728-27	MW-18-5 03-01728-28
CHROMIUM [a]							

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.

J: Reported between PQL and MDL.

Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0

[a] Subcontracted to Advanced Technology Laboratories Inc. See attached.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

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

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-17 0004

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909)396-7662	LAB COORDINATOR'S FAX: (909)396-1455	LABORATORY SERVICE ID: –	LABORATORY CONTACT: Kenny Chan	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: GW Mon. - 1903	PROJECT LOCATION: mw-17 (Harriet & Casitas)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909)590-1828	LABORATORY FAX: (909)590-1498	RECIPIENT NAME: Leo W. Williamson
PROJECT CONTACT: Leo W. Williamson	PROJECT PHONE NUMBER: (714)920-8729	PROJECT FAX: (909)396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave		ADDRESS: 22632 Golden Springs Dr, #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena, CA	CLIENT: US NAVY, SWDIV	CITY, STATE AND ZIPCODE: Chino, CA 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA. 91765
PROJECT MANAGER: Asrar Faheem	PROJECT MANAGER'S PHONE: (909)396-7662	PROJECT MANAGER'S FAX: (909)396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: 524.2 (VOCs)	314.0 (Perchlorate)	200.8 (Total Chromium)	7196 (Hex Chrome)					Comments
1	MW-17-4	H_2O	2/4/03	920	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X					
2	MW-17-3	↓	↓	1010	↓	↓	↓	↓	X	X	X	X					
3	MW-17-2	↓	↓	1115	↓	↓	↓	↓	X	X	X	X					MS/MSD
4																	
5	TB-4-2/4/03	H_2O	N/A	N/A	HCl	2	III	NORMAL	X								
6	EB-4-2/4/03	↓	2/4/03	930	HCl HNO3 NONE	3+1+1	IV	↓	X	X	X	X					1728
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	Roy Aguilar	2/4/03	13:00	
Roy Aguilar	[signature]	2/4/03	1615	

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

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

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-18 0005

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909) 396-7662	LAB COORDINATOR'S FAX: (909) 396-1455	LABORATORY SERVICE ID: —	LABORATORY CONTACT: Kenny Chan	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: GW Mon - 1Q03	PROJECT LOCATION: MW-18 (Altadena/Florita)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX: (909) 590-1498	RECIPIENT NAME: Leo W. Williamson
PROJECT CONTACT: Leo W. Williamson	PROJECT PHONE NUMBER: (714) 920-8729	PROJECT FAX: (909) 396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave.		ADDRESS: 22632 Golden Springs Dr. #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena, CA	CLIENT: US NAVY SWDIV	CITY, STATE AND ZIPCODE: Chino, CA 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA. 91765
PROJECT MANAGER: Asrar Faheem	PROJECT MANAGER'S PHONE: (909) 396-7662	PROJECT MANAGER'S FAX: (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses: 524.2 (VOCs)	314.0 (Perchlorates)	200.8 (Total Chromium)	7196 (Hex Chrome)					Comments
1	MW-18-5	H_2O	2/5/03	825	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X					
2	MW-18-4	↓	↓	920	↓	↓	↓	↓	X	X	X	X					
3	MW-18-3	↓	↓	1000	↓	↓	↓	↓	X	X	X	X					
4	MW-18-2	↓	↓	1045	↓	↓	↓	↓	X	X	X	X					1728
5																	
6	TB-5-2/5/03	H_2O	N/A	N/A	HCl	2	III	NORMAL	X								
7	EB-5-2/5/03	↓	2/5/03	830	HCl HNO3 NONE	3+1+1	↓	↓	X	X	X	X					
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]	2/5/03	1200	
[signature]	[signature]	2/5/03	1248	

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

GEOFON INCORPORATED

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CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-4 0006 1OF2

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**
GW Mon - 1Q03	MW-4 (SE Perimeter Well)	04-4428.10	(909) 590-1826	(909) 590-1498	Leo W. Williamson
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Leo W. Williamson	(714) 920-8729	(909) 396-7455	13760 Magnolia Ave.		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: 524.2 (VOCs)	314.0 (Perchlorate)	200.8 (Total Chromium)	7196 (Hex Chrome)	Comments
1	MW-4-3	H_2O	2/6/03	735	HCl HNO_3 NONE	3+1+1	III	NORMAL	X	X	X	X	
2	MW-4-2	↓	↓	815	↓	↓	↓	↓	X	X	X	X	
3	MW-4-1	↓	↓	925	↓	↓	IV	↓	X	X	X	X	MS/MSD
4													
5	EB-6-2/6/03	H_2O	2/6/03	740	HCl HNO_3 NONE	3+1+1	III	NORMAL	X	X	X	X	
6	TB-6-2/6/03	↓	N/A	N/A	HCl	2	↓	↓	X				1728
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	Richard Stevenson	2/6/03	1350	
Barbara Stevenson		2/6/03	1450	

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

GEOFON INCORPORATED

22632 GOLDEN SPRINGS DR., SUITE 270
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CHAIN-OF-CUSTODY RECORD

MW-3 0007 2OF2

LABORATORY COPY

GEOFON's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Brad Shoajee	(909) 396-7662	(909) 396-1455	-	Kenny Chan	GEOFON, INC.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
GW Mon-1903	MW-3 (Settling Ponds)	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) 980-8729	(909) 396-1455	13760 Magnolia Ave		22632 Golden Springs Dr. #210
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
4900 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: 524.2 (VOCs)	314.0 (Perchlorate)	200.8 (Total Chromium)	7196 (Hex Chrome)	Comments
1	MW-3-4	H_2O	2/6/03	1055	HCl HNO_3 NONE	3+1+1	III	Normal	X	X	X	X	
2	MW-3-3	↓	↓	1135	↓	↓	↓	↓	X	X	X	X	
3	MW-3-2	↓	↓	1210	↓	↓	↓	↓	X	X	X	X	
4													
5													1728
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		2/6/03	1350	
		2/6/03	1450	

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

GEOFON INCORPORATED

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

CHAIN-OF-CUSTODY RECORD

MW-14

LABORATORY COPY

0008

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: JPL GW MON - 1Q03	**PROJECT LOCATION** MW-14 (Annex Parking Lot)	**PROJECT NUMBER** 04-4428.10	**LABORATORY PHONE** (909) 590-1828	**LABORATORY FAX** (909) 590-1498	**RECIPIENT NAME** Leo W. Williamson
PROJECT CONTACT Leo W. Williamson	**PROJECT PHONE NUMBER** (714) 920-8729	**PROJECT FAX** (909) 396-1455	**LABORATORY ADDRESS** 13760 Magnolia Ave		**ADDRESS** 22632 Golden Springs Dr. #270
PROJECT ADDRESS 4800 Oak Grove Dr.	**CITY, STATE AND ZIPCODE** Pasadena, CA	**CLIENT** US NAVY, SWDIV	**CITY, STATE AND ZIPCODE** 91710 Chino, CA		**CITY, STATE AND ZIPCODE** Diamond Bar, CA 91765
PROJECT MANAGER Asrar Faheem	**PROJECT MANAGER'S PHONE** (909) 396-7662	**PROJECT MANAGER'S FAX** (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses: 524.2 (VOCs)	314.0 (Perchlorate)	200.8 (Total Chromium)	7196 (Hex Chrome)					Comments
1	MW-14-5	H_2O	2/10/03	800	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X	X				
2	MW-14-4			910					X	X	X	X	\				
3	MW-14-3			955					X	X	X	X					
4	MW-14-2			1030					X	X	X	X					1728
5	MW-14-1			1110					X	X	X	X					
6																	
7	EB-7-2/10/03	H_2O	2/10/03	920	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X	X	X					
8	TB-7-2/10/03		N/A	N/A	HCl	2			X								
9	DUPE-3-1Q03		2/10/03	N/A	HCl HNO3 NONE	3+1+1	IV		X	X	X	X					DUPLICATE SAMPLE
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	Richard Stinson	2/10/03	1300	
Richard Stinson		2/10/03	1417	

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

GEOFON INCORPORATED

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

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-12

~~0013~~ 0009

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: JPL GW Mon-1903	**PROJECT LOCATION** MW-12 (East of DLDH 302)	**PROJECT NUMBER** 04-4428.10	**LABORATORY PHONE** (909) 590-1828	**LABORATORY FAX** (909) 590-1498	**RECIPIENT NAME** Leo W. Williamson
PROJECT CONTACT Leo W. Williamson	**PROJECT PHONE NUMBER** (714) 920-8729	**PROJECT FAX** (909) 396-7662	**LABORATORY ADDRESS** 13760 Magnolia Ave		**ADDRESS** 22632 Golden Springs Dr. #270
PROJECT ADDRESS 4800 Oak Grove Dr.	**CITY, STATE AND ZIPCODE** Pasadena, CA.	**CLIENT** US NAVY SWDIV	**CITY, STATE AND ZIPCODE** Chino, CA. 91710		**CITY, STATE AND ZIPCODE** Diamond Bar, CA. 91765
PROJECT MANAGER Asrar Faheem	**PROJECT MANAGER'S PHONE** (909) 396-7662	**PROJECT MANAGER'S FAX** (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	Analyses: 524.2 (VOCs)	314.0 (Perchlorates)	200.8 (Total Chromium)	7196 (Hex Chrome)	Comments
1	MW-12-5	H_2O	3/14/03	740	HCl NONE	3+1	III	NORMAL	X	X			
2	MW-12-4			810					X	X			
3	MW-12-3			0955	HCl HNO3 NONE	3+1+1			X	X	X	X	
4	MW-12-2			1000					X	X	X	X	1728
5	MW-12-1			1045					X	X	X	X	
6													
7	TB-8-2/14/03	H_2O	N/A	N/A	HCl	2	III	NORMAL	X				
8	EB-8-2/14/03		2/14/03	820	HCl HNO3 NONE	3+1+1			X	X	X	X	
9	DUPE-4-1Q03			N/A			IV		X	X	X	X	DUPLICATE SAMPLE
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	Richard Stinson	2/14/03	11:40	
Richard Stinson		2/14/03	3:07	

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

APCL Project: #1728

ATL #: 062090

001

Advanced Technology Laboratories

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

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ATL #: 062090
APCL #: **#1728**

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Case Narrative	003-004
Sample Receiving Items	005-007
EPA 200.8	008-106

Advanced Technology Laboratories

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

April 01, 2003

Kenny Chan
Applied P & Ch Laboratories
13760 E. Magnolia Ave.
Chino, CA 91710
TEL: (909) 590-1828
FAX: (909) 590-1498

RE: #1728, JPL

Attention: Kenny Chan

ELAP No.: 1838
NELAP No.: 02107CA
Workorder No.: 062090

Enclosed are the results for sample(s) received on March 27, 2003 by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company.

Please feel free to call me at (562)989-4045 if I can be of further assistance to your company.

Sincerely,

Eddie F. Rodriguez
Laboratory Director

This cover letter is an integral part of this analytical report.

003

Advanced Technology Laboratories

Date: *17-Apr-03*

CLIENT: Applied P & Ch Laboratories
Project: #1728, JPL
Lab Order: 062090

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
062090-001A	MW-17-4		02/04/2003 9:20:00 AM	03/27/2003
062090-002A	MW-17-3		02/04/2003 10:10:00 AM	03/27/2003
062090-003A	MW-17-2		02/04/2003 11:15:00 AM	03/27/2003
062090-004A	EB-4-2/4/03		02/04/2003 9:30:00 AM	03/27/2003
062090-005A	MW-18-5		02/05/2003 8:25:00 AM	03/27/2003
062090-006A	MW-18-4		02/05/2003 9:20:00 AM	03/27/2003
062090-007A	MW-18-3		02/05/2003 10:00:00 AM	03/27/2003
062090-008A	MW-18-2		02/05/2003 10:45:00 AM	03/27/2003
062090-009A	EB-5-2/5/03		02/05/2003 8:30:00 AM	03/27/2003
062090-010A	MW-4-3		02/06/2003 7:35:00 AM	03/27/2003
062090-011A	MW-4-2		02/06/2003 8:15:00 AM	03/27/2003
062090-012A	MW-4-1		02/06/2003 9:25:00 AM	03/27/2003
062090-013A	EB-6-2/6/03		02/06/2003 7:40:00 AM	03/27/2003
062090-014A	MW-3-4		02/06/2003 10:55:00 AM	03/27/2003
062090-015A	MW-3-3		02/06/2003 11:35:00 AM	03/27/2003
062090-016A	MW-3-2		02/06/2003 12:10:00 PM	03/27/2003
062090-017A	MW-14-5		02/10/2003 8:00:00 AM	03/27/2003
062090-018A	MW-14-4		02/10/2003 9:10:00 AM	03/27/2003
062090-019A	MW-14-3		02/10/2003 9:55:00 AM	03/27/2003
062090-020A	MW-14-2		02/10/2003 10:30:00 AM	03/27/2003
062090-021A	MW-14-1		02/10/2003 11:10:00 AM	03/27/2003
062090-022A	EB-7-2/10/03		02/10/2003 9:20:00 AM	03/27/2003
062090-023A	Dupe-3-1Q03		02/10/2003	03/27/2003
062090-024A	MW-12-3		02/14/2003 8:55:00 AM	03/27/2003
062090-025A	MW-12-2		02/14/2003 10:00:00 AM	03/27/2003
062090-026A	MW-12-1		02/14/2003 10:45:00 AM	03/27/2003
062090-027A	EB-8-2/14/03		02/14/2003 8:20:00 AM	03/27/2003
062090-028A	Dupe-4-1Q03		02/14/2003	03/27/2003

004

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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 Page 1 of 2

Subcontract Lab: ATL Contact: Purz Tel #: (562) 989-4045 Fax #: (562) 989-4040

Address: 3275 Walnut Avenue City: Signal Hill State: CA Zip code: 90807

APCL Client: #1728 APCL Contact: Kenny Chan

Project Name/Code JPL Job #

BILL TO APCL Sub Quotation #

Due Date: [X] regular [ ] rush: ___ days ___ hours Sampled by:

Field Sample ID No.	Sample Description	Date Collected	Time Collected	Sample Matrix	Preservation	# of Containers	Total Chromium (200.8)	Analysis Items	Remarks
	MW-17-4	2/14/03	0920	W	HNO3	1	X		RUSH 4 + EDD
	MW-17-3		1010			1	X		Level 4 Package
	MW-17-2		1115			2	X		(MS/MSD)
	EB-4-2/14/03		0930			1	X		
	MW-18-5	2/15/03	0825			1	X		
	MW-18-4		0920			1	X		
	MW-18-3		1000			1	X		
	MW-18-2		1045			1	X		
	EB-5-2/15/03		0830			1	X		
	MW-4-3	2/16/03	0735			1	X		
	MW-4-2		0815			1	X		
	MW-4-1		0925			2	X		(MS/MSD)
	EB-6-2/16/03		0740			1	X		
	MW-3-4		1055			1	X		
	MW-3-3		1135	↓	↓	1	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 (5.9 °C).

Relinquished by Paul Kan Date/Time 3/25/03 /1500 Received by [signature] Date/Time 3/27/03 /10:00

Relinquished by [signature] Date/Time 3/29/03 /1537 Received by [signature] Date/Time 03/27/03 /11:40 am

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: #1728
APCL Contact: Kenny Chan
Project Name/Code JPL
Job #
BILL TO APCL
Sub Quotation #
Due Date: ☒ regular ☐ rush: ___ days ___ hours
Sampled by:

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: Total Chromium (200.8)											Remarks
	MW-3-2	2/6/03	1210	W	HNO3	1	X											
	MW-14-5	2/10/03	0800			1	X											Level 4+ Package
	MW-14-4		0910			1	X											+EDD
	MW-14-3		0955			1	X											
	MW-14-2		1030			1	X											
	MW-14-1		1110			1	X											
	EB-7-2/10/03		0920			1	X											
	Dupe-3-1Q03					1	X											
	MW-12-3	2/14/03	0855			1	X											
	MW-12-2		1000			1	X											
	MW-12-1		1045			1	X											
	EB-8-2/14/03		0820			1	X											
	Dupe-4-1Q03					1	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 (5.5 °C).

Relinquished by Paul Kou Date/Time 3/25/03 / 1500 Received by [signature] Date/Time 3/27/03 / 10:00 AM

Relinquished by [signature] Date/Time 3/27/03 / 1137 Received by [signature] Date/Time 032703 / 11:40 AM

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.

INORGANICS COMPLETE INVENTORY SHEET

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: #1728

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

ATL Number: 062090
Date Sampled: 02/4/03
Date Received: 03/27/03

Method 200.8 (Metals)

	Topic	Page(s)
Sample Data	Inorganic Data Result Sheet	009-015
Standards Data	Initial Calibration	016
	Initial Calibration Verification and Continuing Calibration Verification/External Reference Standard	017-018
	Tune File	019-020
	Internal Standard Table	021-022
Raw QC Data	Blank Report Sheet	023-024
	Spike Sample Recovery	025-026
	Laboratory Control Spike Report	027-028
	Duplicate Report Sheet	029-031
	Holding Times Summary Sheet	032-033
Miscellaneous Items	Preparation Log	034-035
	Analysis Run Log	036-038
	Standards Log	039-045
	List of Method Detection Limits	046
Raw Data Package	Standards Data Sample Data QC Data	047-106

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

Advanced Technology Laboratories

Date: *01-Apr-03*

CLIENT: Applied P & Ch Laboratories
Project: #1728, JPL
Lab Order: 062090

Lab ID: 062090-001
Collection Date: 2/4/2003 9:20:00 AM
Client Sample ID: MW-17-4
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
		EPA 200.8				
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	2.5	1.0		µg/L	1	3/28/2003

Lab ID: 062090-002
Collection Date: 2/4/2003 10:10:00 AM
Client Sample ID: MW-17-3
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
		EPA 200.8				
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	3.8	1.0		µg/L	1	3/28/2003

Lab ID: 062090-003
Collection Date: 2/4/2003 11:15:00 AM
Client Sample ID: MW-17-2
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
		EPA 200.8				
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	2.1	1.0		µg/L	1	3/28/2003

Lab ID: 062090-004
Collection Date: 2/4/2003 9:30:00 AM
Client Sample ID: EB-4-2/4/03
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS						
		EPA 200.8				
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	ND	1.0		µg/L	1	3/28/2003

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

Advanced Technology Laboratories
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CLIENT: Applied P & Ch Laboratories **Lab Order:** 062090
Project: #1728, JPL

Lab ID: 062090-005 **Collection Date:** 2/5/2003 8:25:00 AM
Client Sample ID: MW-18-5 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	2.0	1.0		µg/L	1	3/28/2003

Lab ID: 062090-006 **Collection Date:** 2/5/2003 9:20:00 AM
Client Sample ID: MW-18-4 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	4.1	1.0		µg/L	1	3/28/2003

Lab ID: 062090-007 **Collection Date:** 2/5/2003 10:00:00 AM
Client Sample ID: MW-18-3 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	7.8	1.0		µg/L	1	3/28/2003

Lab ID: 062090-008 **Collection Date:** 2/5/2003 10:45:00 AM
Client Sample ID: MW-18-2 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	3.6	1.0		µg/L	1	3/28/2003

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

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CLIENT: Applied P & Ch Laboratories **Lab Order:** 062090
Project: #1728, JPL

Lab ID: 062090-009 **Collection Date:** 2/5/2003 8:30:00 AM
Client Sample ID: EB-5-2/5/03 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	ND	1.0		µg/L	1	3/28/2003

Lab ID: 062090-010 **Collection Date:** 2/6/2003 7:35:00 AM
Client Sample ID: MW-4-3 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	4.3	1.0		µg/L	1	3/28/2003

Lab ID: 062090-011 **Collection Date:** 2/6/2003 8:15:00 AM
Client Sample ID: MW-4-2 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	4.8	1.0		µg/L	1	3/28/2003

Lab ID: 062090-012 **Collection Date:** 2/6/2003 9:25:00 AM
Client Sample ID: MW-4-1 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B	QC Batch: R26259					Analyst: **NS**
Chromium	2.2	1.0		µg/L	1	3/28/2003

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

Advanced Technology Laboratories
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CLIENT: Applied P & Ch Laboratories **Lab Order:** 062090
Project: #1728, JPL

Lab ID: 062090-013 **Collection Date:** 2/6/2003 7:40:00 AM
Client Sample ID: EB-6-2/6/03 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	ND	1.0		µg/L	1	3/28/2003

Lab ID: 062090-014 **Collection Date:** 2/6/2003 10:55:00 AM
Client Sample ID: MW-3-4 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	2.3	1.0		µg/L	1	3/28/2003

Lab ID: 062090-015 **Collection Date:** 2/6/2003 11:35:00 AM
Client Sample ID: MW-3-3 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	2.0	1.0		µg/L	1	3/28/2003

Lab ID: 062090-016 **Collection Date:** 2/6/2003 12:10:00 PM
Client Sample ID: MW-3-2 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	2.4	1.0		µg/L	1	3/28/2003

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

Advanced Technology Laboratories
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CLIENT: Applied P & Ch Laboratories **Lab Order:** 062090
Project: #1728, JPL

Lab ID: 062090-017 **Collection Date:** 2/10/2003 8:00:00 AM
Client Sample ID: MW-14-5 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	3.0	1.0		µg/L	1	3/28/2003

Lab ID: 062090-018 **Collection Date:** 2/10/2003 9:10:00 AM
Client Sample ID: MW-14-4 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	5.0	1.0		µg/L	1	3/28/2003

Lab ID: 062090-019 **Collection Date:** 2/10/2003 9:55:00 AM
Client Sample ID: MW-14-3 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	3.6	1.0		µg/L	1	3/28/2003

Lab ID: 062090-020 **Collection Date:** 2/10/2003 10:30:00 AM
Client Sample ID: MW-14-2 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A QC Batch: R26258						Analyst: **NS**
Chromium	3.7	1.0		µg/L	1	3/28/2003

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

Advanced Technology Laboratories
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CLIENT: Applied P & Ch Laboratories **Lab Order:** 062090
Project: #1728, JPL

Lab ID: 062090-021 **Collection Date:** 2/10/2003 11:10:00 AM
Client Sample ID: MW-14-1 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328A	QC Batch: R26258					Analyst: **NS**
Chromium	3.5	1.0		µg/L	1	3/28/2003

Lab ID: 062090-022 **Collection Date:** 2/10/2003 9:20:00 AM
Client Sample ID: EB-7-2/10/03 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B	QC Batch: R26259					Analyst: **NS**
Chromium	ND	1.0		µg/L	1	3/28/2003

Lab ID: 062090-023 **Collection Date:** 2/10/2003
Client Sample ID: Dupe-3-1Q03 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B	QC Batch: R26259					Analyst: **NS**
Chromium	4.0	1.0		µg/L	1	3/28/2003

Lab ID: 062090-024 **Collection Date:** 2/14/2003 8:55:00 AM
Client Sample ID: MW-12-3 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B	QC Batch: R26259					Analyst: **NS**
Chromium	2.5	1.0		µg/L	1	3/28/2003

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

014

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

CLIENT: Applied P & Ch Laboratories **Lab Order:** 062090
Project: #1728, JPL

Lab ID: 062090-025 **Collection Date:** 2/14/2003 10:00:00 AM
Client Sample ID: MW-12-2 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B QC Batch: R26259						Analyst: **NS**
Chromium	3.8	1.0		µg/L	1	3/28/2003

Lab ID: 062090-026 **Collection Date:** 2/14/2003 10:45:00 AM
Client Sample ID: MW-12-1 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B QC Batch: R26259						Analyst: **NS**
Chromium	6.0	1.0		µg/L	1	3/28/2003

Lab ID: 062090-027 **Collection Date:** 2/14/2003 8:20:00 AM
Client Sample ID: EB-8-2/14/03 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B QC Batch: R26259						Analyst: **NS**
Chromium	ND	1.0		µg/L	1	3/28/2003

Lab ID: 062090-028 **Collection Date:** 2/14/2003
Client Sample ID: Dupe-4-1Q03 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP-MS METALS				**EPA 200.8**		
RunID: ICP4_030328B QC Batch: R26259						Analyst: **NS**
Chromium	4.0	1.0		µg/L	1	3/28/2003

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

015

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: 062090
Date Received: 03/27/03

(EPA 200.8) - INITIAL CALIBRATION

Instrument ID: ICP4
Date(s) Analyzed: 03/28/03

Initial Calibration:

	INTENSITY				
COMPOUND	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	r2
Chromium	12024	52675	97295	184757	0.9999

Standard Concentration:	0.5 ppb	5 ppb	10 ppb	20 ppb
Standard ID:	MST030328K	MST030328J	MST030328I	MST030328H

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: 062090
Date Received: 03/27/03

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 03/28/2003

	Source:	**Standard Code:**
Initial Calibration Verification:	CPI (1FF002)	MST030328M
Continuing Calibration Verification:	CPI(1FF02)	MST030328M

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found CCV1	%R(1)	Found CCV2	%R(1)	M
Chromium	10.0	10.1	101	10.0	10.1	101	9.93	99	PM

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

017

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: 062090
Date Received: 03/27/03

(EPA 200.8) INITIAL AND CONTINUING CALIBRATION VERFICATION

(EXTERNAL REFERENCE STANDARD)

Instrument ID: ICP4

Date Analyzed: 03/28/2003

	Source:	Standard Code:
Initial Calibration Verification:	CPI (1FF002)	MST030328M
Continuing Calibration Verification:	CPI(1FF02)	MST030328M

Concentration Units: ug/L

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found CCV1	%R(1)	Found CCV2	%R(1)	M
Chromium	10.0	10.1	101	10.0	9.6	96	9.42	94	PM

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: 030328.tun
File Path: D:\ELAN\TUNING\2003\March

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.028	2052	2040	0.712	
Mg	23.985	23.978	5702	2020	0.694	
Rh	102.905	102.878	24978	1955	0.743	
Ce	139.905	139.929	33977	2010	0.764	
Pb	207.977	207.978	50417	2270	0.744	
U	238.050	238.024	57638	2435	0.772	

Daily Performance Report

Sample ID: 030328-daily
Sample Date/Time: Friday, March 28, 2003 10:16:42
Sample Description:
Method File: c:\elandata\Method\Daily.mth
Dataset File: d:\elan\daily performance\2003\march\030328-daily.018
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	18189.0	18189.041	309.568	1.7
	Rh	102.9	162617.0	162617.005	979.993	0.6
	In	114.9	201652.8	201652.760	1911.811	0.9
	Pb	208.0	104503.9	104503.858	710.728	0.7
⌈>	Ba	137.9	183734.5	183734.495	800.401	0.4
⌊	Ba++	69.0	4187.8	0.023	0.001	4.6
⌈>	Ce	139.9	222236.8	222236.831	802.290	0.4
⌊	CeO	155.9	5691.9	0.026	0.000	1.6
	Bkgd	220.0	4.8	4.833	0.808	16.7

Current Optimization File Data

Current Value	Description
0.88	Nebulizer Gas Flow
7.00	Lens Voltage
1100.00	ICP RF Power
-1850.00	Analog Stage Voltage
1425.00	Pulse Stage Voltage
85.00	Discriminator Threshold
-1.50	AC Rod Offset
60.00	Service DAC 1
0.00	Quadrupole Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	9	6.5	5258.0
Co	59	9	7.5	125591.6
In	115	9	8.5	301783.2

020

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062090
Date Received: 03/27/03

Instrument ID: ICP4 Internal Standard ID: MST030328I

Date Analyzed: 03/28/2003 Standard Concentration: 50 ug/L

QC Batch: R26258

			Scandium		Terbium	
			Area	% Rec	Area	% Rec
Calibration Blank			585608	---	1118182	---
Lab ID	Sample Description	APCL Lab ID:				
MB-R26258	MB-R26258		581019	99	1031279	92
LCS-R26258	LCS-R26258		582440	99	1039353	93
062090-003AMS	MW-17-2		597078	102	1056709	95
062090-003AMSD	MW-17-2		612277	105	1071310	96
062090-003A	MW-17-2		600060	102	934909	84
062090-003ADUP	MW-17-2		602728	103	944572	84
062090-001A	MW-17-4		584532	100	1068313	96
062090-002A	MW-17-3		614742	105	1058069	95
062090-004A	EB-4-2/4/03		510684	87	1020859	91
062090-005A	MW-18-5		540162	92	1050803	94
062090-006A	MW-18-4		607977	104	1032021	92
062090-007A	MW-18-3		600305	103	1037935	93
062090-008A	MW-18-2		584347	100	1026309	92
062090-009A	EB-5-2/5/03		500056	85	1000073	89
062090-010A	MW-4-3		509479	87	1020834	91
062090-011A	MW-4-2		641984	110	990212	89
062090-013A	EB-6-2/6/03		505050	86	989570	88
062090-014A	MW-3-4		545294	93	989967	89
062090-015A	MW-3-3		561240	96	998540	89
062090-016A	MW-3-2		589833	101	1003034	90
062090-017A	MW-14-5		623131	106	1015788	91
062090-018A	MW-14-4		627942	107	999740	89
062090-019A	MW-14-3		650753	111	957311	86
062090-020A	MW-14-2		649967	111	944482	84
062090-021A	MW-14-1		659148	113	930199	83
062090-021ADUP	MW-14-1		666947	114	945059	85

021

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062090
Date Received: 03/27/03

Instrument ID: ICP4 Internal Standard ID: MST030328I

Date Analyzed: 03/28/2003 Standard Concentration: 50 ug/L

QC Batch: R26259

			Scandium		Terbium	
			Area	% Rec	Area	% Rec
Calibration Blank			585608	---	1118182	---
Lab ID	Sample Description	APCL Lab ID:				
MB-R26259	MB-R26259		555587	95	933708	84
LCS-R26259	LCS-R26259		549638	94	916805	82
062090-012AMS	MW-4-1		594399	102	941403	84
062090-012AMSD	MW-4-1		605109	103	949321	85
062090-012A	MW-4-1		589356	101	931892	83
062090-012ADUP	MW-4-1		583433	100	930578	83
062090-022A	EB-7-2/10/03		525638	90	933127	83
062090-023A	Dupe-3-1Q03		610823	104	929811	83
062090-024A	MW-12-3		570835	97	929033	83
062090-025A	MW-12-2		592197	101	930635	83
062090-026A	MW-12-1		586321	98	931939	83
062090-027A	EB-8-2/14/03		517974	88	937434	84
062090-028A	Dupe-4-1Q03		586429	100	921799	82

* Outside Acceptance Criteria

Acceptance Criteria: 60 - 125%

022

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: 062090
Date Received: 03/27/03

(EPA 200.8) METHOD BLANKS *

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

Dilution Factor: 1
Matrix: Water
Date Analyzed: 03/28/2003

QC Batch Number: R26258

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	5	0.111		0.216		0.197				-0.021		PM

023

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) METHOD BLANKS *

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

Dilution Factor: 1
Matrix: Water
Date Analyzed: 03/28/2003

QC Batch Number: R26259

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	5	0.111		0.202		0.227		0.219		0.194		PM

n24

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) METALS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample ID: 062090-003A
APCL Lab ID: ---
Sample Description: MW-17-2

Date Sampled: 02/04/2003
Date Digested: N/A
Digestion Method: N/A
MS Spike Code: MST030328G

Concentration Units: ug/L
Dilution Factor: 1
Matrix: Water
Date Analyzed: 03/28/2003

Instrument ID: ICP4

QC Batch Number: R26258

Analyte	Sample Concentration	Spike Added	Spike Result	Spike Dup. Result	Spike % Rec.	Spike Dup. % Rec.	RPD	QC Limits RPD	QC Limits % Rec.
Chromium	2.08	10	11.5	11.3	94	92	2	20	80 - 120

* Values outside of QC limits

RPD: 0 out of 1 outside limits

025

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) METALS MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Sample ID: 062090-012A
APCL Lab ID: ---
Sample Description: MW-4-1

Date Sampled: 02/06/2003
Date Digested: N/A
Digestion Method: N/A
MS Spike Code: MST021125A

Concentration Units: ug/L
Dilution Factor: 1
Matrix: Water
Date Analyzed: 03/28/2003

Instrument ID: ICP4

QC Batch Number: R26259

Analyte	Sample Concentration	Spike Added	Spike Result	Spike Dup. Result	Spike % Rec.	Spike Dup. % Rec.	RPD	QC Limits RPD	QC Limits % Rec.
Chromium	2.16	10	10.4	10.4	82	82	0	20	80 - 120

* Values outside of QC limits

RPD: 0 out of 1 outside limits

026

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) LABORATORY CONTROL SAMPLE

Lab Sample ID: LCS-R26258

Concentration Units: ug/L
Dilution Factor: 1

Date Digested: N/A
Digestion Method: N/A

Matrix: Water
Date Analyzed: 03/28/2003
Instrument ID: ICP4

QC Batch Number: R26258

LCS Standard Code: MST030328L

Analyte	Aqueous (ug/L) Ref Value	True	Found	%R	Solid (ug/kg) True	Found	C	%R		Limits
Chromium	0	10	9.95	99.5						85-115

* Values outside of QC limits

Spike Recovery: ___0_____ out of ____1_____ outside limits

027

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) LABORATORY CONTROL SAMPLE

Lab Sample ID: LCS-R26259

Concentration Units: ug/L
Dilution Factor: 1

Date Digested: N/A
Digestion Method: N/A

Matrix: Water
Date Analyzed: 03/28/2003
Instrument ID: ICP4

QC Batch Number: R26259

LCS Standard Code: MST030328L

Analyte	Aqueous (ug/L) Ref Value	True	Found	%R	Solid (ug/kg) True	Found	C	%R		Limits
Chromium	0	10	9.42	94.2						85-115

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

028

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) SAMPLE DUPLICATE

Lab Sample ID: 062090-003A
APCL Lab ID: ---
Sample Description: MW-17-2

Date Sampled: 02/04/2003
Date Digested: N/A
Digestion Method: N/A

Concentration Units: ug/l
Dilution Factor: 1

Matrix: Water
Date Analyzed: 03/28/2003
Instrument ID: ICP 4

QC Batch Number: R26258

Analyte	DLR	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Chromium	5	2.08		2.05		0		

Acceptance Criteria: +/- 30%

029

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) SAMPLE DUPLICATE

Lab Sample ID: 062090-012A
APCL Lab ID: ---
Sample Description: MW-4-1

Date Sampled: 02/06/2003
Date Digested: N/A
Digestion Method: N/A

Concentration Units: ug/l
Dilution Factor: 1

Matrix: Water
Date Analyzed: 03/28/2003
Instrument ID: ICP 4

QC Batch Number: R26259

Analyte	DLR	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Chromium	5	2.16		2.25		1		

Acceptance Criteria: +/- 30%

030

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

ATL Number: 062090
Date Received: 03/27/03

(EPA 200.8) SAMPLE DUPLICATE

Lab Sample ID: 062090-021A
APCL Lab ID: ---
Sample Description: MW-14-1

Date Sampled: 02/10/2003
Date Digested: N/A
Digestion Method: N/A

Concentration Units: ug/l
Dilution Factor: 1

Matrix: Water
Date Analyzed: 03/28/2003
Instrument ID: ICP 4

QC Batch Number: R26258

Analyte	DLR	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Chromium	5	3.55		3.64		1		

Acceptance Criteria: +/- 30%

031

Client: Applied P & Ch Laboratory
Attn: Kenny Chan
Client's Project: JPL
ATL Number: 062090
Date Received: 03/27/03

HOLDING TIME SUMMARY _ EPA 200.8

	Lab Sample ID	Client Sample ID	Sample Description	Date Sampled	Date Digested	Contract Holding Time
1	062090-001A	MW-17-4		02/04/2003	N/A	6 Months
2	062090-002A	MW-17-3		02/04/2003	N/A	6 Months
3	062090-003A	MW-17-2		02/04/2003	N/A	6 Months
4	062090-004A	EB-4-2/4/03		02/04/2003	N/A	6 Months
5	062090-005A	MW-18-5		02/05/2003	N/A	6 Months
6	062090-006A	MW-18-4		02/05/2003	N/A	6 Months
7	062090-007A	MW-18-3		02/05/2003	N/A	6 Months
8	062090-008A	MW-18-2		02/05/2003	N/A	6 Months
9	062090-009A	EB-5-2/5/03		02/05/2003	N/A	6 Months
10	062090-010A	MW-4-3		02/06/2003	N/A	6 Months
11	062090-011A	MW-4-2		02/06/2003	N/A	6 Months
12	062090-012A	MW-4-1		02/06/2003	N/A	6 Months
13	062090-013A	EB-6-2/6/03		02/06/2003	N/A	6 Months
14	062090-014A	MW-3-4		02/06/2003	N/A	6 Months
15	062090-015A	MW-3-3		02/06/2003	N/A	6 Months
16	062090-016A	MW-3-2		02/06/2003	N/A	6 Months
17	062090-017A	MW-14-5		02/10/2003	N/A	6 Months
18	062090-018A	MW-14-4		02/10/2003	N/A	6 Months
19	062090-019A	MW-14-3		02/10/2003	N/A	6 Months
20	062090-020A	MW-14-2		02/10/2003	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: JPL
ATL Number: 062090
Date Received: 03/27/03

HOLDING TIME SUMMARY _ EPA 200.8

	Lab Sample ID	Client Sample ID	Sample Description	Date Sampled	Date Digested	Contract Holding Time
1	062090-021A	MW-14-1		02/10/2003	N/A	6 Months
2	062090-022A	EB-7-2/10/03		02/10/2003	N/A	6 Months
3	062090-023A	Dupe-3-1Q03		02/10/2003	N/A	6 Months
4	062090-024A	MW-12-3		02/14/2003	N/A	6 Months
5	062090-025A	MW-12-2		02/14/2003	N/A	6 Months
6	062090-026A	MW-12-1		02/14/2003	N/A	6 Months
7	062090-027A	EB-8-2/14/03		02/14/2003	N/A	6 Months
8	062090-028A	Dupe-4-1Q03		02/14/2003	N/A	6 Months
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

____0____ of __8___ sample(s) were outside of holding time.

033

ICP-MS : Turbidity Check and Sample Preparation Log

QC Number: R26258 **Date Read / Digested:** 3/28/03

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

Sample ID	Turbidity Result *	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
MS 62090-3	0.09	10 ml	0.1 ml	1 ppm	NST030328G	10 ml	NS	
MSD "	0.09	"	"	"	"	"	"	
Method Blank	—	"	—	—	—	"	"	
LCS	—	"	0.1 ml	1 ppm	NST030328I	"	"	
Blank MS								
Blank MSD								
1 62090-1	0.30	10				10	NS	
2 -2	0.27							
3 -3	0.09							
4 -4	0.30							
5 -5	0.28							
6 -6	0.25							
7 -7	0.05							
8 -8	0.21							
9 -9	0.22							
10 -10	0.70							
11 -11	0.14							
12 -13	0.25							
13 -14	0.22							
14 -15	0.26							
15 -16	0.14							
16 -17	0.41							
17 -18	0.13							
18 -19	0.18							
19 -20	0.12							
20 -21	0.05							
DUP 62090-3	0.09							

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

Relinquished by / Date: _____

Received by / Date: _____

ICP-MS : Turbidity Check and Sample Preparation Log

QC Number: R26259 **Date Read / Digested:** 3/28/03

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

Sample ID	Turbidity Result *	Sample Wt./Vol.	Spike / LCS Amt. Added	Spike / LCS Conc. (ppm)	Spike Code	Final Vol (ml)	Initials	Comments
MS 62090-12	0.39	10 ml	0.1 ml	1 ppm	MST030328G	10	NJ	
MSD +	0.39	"	"	"	"	"	"	
Method Blank	-	"	-	-	-	"	"	
LCS	-	"	0.1 ml	1 ppm	MST030328L	"	"	
Blank MS								
Blank MSD								
1 62090-12	0.39	10				10	NJ	
2 -22	0.04	"				"	"	
3 -23	0.02	"				"	"	
4 -24	0.07	"				"	"	
5 -25	0.05	"				"	"	
6 -26	0.07	"				"	"	
7 -27	0.05	"				"	"	
8 -28	0.20	"				"	"	
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
DUP 62090-12	0.39	10				10	NJ	

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

Relinquished by / Date: _____

Received by / Date: _____