Calscience Environmental Laboratories, Inc.

Supplemental Report 1

August 18, 2009

Additional requested analyses are reported as a stand-alone report.

DOCKET
08-AFC-2
DATE 08/18/09
RECD. 08/20/09

Mike Flack
AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Subject: **Calscience Work Order No.:** **09-08-0434**
Client Reference: **Beacon Solar / 10056-014-400**

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/6/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Vikas Patel

Calscience Environmental
Laboratories, Inc.
Vikas Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 3005A Filt.
Method: EPA 6010B
Units: mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Arciero #33	**09-08-0434-1-P**	**08/05/09 12:30**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 12:35**	**090811LA3F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	12.4	0.500	1	
Calcium	206	0.100	1		Sodium	247	0.500	1	
Iron	ND	0.100	1		Strontium	0.937	0.0300	1	
Magnesium	25.9	0.100	1		Boron	6.82	0.0200	1	
Manganese	0.0669	0.00500	1		Silicon	22.0	0.0500	1	

Method Blank	**097-01-003-9,635**	**N/A**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 16:36**	**090811LA3F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	ND	0.500	1	
Calcium	ND	0.100	1		Sodium	ND	0.500	1	
Iron	ND	0.100	1		Strontium	ND	0.0300	1	
Magnesium	ND	0.100	1		Boron	ND	0.0200	1	
Manganese	ND	0.00500	1		Silicon	ND	0.0500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment		Date Received:	08/06/09
1220 Avenida Acaso		Work Order No:	09-08-0434
Camarillo, CA 93012-8738		Preparation:	EPA 3010A Total
		Method:	EPA 6010B
		Units:	mg/L
Project: Beacon Solar / 10056-014-400			Page 2 of 2

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Arciero #33	**09-08-0434-1-R**	**08/05/09 12:30**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 12:38**	**090811LA3A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	0.0724	0.0500	1		Potassium	13.1	0.500	1	
Calcium	204	0.100	1		Sodium	252	0.500	1	
Iron	15.1	0.100	1		Strontium	0.946	0.0300	1	
Magnesium	26.9	0.100	1		Boron	7.07	0.0200	1	
Manganese	0.219	0.00500	1		Silicon	24.6	0.0500	1	

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-003-9,631**	**N/A**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 16:36**	**090811LA3A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	ND	0.500	1	
Calcium	ND	0.100	1		Sodium	ND	0.500	1	
Iron	ND	0.100	1		Strontium	ND	0.0300	1	
Magnesium	ND	0.100	1		Boron	ND	0.0200	1	
Manganese	ND	0.00500	1		Silicon	ND	0.0500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 3005A Filt. / EPA 7470A Filt.
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Arciero #33	**09-08-0434-1-P**	**08/05/09 12:30**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/14/09 14:17**	**090811L02F**

Comment(s): -Mercury was analyzed on 8/10/2009 11:58:33 AM with batch 090807L05F

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Molybdenum	0.00195	0.00100	1	
Arsenic	ND	0.00100	1		Nickel	0.00209	0.00100	1	
Barium	0.0102	0.00100	1		Selenium	0.00491	0.00100	1	
Beryllium	ND	0.00100	1		Silver	ND	0.00100	1	
Cadmium	ND	0.00100	1		Thallium	ND	0.00100	1	
Chromium	0.00151	0.00100	1		Vanadium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Zinc	ND	0.00500	1	
Copper	0.00104	0.00100	1		Lead	ND	0.00100	1	

Arciero #33	**09-08-0434-1**	**08/05/09 12:30**	**Aqueous**	**Mercury**	**08/07/09**	**08/10/09 11:58**	**090807L05F**

Comment(s): -Mercury was analyzed on 8/11/2009 2:55:06 PM with batch 090810L07

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

Method Blank	**096-06-003-2,284**	**N/A**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09 20:30**	**090811L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-4,260**	**N/A**	**Aqueous**	**Mercury**	**08/07/09**	**08/10/09 11:31**	**090807L05F**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Arciero #33	**09-08-0434-1-Q**	**08/05/09 12:30**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/14/09 14:20**	**090811L02**

Comment(s): -Mercury was analyzed on 8/11/2009 2:55:06 PM with batch 090810L07

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Zinc	0.196	0.00500	1	
Arsenic	0.00160	0.00100	1		Mercury	ND	0.000500	1	
Barium	0.0520	0.00100	1		Molybdenum	0.00165	0.00100	1	
Beryllium	ND	0.00100	1		Nickel	0.00196	0.00100	1	
Cadmium	ND	0.00100	1		Selenium	0.00482	0.00100	1	
Chromium	0.00285	0.00100	1		Silver	ND	0.00100	1	
Cobalt	ND	0.00100	1		Thallium	ND	0.00100	1	
Copper	0.00307	0.00100	1		Vanadium	0.00201	0.00100	1	
Lead	0.00118	0.00100	1						

Method Blank	**096-06-003-2,275**	**N/A**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09 20:33**	**090811L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-4,263**	**N/A**	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09 14:01**	**090810L07**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Arciero #33	**09-08-0434-1**	**08/05/09**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Fluoride	0.20	0.10	1		mg/L	N/A	08/06/09	EPA 300.0
Chloride	220	10	10		mg/L	N/A	08/06/09	EPA 300.0
Nitrite (as N)	ND	0.10	1		mg/L	N/A	08/06/09	EPA 300.0
Nitrate (as N)	1.2	0.10	1		mg/L	N/A	08/06/09	EPA 300.0
Sulfate	530	10	10		mg/L	N/A	08/06/09	EPA 300.0
Chromium, Hexavalent	ND	1.0	1		ug/L	N/A	08/06/09	EPA 7199

Method Blank			**N/A**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Fluoride	ND	0.10	1		mg/L	N/A	08/06/09	EPA 300.0
Chloride	ND	1.0	1		mg/L	N/A	08/06/09	EPA 300.0
Nitrite (as N)	ND	0.10	1		mg/L	N/A	08/06/09	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	08/06/09	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	08/06/09	EPA 300.0
Chromium, Hexavalent	ND	1.0	1		ug/L	N/A	08/06/09	EPA 7199

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 3010A Total
Method: EPA 6010B

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0853-1	**Aqueous**	**ICP 5300**	**08/11/09**	**08/12/09**	**090811SA3**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aluminum	115	126	73-145	6	0-16	
Calcium	4X	4X	77-113	4X	0-11	Q
Iron	4X	4X	65-149	4X	0-21	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Manganese	4X	4X	86-116	4X	0-7	Q
Potassium	130	137	83-131	3	0-7	3
Sodium	4X	4X	73-127	4X	0-9	Q
Strontium	4X	4X	81-123	4X	0-6	Q
Boron	105	109	81-135	1	0-7	
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 3020A Total
Method: EPA 6020

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0865-2	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	62	60	85-133	2	0-11	3
Arsenic	82	82	73-127	0	0-11	
Barium	4X	4X	74-128	4X	0-10	Q
Beryllium	110	105	56-122	5	0-11	
Cadmium	104	103	84-114	1	0-8	
Chromium	107	101	73-133	5	0-11	
Cobalt	105	106	79-121	1	0-10	
Copper	105	105	72-108	0	0-10	
Lead	107	110	79-121	3	0-10	
Molybdenum	75	76	83-137	1	0-10	3
Nickel	104	105	68-122	1	0-10	
Selenium	74	72	59-125	3	0-12	
Silver	107	106	68-128	1	0-14	
Thallium	101	104	73-121	3	0-11	
Vanadium	110	104	77-137	4	0-15	
Zinc	0	0	43-145	2	0-39	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

AECOM Environment		Date Received	08/06/09
1220 Avenida Acaso		Work Order No:	09-08-0434
Camarillo, CA 93012-8738		Preparation:	EPA 3020A Total
		Method:	EPA 6020

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
09-08-0865-2	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811S02**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	110	106	75-125	3	0-11	
Arsenic	92	89	75-125	4	0-11	
Barium	4X	4X	75-125	4X	0-10	Q
Beryllium	106	101	75-125	5	0-11	
Cadmium	99	96	75-125	3	0-8	
Chromium	97	93	75-125	4	0-11	
Cobalt	102	99	75-125	3	0-10	
Copper	98	96	75-125	1	0-10	
Lead	104	104	75-125	0	0-10	
Molybdenum	99	97	75-125	2	0-10	
Nickel	98	95	75-125	2	0-10	
Selenium	79	77	75-125	2	0-12	
Silver	104	102	75-125	2	0-14	
Thallium	98	100	75-125	2	0-11	
Vanadium	100	95	75-125	4	0-15	
Zinc	0	0	75-125	2	0-39	5

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 7470A Total
Method: EPA 7470A

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0737-1	**Aqueous**	**Mercury**	**08/07/09**	**08/10/09**	**090807S05**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	102	95	57-141	7	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/06/09
Work Order No: 09-08-0434
Preparation: EPA 7470A Total
Method: EPA 7470A

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0743-14	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09**	**090810S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	105	110	57-141	4	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0434

Project: Beacon Solar / 10056-014-400

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	EPA 7199	09-08-0431-1	08/06/09	N/A	93	93	70-130	0	0-25	
Fluoride	EPA 300.0	09-08-0398-1	08/06/09	N/A	92	92	80-120	0	0-20	
Chloride	EPA 300.0	09-08-0398-1	08/06/09	N/A	4X	4X	80-120	4X	0-20	Q
Nitrite (as N)	EPA 300.0	09-08-0398-1	08/06/09	N/A	99	99	80-120	0	0-20	
Nitrate (as N)	EPA 300.0	09-08-0398-1	08/06/09	N/A	99	99	80-120	0	0-20	
Sulfate	EPA 300.0	09-08-0398-1	08/06/09	N/A	4X	4X	80-120	4X	0-20	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received:	N/A
Work Order No:	09-08-0434
Preparation:	EPA 3010A Total
Method:	EPA 6010B

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-9,631	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09**	**090811LA3A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aluminum	97	97	80-120	0	0-20	
Calcium	101	102	80-120	1	0-20	
Iron	107	108	80-120	1	0-20	
Magnesium	106	107	80-120	1	0-20	
Manganese	103	103	80-120	0	0-20	
Potassium	95	97	80-120	2	0-20	
Sodium	101	103	80-120	2	0-20	
Strontium	101	103	80-120	2	0-20	
Boron	88	89	80-120	2	0-20	
Silicon	99	96	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment	Date Received:	N/A
1220 Avenida Acaso	Work Order No:	09-08-0434
Camarillo, CA 93012-8738	Preparation:	EPA 3005A Filt.
	Method:	EPA 6010B

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-9,635	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09**	**090811LA3F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aluminum	97	97	80-120	0	0-20	
Calcium	101	102	80-120	1	0-20	
Iron	107	108	80-120	1	0-20	
Magnesium	106	107	80-120	1	0-20	
Manganese	103	103	80-120	0	0-20	
Potassium	95	97	80-120	2	0-20	
Sodium	101	103	80-120	2	0-20	
Strontium	101	103	80-120	2	0-20	
Boron	88	89	80-120	2	0-20	
Silicon	99	96	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0434
Preparation: EPA 3020A Total
Method: EPA 6020

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-2,275	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	94	97	80-120	73-127	3	0-20	
Arsenic	99	101	80-120	73-127	2	0-20	
Barium	98	99	80-120	73-127	1	0-20	
Beryllium	118	115	80-120	73-127	2	0-20	
Cadmium	101	102	80-120	73-127	1	0-20	
Chromium	102	100	80-120	73-127	2	0-20	
Cobalt	100	100	80-120	73-127	0	0-20	
Copper	103	104	80-120	73-127	1	0-20	
Lead	99	99	80-120	73-127	1	0-20	
Molybdenum	99	99	80-120	73-127	0	0-20	
Nickel	98	100	80-120	73-127	2	0-20	
Selenium	97	96	80-120	73-127	1	0-20	
Silver	95	96	80-120	73-127	2	0-20	
Thallium	94	94	80-120	73-127	1	0-20	
Vanadium	105	103	80-120	73-127	2	0-20	
Zinc	102	102	80-120	73-127	1	0-20	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0434
Preparation: EPA 3005A Filt.
Method: EPA 6020

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-2,284	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811L02F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	94	97	80-120	73-127	3	0-20	
Arsenic	99	101	80-120	73-127	2	0-20	
Barium	98	99	80-120	73-127	1	0-20	
Beryllium	118	115	80-120	73-127	2	0-20	
Cadmium	101	102	80-120	73-127	1	0-20	
Chromium	102	100	80-120	73-127	2	0-20	
Cobalt	100	100	80-120	73-127	0	0-20	
Copper	103	104	80-120	73-127	1	0-20	
Lead	99	99	80-120	73-127	1	0-20	
Molybdenum	99	99	80-120	73-127	0	0-20	
Nickel	98	100	80-120	73-127	2	0-20	
Selenium	97	96	80-120	73-127	1	0-20	
Silver	95	96	80-120	73-127	2	0-20	
Thallium	94	94	80-120	73-127	1	0-20	
Vanadium	105	103	80-120	73-127	2	0-20	
Zinc	102	102	80-120	73-127	1	0-20	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0434
Preparation: EPA 7470A Filt.
Method: EPA 7470A

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-4,260	**Aqueous**	**Mercury**	**08/07/09**	**08/10/09**	**090807L05F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	94	93	85-121	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment		Date Received:	N/A
1220 Avenida Acaso		Work Order No:	09-08-0434
Camarillo, CA 93012-8738		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-4,263	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09**	**090810L07**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	102	102	85-121	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0434

Project: Beacon Solar / 10056-014-400

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chromium, Hexavalent	EPA 7199	099-05-123-2,408	N/A	08/06/09	95	95	80-120	0	0-20	
Fluoride	EPA 300.0	099-12-906-382	N/A	08/06/09	92	92	90-110	0	0-15	
Chloride	EPA 300.0	099-12-906-382	N/A	08/06/09	100	101	90-110	1	0-15	
Nitrite (as N)	EPA 300.0	099-12-906-382	N/A	08/06/09	101	101	90-110	0	0-15	
Nitrate (as N)	EPA 300.0	099-12-906-382	N/A	08/06/09	97	98	90-110	1	0-15	
Sulfate	EPA 300.0	099-12-906-382	N/A	08/06/09	99	99	90-110	1	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-08-0434

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

AECOM
AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738
Phone (805) 388-3775
Fax (805) 388-3577

ANALYTICAL LAB: Calscience

0434

SITE BSEP DATE 8/5 PAGE 1 OF 1

CLIENT: AECOM
PROJECT NAME: Beacon
PROJECT MANAGER: Mike Flack
JOB #: 10056-014-400
COELT LOG CODE: YES / NO
SAMPLER SIGNATURE: [signature]

ANALYTICAL METHODS

LINE ITEM	SAMPLE NO.	DATE	TIME	8260B / 5035 Volatile Organics	8260B BTEX / MTBE / Oxygenates	8015 Diesel / Gasoline / Full Range	8081A Pesticides / 8141A	~~CAM 17 Metals~~ Dissulfide / Tot Sulfide	SVOCs	Tot. Toxic Halogen 5310	PCBs 8082	Herbicides 8151A	Metals (lab filtered)	Metals, Gross Alpha	Hex. Chromium	Anions, Alk, PO4, O-PO4	Reactive Silica	BOD Hardness (total), TOC	SS, TDS TSS	Tot. Cyanide, Amen. Cyanide	Nitrogen, Ammonia	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	OBSERVATIONS/ COMMENTS
1.	Arciero #33	8/5/09	1230	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	W	G/Pl	33	Glass + Plastic
2.	QCTB	8/5/09		X																		W	G	2	
3.																									
4.																									
5.																									
6.																									
7.																									
8.																									
9.																									
10.																									

TURN-AROUND TIME: TDS - 24-48hr; Everything else ~ STD

OBSERVATIONS/ COMMENTS: Please Analyze TDS immediately. Hold other samples. Questions: ask Mike Flack

MATRIX TYPE: S - Soil, W - Water, O - Other
CONTAINER TYPE: G - Glass Bottle, P - Plastic, O - Other

PRESERVATIVES:
All samples are preserved on ice.
Water samples are preserved as indicated on the sample labels.

TEMPERATURE BLANK EACH COOLER: [X] YES [ ] NO

	SIGNATURE	COMPANY	DATE	TIME	
RELINQUISHED BY: [signature]	Ian Stone	AECOM Environment	8/5/09	0430	TOTAL NUMBER OF CONTAINERS: 33
RECEIVED BY: FedEx		FedEx			METHOD OF SHIPMENT: FedEx
RELINQUISHED BY:					SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:
RECEIVED BY: FedEx 870340091254	[signature]	CEL	8/6/09	1000	

DISTRIBUTION: White and Canary = Laboratory   Pink = AECOM Environment

Serial No. 1557

0434

SUMMARY OF WATER QUALITY PARAMETERS
OFFSITE WELL SAMPLING
KOEHN LAKE
BEACON SOLAR ENERGY PROJECT

CHEMICAL GROUP	ANALYTE[1]	ANALYTICAL METHOD
Volatile Organic Compounds (VOCs)	Volatile Organic Compounds	USEPA 8260B
Semivolatile Organic Compounds (SVOCs)	Semivolatile Organic Compounds	USEPA 8270C
Petrolem Hydrocarbons	Gasoline Range Organics (GRO)	USEPA 8015B
	Diesel Range Organics (DRO)	USEPA 8015B
	Oil Range Organics (ORO) - Motor Oil	USEPA 8015B
Organochlorine Pesticides	OCPs	USEPA 8081A
Organophosphorous Pesticides	OPPs	USEPA 8141A
Chlorinated Herbicides	Chlorinated Herbicides	USEPA 8151A
Polychlorinated Biphenyls	PCBs	USEPA 8082
METALS (Including Major Anions)	Dissolved, Al, B, Ca, Fe, K, Mg., Mn, Na, Sr (Major Cations) Will Add Si.	USEPA 6010 B
	Total, Al, B, Ca, Fe, K, Mg., Mn, Na, Sr (Major Cations) Will Add Si.	USEPA 6010 B
	Dissolved CCR Title 22 Metals, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Tl, V, Zn	USEPA 6020/7420A
	Total CCR Title 22 Metals, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Hg, Mo, Ni, Se, Ag, Tl, V, Zn	USEPA 6020/7420A
	Chromium, Hexavalent (USEPA 7199)	USEPA 7199
	Recative Silca (MWH LABS)	SM 4500-SiO2 C
MAJOR ANIONS	Cl, F, NO3, NO2, SO4	USEPA 300.0
	Ammonia as NH3 (titration)	SM 4500-NH3
GENERAL WATER CHEMISTRY	Alkalinity Speciated	SM 2320B
	Biochemical Oxygen Demand (BOD)	SM 5210B
	Bicarbonate Alkalinity as HCO_3	SM 2320B
	Carbonate Alkalinity as $CaCO_3$	SM 2320B
	Hardness, Total as $CaCO_3$ (USEPA 200.7)	SM 2340C
	Hydroxide Alkalinity as Ca CO_3	SM 2320B
	Orthophosphate as Phosphate	USEPA 300.0
	Phosphate, Total as PO_4 (USEPA 365.3)	SM 4500 P B/E
	Sulfide, Soluble	SM 4500 S2-D
	Sulfide, Total	SM 4500 S2-D
	Total Dissolved Solids (TDS)	SM 2540C
	Total Organic Carbon (TOC)	SM 5310C
	Total Suspended Solids (TSS)	SM 2540D
	Total Settleable Solids	SM 2540F
OTHER ANALYTES	Cyanide (total)	SM 4500-CN-E
	Cyanide Free (amenable)	SM 4500-CN-G
	Total Toxic Organic Halogens (TOX) (WECK)	SM 5310D
	Reactive Silica as SiO_2	SM 4500-SiO_2-C
	Silica	USEPA/ML 200.7
	Silt Density Index (PTS LABS)	ASTM D4189
	Gross Alpha (WECK)	USEPA 900
		TOTAL

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08- 0 4 3 4

SAMPLE RECEIPT FORM

Cooler 1 of 2

CLIENT: AECOM DATE: 8/6/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 3.9 °C - 0.2 °C (CF) = 3.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** RN

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☑ RN 8-6-9	☐
Sample container(s) intact and good condition	☐	☑	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☐	☑	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☑	☐
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑4 VOA**h** 1x(-2) ☐VOA**na₂** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑5 1AGB**na₂** ☑1AGB**s** ☐500AGB ☑2 500AGJ ☑500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑5 1PB ☑2 500PB ☑2 500PB**na** ☑2 250PB ☑2 250PB**n** ☑125PB ☐125PB**znna** ☐100PJ ☐100PJ**na₂** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** RN

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelop **Reviewed by:** JP

Preservative: **h:** HCL **n:** HNO3 **na₂:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** RN

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08- 0 4 3 4

SAMPLE RECEIPT FORM

Cooler 2 **of** 2

CLIENT: AECOM **DATE:** 8/6/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 4.8 °C - 0.2 °C (CF) = 4.6 °C ☑ **Blank** ☐ **Sample**

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☐ Cooler ☐_____ ☐ No (Not Intact) ☑ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** RN

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☑ RN 8-6-9	☐
Sample container(s) intact and good condition	☐	☑	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☑VOA**h** (4 + 1x(-2)) ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑1AGB**na$_2$** (5) ☑1AGB**s**

☐500AGB ☑500AGJ (2) ☑500AGJ**s** ☐250AGB ☐250CGB ☑250CGB**s** ☑1PB (5) ☑500PB (2) ☑500PB**na** (2)

☑250PB (2) ☑250PB**n** (2) ☑125PB ☐125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** RN

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelop **Reviewed by:** JP

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** RN

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0434

SAMPLE ANOMALY FORM

SAMPLES - CONTAINERS & LABELS:

- ☐ **Samples NOT RECEIVED but listed on COC**
- ☐ **Samples received but NOT LISTED on COC**
- ☐ **Holding time expired** – list sample ID(s) and test
- ☐ **Insufficient quantities for analysis** – list test
- ☐ **Improper container(s)/preservative used** – list test
- ☐ **No preservative noted on COC or label** – list test & notify lab
- ☐ **Sample labels illegible** – note test/container type
- ☐ **Sample labels do not match COC** – Note in comments
  - ☐ **Sample ID**
  - ☐ **Date and/or Time Collected**
  - ☐ **Project Information**
  - ☐ **# of Containers**
  - ☐ **Analysis**
- ☑ **Sample containers compromised** – Note in comments
  - ☐ **Leaking**
  - ☑ **Broken**
  - ☐ **Without Labels**
- ☐ **Air sample containers compromised** – Note in comments
  - ☐ **Flat**
  - ☐ **Very low in volume**
  - ☐ **Leaking (transferred into Calscience Tedlar® Bag*)**
  - ☐ **Leaking (transferred into Client's Tedlar® Bag*)**
- ☐ **Other:** _____

Comments:

(-1) Received 2 out of 6 vials broken

(-2) Received 1 out of 2 vials broken,

HEADSPACE – Containers with Bubble > 6mm or ¼ inch:

Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of Vials Received	Sample #	Container ID(s)	# of RSK or CO_2 or DO Received
1	D	4						

Comments: _____

*Transferred at Client's request.

Initial / Date RN 18-6-9

Vikas Patel

From: Flack, Mike [Mike.Flack@aecom.com]
Sent: Friday, August 07, 2009 5:26 PM
To: Vikas Patel
Cc: Caceres-Schnell, Carmen; Stone, Ian
Subject: RE: Beacon Solar / CEL 09-08-0434 - Final Report
Attachments: Cal Science - Offsite Wells (6-24).pdf; Arciero Well No. 33 (8-6) TDS.pdf

Vik....

Please consider this authorization to run the following (please run on a 5 day turnaround)

Dissolved Metals
Total Metals
EPA 300 Anions
Chrome VI
Reactive Silica
Gross Alpha

Please report results to Ian Stone and Carmen Caceres-Schnell

Thank you

Michael Flack, PG, CEG
AECOM Environment
1220 Avenida Acaso
Camarillo, California 93012-8738
T 805.388.3775 extension - 243
F 805.388.3577
C 805.760.1840
mike.flack@aecom.com

From: Vikas Patel [mailto:ViPatel@calscience.com]
Sent: Thursday, August 06, 2009 5:29 PM
To: Flack, Mike
Cc: Stone, Ian
Subject: Beacon Solar / CEL 09-08-0434 - Final Report

TDS results.

<<09-08-0434.pdf>>

Best regards,

Vik Patel
Project Manager

Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
Phone: 714-895-5494 x211
Fax: 714-894-7501

Email: vipatel@calscience.com

The difference is service

Vikas Patel

From: Flack, Mike [Mike.Flack@aecom.com]
Sent: Monday, August 10, 2009 10:33 AM
To: Vikas Patel
Subject: RE: Beacon Solar / CEL 09-08-0434 - Final Report

Vic

On vacation.....cancel the request for reactive silica...ok...on the surcharge for any rush request...

If additional questions...call ian or carmen schnell at camarillo number

thx

Sent from my Windows Mobile® phone.

Weck Laboratories, Inc.
Analytical Laboratory Service - Since 1964

Certificate of Analysis

Report Date: Tuesday, August 18, 2009
Received Date: Tuesday, August 11, 2009
Received Time: 3:21 pm
Turnaround Time: 5 workdays

Client: Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Attn: Vikas Patel
Project: 09-08-0434

Phones: (714) 895-5494
Fax: (714) 894-7501

P.O. #:

Lab Sample ID: 9H11056-01 **Sample ID: Arciero #33** **Matrix:** Water
Sampled by: Client **Sampled: 08/05/09 12:30**

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed		Batch	Qualifier
Gross Alpha	**3.79**			pCi/L	1	SM7110C	8/14/09	8/17/09 17:34	abd	W9H0539	
Gross Alpha counting error (+/-)	**0.977**			pCi/L	1	SM7110C	8/14/09	8/17/09 17:34	abd	W9H0539	
Gross Alpha MDA95	**0.343**			pCi/L	1	SM7110C	8/14/09	8/17/09 17:34	abd	W9H0539	

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Weck Laboratories, Inc.
Analytical Laboratory Service - Since 1964

Certificate of Analysis

Quality Control Section

Radiological Parameters by APHA/EPA Methods - Quality Control

Batch W9H0539 - SM7110C

Blank (W9H0539-BLK1) — **Prepared: 08/14/09 Analyzed: 08/17/09 17:34**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Gross Alpha		0.00		pCi/L					
Gross Alpha counting error (+/-)		0.632		pCi/L					
Gross Alpha MDA95		0.343		pCi/L					

LCS (W9H0539-BS1) — **Prepared: 08/14/09 Analyzed: 08/17/09 17:34**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Gross Alpha		18.2		pCi/L	18.0	101	70-130		

LCS Dup (W9H0539-BSD1) — **Prepared: 08/14/09 Analyzed: 08/17/09 17:34**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Gross Alpha		17.6		pCi/L	18.0	97	70-130	4	30

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www.wecklabs.com

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Certificate of Analysis

Notes:
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

Authorized Signature

Contact: Kim G Tu (Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.

Flags for Data Qualifiers:

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
Dil	Dilution Factor
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity

Weck Laboratories, Inc 14859 East Clark Avenue, City of Industry, California 91745-1396 (626) 336-2139 FAX (626) 336-2634
www.wecklabs.com

Calscience Environmental Laboratories, Inc.

Supplemental Report 1

August 18, 2009

Additional requested analyses are reported as a stand-alone report.

Mike Flack
AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Subject: **Calscience Work Order No.: 09-08-0595**
Client Reference: Beacon Solar / 10056-014-400

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 8/7/2009 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Systems Manual, applicable standard operating procedures, and other related documentation. The original report of subcontracted analysis, if any, is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Vikas Patel

Calscience Environmental
Laboratories, Inc.
Vikas Patel
Project Manager

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received:	08/07/09
Work Order No:	09-08-0595
Preparation:	EPA 3005A Filt.
Method:	EPA 6010B
Units:	mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Well 58	**09-08-0595-2-N**	**08/06/09 12:30**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 12:41**	**090811LA3F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	6.01	0.500	1	
Calcium	173	0.100	1		Sodium	134	0.500	1	
Iron	ND	0.100	1		Strontium	2.52	0.0300	1	
Magnesium	56.3	0.100	1		Boron	0.390	0.0200	1	
Manganese	0.252	0.00500	1		Silicon	11.8	0.0500	1	

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	**097-01-003-9,635**	**N/A**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 16:36**	**090811LA3F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	ND	0.500	1	
Calcium	ND	0.100	1		Sodium	ND	0.500	1	
Iron	ND	0.100	1		Strontium	ND	0.0300	1	
Magnesium	ND	0.100	1		Boron	ND	0.0200	1	
Manganese	ND	0.00500	1		Silicon	ND	0.0500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

ACCREDITED IN ACCORDANCE WITH nelac

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595
Preparation: EPA 3010A Total
Method: EPA 6010B
Units: mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Well 58	**09-08-0595-2-O**	**08/06/09 12:30**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 12:45**	**090811LA3A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	6.03	0.500	1	
Calcium	176	0.100	1		Sodium	135	0.500	1	
Iron	3.89	0.100	1		Strontium	2.58	0.0300	1	
Magnesium	55.2	0.100	1		Boron	0.369	0.0200	1	
Manganese	0.257	0.00500	1		Silicon	11.7	0.0500	1	

Method Blank	**097-01-003-9,631**	**N/A**	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09 16:36**	**090811LA3A**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Aluminum	ND	0.0500	1		Potassium	ND	0.500	1	
Calcium	ND	0.100	1		Sodium	ND	0.500	1	
Iron	ND	0.100	1		Strontium	ND	0.0300	1	
Magnesium	ND	0.100	1		Boron	ND	0.0200	1	
Manganese	ND	0.00500	1		Silicon	ND	0.0500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595
Preparation: EPA 3005A Filt. / EPA 7470A Filt.
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Well 58	**09-08-0595-2-N**	**08/06/09 12:30**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09 20:25**	**090811L02F**

Comment(s): -Mercury was analyzed on 8/11/2009 2:48:26 PM with batch 090810L07F

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Molybdenum	0.00451	0.00100	1	
Arsenic	ND	0.00100	1		Nickel	0.00261	0.00100	1	
Barium	0.118	0.00100	1		Selenium	ND	0.00100	1	
Beryllium	ND	0.00100	1		Silver	ND	0.00100	1	
Cadmium	ND	0.00100	1		Thallium	ND	0.00100	1	
Chromium	ND	0.00100	1		Vanadium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Zinc	0.00652	0.00500	1	
Copper	ND	0.00100	1		Lead	ND	0.00100	1	

Well 58	**09-08-0595-2**	**08/06/09 12:30**	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09 14:48**	**090810L07F**

Comment(s): -Mercury was analyzed on 8/11/2009 7:35:23 PM with batch 090811L01

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

Method Blank	**096-06-003-2,284**	**N/A**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09 20:30**	**090811L02F**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-4,264**	**N/A**	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09 14:01**	**090810L07F**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595
Preparation: EPA 3020A Total / EPA 7470A Total
Method: EPA 6020 / EPA 7470A
Units: mg/L

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date /Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Well 58	**09-08-0595-2-O**	**08/06/09 12:30**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09 20:28**	**090811L02**

Comment(s): -Mercury was analyzed on 8/11/2009 7:35:23 PM with batch 090811L01

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Zinc	0.0247	0.00500	1	
Arsenic	0.00188	0.00100	1		Mercury	ND	0.000500	1	
Barium	0.126	0.00100	1		Molybdenum	0.00470	0.00100	1	
Beryllium	ND	0.00100	1		Nickel	0.00258	0.00100	1	
Cadmium	ND	0.00100	1		Selenium	ND	0.00100	1	
Chromium	ND	0.00100	1		Silver	ND	0.00100	1	
Cobalt	ND	0.00100	1		Thallium	ND	0.00100	1	
Copper	0.0122	0.00100	1		Vanadium	ND	0.00100	1	
Lead	ND	0.00100	1						

Method Blank	**096-06-003-2,275**	**N/A**	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09 20:33**	**090811L02**

Parameter	Result	RL	DF	Qual	Parameter	Result	RL	DF	Qual
Antimony	ND	0.00100	1		Lead	ND	0.00100	1	
Arsenic	ND	0.00100	1		Molybdenum	ND	0.00100	1	
Barium	ND	0.00100	1		Nickel	ND	0.00100	1	
Beryllium	ND	0.00100	1		Selenium	ND	0.00100	1	
Cadmium	ND	0.00100	1		Silver	ND	0.00100	1	
Chromium	ND	0.00100	1		Thallium	ND	0.00100	1	
Cobalt	ND	0.00100	1		Vanadium	ND	0.00100	1	
Copper	ND	0.00100	1		Zinc	ND	0.00500	1	

Method Blank	**099-04-008-4,266**	**N/A**	**Aqueous**	**Mercury**	**08/11/09**	**08/11/09 16:03**	**090811L01**

Parameter	Result	RL	DF	Qual
Mercury	ND	0.000500	1	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Analytical Report

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595

Project: Beacon Solar / 10056-014-400

Client Sample Number	Lab Sample Number	Date Collected	Matrix
Well 58	**09-08-0595-2**	**08/06/09**	**Aqueous**

Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Fluoride	0.32	0.10	1		mg/L	N/A	08/07/09	EPA 300.0
Chloride	470	10	10		mg/L	N/A	08/07/09	EPA 300.0
Nitrite (as N)	ND	0.10	1		mg/L	N/A	08/07/09	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	08/07/09	EPA 300.0
Sulfate	150	10	10		mg/L	N/A	08/07/09	EPA 300.0
Chromium, Hexavalent	ND	1.0	1		ug/L	N/A	08/07/09	EPA 7199

Method Blank			**N/A**		**Aqueous**			
Parameter	Result	RL	DF	Qual	Units	Date Prepared	Date Analyzed	Method
Fluoride	ND	0.10	1		mg/L	N/A	08/07/09	EPA 300.0
Chloride	ND	1.0	1		mg/L	N/A	08/07/09	EPA 300.0
Nitrite (as N)	ND	0.10	1		mg/L	N/A	08/07/09	EPA 300.0
Nitrate (as N)	ND	0.10	1		mg/L	N/A	08/07/09	EPA 300.0
Sulfate	ND	1.0	1		mg/L	N/A	08/07/09	EPA 300.0
Chromium, Hexavalent	ND	1.0	1		ug/L	N/A	08/13/09	EPA 7199

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595
Preparation: EPA 3010A Total
Method: EPA 6010B

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0853-1	**Aqueous**	**ICP 5300**	**08/11/09**	**08/12/09**	**090811SA3**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aluminum	115	126	73-145	6	0-16	
Calcium	4X	4X	77-113	4X	0-11	Q
Iron	4X	4X	65-149	4X	0-21	Q
Magnesium	4X	4X	56-140	4X	0-11	Q
Manganese	4X	4X	86-116	4X	0-7	Q
Potassium	130	137	83-131	3	0-7	3
Sodium	4X	4X	73-127	4X	0-9	Q
Strontium	4X	4X	81-123	4X	0-6	Q
Boron	105	109	81-135	1	0-7	
Silicon	4X	4X	24-180	4X	0-15	Q

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595
Preparation: EPA 3020A Total
Method: EPA 6020

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0865-2	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811S02**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	62	60	85-133	2	0-11	3
Arsenic	82	82	73-127	0	0-11	
Barium	4X	4X	74-128	4X	0-10	Q
Beryllium	110	105	56-122	5	0-11	
Cadmium	104	103	84-114	1	0-8	
Chromium	107	101	73-133	5	0-11	
Cobalt	105	106	79-121	1	0-10	
Copper	105	105	72-108	0	0-10	
Lead	107	110	79-121	3	0-10	
Molybdenum	75	76	83-137	1	0-10	3
Nickel	104	105	68-122	1	0-10	
Selenium	74	72	59-125	3	0-12	
Silver	107	106	68-128	1	0-14	
Thallium	101	104	73-121	3	0-11	
Vanadium	110	104	77-137	4	0-15	
Zinc	0	0	43-145	2	0-39	3

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - PDS / PDSD

AECOM Environment		Date Received	08/07/09
1220 Avenida Acaso		Work Order No:	09-08-0595
Camarillo, CA 93012-8738		Preparation:	EPA 3020A Total
		Method:	EPA 6020

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	PDS/PDSD Batch Number
09-08-0865-2	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811S02**

Parameter	PDS %REC	PDSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	110	106	75-125	3	0-11	
Arsenic	92	89	75-125	4	0-11	
Barium	4X	4X	75-125	4X	0-10	Q
Beryllium	106	101	75-125	5	0-11	
Cadmium	99	96	75-125	3	0-8	
Chromium	97	93	75-125	4	0-11	
Cobalt	102	99	75-125	3	0-10	
Copper	98	96	75-125	1	0-10	
Lead	104	104	75-125	0	0-10	
Molybdenum	99	97	75-125	2	0-10	
Nickel	98	95	75-125	2	0-10	
Selenium	79	77	75-125	2	0-12	
Silver	104	102	75-125	2	0-14	
Thallium	98	100	75-125	2	0-11	
Vanadium	100	95	75-125	4	0-15	
Zinc	0	0	75-125	2	0-39	5

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: 08/07/09
Work Order No: 09-08-0595
Preparation: EPA 7470A Total
Method: EPA 7470A

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0743-14	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09**	**090810S07**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	105	110	57-141	4	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

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AECOM Environment		Date Received:	08/07/09
1220 Avenida Acaso		Work Order No:	09-08-0595
Camarillo, CA 93012-8738		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
09-08-0865-5	**Aqueous**	**Mercury**	**08/11/09**	**08/11/09**	**090811S01**

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	100	101	57-141	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0595

Project: Beacon Solar / 10056-014-400

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Analyzed	Date Extracted	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Chromium, Hexavalent	EPA 7199	Well 57	08/07/09	N/A	96	97	70-130	1	0-25	
Fluoride	EPA 300.0	Well 52	08/07/09	N/A	86	85	80-120	0	0-20	
Chloride	EPA 300.0	Well 52	08/07/09	N/A	91	91	80-120	0	0-20	
Nitrite (as N)	EPA 300.0	Well 52	08/07/09	N/A	99	99	80-120	0	0-20	
Nitrate (as N)	EPA 300.0	Well 52	08/07/09	N/A	88	89	80-120	0	0-20	
Sulfate	EPA 300.0	Well 52	08/07/09	N/A	89	89	80-120	0	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment		Date Received:	N/A
1220 Avenida Acaso		Work Order No:	09-08-0595
Camarillo, CA 93012-8738		Preparation:	EPA 3010A Total
		Method:	EPA 6010B

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-9,631	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09**	**090811LA3A**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aluminum	97	97	80-120	0	0-20	
Calcium	101	102	80-120	1	0-20	
Iron	107	108	80-120	1	0-20	
Magnesium	106	107	80-120	1	0-20	
Manganese	103	103	80-120	0	0-20	
Potassium	95	97	80-120	2	0-20	
Sodium	101	103	80-120	2	0-20	
Strontium	101	103	80-120	2	0-20	
Boron	88	89	80-120	2	0-20	
Silicon	99	96	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0595
Preparation: EPA 3005A Filt.
Method: EPA 6010B

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
097-01-003-9,635	**Aqueous**	**ICP 5300**	**08/11/09**	**08/13/09**	**090811LA3F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Aluminum	97	97	80-120	0	0-20	
Calcium	101	102	80-120	1	0-20	
Iron	107	108	80-120	1	0-20	
Magnesium	106	107	80-120	1	0-20	
Manganese	103	103	80-120	0	0-20	
Potassium	95	97	80-120	2	0-20	
Sodium	101	103	80-120	2	0-20	
Strontium	101	103	80-120	2	0-20	
Boron	88	89	80-120	2	0-20	
Silicon	99	96	80-120	3	0-20	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0595
Preparation: EPA 3020A Total
Method: EPA 6020

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-2,275	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811L02**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	94	97	80-120	73-127	3	0-20	
Arsenic	99	101	80-120	73-127	2	0-20	
Barium	98	99	80-120	73-127	1	0-20	
Beryllium	118	115	80-120	73-127	2	0-20	
Cadmium	101	102	80-120	73-127	1	0-20	
Chromium	102	100	80-120	73-127	2	0-20	
Cobalt	100	100	80-120	73-127	0	0-20	
Copper	103	104	80-120	73-127	1	0-20	
Lead	99	99	80-120	73-127	1	0-20	
Molybdenum	99	99	80-120	73-127	0	0-20	
Nickel	98	100	80-120	73-127	2	0-20	
Selenium	97	96	80-120	73-127	1	0-20	
Silver	95	96	80-120	73-127	2	0-20	
Thallium	94	94	80-120	73-127	1	0-20	
Vanadium	105	103	80-120	73-127	2	0-20	
Zinc	102	102	80-120	73-127	1	0-20	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0595
Preparation: EPA 3005A Filt.
Method: EPA 6020

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
096-06-003-2,284	**Aqueous**	**ICP/MS 03**	**08/11/09**	**08/11/09**	**090811L02F**

Parameter	LCS %REC	LCSD %REC	%REC CL	ME_CL	RPD	RPD CL	Qualifiers
Antimony	94	97	80-120	73-127	3	0-20	
Arsenic	99	101	80-120	73-127	2	0-20	
Barium	98	99	80-120	73-127	1	0-20	
Beryllium	118	115	80-120	73-127	2	0-20	
Cadmium	101	102	80-120	73-127	1	0-20	
Chromium	102	100	80-120	73-127	2	0-20	
Cobalt	100	100	80-120	73-127	0	0-20	
Copper	103	104	80-120	73-127	1	0-20	
Lead	99	99	80-120	73-127	1	0-20	
Molybdenum	99	99	80-120	73-127	0	0-20	
Nickel	98	100	80-120	73-127	2	0-20	
Selenium	97	96	80-120	73-127	1	0-20	
Silver	95	96	80-120	73-127	2	0-20	
Thallium	94	94	80-120	73-127	1	0-20	
Vanadium	105	103	80-120	73-127	2	0-20	
Zinc	102	102	80-120	73-127	1	0-20	

Total number of LCS compounds : 16
Total number of ME compounds : 0
Total number of ME compounds allowed : 1
LCS ME CL validation result : Pass

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment		Date Received:	N/A
1220 Avenida Acaso		Work Order No:	09-08-0595
Camarillo, CA 93012-8738		Preparation:	EPA 7470A Filt.
		Method:	EPA 7470A

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-4,264	**Aqueous**	**Mercury**	**08/10/09**	**08/11/09**	**090810L07F**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	102	102	85-121	0	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment		Date Received:	N/A
1220 Avenida Acaso		Work Order No:	09-08-0595
Camarillo, CA 93012-8738		Preparation:	EPA 7470A Total
		Method:	EPA 7470A

Project: Beacon Solar / 10056-014-400

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-04-008-4,266	**Aqueous**	**Mercury**	**08/11/09**	**08/11/09**	**090811L01**

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	99	98	85-121	1	0-10	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738

Date Received: N/A
Work Order No: 09-08-0595

Project: Beacon Solar / 10056-014-400

Matrix: Aqueous or Solid

Parameter	Method	Quality Control Sample ID	Date Extracted	Date Analyzed	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	Qual
Chromium, Hexavalent	EPA 7199	099-05-123-2,414	N/A	08/13/09	97	96	80-120	1	0-20	
Fluoride	EPA 300.0	099-12-906-390	N/A	08/07/09	96	96	90-110	1	0-15	
Chloride	EPA 300.0	099-12-906-390	N/A	08/07/09	102	102	90-110	0	0-15	
Nitrite (as N)	EPA 300.0	099-12-906-390	N/A	08/07/09	100	101	90-110	0	0-15	
Nitrate (as N)	EPA 300.0	099-12-906-390	N/A	08/07/09	99	98	90-110	0	0-15	
Sulfate	EPA 300.0	099-12-906-390	N/A	08/07/09	99	99	90-110	0	0-15	

RPD - Relative Percent Difference , CL - Control Limit

Calscience Environmental Laboratories, Inc.

Glossary of Terms and Qualifiers

Work Order Number: 09-08-0595

Qualifier	Definition
*	See applicable analysis comment.
1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
A	Result is the average of all dilutions, as defined by the method.
B	Analyte was present in the associated method blank.
C	Analyte presence was not confirmed on primary column.
E	Concentration exceeds the calibration range.
H	Sample received and/or analyzed past the recommended holding time.
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
ME	LCS Recovery Percentage is within LCS ME Control Limit range.
N	Nontarget Analyte.
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
U	Undetected at the laboratory method detection limit.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture.

AECOM

AECOM Environment
1220 Avenida Acaso
Camarillo, CA 93012-8738
Phone (805) 388-3775
Fax (805) 388-3577

ANALYTICAL LAB: Calscience (0595)

SITE BSEP DATE 8/6/09 PAGE 1 OF 1

CLIENT AECOM / Begay

PROJECT NAME: BSEP

PROJECT MANAGER: Mike Flack

JOB #: 10056-014-400

COELT LOG CODE: YES / NO

SAMPLER SIGNATURE:

LINE ITEM	SAMPLE NO.	DATE	TIME	8260B / 5035 Volatile Organics	8260B BTEX / MTBE / Oxygenates	8015 Diesel / Gasoline / Full Range	8081A Pesticides 8141A	CAM 17 Metals	TPH-cc (Fingerprint)	TPH-D/MO	PCBs	Herbicides	SVOCs	Dis Sulfide, Tot Sulfide	Hex Chrom	Anions, Alk, PO4, SO4	BOD	SS, TSS, TDS	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS
1.	Well 52	8/6/09	1415				X		X	X	X	X	X	X	X	X	X	X	W	G/P	15
2.	Well 58	8/6/09	1230				X		X	X	X	X	X	X	X	X	X	X	W	G/P	15
3.	Well 59	8/6/09	1130				X		X	X	X	X	X	X	X	X	X	X	W	G/P	15
4.	Well 57	8/6/09	1330				X		X	X	X	X	X	X	X	X	X	X	W	G/P	15
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					

TURN-AROUND TIME: TDS - 24-48hr Everything Else STD

OBSERVATIONS/ COMMENTS: more samples were collected and will be picked up on Monday

MATRIX TYPE: S - Soil, W - Water, O - Other

CONTAINER TYPE: G - Glass Bottle, P - Plastic, O - Other

PRESERVATIVES:
All samples are preserved on ice.
Water samples are preserved as indicated on the sample labels.

TEMPERATURE BLANK EACH COOLER: [X] YES [ ] NO

RELINQUISHED BY: Ian Stone	SIGNATURE	**AECOM Environment**	DATE 8/6/09	TIME 1700	TOTAL NUMBER OF CONTAINERS: 60
RECEIVED BY: FedEx	SIGNATURE	COMPANY FedEx	DATE 8/6/09	TIME 1700	METHOD OF SHIPMENT: FedEx
RELINQUISHED BY: FedEx AB Master # 8703-4004-8255	SIGNATURE	COMPANY @ 19:19	DATE	TIME	SPECIAL SHIPMENT/HANDLING/STORAGE REQUIREMENTS:
RECEIVED BY	SIGNATURE Noel Cruz	COMPANY CEL	DATE 8/7/09	TIME 1000	

DISTRIBUTION: White and Canary = Laboratory Pink = AECOM Environment

Serial No. 1558

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0595

SAMPLE RECEIPT FORM

Cooler 1 of 4

CLIENT: AECOM

DATE: 08/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.8 °C - 0.2 °C (CF) = 1.6 °C ☑ **Blank** ☐ **Sample**

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** _____

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A **Initial:** _____

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** NC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑(5) 1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑(2) 500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☑(4) 1PB ☑ 500PB ☐500PB**na**

☑ 250PB ☐250PB**n** ☑ 125PB ☑ 125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelop **Reviewed by:** _____

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** _____

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0595

SAMPLE RECEIPT FORM

Cooler 2 of 4

CLIENT: AECOM

DATE: 08/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.0 °C - 0.2 °C (CF) = 1.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** NC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑(5) 1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑(2) 500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☑(4) 1PB ☑500PB ☐500PB**na**

☑250PB ☐250PB**n** ☑125PB ☑125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelop **Reviewed by:** (2)

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** (2)

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0595

SAMPLE RECEIPT FORM

Cooler 3 of 4

CLIENT: AECOM

DATE: 08/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 2.0 °C - 0.2 °C (CF) = 1.8 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** NC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑(5) 1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑(2) 500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☑(4) 1PB ☑500PB ☐500PB**na**

☑250PB ☐250PB**n** ☑125PB ☑125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelop **Reviewed by:** [illegible]

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** [illegible]

Calscience Environmental Laboratories, Inc.

WORK ORDER #: 09-08-0595

SAMPLE RECEIPT FORM

Cooler 4 of 4

CLIENT: AECOM

DATE: 08/07/09

TEMPERATURE: (Criteria: 0.0 °C – 6.0 °C, not frozen)

Temperature 1.9 °C - 0.2 °C (CF) = 1.7 °C ☑ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ **Received at ambient temperature, placed on ice for transport by Courier.**

Ambient Temperature: ☐ Air ☐ Filter ☐ Metals Only ☐ PCBs Only **Initial:** JP

CUSTODY SEALS INTACT:

☑ Cooler ☐_____ ☐ No (Not Intact) ☐ Not Present ☐ N/A **Initial:** JP

☐ Sample ☐_____ ☐ No (Not Intact) ☑ Not Present **Initial:** NC

SAMPLE CONDITION:	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples	☑	☐	☐
COC document(s) received complete	☑	☐	☐
☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.			
☐ COC not relinquished. ☐ No date relinquished. ☐ No time relinquished.			
Sampler's name indicated on COC	☑	☐	☐
Sample container label(s) consistent with COC	☑	☐	☐
Sample container(s) intact and good condition	☑	☐	☐
Correct containers and volume for analyses requested	☑	☐	☐
Analyses received within holding time	☑	☐	☐
Proper preservation noted on COC or sample container	☑	☐	☐
☐ Unpreserved vials received for Volatiles analysis			
Volatile analysis container(s) free of headspace	☐	☐	☑
Tedlar bag(s) free of condensation	☐	☐	☑

CONTAINER TYPE:

Solid: ☐4ozCGJ ☐8ozCGJ ☐16ozCGJ ☐Sleeve ☐EnCores® ☐TerraCores® ☐_____

Water: ☐VOA ☐VOA**h** ☐VOA**na$_2$** ☐125AGB ☐125AGB**h** ☐125AGB**p** ☐1AGB ☑(5) 1AGB**na$_2$** ☐1AGB**s**

☐500AGB ☑(2) 500AGJ ☐500AGJ**s** ☐250AGB ☐250CGB ☐250CGB**s** ☑(4) 1PB ☑500PB ☐500PB**na**

☑250PB ☐250PB**n** ☑125PB ☑125PB**znna** ☐100PJ ☐100PJ**na$_2$** ☐_____ ☐_____ ☐_____

Air: ☐Tedlar® ☐Summa® ☐_____ **Other:** ☐_____ **Checked/Labeled by:** NC

Container: **C:** Clear **A:** Amber **P:** Plastic **G:** Glass **J:** Jar **B:** Bottle **Z:** Ziploc/Resealable Bag **E:** Envelop **Reviewed by:** (2)

Preservative: **h:** HCL **n:** HNO3 **na$_2$:** $Na_2S_2O_3$ **Na:** NaOH **p:** H_3PO_4 **s:** H_2SO_4 **znna:** $ZnAc_2$+NaOH **f:** Field-filtered **Scanned by:** (2)

Vikas Patel

From: Caceres-Schnell, Carmen [Carmen.Caceres-Schnell@aecom.com]
Sent: Monday, August 10, 2009 11:18 AM
To: Vikas Patel
Cc: Stone, Ian; Flack, Mike
Subject: FW: Beacon Solar / CEL 09-08-0434 - Final Report

Vik ,

Please consider this authorization to run the following analysis on Well 58 (Lab ID 09-08-0595-2) collected on 08/06/09. Please run on a 5 day turnaround .

Dissolved Metals
Total Metals
EPA 300 Anions
Chrome VI
Reactive Silica
Gross Alpha

Please report results to Ian Stone and myself.

Thank you ,

Carmen C. Schnell, P.G.
Project Geologist, ISC Group, Southwest Region
AECOM Environment
carmen.caceres-schnell@aecom.com

AECOM
1220 Avenida Acaso
Camarillo, California 93012
D 805.388.3775 Ext. 288
F 805.388.3577

Vikas Patel

From: Caceres-Schnell, Carmen [Carmen.Caceres-Schnell@aecom.com]
Sent: Monday, August 10, 2009 12:46 PM
To: Vikas Patel
Cc: Stone, Ian; Flack, Mike; Philip Sanelle
Subject: RE: Beacon Solar / CEL 09-08-0434 - Final Report

Vik,

Please cancel the Reactive Silica for Well 58 as well. Thank you for letting me know about this.

Carmen

-----Original Message-----
From: Vikas Patel [mailto:ViPatel@calscience.com]
Sent: Monday, August 10, 2009 11:31 AM
To: Caceres-Schnell, Carmen
Cc: Stone, Ian; Flack, Mike; Philip Sanelle
Subject: FW: Beacon Solar / CEL 09-08-0434 - Final Report

Carmen -

Mike Flack canceled the request for Reactive Silica analysis on sample Arciero #33 (Lab ID 09-08-0434-1) collected on 08/05/09.

FYI - Do you want us to subcontract the Reactive Silica analysis on Well 58 (Lab ID 09-08-0595-2) collected on 08/06/09?

Best regards,

Vik Patel
Project Manager
Calscience Environmental Laboratories, Inc.
7440 Lincoln Way
Garden Grove, CA 92841-1427
Phone: 714-895-5494 x211
Fax: 714-894-7501
Email: vipatel@calscience.com

-----Original Message-----
From: Flack, Mike [mailto:Mike.Flack@aecom.com]
Sent: Monday, August 10, 2009 10:33 AM
To: Vikas Patel
Subject: RE: Beacon Solar / CEL 09-08-0434 - Final Report

Vic

On vacation.....cancel the request for reactive silica...ok...on the surcharge for any rush request...

If additional questions...call ian or carmen schnell at camarillo number

thx

Sent from my Windows Mobile(r) phone.

Weck Laboratories, Inc.
Analytical Laboratory Service - Since 1964

Certificate of Analysis

Report Date: Tuesday, August 18, 2009
Received Date: Tuesday, August 11, 2009
Received Time: 3:21 pm
Turnaround Time: 5 workdays

Client: Calscience Environmental Laboratories
7440 Lincoln Way
Garden Grove, CA 92841-1432

Attn: Vikas Patel
Project: 09-08-0595

Phones: (714) 895-5494
Fax: (714) 894-7501

P.O. #:

Lab Sample ID: 9H11055-01 **Sample ID: Well 58** **Matrix:** Water
Sampled by: Client **Sampled: 08/06/09 12:30**

Analyte	Result	DL	RL	Units	Dil	Method	Prepared	Analyzed		Batch	Qualifier
Gross Alpha	**0.00**			pCi/L	1	SM7110C	8/14/09	8/17/09 17:34	abd	W9H0539	
Gross Alpha counting error (+/-)	**0.660**			pCi/L	1	SM7110C	8/14/09	8/17/09 17:34	abd	W9H0539	
Gross Alpha MDA95	**0.343**			pCi/L	1	SM7110C	8/14/09	8/17/09 17:34	abd	W9H0539	

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Quality Control Section

Radiological Parameters by APHA/EPA Methods - Quality Control

Batch W9H0539 - SM7110C

Blank (W9H0539-BLK1) — **Prepared: 08/14/09 Analyzed: 08/17/09 17:34**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Gross Alpha		0.00		pCi/L					
Gross Alpha counting error (+/-)		0.632		pCi/L					
Gross Alpha MDA95		0.343		pCi/L					

LCS (W9H0539-BS1) — **Prepared: 08/14/09 Analyzed: 08/17/09 17:34**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Gross Alpha		18.2		pCi/L	18.0	101	70-130		

LCS Dup (W9H0539-BSD1) — **Prepared: 08/14/09 Analyzed: 08/17/09 17:34**

Analyte	Sample Result	QC Result	Qualifier	Units	Spike Level	%REC	%REC Limits	RPD	RPD Limit
Gross Alpha		17.6		pCi/L	18.0	97	70-130	4	30

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Notes:
The Chain of Custody document is part of the analytical report.
Any remaining sample(s) for testing will be disposed of one month from the final report date unless other arrangements are made in advance.
All results are expressed on wet weight basis unless otherwise specified.

An Absence of Total Coliform meets the drinking water standards as established by the State of California Department of Health Services.
The Reporting Limit (RL) is referenced as laboratory's Practical Quantitation Limit (PQL).
For Potable water analysis, the Reporting Limit (RL) is referenced as Detection Limit for reporting purposes (DLRs) defined by EPA.

If sample collected by Weck Laboratories, sampled in accordance to lab SOP MIS002

Authorized Signature

Contact: Kim G Tu (Project Manager)

ELAP # 1132
LACSD # 10143
NELAC # 04229CA

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Weck Laboratories certifies that the test results meet all requirements of NELAC unless noted in the Case Narrative. This analytical report must be reproduced in its entirety.

Flags for Data Qualifiers:

ND	NOT DETECTED at or above the Reporting Limit. If J-value reported, then NOT DETECTED at or above the Method Detection Limit (MDL).
Sub	Subcontracted analysis, original report enclosed.
Dil	Dilution Factor
DL	Method Detection Limit
RL	Method Reporting Limit
MDA	Minimum Detectable Activity

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GROUNDWATER ANALYTICAL RESULTS
(AUGUST 2009)
BEACON SOLAR ENERGY PROJECT
KERN COUNTY, CALIFORNIA

Well Number	Depth to Water		Lab Analytical and Field Measured[1] Data											
	Date	feet-bgs[2]	TDS[3] (mg/L)	Fluoride	Chloride	Nitrite	Nitrate	Sulfate	Gross Alpha[4]	pH	Turbidity[5]	ORP[6]	EC[7]	DO[8]
Arciero #33	8/5/2009	253.7	**1420**	0.20	220	<0.10	1.2	530	3.79	7.43	35	137	0.22	4.3
Well 52	8/6/2009	NM[9]	522	--	--	--	--	--	--	7.51	0	-37	82.8	4.4
Well 57	8/6/2009	NM[9]	516	--	--	--	--	--	--	7.5	0	-36	84.1	1.7
Well 58	8/6/2009	NM[9]	**1210**	0.32	470	<0.10	<0.10	150	0.00	--	--	--	--	--
Well 59	8/6/2009	NM[9]	895	--	--	--	--	--	--	6.93	0	-48	0.145	3.2
Well 61	8/7/2009	NM[9]	482	--	--	--	--	--	--	7.93	0	92	69.4	4.4
Well 63	8/7/2009	NM[9]	514	--	--	--	--	--	--	7.3	0	119	74.1	2.6

Notes:

1 pH, Turbidity, ORP, EC, and DO were measured in the field with a Horiba.
2 bgs = below ground surface
3 TDS = Total Dissolved Solids (milligrams per liter)
4 Gross Alpha = Radionuclides (pico Curies per liter)
5 Turbidity is measured in NTUs
6 ORP = Oxidation-reduction potential (milliVolts)
7 EC = Electric Conductivity (micromhos per centimeter)
8 DO = Dissolved oxygen
9 NM = Not measured. Well had a pump on it that did not allow the water level meter to be dropped down the well.

Bold Values Bold values indicate TDS results exceeding 1,000 mg/L.
-- Analysis not run.

LAB FILTERED METALS SAMPLING RESULTS
(AUGUST 2009)
BEACON SOLAR ENERGY PROJECT
KERN COUNTY, CALIFORNIA

Well Number	Date	Al	Ca	Fe	Mg	Mn	K	Na	Sr	B	Si	As	Ba	Cr	Cu	Mo	Ni	Se	V	Zn	Pb
Arciero #33	8/5/2009	<0.0500	206	<0.100	25.9	0.0669	12.4	247	0.937	6.82	22.0	<0.00100[27]	0.0102	0.00151	0.00104	0.00195	0.00209	0.00491	<0.00100	<0.00500	<0.00100
Well 52	8/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 57	8/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 58	8/6/2009	<0.0500	173	<0.100	56.3	0.252	6.01	134	2.52	0.39	11.8	<0.00100	0.118	<0.00100	<0.00100	0.00451	0.00261	<0.00100	<0.00100	0.00652	<0.00100
Well 59	8/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 61	8/7/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 63	8/7/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

Al = Aluminum
Ca = Calcium
Fe = Iron
Mg = Magnesium
Mn = Manganese
K = Sodium
Na = Sodium
Sr = Strontium
B = Boron
Si = Silicon
All Results reported in milligrams per liter
<0.00100 = Parameter not detected above the indicated reporting limit

As = Arsenic
Ba = Barium
Cr = Chromium
Cu = Copper
Mo = Molybdenum
Ni = Nickel
Se = Selenium
V = Vanadium
Zn = Zinc
Pb = Lead
-- Analysis not run.

Methods:

Samples were prepared using EPA Methods 3005A Filt./7470A Filt.
Samples were analyzed using EPA Methods 6010B/6020/7470A

TOTAL METALS (UNFILTERED) SAMPLING RESULTS
(AUGUST 2009)
BEACON SOLAR ENERGY PROJECT
KERN COUNTY, CALIFORNIA

Well Number	Date	Al	Ca	Fe	Mg	Mn	K	Na	Sr	B	Si	As	Ba	Cr	Cu	Mo	Ni	Se	V	Zn	Pb
Arciero #33	8/5/2009	0.0724	204	15.1	26.9	0.219	13.1	252	0.946	7.07	24.6	0.0016	0.052	0.00285	0.00307	0.00165	0.00196	0.00482	0.00201	0.196	0.00118
Well 52	8/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 57	8/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 58	8/6/2009	<0.0500	176	3.89	55.2	0.257	6.03	135	2.58	0.369	11.7	0.00188	0.126	<0.00100	0.0122	0.0047	0.00258	<0.00100	<0.00100	0.0247	<0.00100
Well 59	8/6/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 61	8/7/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Well 63	8/7/2009	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

Al = Aluminum
Ca = Calcium
Fe = Iron
Mg = Magnesium
Mn = Manganese
K = Sodium
Na = Sodium
Sr = Strontium
B = Boron
Si = Silicon

As = Arsenic
Ba = Barium
Cr = Chromium
Cu = Copper
Mo = Molybdenum
Ni = Nickel
Se = Selenium
V = Vanadium
Zn = Zinc
Pb = Lead

All Results reported in milligrams per liter
-- Analysis not run.
<0.00100 = Parameter not detected above the indicated reporting limit

Methods:

Samples were prepared using EPA Methods 3010A/3020A/7470A
Samples were analyzed using EPA Methods 6010B/6020/7470A