Sample Information Detail Report
Document Name: 100628wb

File Description
Sample Information File

Parameters Common to All Samples

Batch ID	100628wb
Analyst Name	JBN

Parameters That Vary By Sample

Sample No	A/S Location	Sample ID	Aliquot Volume
1	12	B0F2809-BLK1@2x	
2	13	B0F2809-BS1@2x	
3	14	1006381-01@2x WET	
4	15	B0F2809-DUP1@2x	
5	16	B0F2809-DUP2@2x	
6	17	B0F2809-MS1@2x	
7	18	B0F2809-MSD1@2x	

Sample No	Diluted To Vol.	Wash Time *
1		
2		
3		
4		
5		
6		
7		

ICP-OES METALS DATA CHECK LIST
EPA METHOD 6010b

Analyst: JBH

Checked By: BW

Date Analyzed: 6/28/2010

Date Checked: 6/29/2010

1. ✓ Initial calibration performed when necessary
2. ✓ ICV (Percent Difference ≤ 10), after calibration
4. ✓ CCV (Percent Difference ≤ 10), after calibration, every 10 samples, and at end
5. ✓ CCB (all analytes below detection limits), after calibration, every 10 samples, and at end
6. ✓ Interference Check Standard (ICSAB), after calibration (Percent Recovery 80-120, or below detection limit)
7. ✓ Method Blank (BLK), one per batch of no more than twenty samples (All analytes below detection limits)
8. ✓ LCS/LFB (BS), one per batch of no more than twenty samples (Percent Recovery 80-120)
9. ✓ MS/MSD, one per batch of no more than twenty samples (Percent Recovery 70-130, Ag & Sb 60-140)
10. ✓ Sample Analysis, calculation and reporting (check 15% of all samples analyzed) results within Linear Dynamic Range (LDR), correct use of digestion an dilution factors

Comments:

PREPARATION BENCH SHEET

B0F2809

Sierra Analytical Labs, Inc.

Matrix: Extract **Prepared using: Metals - EPA 3010A** **Printed: 6/28/2010 11:20:02A**

Lab Number	Prepared	Initial (mL)	Final (mL)	Spike ID	Source ID	ul Spike	Comments
1006381-01 *Cd STLC ICP 6010B*	06/28/10 11:01	2.5	25	THE NON-TOXIC SOLAR ALLIANCE e.V. (			
B0F2809-BLK1	06/28/10 11:01	2.5	25				
B0F2809-BS1	06/28/10 11:01	2.5	25	0052301		50	
B0F2809-DUP1	06/28/10 11:01	2.5	25		1006381-01		
B0F2809-DUP2	06/28/10 11:01	2.5	25		1006381-01		
B0F2809-MS1	06/28/10 11:01	2.5	25	0052301	1006381-01	50	
B0F2809-MSD1	06/28/10 11:01	2.5	25	0052301	1006381-01	50	

Justin B. Null 6/28/2010
Spiking Witnessed By Date

Justin B. Null 6/28/2010
Preparation Reviewed By Date

Justin B. Null 6/28/2010
Extracts Received By Date

Analysis Begun

Start Time: 6/28/2010 4:34:46 PM
Logged In Analyst: justinn
Spectrometer Model: Optima 4300 DV, S/N 077N9110304
Plasma On Time: 6/28/2010 12:00:47 PM
Technique: ICP Continuous
Autosampler Model: AS-93plus

Sample Information File: C:\pe\SIERRA LABORATORIES\Sample Information\100628wb.sif
Batch ID: 100628wb
Results Data Set: 100628wb
Results Library: C:\pe\SIERRA LABORATORIES\Results\Results.mdb

Method Loaded
Method Name: Cd WET 6010b
IEC File:
Method Description: ICP - Metals Analysis
Method Last Saved: 6/28/2010 4:34:32 PM
MSF File: 091103.msf

Sequence No.: 1
Sample ID: Calib Blank 1
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 1
Date Collected: 6/28/2010 4:34:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	72312.0	467.41	0.65%	1.000	mg/L
Yb 369.419	52380.3	973.87	1.86%	1.000	mg/L
Cd 228.802†	21.7	3.69	16.96%	[0.00]	mg/L
Cd 214.440†	-22.4	8.38	37.40%	[0.00]	mg/L

Sequence No.: 2
Sample ID: Cal Std 1 0.01ppm
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 2
Date Collected: 6/28/2010 4:39:08 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Cal Std 1 0.01ppm

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	74573.5	1253.21	1.68%	1.031	mg/L
Yb 369.419	54464.1	837.58	1.54%	1.040	mg/L
Cd 228.802†	701.8	13.28	1.89%	[0.010]	mg/L
Cd 214.440†	919.7	29.84	3.24%	[0.010]	mg/L

Sequence No.: 3
Sample ID: Cal Std 2 0.10ppm
Analyst:
Initial Sample Wt:
Dilution:
Autosampler Location: 3
Date Collected: 6/28/2010 4:43:33 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Cal Std 2 0.10ppm

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	73497.4	388.41	0.53%	1.016	mg/L
Yb 369.419	53803.6	752.19	1.40%	1.027	mg/L
Cd 228.802†	6946.7	85.66	1.23%	[0.100]	mg/L
Cd 214.440†	9121.5	184.01	2.02%	[0.100]	mg/L

Sequence No.: 4
Sample ID: Cal Std 3 1.00ppm
Analyst:
Initial Sample Wt:
Autosampler Location: 4
Date Collected: 6/28/2010 4:45:54 PM
Data Type: Original
Initial Sample Vol:

Dilution: Sample Prep Vol:

Mean Data: Cal Std 3 1.00ppm

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	70637.0	600.68	0.85%	0.9768	mg/L
Yb 369.419	50951.5	809.64	1.59%	0.9727	mg/L
Cd 228.802†	68694.6	1047.26	1.52%	[1.00]	mg/L
Cd 214.440†	88042.8	1959.23	2.23%	[1.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Cd 228.802	3	Lin, Calc Int	30.0	68670	0.00000	0.999999	
Cd 214.440	3	Lin, Calc Int	115.5	87950	0.00000	0.999994	

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Sequence No.: 5
Sample ID: ICV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 7
Date Collected: 6/28/2010 4:48:18 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	72314.0	1.000	mg/L	0.0114				1.14%
Yb 369.419	52408.3	1.001	mg/L	0.0131				1.31%
Cd 228.802†	44767.4	0.6515	mg/L	0.01020	0.6515	mg/L	0.01020	1.57%
QC value within limits for Cd 228.802 Recovery = 97.67%								
Cd 214.440†	58583.5	0.6648	mg/L	0.01577	0.6648	mg/L	0.01577	2.37%
QC value within limits for Cd 214.440 Recovery = 99.67%								

All analyte(s) passed QC.

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Sequence No.: 6
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/28/2010 4:50:37 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	72317.0	1.000	mg/L	0.0132				1.32%
Yb 369.419	52648.0	1.005	mg/L	0.0167				1.66%
Cd 228.802†	34267.0	0.4986	mg/L	0.00406	0.4986	mg/L	0.00406	0.81%
QC value within limits for Cd 228.802 Recovery = 99.72%								
Cd 214.440†	44283.3	0.5022	mg/L	0.00360	0.5022	mg/L	0.00360	0.72%
QC value within limits for Cd 214.440 Recovery = 100.44%								

All analyte(s) passed QC.

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Sequence No.: 7
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/28/2010 4:53:01 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	71633.4	0.9906	mg/L	0.00276				0.28%
Yb 369.419	52573.2	1.004	mg/L	0.0180				1.79%
Cd 228.802†	2.3	-0.0004	mg/L	0.00003	-0.0004	mg/L	0.00003	6.82%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Cd 214.440†	7.0	-0.0012	mg/L	0.00004	-0.0012	mg/L	0.00004	3.26%

QC value within limits for Cd 214.440 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 8
Sample ID: ICSAB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 10
Date Collected: 6/28/2010 4:57:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	62044.6	0.8580	mg/L	0.00523				0.61%
Yb 369.419	47906.2	0.9146	mg/L	0.00873				0.95%
Cd 228.802†	67206.5	0.9783	mg/L	0.01015	0.9783	mg/L	0.01015	1.04%
QC value within limits for Cd 228.802 Recovery = 97.83%								
Cd 214.440†	77258.6	0.8771	mg/L	0.02337	0.8771	mg/L	0.02337	2.66%
QC value within limits for Cd 214.440 Recovery = 87.71%								

All analyte(s) passed QC.

Sequence No.: 9
Sample ID: Rinse Blank
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 11
Date Collected: 6/28/2010 4:59:46 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: Rinse Blank

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	71536.6	0.9893	mg/L	0.00751				0.76%
Yb 369.419	52472.3	1.002	mg/L	0.0118				1.18%
Cd 228.802†	9.1	-0.0003	mg/L	0.00005	-0.0003	mg/L	0.00005	15.57%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Cd 214.440†	12.9	-0.0012	mg/L	0.00009	-0.0012	mg/L	0.00009	7.61%
QC value within limits for Cd 214.440 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 10
Sample ID: B0F2809-BLK1@2x
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 12
Date Collected: 6/28/2010 5:04:10 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: B0F2809-BLK1@2x

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	63604.9	0.8796	mg/L	0.01571				1.79%
Yb 369.419	45971.6	0.8777	mg/L	0.01128				1.28%
Cd 228.802†	-1.1	-0.0005	mg/L	0.00004	-0.0005	mg/L	0.00004	9.88%
Cd 214.440†	-2.7	-0.0013	mg/L	0.00002	-0.0013	mg/L	0.00002	1.15%

Sequence No.: 11
Sample ID: B0F2809-BS1@2x
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 13
Date Collected: 6/28/2010 5:08:36 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: B0F2809-BS1@2x

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	63835.7	0.8828	mg/L	0.00964				1.09%
Yb 369.419	45857.6	0.8755	mg/L	0.00931				1.06%
Cd 228.802†	7241.8	0.1050	mg/L	0.00055	0.1050	mg/L	0.00055	0.53%
Cd 214.440†	9407.7	0.1057	mg/L	0.00360	0.1057	mg/L	0.00360	3.41%

Sequence No.: 12
Sample ID: 1006381-01@2x WET
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 14
Date Collected: 6/28/2010 5:11:04 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: 1006381-01@2x WET

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	64069.1	0.8860	mg/L	0.01099				1.24%
Yb 369.419	46245.8	0.8829	mg/L	0.00941				1.07%
Cd 228.802†	9664.3	0.1403	mg/L	0.00064	0.1403	mg/L	0.00064	0.45%
Cd 214.440†	12261.8	0.1381	mg/L	0.00150	0.1381	mg/L	0.00150	1.08%

Sequence No.: 13
Sample ID: B0F2809-DUP1@2x
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 15
Date Collected: 6/28/2010 5:13:25 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: B0F2809-DUP1@2x

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	63261.3	0.8748	mg/L	0.00212				0.24%
Yb 369.419	45421.7	0.8672	mg/L	0.00360				0.42%
Cd 228.802†	10155.5	0.1475	mg/L	0.00035	0.1475	mg/L	0.00035	0.24%
Cd 214.440†	13111.6	0.1478	mg/L	0.00247	0.1478	mg/L	0.00247	1.67%

Sequence No.: 14
Sample ID: B0F2809-DUP2@2x
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 16
Date Collected: 6/28/2010 5:15:51 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: B0F2809-DUP2@2x

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	65095.8	0.9002	mg/L	0.01471				1.63%
Yb 369.419	46414.7	0.8861	mg/L	0.01781				2.01%
Cd 228.802†	9979.4	0.1449	mg/L	0.00200	0.1449	mg/L	0.00200	1.38%
Cd 214.440†	12799.9	0.1442	mg/L	0.00147	0.1442	mg/L	0.00147	1.02%

Sequence No.: 15
Sample ID: B0F2809-MS1@2x
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 17
Date Collected: 6/28/2010 5:18:13 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: B0F2809-MS1@2x

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	65194.7	0.9016	mg/L	0.00976				1.08%
Yb 369.419	46514.9	0.8880	mg/L	0.02522				2.84%
Cd 228.802†	16678.6	0.2424	mg/L	0.00497	0.2424	mg/L	0.00497	2.05%
Cd 214.440†	21720.2	0.2457	mg/L	0.00763	0.2457	mg/L	0.00763	3.11%

Sequence No.: 16
Sample ID: B0F2809-MSD1@2x
Analyst: JBN
Initial Sample Wt:
Dilution:

Autosampler Location: 18
Date Collected: 6/28/2010 5:20:35 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: B0F2809-MSD1@2x

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	66132.5	0.9145	mg/L	0.00505				0.55%
Yb 369.419	47442.5	0.9057	mg/L	0.00739				0.82%
Cd 228.802†	16486.5	0.2396	mg/L	0.00092	0.2396	mg/L	0.00092	0.39%
Cd 214.440†	21102.2	0.2386	mg/L	0.00212	0.2386	mg/L	0.00212	0.89%

Sequence No.: 17
Sample ID: CCV
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 8
Date Collected: 6/28/2010 5:23:00 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	72044.1	0.9963	mg/L	0.00505				0.51%
Yb 369.419	52754.7	1.007	mg/L	0.0128				1.27%
Cd 228.802†	34048.0	0.4954	mg/L	0.00481	0.4954	mg/L	0.00481	0.97%
QC value within limits for Cd 228.802 Recovery = 99.08%								
Cd 214.440†	43813.9	0.4969	mg/L	0.01438	0.4969	mg/L	0.01438	2.90%
QC value within limits for Cd 214.440 Recovery = 99.37%								

All analyte(s) passed QC.

Sequence No.: 18
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 6/28/2010 5:25:23 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	72207.1	0.9986	mg/L	0.01615				1.62%
Yb 369.419	53327.8	1.018	mg/L	0.0302				2.97%
Cd 228.802†	-0.7	-0.0004	mg/L	0.00001	-0.0004	mg/L	0.00001	1.85%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Cd 214.440†	4.5	-0.0013	mg/L	0.00009	-0.0013	mg/L	0.00009	7.02%
QC value within limits for Cd 214.440 Recovery = Not calculated								

All analyte(s) passed QC.