

August 30, 2012

Report to:

Brenda Lamiroy  
SG Interests I, Ltd.  
1485 Florida Rd. Suite 202  
Durango, CO 81301

Bill to:

Brenda Lamiroy  
SG Interests I, Ltd.  
1485 Florida Rd.  
Durango, CO 81301

cc: Eric Petterson

Project ID: Jacobs 29-1 Env Qual  
ACZ Project ID: L96154

Brenda Lamiroy:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on August 11, 2012. This project has been assigned to ACZ's project number, L96154. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L96154. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after September 30, 2012. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.



Sue Webber has reviewed and  
approved this report.



SG Interests I, Ltd.

August 30, 2012

Project ID: Jacobs 29-1 Env Qual

ACZ Project ID: L96154

**Sample Receipt**

ACZ Laboratories, Inc. (ACZ) received 3 soil samples from SG Interests I, Ltd. on August 11, 2012. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L96154. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

**Holding Times**

All analyses were performed within EPA recommended holding times.

**Sample Analysis**

These samples were analyzed for inorganic, organic parameters. The individual methods are referenced on both, the ACZ invoice and the analytical reports. The following anomalies required further explanation not provided by the Extended Qualifier Report.

1. For the DRO OTP recoveries flagged with an "S8" in the QC Summary, the surrogate required dilution such that the surrogate calculation does not provide useful information.
2. For PAH values flagged with an "N1, R1", the LCSS was contaminated from another sample during prep causing matrix suppression, surrogate and RPD failures. Because of the failure/problems, the RPD for the LCSS/LC SSD also failed. Accuracy and precision are demonstrated in the MS/MSD.
3. for PAH Pyrene values flagged with an "R5", recoveries were in limits by the RPD was out. All samples were non-detect for Pyrene, precision for all other spike analytes was acceptable and acceptable recoveries were seen in the LC SSD which was not contaminated.

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
Sample ID: BACKGROUND

ACZ Sample ID: **L96154-01**  
Date Sampled: 08/10/12 10:00  
Date Received: 08/11/12  
Sample Matrix: Soil

**Metals Analysis**

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, total (3050)	M6020 ICP-MS	1.7		*	mg/Kg	0.1	0.5	08/28/12 21:01	pmc
Barium, total (3050)	M6010B ICP	297		*	mg/Kg	0.3	2	08/29/12 5:07	jjc
Boron, total (3050)	M6010B ICP		U		mg/Kg	1	5	08/29/12 5:07	jjc
Cadmium, total (3050)	M6010B ICP		U		mg/Kg	0.5	2	08/29/12 5:07	jjc
Calcium, soluble (Sat. Paste)	M6010B ICP	1.08			meq/L	0.01	0.05	08/27/12 13:13	jjc
Chromium, total (3050)	M6010B ICP	5		*	mg/Kg	1	5	08/29/12 5:07	jjc
Copper, total (3050)	M6010B ICP	11		*	mg/Kg	1	5	08/29/12 5:07	jjc
Lead, total (3050)	M6010B ICP	11	B		mg/Kg	4	20	08/29/12 5:07	jjc
Magnesium, soluble (Sat. Paste)	M6010B ICP	0.33			meq/L	0.02	0.08	08/27/12 13:13	jjc
Mercury, total	M7471A CVAA		U		mg/Kg	0.04	0.2	08/27/12 17:27	erf
Nickel, total (3050)	M6010B ICP	4	B		mg/Kg	1	5	08/29/12 5:07	jjc
Selenium, total (3050)	M6010B ICP		U		mg/Kg	6	30	08/29/12 5:07	jjc
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	2	5	08/29/12 13:11	jjc
Sodium Absorption Ratio	Calculation	0.35				0.03	0.15	08/30/12 10:15	calc
Sodium, soluble (Sat. Paste)	M6010B ICP	0.29			meq/L	0.01	0.09	08/27/12 13:13	jjc
Zinc, total (3050)	M6010B ICP	50		*	mg/Kg	1	5	08/29/12 5:07	jjc

**Soil Analysis**

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Conductivity @25C	SM2510B	0.165		*	mmhos/cm	0.001	0.01	08/26/12 11:30	cdb
pH, Saturated Paste	USDA No. 60 (21A)	7.1		*	units	0.1	0.1	08/26/12 11:30	cdb
Solids, Percent	CLPSOW390, PART F, D-98	89.2		*	%	0.1	0.5	08/21/12 16:52	mss2

**Soil Preparation**

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972							08/21/12 13:30	mss2
Crush and Pulverize	EPA-600/2-78-054 3.1.3							08/23/12 9:00	cdb
Digestion - Hot Plate	M3050B ICP							08/24/12 17:40	nrc
Digestion - Hot Plate	M3050B ICP-MS							08/24/12 17:40	nrc
Saturated Paste Extraction	USDA No. 60 (2)							08/26/12 20:30	cdb

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual

Sample ID: SUBSOIL#1

ACZ Sample ID: **L96154-02**

Date Sampled: 08/10/12 10:30

Date Received: 08/11/12

Sample Matrix: Soil

## Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, total (3050)	M6020 ICP-MS	2.8		*	mg/Kg	0.1	0.5	08/28/12 21:07	pmc
Barium, total (3050)	M6010B ICP	430		*	mg/Kg	0.3	2	08/29/12 5:16	jjc
Boron, total (3050)	M6010B ICP		U		mg/Kg	1	5	08/29/12 5:16	jjc
Cadmium, total (3050)	M6010B ICP		U		mg/Kg	0.5	2	08/29/12 5:16	jjc
Calcium, soluble (Sat. Paste)	M6010B ICP	1.50			meq/L	0.01	0.05	08/27/12 13:16	jjc
Chromium, total (3050)	M6010B ICP	9		*	mg/Kg	1	5	08/29/12 5:16	jjc
Copper, total (3050)	M6010B ICP	10		*	mg/Kg	1	5	08/29/12 5:16	jjc
Lead, total (3050)	M6010B ICP	10	B		mg/Kg	4	20	08/29/12 5:16	jjc
Magnesium, soluble (Sat. Paste)	M6010B ICP	0.48			meq/L	0.02	0.08	08/27/12 13:16	jjc
Mercury, total	M7471A CVAA		U		mg/Kg	0.04	0.2	08/27/12 17:29	erf
Nickel, total (3050)	M6010B ICP	10			mg/Kg	1	5	08/29/12 5:16	jjc
Selenium, total (3050)	M6010B ICP		U		mg/Kg	6	30	08/29/12 5:16	jjc
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	2	5	08/29/12 13:21	jjc
Sodium Absorption Ratio	Calculation	0.49				0.03	0.15	08/30/12 10:15	calc
Sodium, soluble (Sat. Paste)	M6010B ICP	0.49			meq/L	0.01	0.09	08/27/12 13:16	jjc
Zinc, total (3050)	M6010B ICP	58		*	mg/Kg	1	5	08/29/12 5:16	jjc

## Soil Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Conductivity @25C	SM2510B	0.249		*	mmhos/cm	0.001	0.01	08/26/12 16:00	cdb
pH, Saturated Paste	USDA No. 60 (21A)	7.4		*	units	0.1	0.1	08/26/12 16:00	cdb
Solids, Percent	CLPSOW390, PART F, D-98	82.4		*	%	0.1	0.5	08/21/12 19:45	mss2

## Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972							08/21/12 13:35	mss2
Crush and Pulverize	EPA-600/2-78-054 3.1.3							08/23/12 9:25	cdb
Digestion - Hot Plate	M3050B ICP							08/24/12 23:25	nrc
Digestion - Hot Plate	M3050B ICP-MS							08/24/12 23:25	nrc
Saturated Paste Extraction	USDA No. 60 (2)							08/27/12 1:00	cdb

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual

Sample ID: SUBSOIL#2

ACZ Sample ID: **L96154-03**

Date Sampled: 08/10/12 10:30

Date Received: 08/11/12

Sample Matrix: Soil

## Metals Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic, total (3050)	M6020 ICP-MS	2.6		*	mg/Kg	0.1	0.5	08/28/12 21:11	pmc
Barium, total (3050)	M6010B ICP	435		*	mg/Kg	0.3	2	08/29/12 5:23	jjc
Boron, total (3050)	M6010B ICP	1	B		mg/Kg	1	5	08/29/12 5:23	jjc
Cadmium, total (3050)	M6010B ICP		U		mg/Kg	0.5	2	08/29/12 5:23	jjc
Calcium, soluble (Sat. Paste)	M6010B ICP	1.47			meq/L	0.01	0.05	08/27/12 13:19	jjc
Chromium, total (3050)	M6010B ICP	9		*	mg/Kg	1	5	08/29/12 5:23	jjc
Copper, total (3050)	M6010B ICP	9		*	mg/Kg	1	5	08/29/12 5:23	jjc
Lead, total (3050)	M6010B ICP	8	B		mg/Kg	4	20	08/29/12 5:23	jjc
Magnesium, soluble (Sat. Paste)	M6010B ICP	0.49			meq/L	0.02	0.08	08/27/12 13:19	jjc
Mercury, total	M7471A CVAA		U		mg/Kg	0.04	0.2	08/27/12 17:35	erf
Nickel, total (3050)	M6010B ICP	7			mg/Kg	1	5	08/29/12 5:23	jjc
Selenium, total (3050)	M6010B ICP		U		mg/Kg	6	30	08/29/12 5:23	jjc
Silver, total (3050)	M6010B ICP		U	*	mg/Kg	2	5	08/29/12 13:27	jjc
Sodium Absorption Ratio	Calculation	0.59				0.03	0.15	08/30/12 10:15	calc
Sodium, soluble (Sat. Paste)	M6010B ICP	0.58			meq/L	0.01	0.09	08/27/12 13:19	jjc
Zinc, total (3050)	M6010B ICP	58		*	mg/Kg	1	5	08/29/12 5:23	jjc

## Soil Analysis

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Conductivity @25C	SM2510B	0.263		*	mmhos/cm	0.001	0.01	08/26/12 20:30	cdb
pH, Saturated Paste	USDA No. 60 (21A)	7.3		*	units	0.1	0.1	08/26/12 20:30	cdb
Solids, Percent	CLPSOW390, PART F, D-98	85.0		*	%	0.1	0.5	08/21/12 22:37	mss2

## Soil Preparation

Parameter	EPA Method	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees C	USDA No. 1, 1972							08/21/12 13:40	mss2
Crush and Pulverize	EPA-600/2-78-054 3.1.3							08/23/12 9:51	cdb
Digestion - Hot Plate	M3050B ICP-MS							08/25/12 1:20	nrc
Digestion - Hot Plate	M3050B ICP							08/25/12 1:20	nrc
Saturated Paste Extraction	USDA No. 60 (2)							08/27/12 5:30	cdb

## Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

## QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

## QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

## ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

## Method References

- (1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
- (2) EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
- (3) EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
- (4) EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
- (5) Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995 & 20th edition (1998).

## Comments

- (1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
- (2) Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
- (3) Animal matrices for Inorganic analyses are reported on an "as received" basis.
- (4) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<http://www.acz.com/public/extquallist.pdf>

SG Interests I, Ltd.

ACZ Project ID: **L96154**

**Arsenic, total (3050)**

M6020 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329143</b>													
WG329143ICV	ICV	08/28/12 20:34	MS120710-2	.05		.05199	mg/L	104	90	110			
WG329143ICB	ICB	08/28/12 20:37				U	mg/L		-0.0006	0.0006			
WG328967PBS	PBS	08/28/12 20:49				.25	mg/Kg		-0.3	0.3			
WG328967LCSS	LCSS	08/28/12 20:52	PCN39542	94.5		94.5	mg/Kg		77.8	111			
WG328967LCSSD	LCSSD	08/28/12 20:55	PCN39542	94.5		94.5	mg/Kg		77.8	111	0	20	
L96315-01MS	MS	08/28/12 21:23	MSDBLSOIL	50.5505	1700	1732.15	mg/Kg	63.6	75	125			M3
L96315-01MSD	MSD	08/28/12 21:26	MSDBLSOIL	50.5505	1700	1750.33	mg/Kg	99.6	75	125	1.04	20	

**Barium, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2		2.041	mg/L	102.1	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.009	0.009			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-0.9	0.9			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	167		169.4	mg/Kg		140	193			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	167		165	mg/Kg		140	193	2.6	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5	297	353.08	mg/Kg	108.9	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5	297	365.34	mg/Kg	132.7	75	125	3.41	20	M3

**Boron, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2		2.047	mg/L	102.4	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.03	0.03			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-3	3			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	106		117.2	mg/Kg		80.3	133			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	106		115.9	mg/Kg		80.3	133	1.1	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5515	U	45.7	mg/Kg	88.6	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5515	U	47.7	mg/Kg	92.5	75	125	4.28	20	

**Cadmium, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2		2.01	mg/L	100.5	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.015	0.015			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-1.5	1.5			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	60.5		60.27	mg/Kg		50.3	70.7			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	60.5		60.62	mg/Kg		50.3	70.7	0.6	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5	U	44.87	mg/Kg	87.1	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5	U	47.02	mg/Kg	91.3	75	125	4.68	20	

**Calcium, soluble (Sat. Paste)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329078</b>													
WG329078ICV	ICV	08/27/12 12:12	II120711-1	100		97.88	mg/L	97.9	90	110			
WG329078ICB	ICB	08/27/12 12:15				U	mg/L		-0.6	0.6			
L96154-03DUP	DUP	08/27/12 13:22			1.47	1.389	meq/L				5.7	20	

SG Interests I, Ltd.

ACZ Project ID: **L96154**

**Chromium, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2		2.006	mg/L	100.3	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.03	0.03			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-3	3			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	70.4		70.7	mg/Kg		57.6	83.2			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	70.4		70.4	mg/Kg		57.6	83.2	0.4	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5	5	53.7	mg/Kg	94.6	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5	5	55.6	mg/Kg	98.3	75	125	3.48	20	

**Conductivity @25C**

SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG328960</b>													
L96154-03DUP	DUP	08/27/12 5:30			.263	.249	nmhos/cm				5.5	20	

**Copper, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2		2.018	mg/L	100.9	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.03	0.03			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-3	3			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	79.6		80.1	mg/Kg		66.7	92.4			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	79.6		79.4	mg/Kg		66.7	92.4	0.9	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5	11	58.5	mg/Kg	92.2	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5	11	61.2	mg/Kg	97.5	75	125	4.51	20	

**Lead, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	4		4.097	mg/L	102.4	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.12	0.12			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-12	12			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	91.8		94.2	mg/Kg		75.5	108			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	91.8		89.1	mg/Kg		75.5	108	5.6	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	103	11	108.7	mg/Kg	94.9	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	103	11	109	mg/Kg	95.1	75	125	0.28	20	

**Magnesium, soluble (Sat. Paste)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329078</b>													
WG329078ICV	ICV	08/27/12 12:12	II120711-1	100		98.76	mg/L	98.8	90	110			
WG329078ICB	ICB	08/27/12 12:15				U	mg/L		-0.6	0.6			
L96154-03DUP	DUP	08/27/12 13:22			.49	.5	meq/L				2	20	



SG Interests I, Ltd.

ACZ Project ID: **L96154**

**Mercury, total**

M7471A CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG328938</b>													
WG328938ICV	ICV	08/27/12 16:01	II120817-3	.01005		.00976	mg/L	97.1	90	110			
WG328938ICB	ICB	08/27/12 16:03				U	mg/L		-0.0006	0.0006			
<b>WG328939</b>													
WG328939PBS	PBS	08/27/12 17:17				U	mg/Kg		-0.12	0.12			
WG328939LCSS	LCSS	08/27/12 17:20	PCN39544	3.73		4.03	mg/Kg		2.67	4.78			
WG328939LCSSD	LCSSD	08/27/12 17:22	PCN39544	3.73		3.89	mg/Kg		2.67	4.78	3.5	20	
L96154-02MS	MS	08/27/12 17:31	II120817-6	1.066065	U	1.07	mg/Kg	100.4	85	115			
L96154-02MSD	MSD	08/27/12 17:33	II120817-6	1.06106	U	1.086	mg/Kg	102.4	85	115	1.48	20	

**Nickel, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2.002		2.019	mg/L	100.8	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.03	0.03			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-3	3			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	57.6		58.6	mg/Kg		47.7	67.5			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	57.6		58.9	mg/Kg		47.7	67.5	0.5	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5	4	50.2	mg/Kg	89.7	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5	4	51.6	mg/Kg	92.4	75	125	2.75	20	

**pH, Saturated Paste**

USDA No. 60 (21A)

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG328960</b>													
WG328960ICV	ICV	08/24/12 23:30	PCN38642	4		3.99	units	99.8	97	103			
L96154-03DUP	DUP	08/27/12 5:30			7.3	7.29	units				0.1	20	

**Selenium, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	4		4.163	mg/L	104.1	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.18	0.18			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-18	18			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	86.4		93.5	mg/Kg		69.2	104			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	86.4		88.3	mg/Kg		69.2	104	5.7	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	103	U	122.5	mg/Kg	118.9	75	125			
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	103	U	101.2	mg/Kg	98.3	75	125	19.04	20	

SG Interests I, Ltd.

ACZ Project ID: **L96154**

**Silver, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329257</b>													
WG329257ICV	ICV	08/29/12 12:43	II120711-3	1.003		1.015	mg/L	101.2	90	110			
WG329257ICB	ICB	08/29/12 12:46				U	mg/L		-0.03	0.03			
WG328967PBS	PBS	08/29/12 12:59				U	mg/Kg		-3	3			
WG328967LCSS	LCSS	08/29/12 13:02	PCN39542	34.4		32.8	mg/Kg		22.8	46.1			
WG328967LCSSD	LCSSD	08/29/12 13:05	PCN39542	34.4		34.1	mg/Kg		22.8	46.1	3.9	20	
L96154-01MS	MS	08/29/12 13:14	II2XSOIL	51.5	U	49.7	mg/Kg	96.5	75	125			
L96154-01MSD	MSD	08/29/12 13:17	II2XSOIL	51.5	U	51.4	mg/Kg	99.8	75	125	3.36	20	

**Sodium, soluble (Sat. Paste)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329078</b>													
WG329078ICV	ICV	08/27/12 12:12	II120711-1	100		97.56	mg/L	97.6	90	110			
WG329078ICB	ICB	08/27/12 12:15				U	mg/L		-0.9	0.9			
L96154-03DUP	DUP	08/27/12 13:22			.58	.556	meq/L				4.2	20	

**Solids, Percent**

CLPSOW390, PART F, D-98

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG328667</b>													
WG328667PBS	PBS	08/21/12 14:00				U	%		99.9	100.1			
L96315-01DUP	DUP	08/22/12 13:00			72.6	71.77	%				1.1	20	

**Zinc, total (3050)**

M6010B ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
<b>WG329181</b>													
WG329181ICV	ICV	08/29/12 4:39	II120711-3	2		2.031	mg/L	101.6	90	110			
WG329181ICB	ICB	08/29/12 4:42				U	mg/L		-0.03	0.03			
WG328967PBS	PBS	08/29/12 4:55				U	mg/Kg		-3	3			
WG328967LCSS	LCSS	08/29/12 4:58	PCN39542	140		143.7	mg/Kg		115	165			
WG328967LCSSD	LCSSD	08/29/12 5:01	PCN39542	140		145.3	mg/Kg		115	165	1.1	20	
L96154-01MS	MS	08/29/12 5:10	II120806-3	51.5	51	121.6	mg/Kg	139	75	125			MA
L96154-01MSD	MSD	08/29/12 5:13	II120806-3	51.5	51	112.2	mg/Kg	120.8	75	125	8.04	20	

SG Interests I, Ltd.

ACZ Project ID: **L96154**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
<b>L96154-01</b>	WG329143	Arsenic, total (3050)	M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 100 times the MDL.
	WG329181	Barium, total (3050)	M6010B ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M6010B ICP	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Chromium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG329257	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Silver, total (3050)	M6010B ICP	DB	Sample required dilution due to low bias result.
	WG329181	Zinc, total (3050)	M6010B ICP	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
			M6010B ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
			M6010B ICP	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
<b>L96154-02</b>	WG329143	Arsenic, total (3050)	M6020 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 100 times the MDL.
	WG329181	Barium, total (3050)	M6010B ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M6010B ICP	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Chromium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG329257	Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Silver, total (3050)	M6010B ICP	DB	Sample required dilution due to low bias result.
	WG329181	Zinc, total (3050)	M6010B ICP	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
			M6010B ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
			M6010B ICP	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.

SG Interests I, Ltd.

ACZ Project ID: **L96154**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L96154-03	WG329143	Arsenic, total (3050)	M6020 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M6020 ICP-MS	ZB	The ICP-MS Serial Dilution was not used for data validation because the sample concentration was less than 100 times the MDL.
	WG329181	Barium, total (3050)	M6010B ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
			M6010B ICP	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.
		Chromium, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
		Copper, total (3050)	M6010B ICP	ZG	The ICP Serial Dilution was not used for data validation because the sample concentration was less than 50 times the MDL.
	WG329257	Silver, total (3050)	M6010B ICP	DB	Sample required dilution due to low bias result.
			M6010B ICP	EA	Concentration estimated. Analytical result was less than the negative MDL due to matrix interferences.
	WG329181	Zinc, total (3050)	M6010B ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
			M6010B ICP	ZH	Serial Dilution exceeded the acceptance criteria. Matrix interference [physical or chemical] is suspected.

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: BACKGROUND

ACZ Sample ID: **L96154-01**  
 Date Sampled: 08/10/12 10:00  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**BTEX/Gasoline Range Organics (C6-C10)**

Analysis Method: **M8021B/8015D GC/PID/FID**  
 Extract Method: **5035A**

**Workgroup: WG328436**

Analyst: pml  
 Extract Date: 08/17/12 12:59  
 Analysis Date: 08/17/12 12:59

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/Kg	0.2	1
Ethylbenzene	100-41-4		U	1	*	ug/Kg	0.2	1
m p Xylene	1330-20-7		U	1	*	ug/Kg	0.4	2
o Xylene	95-47-6		U	1	*	ug/Kg	0.2	1
Toluene	108-88-3	.2	J	1	*	ug/Kg	0.2	1
TVH C6 to C10	TVH		U	1	*	mg/Kg	0.05	0.05
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	88		1	*	%	70	130
Bromofluorobenzene (TVH)	460-00-4	96.4		1	*	%	70	130

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: BACKGROUND

ACZ Sample ID: **L96154-01**  
 Date Sampled: 08/10/12 10:00  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**Diesel Range Organics (C10-C28)**

Analysis Method: **M8015D GC/FID**  
 Extract Method: **M3540**

**Workgroup: WG328902**

Analyst: gk  
 Extract Date: 08/21/12 13:50  
 Analysis Date: 08/23/12 21:45

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
TPH C10 to C28		38		33.33	*	mg/Kg	3	20
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
OTP	84-15-1	77.8		33.33		%	70	130

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
Sample ID: BACKGROUND

ACZ Sample ID: **L96154-01**  
Date Sampled: 08/10/12 10:00  
Date Received: 08/11/12  
Sample Matrix: Soil

**Polynuclear Aromatic Hydrocarbons GC/M**

Analysis Method: **M8270C GC/MS**  
Extract Method: **M3540**

**Workgroup: WG328310**

Analyst: itk  
Extract Date: 08/14/12 16:37  
Analysis Date: 08/15/12 21:39

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
2-Methylnaphthalene	91-57-6		U	66.66	*	ug/Kg	100	700
Acenaphthene	83-32-9		U	66.66	*	ug/Kg	100	700
Acenaphthylene	208-96-8		U	66.66	*	ug/Kg	100	700
Anthracene	120-12-7		U	66.66	*	ug/Kg	100	700
Benzo(a)anthracene	56-55-3		U	66.66	*	ug/Kg	100	700
Benzo(a)pyrene	50-32-8		U	66.66	*	ug/Kg	100	700
Benzo(b)fluoranthene	205-99-2		U	66.66	*	ug/Kg	100	700
Benzo(g,h,i)perylene	191-24-2		U	66.66	*	ug/Kg	100	700
Benzo(k)fluoranthene	207-08-9		U	66.66	*	ug/Kg	100	700
Chrysene	218-01-9		U	66.66	*	ug/Kg	100	700
Dibenzo(a,h)anthracene	53-70-3		U	66.66	*	ug/Kg	100	700
Fluoranthene	206-44-0		U	66.66	*	ug/Kg	100	700
Fluorene	86-73-7		U	66.66	*	ug/Kg	100	700
Indeno(1,2,3-cd)pyrene	193-39-5		U	66.66	*	ug/Kg	100	700
Naphthalene	91-20-3		U	66.66	*	ug/Kg	100	700
Phenanthrene	85-01-8		U	66.66	*	ug/Kg	100	700
Pyrene	129-00-0		U	66.66	*	ug/Kg	100	700
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
2-Fluorobiphenyl	321-60-8	86.1		66.66	*	%	45	105
Nitrobenzene-d5	4165-60-0	78.4		66.66	*	%	35	100
Terphenyl-d14	1718-51-0	86.2		66.66	*	%	30	125

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: SUBSOIL#1

ACZ Sample ID: **L96154-02**  
 Date Sampled: 08/10/12 10:30  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**BTEX/Gasoline Range Organics (C6-C10)**

Analysis Method: **M8021B/8015D GC/PID/FID**  
 Extract Method: **5035A**

**Workgroup: WG328436**

Analyst: pml  
 Extract Date: 08/17/12 14:54  
 Analysis Date: 08/17/12 14:54

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/Kg	0.2	1
Ethylbenzene	100-41-4		U	1	*	ug/Kg	0.2	1
m p Xylene	1330-20-7		U	1	*	ug/Kg	0.4	2
o Xylene	95-47-6		U	1	*	ug/Kg	0.2	1
Toluene	108-88-3	.3	J	1	*	ug/Kg	0.2	1
TVH C6 to C10	TVH		U	1	*	mg/Kg	0.05	0.05
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	89.2		1	*	%	70	130
Bromofluorobenzene (TVH)	460-00-4	94		1	*	%	70	130



**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: SUBSOIL#1

ACZ Sample ID: **L96154-02**  
 Date Sampled: 08/10/12 10:30  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**Diesel Range Organics (C10-C28)**

Analysis Method: **M8015D GC/FID**  
 Extract Method: **M3540**

**Workgroup: WG328902**

Analyst: gk  
 Extract Date: 08/21/12 14:09  
 Analysis Date: 08/23/12 22:11

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
TPH C10 to C28		5	J	33.33	*	mg/Kg	3	20
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
OTP	84-15-1	78		33.33		%	70	130

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: SUBSOIL#1

ACZ Sample ID: **L96154-02**  
 Date Sampled: 08/10/12 10:30  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**Polynuclear Aromatic Hydrocarbons GC/M**

Analysis Method: **M8270C GC/MS**  
 Extract Method: **M3540**

**Workgroup: WG328310**

Analyst: itk  
 Extract Date: 08/14/12 16:38  
 Analysis Date: 08/15/12 22:10

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
2-Methylnaphthalene	91-57-6		U	133.34	*	ug/Kg	300	1000
Acenaphthene	83-32-9		U	133.34	*	ug/Kg	300	1000
Acenaphthylene	208-96-8		U	133.34	*	ug/Kg	300	1000
Anthracene	120-12-7		U	133.34	*	ug/Kg	300	1000
Benzo(a)anthracene	56-55-3		U	133.34	*	ug/Kg	300	1000
Benzo(a)pyrene	50-32-8		U	133.34	*	ug/Kg	300	1000
Benzo(b)fluoranthene	205-99-2		U	133.34	*	ug/Kg	300	1000
Benzo(g,h,i)perylene	191-24-2		U	133.34	*	ug/Kg	300	1000
Benzo(k)fluoranthene	207-08-9		U	133.34	*	ug/Kg	300	1000
Chrysene	218-01-9		U	133.34	*	ug/Kg	300	1000
Dibenzo(a,h)anthracene	53-70-3		U	133.34	*	ug/Kg	300	1000
Fluoranthene	206-44-0		U	133.34	*	ug/Kg	300	1000
Fluorene	86-73-7		U	133.34	*	ug/Kg	300	1000
Indeno(1,2,3-cd)pyrene	193-39-5		U	133.34	*	ug/Kg	300	1000
Naphthalene	91-20-3		U	133.34	*	ug/Kg	300	1000
Phenanthrene	85-01-8		U	133.34	*	ug/Kg	300	1000
Pyrene	129-00-0		U	133.34	*	ug/Kg	300	1000
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
2-Fluorobiphenyl	321-60-8	72.3		133.34	*	%	45	105
Nitrobenzene-d5	4165-60-0	67.4		133.34	*	%	35	100
Terphenyl-d14	1718-51-0	94.6		133.34	*	%	30	125

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: SUBSOIL#2

ACZ Sample ID: **L96154-03**  
 Date Sampled: 08/10/12 10:30  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**BTEX/Gasoline Range Organics (C6-C10)**

Analysis Method: **M8021B/8015D GC/PID/FID**  
 Extract Method: **5035A**

**Workgroup: WG328436**

Analyst: pml  
 Extract Date: 08/17/12 15:33  
 Analysis Date: 08/17/12 15:33

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Benzene	71-43-2		U	1	*	ug/Kg	0.2	1
Ethylbenzene	100-41-4		U	1	*	ug/Kg	0.2	1
m p Xylene	1330-20-7		U	1	*	ug/Kg	0.4	2
o Xylene	95-47-6		U	1	*	ug/Kg	0.2	1
Toluene	108-88-3	.2	J	1	*	ug/Kg	0.2	1
TVH C6 to C10	TVH		U	1	*	mg/Kg	0.05	0.05
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
Bromofluorobenzene	460-00-4	89.8		1	*	%	70	130
Bromofluorobenzene (TVH)	460-00-4	91.7		1	*	%	70	130

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: SUBSOIL#2

ACZ Sample ID: **L96154-03**  
 Date Sampled: 08/10/12 10:30  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**Diesel Range Organics (C10-C28)**

Analysis Method: **M8015D GC/FID**  
 Extract Method: **M3540**

**Workgroup: WG328902**

Analyst: gk  
 Extract Date: 08/21/12 14:28  
 Analysis Date: 08/23/12 22:37

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
TPH C10 to C28			U	33.33	*	mg/Kg	3	20
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
OTP	84-15-1	77.1		33.33		%	70	130

**SG Interests I, Ltd.**

Project ID: Jacobs 29-1 Env Qual  
 Sample ID: SUBSOIL#2

ACZ Sample ID: **L96154-03**  
 Date Sampled: 08/10/12 10:30  
 Date Received: 08/11/12  
 Sample Matrix: Soil

**Polynuclear Aromatic Hydrocarbons GC/M**

Analysis Method: **M8270C GC/MS**  
 Extract Method: **M3540**

**Workgroup: WG328310**

Analyst: itk  
 Extract Date: 08/14/12 16:39  
 Analysis Date: 08/15/12 22:41

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
2-Methylnaphthalene	91-57-6		U	133.34	*	ug/Kg	300	1000
Acenaphthene	83-32-9		U	133.34	*	ug/Kg	300	1000
Acenaphthylene	208-96-8		U	133.34	*	ug/Kg	300	1000
Anthracene	120-12-7		U	133.34	*	ug/Kg	300	1000
Benzo(a)anthracene	56-55-3		U	133.34	*	ug/Kg	300	1000
Benzo(a)pyrene	50-32-8		U	133.34	*	ug/Kg	300	1000
Benzo(b)fluoranthene	205-99-2		U	133.34	*	ug/Kg	300	1000
Benzo(g,h,i)perylene	191-24-2		U	133.34	*	ug/Kg	300	1000
Benzo(k)fluoranthene	207-08-9		U	133.34	*	ug/Kg	300	1000
Chrysene	218-01-9		U	133.34	*	ug/Kg	300	1000
Dibenzo(a,h)anthracene	53-70-3		U	133.34	*	ug/Kg	300	1000
Fluoranthene	206-44-0		U	133.34	*	ug/Kg	300	1000
Fluorene	86-73-7		U	133.34	*	ug/Kg	300	1000
Indeno(1,2,3-cd)pyrene	193-39-5		U	133.34	*	ug/Kg	300	1000
Naphthalene	91-20-3		U	133.34	*	ug/Kg	300	1000
Phenanthrene	85-01-8		U	133.34	*	ug/Kg	300	1000
Pyrene	129-00-0		U	133.34	*	ug/Kg	300	1000
Surrogate Recoveries	CAS	% Recovery		Dilution	XQ	Units	LCL	UCL
2-Fluorobiphenyl	321-60-8	85.6		133.34	*	%	45	105
Nitrobenzene-d5	4165-60-0	79.4		133.34	*	%	35	100
Terphenyl-d14	1718-51-0	88.9		133.34	*	%	30	125

## Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>LCL</i>	Lower Control Limit
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit. Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit, typically 5 times the MDL.
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>UCL</i>	Upper Control Limit
<i>Sample</i>	Value of the Sample of interest

## QC Sample Types

<i>SURR</i>	Surrogate	<i>LFM</i>	Laboratory Fortified Matrix
<i>INTS</i>	Internal Standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>MS/MSD</i>	Matrix Spike/Matrix Spike Duplicate
<i>LCSW</i>	Laboratory Control Sample - Water	<i>PBS</i>	Prep Blank - Soil
<i>LFB</i>	Laboratory Fortified Blank	<i>PBW</i>	Prep Blank - Water

## QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

## ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
E	Analyte concentration is estimated due to result exceeding calibration range.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
J	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
L	Target analyte response was below the laboratory defined negative threshold.
M	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.
P	Analyte concentration differs from second detector by more than 40%.
R	Poor spike recovery accepted because the other spike in the set fell within the given limits.
T	High Relative Percent Difference (RPD) accepted because sample concentrations are less than 10x the MDL.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
V	High blank data accepted because sample concentration is 10 times higher than blank concentration.
X	Quality control sample is out of control.
Z	Poor spike recovery is accepted because sample concentration is four times greater than spike concentration.

## Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
(3)	EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste, Third Edition with Update III, December 1996.
(5)	Standard Methods for the Examination of Water and Wastewater, 19th edition, 1995 & 20th edition (1998).

## Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:

<http://www.acz.com/public/extquallist.pdf>

SG Interests I, Ltd.

ACZ Project ID: **L96154**

**BTEX/Gasoline Range Organics (C6-C10)**

M8021B/8015D GC/PID/FID

**WG328436**

AS	Sample ID: L96154-01AS		PCN/SCN: B120726-1-SPIK				Analyzed:		08/17/12 13:37	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
BENZENE	25	U	22.52	ug/Kg	90.1	70	130			
ETHYLBENZENE	25	U	23.16	ug/Kg	92.6	70	130			
M P XYLENE	50	U	47.22	ug/Kg	94.4	70	130			
O XYLENE	50	U	44.72	ug/Kg	89.4	70	130			
TOLUENE	75	.2	70.28	ug/Kg	93.4	70	130			
TVH C6 TO C10	.5	U	.51	mg/Kg	102.0	70	130			
BROMOFLUOROBENZENE (surr)				%	92.0	70	130			
BROMOFLUOROBENZENE (TVH) (surr)				%	98.1	70	130			

ASD	Sample ID: L96154-01ASD		PCN/SCN: B120726-1-SPIK				Analyzed:		08/17/12 14:15	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
BENZENE	25	U	23.44	ug/Kg	93.8	70	130	4	20	
ETHYLBENZENE	25	U	23.74	ug/Kg	95.0	70	130	2.47	20	
M P XYLENE	50	U	48.46	ug/Kg	96.9	70	130	2.59	20	
O XYLENE	50	U	46.35	ug/Kg	92.7	70	130	3.58	20	
TOLUENE	75	.2	71.54	ug/Kg	95.1	70	130	1.78	20	
TVH C6 TO C10	.5	U	.51	mg/Kg	102.0	70	130	0	20	
BROMOFLUOROBENZENE (surr)				%	92.6	70	130			
BROMOFLUOROBENZENE (TVH) (surr)				%	100.4	70	130			

LCSS	Sample ID: WG328436LCSS		PCN/SCN: B120726-1-SPIK				Analyzed:		08/17/12 11:07	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
BENZENE	25		24.73	ug/Kg	98.9	70	130			
ETHYLBENZENE	25		25.17	ug/Kg	100.7	70	130			
M P XYLENE	50		51.33	ug/Kg	102.7	70	130			
O XYLENE	50		48.76	ug/Kg	97.5	70	130			
TOLUENE	75		75.44	ug/Kg	100.6	70	130			
TVH C6 TO C10	.5		.55	mg/Kg	110.0	70	130			
BROMOFLUOROBENZENE (surr)				%	91.9	70	130			
BROMOFLUOROBENZENE (TVH) (surr)				%	96.9	70	130			

LCSSD	Sample ID: WG328436LCSSD		PCN/SCN: B120726-1-SPIK				Analyzed:		08/17/12 11:44	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
BENZENE	25		24.84	ug/Kg	99.4	70	130	0.4	20	
ETHYLBENZENE	25		25.67	ug/Kg	102.7	70	130	2	20	
M P XYLENE	50		52.3	ug/Kg	104.6	70	130	1.9	20	
O XYLENE	50		50.86	ug/Kg	101.7	70	130	4.2	20	
TOLUENE	75		75.16	ug/Kg	100.2	70	130	0.4	20	
TVH C6 TO C10	.5		.547	mg/Kg	109.4	70	130	0.5	20	
BROMOFLUOROBENZENE (surr)				%	96.2	70	130			
BROMOFLUOROBENZENE (TVH) (surr)				%	99.5	70	130			

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ACZ Project ID: **L96154**

PBS	Sample ID: WG328436PBS						Analyzed:		08/17/12 12:22	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
BENZENE			U	ug/Kg		-1	1			
ETHYLBENZENE			U	ug/Kg		-1	1			
M P XYLENE			U	ug/Kg		-2	2			
O XYLENE			U	ug/Kg		-1	1			
TOLUENE			U	ug/Kg		-1	1			
TVH C6 TO C10			U	mg/Kg		-.05	.05			
BROMOFLUOROBENZENE (surr)				%	97.1	70	130			
BROMOFLUOROBENZENE (TVH) (surr)				%	101.3	70	130			



SG Interests I, Ltd.

ACZ Project ID: **L96154**

**Diesel Range Organics (C10-C28)**

M8015D GC/FID

**WG328902**

MS	Sample ID: L96215-01MS		PCN/SCN: TPH120729-1-30				Analyzed:		08/24/12 9:09	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28	83.3	7200	2370	mg/Kg	-5796.0	70	130			M3
OTP (surr)				%	0.0	70	130			M3 S8

MSD		Sample ID: L96215-01MSD		PCN/SCN: TPH120729-1-30				Analyzed:		08/24/12 9:34	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual	
TPH C10 TO C28	83.3	7200	2790	mg/Kg	-5292.0	70	130	16.28	20	M3	
OTP (surr)				%	0.0	70	130			S8	

LCSS		Sample ID: WG328204LCSS		PCN/SCN: TPH120729-1-30				Analyzed: 08/23/12 20:01		
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28	83.3		76	mg/Kg	91.2	70	130			
OTP (surr)				%	82.4	70	130			

LCSSD		Sample ID: WG328204LCSSD		PCN/SCN: TPH120729-1-30			Analyzed: 08/23/12 20:27			
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28	83.3		76	mg/Kg	91.2	70	130	0	20	
OTP (surr)				%	82.9	70	130			

PBS		Sample ID: WG328204PBS						Analyzed: 08/23/12 19:35		
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
TPH C10 TO C28			U	mg/Kg		-20	20			
OTP (surr)				%	78.2	70	130			

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ACZ Project ID: **L96154**

**Polynuclear Aromatic Hydrocarbons GC/MS**

M8270C GC/MS

**WG328310**

MS	Sample ID: L96153-02MS		PCN/SCN: BNA120618-2-30				Analyzed:		08/15/12 20:37	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
1,2,4-TRICHLOROBENZENE	1666.7	U	1270	ug/Kg	76.2	45	110			D1
1,4-DICHLOROBENZENE	1666.7	U	1090	ug/Kg	65.4	35	105			D1
2,4-DINITROTOLUENE	1666.7	U	1360	ug/Kg	81.6	50	115			D1
2-CHLOROPHENOL	2500.7	U	2180	ug/Kg	87.2	45	105			D1
4-CHLORO-3-METHYLPHENOL	2500.3	U	2000	ug/Kg	80.0	45	115			D1
4-NITROPHENOL	2500.7	U	1990	ug/Kg	79.6	15	140			D1 MD
ACENAPHTHENE	1666.7	U	1370	ug/Kg	82.2	45	110			D1
N-NITROSODI-N-PROPYLAMINE	1666.7	U	1280	ug/Kg	76.8	40	115			D1
PENTACHLOROPHENOL	2500	U	2370	ug/Kg	94.8	25	120			D1 MD
PHENOL	2500	U	2000	ug/Kg	80.0	40	100			D1
PYRENE	1666.7	U	1620	ug/Kg	97.2	45	125			D1
2,4,6-TRIBROMOPHENOL (surr)				%	86.9	35	125			D1
2-FLUOROBIPHENYL (surr)				%	82.7	45	105			D1
2-FLUOROPHENOL (surr)				%	86.7	35	105			D1
NITROBENZENE-D5 (surr)				%	80.2	35	100			D1
PHENOL-D6 (surr)				%	81.1	40	100			D1
TERPHENYL-D14 (surr)				%	88.1	30	125			D1

MSD	Sample ID: L96153-02MSD		PCN/SCN: BNA120618-2-30				Analyzed:		08/15/12 21:08	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
1,2,4-TRICHLOROBENZENE	1666.7	U	1270	ug/Kg	76.2	45	110	0	20	
1,4-DICHLOROBENZENE	1666.7	U	1120	ug/Kg	67.2	35	105	2.71	20	
2,4-DINITROTOLUENE	1666.7	U	1510	ug/Kg	90.6	50	115	10.45	20	
2-CHLOROPHENOL	2500.7	U	2120	ug/Kg	84.8	45	105	2.79	20	
4-CHLORO-3-METHYLPHENOL	2500.3	U	2010	ug/Kg	80.4	45	115	0.5	20	
4-NITROPHENOL	2500.7	U	2300	ug/Kg	92.0	15	140	14.45	20	MD
ACENAPHTHENE	1666.7	U	1350	ug/Kg	81.0	45	110	1.47	20	
N-NITROSODI-N-PROPYLAMINE	1666.7	U	1370	ug/Kg	82.2	40	115	6.79	20	
PENTACHLOROPHENOL	2500	U	2490	ug/Kg	99.6	25	120	4.94	20	MD
PHENOL	2500	U	2040	ug/Kg	81.6	40	100	1.98	20	
PYRENE	1666.7	U	1210	ug/Kg	72.6	45	125	28.98	20	R5
2,4,6-TRIBROMOPHENOL (surr)				%	88.1	35	125			
2-FLUOROBIPHENYL (surr)				%	91.0	45	105			
2-FLUOROPHENOL (surr)				%	86.1	35	105			
NITROBENZENE-D5 (surr)				%	80.4	35	100			
PHENOL-D6 (surr)				%	81.4	40	100			
TERPHENYL-D14 (surr)				%	100.5	30	125			

LCSS	Sample ID: WG328214LCSS		PCN/SCN: BNA120618-2-30				Analyzed: 08/15/12 18:32			
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
1,2,4-TRICHLOROBENZENE	1666.7		964	ug/Kg	57.8	45	110			N1 R1
1,4-DICHLOROBENZENE	1666.7		773	ug/Kg	46.4	35	105			N1 R1
2,4-DINITROTOLUENE	1666.7		6114	ug/Kg	366.8	50	115			N1 R1
2-CHLOROPHENOL	2500.7		1459	ug/Kg	58.3	45	105			N1 R1

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4-CHLORO-3-METHYLPHENOL	2500.3	1746	ug/Kg	69.8	45	115	N1 R1
4-NITROPHENOL	2500.7	7650	ug/Kg	305.9	15	140	N1 R1
ACENAPHTHENE	1666.7	1476	ug/Kg	88.6	45	110	N1 R1
N-NITROSODI-N-PROPYLAMINE	1666.7	U	ug/Kg	0.0	40	115	N1 R1
PENTACHLOROPHENOL	2500	5260	ug/Kg	210.4	25	120	N1 R1
PHENOL	2500	860	ug/Kg	34.4	40	100	N1 R1
PYRENE	1666.7	732	ug/Kg	43.9	45	125	N1 R1
2,4,6-TRIBROMOPHENOL (surr)			%	247.9	35	125	N1 R1
2-FLUOROBIPHENYL (surr)			%	290.7	45	105	N1 R1
2-FLUOROPHENOL (surr)			%	60.1	35	105	N1 R1
NITROBENZENE-D5 (surr)			%	59.6	35	100	N1 R1
PHENOL-D6 (surr)			%	0.0	40	100	N1 R1
TERPHENYL-D14 (surr)			%	675.0	30	125	N1 R1

LCSSD	Sample ID: WG328214LCSSD		PCN/SCN: BNA120618-2-30				Analyzed:		08/15/12 19:03	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
1,2,4-TRICHLOROBENZENE	1666.7		1003	ug/Kg	60.2	45	110	4	20	N1 R1
1,4-DICHLOROBENZENE	1666.7		921	ug/Kg	55.3	35	105	17.5	20	N1 R1
2,4-DINITROTOLUENE	1666.7		1336	ug/Kg	80.2	50	115	128.3	20	N1 R1
2-CHLOROPHENOL	2500.7		1671	ug/Kg	66.8	45	105	13.5	20	N1 R1
4-CHLORO-3-METHYLPHENOL	2500.3		1469	ug/Kg	58.8	45	115	17.2	20	N1 R1
4-NITROPHENOL	2500.7		1990	ug/Kg	79.6	15	140	117.4	20	N1 R1
ACENAPHTHENE	1666.7		1043	ug/Kg	62.6	45	110	34.4	20	N1 R1
N-NITROSODI-N-PROPYLAMINE	1666.7		946	ug/Kg	56.8	40	115		20	N1 R1
PENTACHLOROPHENOL	2500		2220	ug/Kg	88.8	25	120	81.3	20	N1 R1
PHENOL	2500		1540	ug/Kg	61.6	40	100	56.7	20	N1 R1
PYRENE	1666.7		1197	ug/Kg	71.8	45	125	48.2	20	N1 R1
2,4,6-TRIBROMOPHENOL (surr)				%	77.6	35	125			N1 R1
2-FLUOROBIPHENYL (surr)				%	67.7	45	105			N1 R1
2-FLUOROPHENOL (surr)				%	67.1	35	105			N1 R1
NITROBENZENE-D5 (surr)				%	63.2	35	100			N1 R1
PHENOL-D6 (surr)				%	61.8	40	100			N1 R1
TERPHENYL-D14 (surr)				%	101.5	30	125			N1 R1

PBS		Sample ID: WG328214PBS					Analyzed:		08/15/12 18:01	
Compound	QC	Sample	Found	Units	Rec	Lower	Upper	RPD	Limit	Qual
1,2,4-TRICHLOROBENZENE			U	ug/Kg		-300	300			
1,2-DICHLOROBENZENE			U	ug/Kg		-300	300			
1,3-DICHLOROBENZENE			U	ug/Kg		-300	300			
1,4-DICHLOROBENZENE			U	ug/Kg		-300	300			
2,4,5-TRICHLOROPHENOL			U	ug/Kg		-2000	2000			
2,4,6-TRICHLOROPHENOL			U	ug/Kg		-300	300			
2,4-DICHLOROPHENOL			U	ug/Kg		-300	300			
2,4-DIMETHYLPHENOL			U	ug/Kg		-700	700			
2,4-DINITROPHENOL			U	ug/Kg		-2000	2000			
2,4-DINITROTOLUENE			U	ug/Kg		-300	300			
2,6-DINITROTOLUENE			U	ug/Kg		-2000	2000			
2-CHLORONAPHTHALENE			U	ug/Kg		-300	300			
2-CHLOROPHENOL			U	ug/Kg		-300	300			

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2-METHYLNAPHTHALENE	U	ug/Kg	-300	300
2-METHYLPHENOL	U	ug/Kg	-300	300
2-NITROANILINE	U	ug/Kg	-2000	2000
2-NITROPHENOL	U	ug/Kg	-700	700
3- & 4-METHYLPHENOL	U	ug/Kg	-700	700
3,3-DICHLOROBENZIDINE	U	ug/Kg	-2000	2000
3-NITROANILINE	U	ug/Kg	-2000	2000
4,6-DINITRO-2-METHYLPHENOL	U	ug/Kg	-2000	2000
4-BROMOPHENYL PHENYL ETHER	U	ug/Kg	-300	300
4-CHLORO-3-METHYLPHENOL	U	ug/Kg	-300	300
4-CHLOROANILINE	U	ug/Kg	-300	300
4-CHLOROPHENYL PHENYL ETHER	U	ug/Kg	-300	300
4-NITROANILINE	U	ug/Kg	-2000	2000
4-NITROPHENOL	U	ug/Kg	-2000	2000
ACENAPHTHENE	U	ug/Kg	-300	300
ACENAPHTHYLENE	U	ug/Kg	-300	300
ANILINE	U	ug/Kg	-2000	2000
ANTHRACENE	U	ug/Kg	-300	300
AZOBENZENE	U	ug/Kg	-2000	2000
BENZO(A)ANTHRACENE	U	ug/Kg	-300	300
BENZO(A)PYRENE	U	ug/Kg	-300	300
BENZO(B)FLUORANTHENE	U	ug/Kg	-300	300
BENZO(G,H,I)PERYLENE	U	ug/Kg	-300	300
BENZO(K)FLUORANTHENE	U	ug/Kg	-300	300
BENZOIC ACID	U	ug/Kg	-2000	2000
BENZYL ALCOHOL	U	ug/Kg	-300	300
BIS(2-CHLOROETHOXY)METHANE	U	ug/Kg	-300	300
BIS(2-CHLOROETHYL) ETHER	U	ug/Kg	-300	300
BIS(2-CHLOROISOPROPYL) ETHER	U	ug/Kg	-300	300
BIS(2-ETHYLHEXYL) PHTHALATE	U	ug/Kg	-700	700
BUTYL BENZYL PHTHALATE	U	ug/Kg	-300	300
CHRYSENE	U	ug/Kg	-300	300
DIBENZO(A,H)ANTHRACENE	U	ug/Kg	-300	300
DIBENZOFURAN	U	ug/Kg	-300	300
DIETHYLPHTHALATE	U	ug/Kg	-300	300
DIMETHYL PHTHALATE	U	ug/Kg	-300	300
DI-N-BUTYL PHTHALATE	U	ug/Kg	-300	300
DI-N-OCTYL PHTHALATE	U	ug/Kg	-300	300
FLUORANTHENE	U	ug/Kg	-300	300
FLUORENE	U	ug/Kg	-300	300
HEXACHLOROBENZENE	U	ug/Kg	-300	300
HEXACHLOROBUTADIENE	U	ug/Kg	-300	300
HEXACHLOROCYCLOPENTADIENE	U	ug/Kg	-300	300
HEXACHLOROETHANE	U	ug/Kg	-300	300
INDENO(1,2,3-CD)PYRENE	U	ug/Kg	-300	300
ISOPHORONE	U	ug/Kg	-300	300
NAPHTHALENE	U	ug/Kg	-300	300
NITROBENZENE	U	ug/Kg	-300	300
N-NITROSODIMETHYLAMINE	U	ug/Kg	-2000	2000

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N-NITROSODI-N-PROPYLAMINE	U	ug/Kg	-300	300
N-NITROSODIPHENYLAMINE	U	ug/Kg	-300	300
PENTACHLOROPHENOL	U	ug/Kg	-2000	2000
PHENANTHRENE	U	ug/Kg	-300	300
PHENOL	U	ug/Kg	-700	700
PYRENE	U	ug/Kg	-300	300
2,4,6-TRIBROMOPHENOL (surr)		%	77.3	35
2-FLUOROBIPHENYL (surr)		%	70.6	45
2-FLUOROPHENOL (surr)		%	74.1	35
NITROBENZENE-D5 (surr)		%	69.9	35
PHENOL-D6 (surr)		%	72.6	40
TERPHENYL-D14 (surr)		%	84.2	30

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ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
<b>L96154-01</b>	WG328436	*All Compounds*	M8021B/8015D GC/PID/FID	ZM	Data is estimated because result is below 200 ug/Kg; ACZ does not have a closed-system purge and trap as described in method 5035.
	WG328902	TPH C10 to C28	M8015D GC/FID	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG328310	*All Compounds*	M8270C GC/MS	D1	Sample required dilution due to matrix.
			M8270C GC/MS	N1	See Case Narrative.
			M8270C GC/MS	R1	RPD exceeded the method or laboratory acceptance limit. See Case Narrative.
		Pyrene	M8270C GC/MS	R5	RPD for a spike and spike duplicate exceeded the method or laboratory acceptance limit. See Case Narrative.
<b>L96154-02</b>	WG328214	*All Compounds*	M3540	D1	Sample required dilution due to matrix.
	WG328436		M8021B/8015D GC/PID/FID	ZM	Data is estimated because result is below 200 ug/Kg; ACZ does not have a closed-system purge and trap as described in method 5035.
	WG328902	TPH C10 to C28	M8015D GC/FID	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG328310	*All Compounds*	M8270C GC/MS	D1	Sample required dilution due to matrix.
			M8270C GC/MS	N1	See Case Narrative.
			M8270C GC/MS	R1	RPD exceeded the method or laboratory acceptance limit. See Case Narrative.
		Pyrene	M8270C GC/MS	R5	RPD for a spike and spike duplicate exceeded the method or laboratory acceptance limit. See Case Narrative.
<b>L96154-03</b>	WG328214	*All Compounds*	M3540	D1	Sample required dilution due to matrix.
	WG328436		M8021B/8015D GC/PID/FID	ZM	Data is estimated because result is below 200 ug/Kg; ACZ does not have a closed-system purge and trap as described in method 5035.
	WG328902	TPH C10 to C28	M8015D GC/FID	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG328310	*All Compounds*	M8270C GC/MS	D1	Sample required dilution due to matrix.
			M8270C GC/MS	N1	See Case Narrative.
			M8270C GC/MS	R1	RPD exceeded the method or laboratory acceptance limit. See Case Narrative.
		Pyrene	M8270C GC/MS	R5	RPD for a spike and spike duplicate exceeded the method or laboratory acceptance limit. See Case Narrative.
	WG328214	*All Compounds*	M3540	D1	Sample required dilution due to matrix.

**SG Interests I, Ltd.**

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Soil Analysis

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Conductivity @25C	SM2510B
pH, Saturated Paste	USDA No. 60 (21A)
Solids, Percent	CLPSOW390, PART F, D-98

**SG Interests I, Ltd.**  
Jacobs 29-1 Env Qual

ACZ Project ID: L96154  
Date Received: 08/11/2012 10:47  
Received By: ksj  
Date Printed: 8/13/2012

#### Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2) Is the Chain of Custody or other directive shipping papers present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3) Does this project require special handling procedures such as CLP protocol?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4) Are any samples NRC licensable material?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5) If samples are received past hold time, proceed with requested short hold time analyses?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6) Is the Chain of Custody complete and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7) Were any changes made to the Chain of Custody prior to ACZ receiving the samples?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9) Are all labels on containers and are they intact and legible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10) Do the sample labels and Chain of Custody match for Sample ID, Date, and Time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11) For preserved bottle types, was the pH checked and within limits?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12) Is there sufficient sample volume to perform all requested work?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13) Is the custody seal intact on all containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14) Are samples that require zero headspace acceptable?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15) Are all sample containers appropriate for analytical requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16) Is there an Hg-1631 trip blank present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17) Is there a VOA trip blank present?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
18) Were all samples received within hold time?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Chain of Custody Related Remarks

#### Client Contact Remarks

#### Shipping Containers

Cooler Id	Temp (°C)	Rad (µR/Hr)	Custody Seal Intact?
-----	-----	-----	-----
3425	2.9	15	Yes

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.





Laboratories, Inc.

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

L96154

CHARGE SLIP

Name: Brenda Lomiroy  
 Company: SG Interests  
 E-mail: blomiroy@sginterests.com

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Durango, Co. 81301  
 Telephone: 970-385-0696

Name: Eric Petterson  
 Company: RMES, Inc.

E-mail: epetterson@rmes-inc.com  
 Telephone: 970-945-9558

Name: Brenda Lomiroy  
 Company: SG Interests  
 E-mail: blomiroy@sginterests.com

Address: 1485 Florida Rd. Suite 202  
Durango, Co. 81301  
 Telephone: 970-385-0696

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses?

YES ☒  
 NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO"

is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified.

Are samples for SDWA Compliance Monitoring?

Yes ☐ No ☒

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: Steve Petterson Sampler's site Information State: Co Zip code: 81601 Time Zone: Mtn

Quote #: 910-1 Soil  
 Project/PO #: Jacobs 29-1 Env. qual. assmt  
 Reporting state for compliance testing:  
 Check box if samples include NRC licensed material? ☐

# of Containers

Background	8-10-12 10:30am	SO	3
Subsoil #1	8-10-12 10:30am	SO	3
Subsoil #2	8-10-12 10:30am	SO	3

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

Steve Petterson  
8-10-12 3:00pm

L96154 Chain of Custody