Sequence No.: 17
Sample ID: LS34 MBSPK TWC
Analyst: BLW
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 33
Date Collected: 10/10/2007 1:29:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: LS34 MBSPK TWC

Analyte	Back Pressure	Flow
All	156.0 kPa	0.50 L/min

Mean Data: LS34 MBSPK TWC

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	1843280.5	100.9	%	0.36				0.35%
ScR 361.383	158453.9	103.5	%	0.75				0.72%
Ag 328.068†	84700.3	0.5273	mg/L	0.00571	0.5273	mg/L	0.00571	1.08%
Al 308.215†	3317.5	2.023	mg/L	0.0115	2.023	mg/L	0.0115	0.57%
As 188.979†	2424.1	2.062	mg/L	0.0034	2.062	mg/L	0.0034	0.17%
B 249.677†	4.7	0.00103	mg/L	0.002604	0.00103	mg/L	0.002604	251.80%
Ba 233.527†	10967.8	1.980	mg/L	0.0036	1.980	mg/L	0.0036	0.18%
Be 313.042†	140247.7	0.5199	mg/L	0.00013	0.5199	mg/L	0.00013	0.02%
Ca 317.933†	103789.7	10.34	mg/L	0.007	10.34	mg/L	0.007	0.07%
Cd 228.802†	19948.4	0.4981	mg/L	0.00639	0.4981	mg/L	0.00639	1.28%
Co 228.616†	25674.9	0.5009	mg/L	0.00564	0.5009	mg/L	0.00564	1.13%
Cr 267.716†	2093.7	0.5099	mg/L	0.00206	0.5099	mg/L	0.00206	0.40%
Cu 324.752†	112321.6	0.5234	mg/L	0.00517	0.5234	mg/L	0.00517	0.99%
Fe 273.955†	2533.3	2.089	mg/L	0.0190	2.089	mg/L	0.0190	0.91%
K 766.490†	13633.5	10.45	mg/L	0.049	10.45	mg/L	0.049	0.46%
Mg 279.077†	13018.1	10.53	mg/L	0.030	10.53	mg/L	0.030	0.29%
Mn 257.610†	15407.9	0.5270	mg/L	0.00194	0.5270	mg/L	0.00194	0.37%
Mo 202.031†	21.3	0.00330	mg/L	0.000862	0.00330	mg/L	0.000862	26.12%
Na 589.592†	21074.3	10.47	mg/L	0.035	10.47	mg/L	0.035	0.34%
Na 330.237†	225.7	9.863	mg/L	0.4503	9.863	mg/L	0.4503	4.57%
Ni 231.604†	618.1	0.5101	mg/L	0.00656	0.5101	mg/L	0.00656	1.29%
Pb 220.353†	14101.2	2.047	mg/L	0.0239	2.047	mg/L	0.0239	1.17%
Sb 206.836†	14.4	0.00188	mg/L	0.001401	0.00188	mg/L	0.001401	74.46%
Se 196.026†	2060.4	1.946	mg/L	0.0092	1.946	mg/L	0.0092	0.47%
Si 288.158†	17.8	0.01059	mg/L	0.004761	0.01059	mg/L	0.004761	44.95%
Sn 189.927†	-24.5	-0.00713	mg/L	0.000166	-0.00713	mg/L	0.000166	2.33%
Sr 421.552†	145539.5	0.4985	mg/L	0.00205	0.4985	mg/L	0.00205	0.41%
Ti 334.903†	29.5	0.00132	mg/L	0.001272	0.00132	mg/L	0.001272	96.29%
Tl 190.801†	3976.8	1.952	mg/L	0.0077	1.952	mg/L	0.0077	0.39%
V 292.402†	61245.1	0.5313	mg/L	0.00675	0.5313	mg/L	0.00675	1.27%
Zn 206.200†	534.0	0.5038	mg/L	0.00516	0.5038	mg/L	0.00516	1.02%

Sequence No.: 18
Sample ID: CV 3
Analyst: BLW
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 7
Date Collected: 10/10/2007 1:35:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	157.0 kPa	0.50 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	1846361.3	101.0	%	0.54				0.54%
ScR 361.383	160543.4	104.9	%	1.22				1.17%
Ag 328.068†	161869.7	1.008	mg/L	0.0075	1.008	mg/L	0.0075	0.74%
Al 308.215†	3152.3	1.890	mg/L	0.0179	1.890	mg/L	0.0179	0.95%
As 188.979†	2342.9	1.992	mg/L	0.0183	1.992	mg/L	0.0183	0.92%
B 249.677†	1827.8	0.9505	mg/L	0.01496	0.9505	mg/L	0.01496	1.57%
Ba 233.527†	5231.3	0.9447	mg/L	0.01260	0.9447	mg/L	0.01260	1.33%
Be 313.042†	263482.5	0.9766	mg/L	0.00659	0.9766	mg/L	0.00659	0.68%
Ca 317.933†	20273.6	2.019	mg/L	0.0153	2.019	mg/L	0.0153	0.76%
Cd 228.802†	38770.8	0.9813	mg/L	0.00621	0.9813	mg/L	0.00621	0.63%
Co 228.616†	49379.2	0.9627	mg/L	0.01084	0.9627	mg/L	0.01084	1.13%
Cr 267.716†	3916.7	0.9539	mg/L	0.01167	0.9539	mg/L	0.01167	1.22%
Cu 324.752†	226302.7	1.054	mg/L	0.0090	1.054	mg/L	0.0090	0.86%
Fe 273.955†	2358.4	1.943	mg/L	0.0259	1.943	mg/L	0.0259	1.33%
K 766.490†	26050.8	19.97	mg/L	0.209	19.97	mg/L	0.209	1.05%
Mg 279.077†	2434.2	1.972	mg/L	0.0232	1.972	mg/L	0.0232	1.18%
Mn 257.610†	28976.6	0.9903	mg/L	0.00055	0.9903	mg/L	0.00055	0.06%
Mo 202.031†	5710.2	0.9571	mg/L	0.00755	0.9571	mg/L	0.00755	0.79%
Na 589.592†	98584.7	48.99	mg/L	0.260	48.99	mg/L	0.260	0.53%
Na 330.237†	1078.5	48.26	mg/L	0.555	48.26	mg/L	0.555	1.15%
Ni 231.604†	1165.1	0.9639	mg/L	0.01362	0.9639	mg/L	0.01362	1.41%
Pb 220.353†	13761.9	1.998	mg/L	0.0226	1.998	mg/L	0.0226	1.13%
Sb 206.836†	3980.1	1.969	mg/L	0.0175	1.969	mg/L	0.0175	0.89%
Se 196.026†	2004.7	1.892	mg/L	0.0178	1.892	mg/L	0.0178	0.94%
Si 288.158†	3503.3	2.019	mg/L	0.0190	2.019	mg/L	0.0190	0.94%
Sn 189.927†	2778.9	0.8866	mg/L	0.00586	0.8866	mg/L	0.00586	0.66%
Sr 421.552†	277991.7	0.9523	mg/L	0.00681	0.9523	mg/L	0.00681	0.71%
Ti 334.903†	19568.3	0.9750	mg/L	0.00885	0.9750	mg/L	0.00885	0.91%
Tl 190.801†	3915.9	1.915	mg/L	0.0122	1.915	mg/L	0.0122	0.64%
V 292.402†	115439.5	1.006	mg/L	0.0081	1.006	mg/L	0.0081	0.81%
Zn 206.200†	1044.7	0.9847	mg/L	0.01346	0.9847	mg/L	0.01346	1.37%

Sequence No.: 19
Sample ID: CB 3
Analyst: BLW
Initial Sample Wt:
Dilution: 1X

Autosampler Location: 1
Date Collected: 10/10/2007 1:42:09 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	157.0 kPa	0.50 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib Conc.	Calib Units	Calib Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	1865574.7	102.1	%	0.33				0.32%
ScR 361.383	157577.9	103.0	%	0.62				0.60%
Ag 328.068†	14.0	0.00009	mg/L	0.000232	0.00009	mg/L	0.000232	265.88%
Al 308.215†	6.8	0.00412	mg/L	0.015871	0.00412	mg/L	0.015871	385.34%
As 188.979†	6.5	0.00550	mg/L	0.002470	0.00550	mg/L	0.002470	44.95%
B 249.677†	8.5	0.00444	mg/L	0.001699	0.00444	mg/L	0.001699	38.27%
Ba 233.527†	-4.9	-0.00088	mg/L	0.000258	-0.00088	mg/L	0.000258	29.28%
Be 313.042†	-3.4	-0.00001	mg/L	0.000103	-0.00001	mg/L	0.000103	773.93%
Ca 317.933†	-3.5	-0.00035	mg/L	0.003740	-0.00035	mg/L	0.003740	>999.9%
Cd 228.802†	-1.4	-0.00007	mg/L	0.000092	-0.00007	mg/L	0.000092	129.93%
Co 228.616†	-0.1	0.00000	mg/L	0.000078	0.00000	mg/L	0.000078	>999.9%
Cr 267.716†	2.3	0.00057	mg/L	0.001295	0.00057	mg/L	0.001295	228.42%
Cu 324.752†	23.6	0.00011	mg/L	0.000157	0.00011	mg/L	0.000157	143.48%
Fe 273.955†	-5.4	-0.00448	mg/L	0.000880	-0.00448	mg/L	0.000880	19.63%
K 766.490†	112.1	0.08595	mg/L	0.011601	0.08595	mg/L	0.011601	13.50%
Mg 279.077†	5.8	0.00469	mg/L	0.005779	0.00469	mg/L	0.005779	123.11%
Mn 257.610†	2.3	0.00008	mg/L	0.000104	0.00008	mg/L	0.000104	132.12%
Mo 202.031†	3.5	0.00058	mg/L	0.000268	0.00058	mg/L	0.000268	46.13%
Na 589.592†	172.8	0.08588	mg/L	0.008233	0.08588	mg/L	0.008233	9.59%
Na 330.237†	-17.8	-0.7996	mg/L	1.11578	-0.7996	mg/L	1.11578	139.54%
Ni 231.604†	0.5	0.00043	mg/L	0.003397	0.00043	mg/L	0.003397	795.71%
Pb 220.353†	11.7	0.00170	mg/L	0.000588	0.00170	mg/L	0.000588	34.57%
Sb 206.836†	3.9	0.00193	mg/L	0.003716	0.00193	mg/L	0.003716	192.11%
Se 196.026†	2.7	0.00258	mg/L	0.004188	0.00258	mg/L	0.004188	162.18%
Si 288.158†	8.4	0.00481	mg/L	0.002613	0.00481	mg/L	0.002613	54.32%
Sn 189.927†	-0.5	-0.00015	mg/L	0.000477	-0.00015	mg/L	0.000477	318.91%
Sr 421.552†	0.8	0.00000	mg/L	0.000127	0.00000	mg/L	0.000127	>999.9%
Ti 334.903†	-0.7	-0.00004	mg/L	0.000662	-0.00004	mg/L	0.000662	>999.9%
Tl 190.801†	10.9	0.00536	mg/L	0.001612	0.00536	mg/L	0.001612	30.08%
V 292.402†	34.6	0.00031	mg/L	0.000108	0.00031	mg/L	0.000108	35.17%
Zn 206.200†	-1.7	-0.00159	mg/L	0.001794	-0.00159	mg/L	0.001794	113.07%

end package

Mercury Analysis Log

Analyst: EJR
Instrument: Cetac

Date: 10-09-07
Page: 3 of 5

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
STD 0.0	5mm	1X		
0.1				
0.5				
1.0				
2.0				
5.0				
10.0				
ICV			8.19	Begin CLP %R=102
ICB			-0.05	
CCV1			3.98	%R=100
CCB1			-0.02	
CRA			0.11	
LR71 mB			-0.00	
mBSPK			2.10	%R=105
a			0.09	
aDUP			0.09	NO RPD undetected
aSPK			1.09	%R=109
B				
C				
D				
E				
CCV2			3.81	%R=95
CCB2			-0.01	
LR71 F				
H				
I				
J				
K				
L				
LR67 mB	5mm	1X	-0.04	

Chemical/Reagent ID:
10% $SnCl_2$: MP1294
14% NH_2OH/NaCl: MP1297
Standard ID:
Standard: 2420-C
ICV/CCV: 43-4

Mercury Analysis Log

Analyst: ESR
Instrument: Cetac

* all corrections by ESR 10-09-07

Date: 10-09-07
Page: 12 of 5

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
LR67 mBSPK	5mm	1X	2.06	%R = 103
a			0.83	
aDUP			0.84	
CCV 3			3.95	%R = 99
CCB 3			-0.02	
LR67 aSPK			1.42	%R = 59 X low
B				
C				
D				
E				
F				
S				
T				
U				
V				
CCV 4			3.69	%R = 92
CCB 4			-0.02	
LR41 mB			-0.00	
mBSPK			2.02	%R = 101
a			-0.01	
aDUP			0.00	
aSPK			1.06	%R = 106
B				
C				
D				
E				
F				
CCV 5			3.93	%R = 98
CCB 5			-0.02	
LR41 G	5mm	1X		

Chemical/Reagent ID:
10% $SnCl_2$: mP1294

14% NH_2OH/NaCl: mP1297

Standard ID:
Standard: 2420-6

ICV/CCV: 43-4

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA

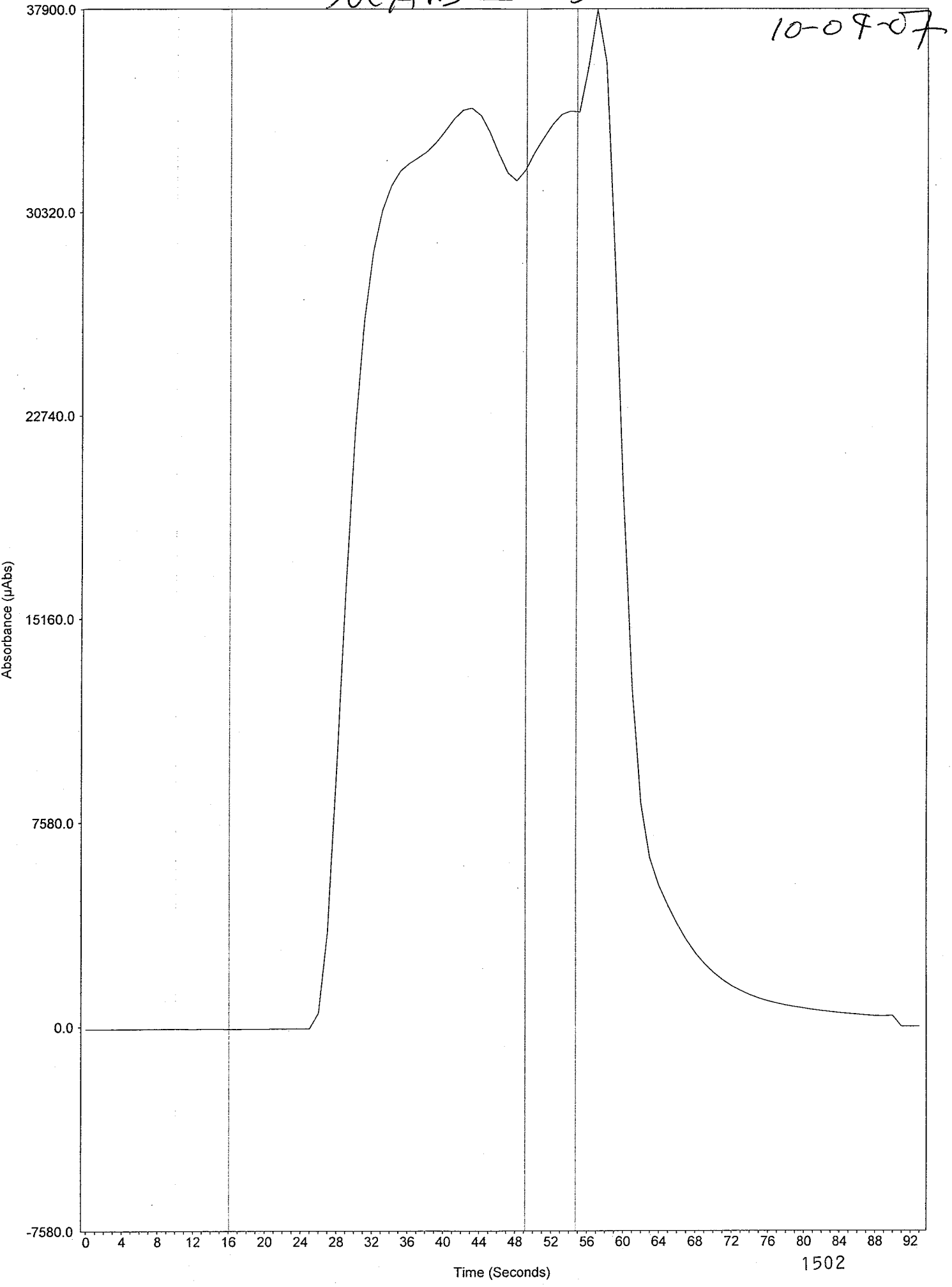
Analysis Date: 10-09-07

	Analyst ES14 10-09-07	Peer BW 10.9	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	—	—	
Carry-over	—	—	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	—	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	LR67
Matrix Duplicates	✓	—	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	—	
Correct samples identified for distribution	✓	—	
Raw data match distributed data	✓	—	
Data filename correct	✓	—	
Necessary Analysts Notes and CAF's	✓	✓	LR67

Std Tube 6

μAbs = 33382 ESR

10-09-07



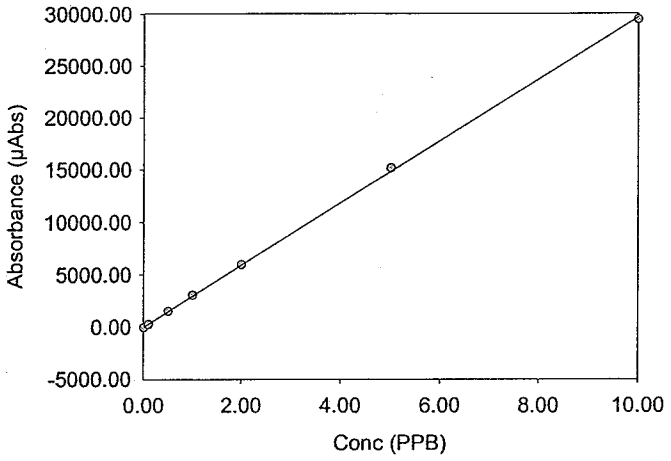
1502

CETAC Hg Analysis Report - 07100900.DB - Tuesday, October 09, 2007, 1:23:45 PM

Analyst
Date Started Tuesday, October 09, 2007, 10:54:43
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	09-Oct-2007, 10:54	0.00	48.70	-9.83	1.00	
Standard #1	09-Oct-2007, 10:56	0.10	0.71	296.00	1.00	
Standard #2	09-Oct-2007, 10:57	0.50	0.71	1530.00	1.00	
Standard #3	09-Oct-2007, 10:59	1.00	1.15	3070.00	1.00	
Standard #4	09-Oct-2007, 11:01	2.00	1.89	5990.00	1.00	
Standard #5	09-Oct-2007, 11:02	5.00	1.77	15200.00	1.00	
Standard #6	09-Oct-2007, 11:04	10.00	2.30	29500.00	1.00	

Calibration Data



Int.	0.000
Slope	2968.168
Correlation	0.99987

SMM

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	09-Oct-2007, 11:07	8.19	1.01	24300.00	1.00	Begin CLP
ICB	09-Oct-2007, 11:09	-0.05	1.81	-150.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	09-Oct-2007, 11:10	3.98	2.49	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	09-Oct-2007, 11:12	-0.02	12.70	-74.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	09-Oct-2007, 11:14	0.11	0.83	314.00	1.00	
LR71 MB SMM	09-Oct-2007, 11:15	-0.00	32.60	-4.87	1.00	
LR71 MBSPK SMM	09-Oct-2007, 11:17	2.10	0.35	6220.00	1.00	
LR71 A SMM	09-Oct-2007, 11:18	0.09	0.59	275.00	1.00	
LR71 ADUP SMM	09-Oct-2007, 11:20	0.09	1.33	271.00	1.00	
LR71 ASPK SMM	09-Oct-2007, 11:22	1.09	1.07	3250.00	1.00	
LR71 B SMM	09-Oct-2007, 11:23	0.29	1.26	875.00	1.00	
LR71 C SMM	09-Oct-2007, 11:25	0.05	2.75	161.00	1.00	
LR71 D SMM	09-Oct-2007, 11:26	0.20	1.10	584.00	1.00	
LR71 E SMM	09-Oct-2007, 11:28	0.20	2.01	602.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	09-Oct-2007, 11:30	3.81	3.22	11300.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	09-Oct-2007, 11:31	-0.01	5.37	-34.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
LR71 F SMM	09-Oct-2007, 11:33	0.23	0.43	670.00	1.00	
LR71 H SMM	09-Oct-2007, 11:35	0.48	0.73	1430.00	1.00	
LR71 I SMM	09-Oct-2007, 11:36	0.09	0.92	254.00	1.00	
LR71 J SMM	09-Oct-2007, 11:38	0.51	0.68	1520.00	1.00	

1503

Analyst
Date Started Tuesday, October 09, 2007, 11:39:55
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
LR71 K SMM	09-Oct-2007, 11:39	0.44	0.61	1300.00	1.00	
LR71 L SMM	09-Oct-2007, 11:41	7.24	0.65	21500.00	1.00	
LR67 MB SMM	09-Oct-2007, 11:43	-0.04	10.90	-119.00	1.00	
LR67 MBSPK SMM	09-Oct-2007, 11:44	2.06	1.31	6100.00	1.00	
LR67 A SMM	09-Oct-2007, 11:46	0.83	1.40	2470.00	1.00	
LR67 ADUP SMM	09-Oct-2007, 11:48	0.84	3.29	2490.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	09-Oct-2007, 11:49	3.95	2.23	11700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	09-Oct-2007, 11:51	-0.02	8.83	-48.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
LR67 ASPK SMM	09-Oct-2007, 11:52	1.42	1.54	4220.00	1.00	
LR67 B SMM	09-Oct-2007, 11:54	1.92	2.48	5700.00	1.00	
LR67 C SMM	09-Oct-2007, 11:56	0.01	32.80	22.50	1.00	
LR67 D SMM	09-Oct-2007, 11:57	0.02	1.67	65.80	1.00	
LR67 E SMM	09-Oct-2007, 11:59	0.03	2.09	91.60	1.00	
LR67 F SMM	09-Oct-2007, 12:01	0.14	1.38	401.00	1.00	
LR67 S SMM	09-Oct-2007, 12:02	0.02	1.96	69.20	1.00	
LR67 T SMM	09-Oct-2007, 12:04	0.03	3.37	80.00	1.00	
LR67 U SMM	09-Oct-2007, 12:05	0.01	7.13	36.60	1.00	
LR67 V SMM	09-Oct-2007, 12:07	0.03	3.99	87.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	09-Oct-2007, 12:09	3.69	2.39	11000.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	09-Oct-2007, 12:10	-0.02	8.88	-45.40	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
LR41 MB SMM	09-Oct-2007, 12:12	-0.00	21.10	-7.42	1.00	
LR41 MBSPK SMM	09-Oct-2007, 12:14	2.02	0.69	5980.00	1.00	
LR41 A SMM	09-Oct-2007, 12:15	-0.01	18.50	-27.80	1.00	
LR41 ADUP SMM	09-Oct-2007, 12:17	0.00	51.90	2.81	1.00	
LR41 ASPK SMM	09-Oct-2007, 12:19	1.06	0.36	3130.00	1.00	
LR41 B SMM	09-Oct-2007, 12:20	-0.00	81.80	-1.28	1.00	
LR41 C SMM	09-Oct-2007, 12:22	-0.00	34.70	-5.20	1.00	
LR41 D SMM	09-Oct-2007, 12:23	0.01	7.86	31.20	1.00	
LR41 E SMM	09-Oct-2007, 12:25	-0.00	107.00	-3.07	1.00	
LR41 F SMM	09-Oct-2007, 12:27	0.02	5.39	60.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	09-Oct-2007, 12:28	3.93	2.95	11700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	09-Oct-2007, 12:30	-0.02	4.95	-53.90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
LR41 G SMM	09-Oct-2007, 12:32	0.01	1.97	21.30	1.00	
LR41 H SMM	09-Oct-2007, 12:33	-0.00	9.46	-4.43	1.00	
LR41 I SMM	09-Oct-2007, 12:35	0.00	104.00	4.57	1.00	
LR41 J SMM	09-Oct-2007, 12:36	0.00	26.00	9.95	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	09-Oct-2007, 12:38	3.95	2.37	11700.00	1.00	

MC 10/11/07

1504

Analyst	
Date Created:	Thursday, July 13, 2000
Worksheet	ARI 10ppb CALIB
Comment	
Sip Duration (Sec.):	30
Rinse Duration (Sec.):	60
Read Delay:	49
Integration Time/Replicate:	1.40
# of Replicates:	4
# of Repeats:	1
Baseline Correction Enabled:	True
Baseline Point 1 Start Time:	10
Baseline Point 1 End Time:	16
2-Point Baseline Corr. Enabled:	False
Baseline Point 2 Start Time:	
Baseline Point 2 End Time:	
Gas Flow (ml/min):	180
Calibration Algorithm:	Linear, Zero Intercept
Recalibration Frequency:	0
Reslope Frequency:	0
Reslope Standard:	5
Calibration Standard #1 Conc.:	0.10 PPB
Calibration Standard #2 Conc.:	0.50 PPB
Calibration Standard #3 Conc.:	1.00 PPB
Calibration Standard #4 Conc.:	2.00 PPB
Calibration Standard #5 Conc.:	5.00 PPB
Calibration Standard #6 Conc.:	10.00 PPB
QC Enabled:	True
QC-RSD Enabled:	True
Limit Condition & Error Action:	If %RSD > 5.0%, if µAbs. > 1500, Flag and Continue
QC-Std Enabled:	True
Limit Condition & Error Action:	If outside 80% .. 120%,Stop
QC-Blank Enabled:	True
Limit Condition & Error Action:	If outside -100 .. 100,Stop

Mercury Standard Prep Log

Digested 20.0mL

Prep Code: TWM
Analyst: EJR
Bath Temp: 95°C
Instrument: Cetac
Date: 10-08-07
Start Time: 1350
End Time: 1550

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	1
STD1	2420.6	0.01	↑	0.1	1
STD2	↓	0.05	↑	0.5	1
STD3	↓	0.10	↑	1.0	1
STD4	↓	0.20	↑	2.0	1
STD5	↓	0.50	↑	5.0	1
STD6	↓	1.00	↑	10.0	1
CRA	↓	0.01	↑	0.1	1
ICB/CCB	—	0.00	↑	0.0	1
ICV/LCS	43-4	0.16	↓	8.0	1
CCV	43-4	0.08	100.0	4.0	1

Chemical/Reagent ID:
HNO_3: I3851
H_2SO_4: I3819
HCl: —
5% $K_2S_2O_8$: MP1297
5% $KMnO_4$: MP1298

Prep Code: SMM
Analyst: EJR
Bath Temp: —
Instrument: Cetac
Date: 10-08-07
Start Time: 1400
End Time: 1430

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	2
STD1	2420.6	0.01	↑	0.1	2
STD2	↓	0.05	↑	0.5	2
STD3	↓	0.10	↑	1.0	2
STD4	↓	0.20	↑	2.0	2
STD5	↓	0.50	↑	5.0	2
STD6	↓	1.00	↑	10.0	2
CRA	↓	0.01	↑	0.1	2
ICB/CCB	—	0.00	↑	0.0	2
ICV/LCS	43-4	0.16	↓	8.0	2
CCV	43-4	0.08	100.0	4.0	2

Chemical/Reagent ID:
HNO_3: I3851
H_2SO_4: I3819
HCl: —
5% $K_2S_2O_8$: MP1297
5% $KMnO_4$: MP1298

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM Matrix: Soil
Analyst: DM Date: 10.05.07
Bath Temp: 95°C Start Time: 1500 End Time: 1530

ARI Sample ID	Sample Bottle #	BOD Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CL P	Comments
LR71 A	4	I8	–	0.248	100.0	1	N	
" ADUP	4	I13	–	0.249		1		
" ASPK	4	I14	–	0.250		1		
" B	4	I23	–	0.294		1		
" C	4	I18	–	0.208		1		
" D	4	H21	–	0.204		1		
" E	4	N5	–	0.232		1		
" F	4	L23	–	0.242		1		
" H	4	P1	–	0.250		1		
" I	4	L8	–	0.290		1		
" J	4	P18	–	0.259		1		
" K	4	T18	–	0.207		1		
" L	4	T3	–	0.291		1		
" MB	–	C15	–	–		1		
" MBSPK	–	E9	–	–	100.0	1	N	

10.5.07 DM

Chemical/Reagent ID:
HNO_3: I3851 H_2SO_4: I3819 HCl: –
5% $K_2S_2O_8$: MP1276 5% $KMnO_4$: MP1298

Metals Prep Logs

prepared
for

ANCHOR ENVIRONMENTAL

Project : KIMBERLY CLARK ANACORTES

ARI JOB NO. LR71

prepared
by

Analytical Resources, Inc.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Metals Total Solids

Oven in:
Analyst: DM Date: 10-04-07 Time: 1555 Temp: 105°C

Oven out:
Analyst: DM Date: 10-05-07 Time: 0900 Temp: 102°C

ARI Sample ID	Tare Weight (g)	Tare + Sample Wet (g)	Tare + Sample Dry (g)	Comments
LR71 A	0.997	10.888	6.519	
" B	1.027	10.241	5.691	
" C	1.016	10.471	7.250	
" D	1.013	10.380	7.365	
" E	1.003	10.097	7.897	
" F	1.012	10.526	7.064	
" H	1.047	10.502	6.992	
" I	1.013	10.337	6.598	
" J	1.030	10.136	7.459	
" K	1.018	10.628	6.659	
" L	1.037	10.304	8.153	
		10-4-07	DM	

Analytical Resources,Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: DM **Final Volume** 50 **Sample ID** LR71 ASPK, MBSPK

Date: 10.05.07 **Final Volume (Hg):** 100

		Prepcode:	SWC	
		Spike Solution:	ICP Routine	ICP No GFA	GFA
		Standard No.:	2410-5		
		Vol Added (mL):	1.0		
	Ag	50 ✓		2.0
S	Al	200	200	
T	As	200 ✓		10
O	Ba	200	200	
C	Be	50	50	
K	Ca	1000	1000	
	Cd	50 ✓		2.0
	Co	50 ✗	NO DIL 50	
C	Cr	50 ✓	10.5 50	
O	Cu	50 ✓	50	
N	Fe	200	200	
C	K	1000	1000	
E	Mg	1000	1000	
N	Mn	50	50	
T	Na	1000	1000	
R	Ni	50 ✓	50	
A	Pb	200 ✓		10
T	Se	200		10
I	Sr	50	50	
O	Tl	200		10
N	V	50	50	
	Zn	50 ✓	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Th	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	SMM	CVA	1.0	0.1	2344-4
Hg MBSPK	↓	CVA	1.0	0.2	↓
Sb	SWC	ICP	2000	0.1	2368-6
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

1510

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM Matrix: Soil
Analyst: DM Date: 10.05.07
Bath Temp: 95°C Start Time: 1500 End Time: 1530

ARI Sample ID	Sample Bottle #	BOD Bottle #	pH<2	Initial Weight (g) ~~Volume (mL)~~	Final Volume (mL)	# $KMnO_4$ Aliquots	CL P	Comments
LR71 A	4	I8	–	0.248	100.0	10/9 1	N	
" ADUP	4	I13	–	0.249		1		
" ASPK	4	I14	–	0.250		1		
" B	4	I23	–	0.294		1		
" C	4	I18	–	0.208		1		
" D	4	H21	–	0.204		1		
" E	4	N5	–	0.232		1		
" F	4	L23	–	0.242		1		
" H	4	P1	–	0.250		1		
" I	4	L8	–	0.290		1		
" J	4	P18	–	0.259		1		
" K	4	T18	–	0.207		1		
" L	4	T3	–	0.291		1		
" MB	–	C15	–	–	↓	1	↓	
" MBSPK	–	E9	–	–	100.0	1	N	

10.5.07 DM

Chemical/Reagent ID:
HNO_3: I3851 H_2SO_4: I3819 HCl: –
5% $K_2S_2O_8$: MP1276 5% $KMnO_4$: MP1298

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: DM
Matrix: Soil

Date: 10.05.07
Block Temp: 92°C

ARI Sample ID	Btl #	pH<2	Prep Code: SWC Initial Wt (g) ~~Vol (mL)~~	Prep Code: SWC Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
LB71 A	4	—	1.052	50.0			
" ADUP	4	—	1.053				
" ASPK	4	—	1.054				
" B	4	—	1.069				
" C	4	—	1.057				
" D	4	—	1.037				
" E	4	—	1.088				
" F	4	—	1.044				
" H	4	—	1.026				
" I	4	—	1.034				
" J	4	—	1.039				
" K	4	—	1.099				
" L	4	—	1.027				
" MB	—	—	—				
" MBSPK	—	—	—	50.0			
				10-5-07 DM			

Chemical/Reagent ID:
HNO_3: MP1299 / I3851 HCl: I2854 H_2O_2: I3850

ANALYTICAL
RESOURCES
INCORPORATED

ANALYST NOTES - Metals

ARI Job No: LR71 ~~LR71~~ 10.10

Client Name: Anchor

Parameter: ICP

Client Project:

☐ Job OK, no corrective action required

LR71 Asph 20%R for Sb

Analyst: Barbara Test

Date Analyzed: 10-10-07

5048F

Rev. 4
04/18/95

General Chemistry Analysis
QC Summary Data

prepared
for

ANCHOR ENVIRONMENTAL

Project : KIMBERLY CLARK ANACORTES

ARI JOB NO. LR71

prepared
by

Analytical Resources, Inc.

METHOD BLANK RESULTS-CONVENTIONALS
LR71-Anchor Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/16/07

Project: Kimberly Clark Anacortes
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	10/02/07	Percent	< 0.01 U
	10/02/07		< 0.01 U
	10/02/07		< 0.01 U
Total Organic Carbon	10/15/07	Percent	< 0.020 U

LAB CONTROL RESULTS-CONVENTIONALS
LR71-Anchor Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/16/07

Project: Kimberly Clark Anacortes
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon	10/15/07	Percent	0.528	0.500	105.6%

STANDARD REFERENCE RESULTS-CONVENTIONALS
LR71-Anchor Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/16/07

Project: Kimberly Clark Anacortes
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST #8704	10/15/07	Percent	3.43	3.35	102.4%

REPLICATE RESULTS-CONVENTIONALS
LR71-Anchor Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/16/07

Project: Kimberly Clark Anacortes
Event: NA
Date Sampled: 09/28/07
Date Received: 09/29/07

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: LR71G Client ID: AN-SS-REF-070928					
Total Solids	10/02/07	Percent	74.20	74.20 74.30	0.1%
Total Organic Carbon	10/15/07	Percent	0.951	1.02 1.20	12.2%

MS/MSD RESULTS-CONVENTIONALS
LR71-Anchor Environmental, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 10/16/07

Project: Kimberly Clark Anacortes
Event: NA
Date Sampled: 09/28/07
Date Received: 09/29/07

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: LR71G Client ID: AN-SS-REF-070928						
Total Organic Carbon	10/15/07	Percent	0.951	2.08	0.988	114.3%

General Chemistry Analysis
Sample Data

prepared
for

ANCHOR ENVIRONMENTAL

Project : KIMBERLY CLARK ANACORTES

ARI JOB NO. LR71

prepared
by

Analytical Resources, Inc.