



12/15/14

Received 12/23/14

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## Technical Report for

CCI

Summit 1 Reclaim, San Miguel County

AFE-100066-7010-7400

Accutest Job Number: D65431

Sampling Date: 12/05/14

### Report to:

CCI  
741 County RD U-29E  
Redvale, CO 81431  
danny.white@cci.com

ATTN: Danny White

Total number of pages in report: **86**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink, appearing to read 'Scott Heideman'.

**Scott Heideman**  
Laboratory Director

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Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

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Test results relate only to samples analyzed.

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Sample Summary

CCI

Job No: D65431

Summit 1 Reclaim, San Miguel County  
Project No: AFE-100066-7010-7400

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
D65431-1	12/05/14	12:00 DW	12/09/14	SO	Soil	1 DRILL RIG
D65431-1A	12/05/14	12:00 DW	12/09/14	SO	Soil	1 DRILL RIG
D65431-2	12/05/14	12:00 DW	12/09/14	SO	Soil	2 DRILL RIG
D65431-2A	12/05/14	12:00 DW	12/09/14	SO	Soil	2 DRILL RIG

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

## CASE NARRATIVE / CONFORMANCE SUMMARY

**Client:** CCI

**Job No** D65431

**Site:** Summit 1 Reclaim, San Migual County

**Report Date** 12/15/2014 3:17:06 P

On 12/09/2014, 2 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 1.6 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D65431 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

### Volatiles by GCMS By Method SW846 8260B

<b>Matrix:</b> SO	<b>Batch ID:</b> F:VY768
-------------------	--------------------------

- The data for SW846 8260B meets quality control requirements.
- D65431-2: Sample was prepared from a bulk container. Analysis performed at Accutest Laboratories, Orlando FL.

<b>Matrix:</b> SO	<b>Batch ID:</b> F:VY769
-------------------	--------------------------

- The data for SW846 8260B meets quality control requirements.
- D65431-1: Sample was prepared from a bulk container. Analysis performed at Accutest Laboratories, Orlando FL.

### Extractables by GCMS By Method SW846 8270D BY SIM

<b>Matrix:</b> SO	<b>Batch ID:</b> F:OP54208
-------------------	----------------------------

- The data for SW846 8270D BY SIM meets quality control requirements.
- D65431-1,-2: Analysis performed at Accutest Laboratories, Orlando FL.

### Volatiles by GC By Method SW846 8015B

<b>Matrix:</b> SO	<b>Batch ID:</b> GGB1507
-------------------	--------------------------

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D65486-1MS, D65486-1MSD were used as the QC samples indicated.

### Extractables by GC By Method SW846-8015B

<b>Matrix:</b> SO	<b>Batch ID:</b> OP11056
-------------------	--------------------------

- All samples were extracted and analyzed within the recommended method holding time.
- Sample(s) D65477-2MS, D65477-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

## Metals By Method SW846 6010C

**Matrix:** AQ

**Batch ID:** MP14749

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D65436-1AMS, D65436-1AMSD, D65436-1ASDL were used as the QC samples for the metals analysis.

**Matrix:** SO

**Batch ID:** MP14734

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D65477-2MS, D65477-2MSD, D65477-2SDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Cadmium, Copper, Lead, Nickel, Zinc are outside control limits for sample MP14734-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- MP14734-SD1 for Zinc: Serial dilution indicates possible matrix interference.
- D65431-1 for Lead: Elevated detection limit due to dilution required for possible matrix interference.

## Metals By Method SW846 6020A

**Matrix:** SO

**Batch ID:** MP14735

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D65477-2MS, D65477-2MSD, D65477-2SDL were used as the QC samples for the metals analysis.
- The serial dilution RPD(s) for Arsenic are outside control limits for sample MP14735-SD1. Probable cause due to sample homogeneity.
- MP14735-SD1 for Arsenic: Serial dilution indicates possible matrix interference.

## Metals By Method SW846 7471B

**Matrix:** SO

**Batch ID:** MP14751

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D65477-2MS, D65477-2MSD were used as the QC samples for the metals analysis.

## Wet Chemistry By Method ASTM D1498-76M

**Matrix:** SO

**Batch ID:** GN27847

- Sample(s) D65431-1DUP were used as the QC samples for the Redox Potential Vs H2 analysis.

## Wet Chemistry By Method SM2540G-2011 M

**Matrix:** SO

**Batch ID:** GN27786

- The data for SM2540G-2011 M meets quality control requirements.

## Wet Chemistry By Method SW846 3060A/7196A

**Matrix:** SO

**Batch ID:** GP14228

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D65477-2MS, D65477-2MSD, D65477-2DUP were used as the QC samples for the Chromium, Hexavalent analysis.
- The duplicate RPD(s) for Chromium, Hexavalent are outside control limits for sample GP14228-D1. RPD acceptable due to low duplicate and sample concentrations.

### Wet Chemistry By Method SW846 3060A/7196A M

**Matrix:** SO

**Batch ID:** R25444

- The data for SW846 3060A/7196A M meets quality control requirements.
- D65431-2 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

**Matrix:** SO

**Batch ID:** R25451

- The data for SW846 3060A/7196A M meets quality control requirements.
- D65431-1 for Chromium, Trivalent: Calculated as: (Chromium) - (Chromium, Hexavalent)

### Wet Chemistry By Method SW846 9045D

**Matrix:** SO

**Batch ID:** GN27792

- The following samples were run outside of holding time for method SW846 9045D: D65431-1, D65431-2

### Wet Chemistry By Method USDA HANDBOOK 60

**Matrix:** SO

**Batch ID:** MP14749

- D65431-1A,-2A for Sodium Adsorption Ratio: Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+(Mg meq/L)/2]

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

## SAMPLE DELIVERY GROUP CASE NARRATIVE

**Client:** Accutest Mountain States

**Job No:** D65431

**Site:** POAGCORV: Summit 1 Reclain, San Migual County

**Report Date:** 12/15/2014 1:15:05

2 Sample(s) were collected on 12/05/2014 and were received at Accutest SE on 12/10/2014 properly preserved, at 3.4 Deg. C and intact. These Samples received an Accutest job number of D65431. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section of this report.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

### Volatiles by GCMS By Method SW846 8260B

**Matrix:** SO

**Batch ID:** VY768

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20546-1MS, FA20546-1MSD were used as the QC samples indicated.

Matrix Spike Duplicate Recovery(s) for Ethylbenzene, Toluene, Xylene (total) are outside control limits. Probable cause is due to matrix interference. For method performance in a clean matrix, refer to Blank Spike.

RPD(s) for MSD for Ethylbenzene, Toluene, Xylene (total) are outside control limits for sample FA20546-1MSD. Probable cause is due to sample non-homogeneity.

D65431-2: Sample was prepared from a bulk container.

**Matrix:** SO

**Batch ID:** VY769

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) FA20591-1MS, FA20591-1MSD were used as the QC samples indicated.

D65431-1: Sample was prepared from a bulk container.

### Extractables by GCMS By Method SW846 8270D BY SIM

**Matrix:** SO

**Batch ID:** OP54208

All samples were extracted within the recommended method holding time.

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) D65436-1MS, D65436-1MSD were used as the QC samples indicated.

Accutest Laboratories Southeast (ALSE) certifies that this report meets the project requirements for analytical data produced for the samples as received at ALSE and as stated on the COC. ALSE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the ALSE Quality Manual except as noted above. This report is to be used in its entirety. ALSE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

Kim Benham, Client Services (signature on file)

Date: December 15, 2014

## Summary of Hits

Page 1 of 1

Job Number: D65431  
Account: CCI  
Project: Summit 1 Reclaim, San Migual County  
Collected: 12/05/14

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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### D65431-1 1 DRILL RIG

TPH-DRO (C10-C28)	38.6	7.7	5.8	mg/kg	SW846-8015B
Arsenic	13.9	0.12		mg/kg	SW846 6020A
Barium	159	23		mg/kg	SW846 6010C
Chromium	13.0	1.2		mg/kg	SW846 6010C
Copper	12.1	1.2		mg/kg	SW846 6010C
Nickel	15.4	3.5		mg/kg	SW846 6010C
Zinc	37.9	3.5		mg/kg	SW846 6010C
Specific Conductivity	4440	1.0		umhos/cm	SM 2510B-2011 MOD
Chromium, Trivalent <sup>a</sup>	12.4	2.2		mg/kg	SW846 3060A/7196A M
Redox Potential Vs H2	208			mv	ASTM D1498-76M
pH	8.68			su	SW846 9045D

### D65431-1A 1 DRILL RIG

Calcium	326	2.0		mg/l	SW846 6010C
Magnesium	85.4	1.0		mg/l	SW846 6010C
Sodium	448	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio <sup>b</sup>	5.71			ratio	USDA HANDBOOK 60

### D65431-2 2 DRILL RIG

TPH-DRO (C10-C28)	109	7.3	5.4	mg/kg	SW846-8015B
Arsenic	6.7	0.11		mg/kg	SW846 6020A
Barium	172	1.1		mg/kg	SW846 6010C
Chromium	8.6	1.1		mg/kg	SW846 6010C
Copper	10.9	1.1		mg/kg	SW846 6010C
Lead	12.1	5.5		mg/kg	SW846 6010C
Nickel	10.1	3.3		mg/kg	SW846 6010C
Zinc	22.6	3.3		mg/kg	SW846 6010C
Specific Conductivity	5450	1.0		umhos/cm	SM 2510B-2011 MOD
Chromium, Trivalent <sup>a</sup>	8.0	2.1		mg/kg	SW846 3060A/7196A M
Redox Potential Vs H2	231			mv	ASTM D1498-76M
pH	8.50			su	SW846 9045D

### D65431-2A 2 DRILL RIG

Calcium	373	2.0		mg/l	SW846 6010C
Magnesium	91.0	1.0		mg/l	SW846 6010C
Sodium	586	2.0		mg/l	SW846 6010C
Sodium Adsorption Ratio <sup>b</sup>	7.05			ratio	USDA HANDBOOK 60

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

(b) Calculated as: (Na meq/L) / sqrt [(Ca meq/L) + (Mg meq/L)/2]



## Sample Results

## Report of Analysis

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Method:	SW846 8260B SW846 5030A		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	Y17520.D	1	12/11/14	AFL	12/10/14 14:27	n/a	F:VY769
Run #2							

Run #	Initial Weight
Run #1	4.70 g
Run #2	

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	6.2	1.2	ug/kg	
108-88-3	Toluene	ND	6.2	1.2	ug/kg	
100-41-4	Ethylbenzene	ND	6.2	1.2	ug/kg	
1330-20-7	Xylene (total)	ND	19	3.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-124%
2037-26-5	Toluene-D8	108%		75-126%
460-00-4	4-Bromofluorobenzene	108%		71-133%
17060-07-0	1,2-Dichloroethane-D4	107%		72-135%

(a) Sample was prepared from a bulk container. Analysis performed at Accutest Laboratories, Orlando FL.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Method:	SW846 8270D BY SIM SW846 3550C		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	W084289.D	1	12/12/14	AFL	12/11/14	F:OP54208	F:SW3902
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.3 g	1.0 ml
Run #2		

## COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	38	15	ug/kg	
120-12-7	Anthracene	ND	38	9.6	ug/kg	
56-55-3	Benzo(a)anthracene	ND	7.7	1.9	ug/kg	
50-32-8	Benzo(a)pyrene	ND	7.7	1.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	7.7	1.9	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	7.7	1.9	ug/kg	
218-01-9	Chrysene	ND	7.7	1.9	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	7.7	1.9	ug/kg	
206-44-0	Fluoranthene	ND	38	9.6	ug/kg	
86-73-7	Fluorene	ND	38	15	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	7.7	1.9	ug/kg	
91-20-3	Naphthalene	ND	38	15	ug/kg	
129-00-0	Pyrene	ND	38	9.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		40-105%
321-60-8	2-Fluorobiphenyl	79%		43-107%
1718-51-0	Terphenyl-d14	105%		45-119%

(a) Analysis performed at Accutest Laboratories, Orlando FL.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Method:	SW846 8015B		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB27959.D	1	12/11/14	EP	n/a	n/a	GGB1507
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	13	6.6	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Method:	SW846-8015B SW846 3546		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FI20163.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	38.6	7.7	5.8	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	78%		20-130%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Project:	Summit 1 Reclaim, San Miguel County		

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	13.9	0.12	mg/kg	5	12/10/14	12/11/14 KV	SW846 6020A <sup>1</sup>	SW846 3050B <sup>6</sup>
Barium	159	23	mg/kg	20	12/10/14	12/13/14 JB	SW846 6010C <sup>4</sup>	SW846 3050B <sup>5</sup>
Cadmium	< 1.2	1.2	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Chromium	13.0	1.2	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Copper	12.1	1.2	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Lead <sup>a</sup>	< 120	120	mg/kg	20	12/10/14	12/13/14 JB	SW846 6010C <sup>4</sup>	SW846 3050B <sup>5</sup>
Mercury	< 0.097	0.097	mg/kg	1	12/12/14	12/12/14 JB	SW846 7471B <sup>3</sup>	SW846 7471B <sup>7</sup>
Nickel	15.4	3.5	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Selenium	< 5.8	5.8	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Silver	< 3.5	3.5	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Zinc	37.9	3.5	mg/kg	1	12/10/14	12/12/14 JB	SW846 6010C <sup>4</sup>	SW846 3050B <sup>5</sup>

(1) Instrument QC Batch: MA5572

(2) Instrument QC Batch: MA5576

(3) Instrument QC Batch: MA5581

(4) Instrument QC Batch: MA5582

(5) Prep QC Batch: MP14734

(6) Prep QC Batch: MP14735

(7) Prep QC Batch: MP14751

(a) Elevated detection limit due to dilution required for possible matrix interference.

RL = Reporting Limit

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Project:	Summit 1 Reclaim, San Miguel County		

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	86.1		%	1	12/10/14	SWT	SM2540G-2011 M
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	4440	1.0	umhos/cm	1	12/11/14	JD	SM 2510B-2011 MOD
Chromium, Hexavalent	< 1.0	1.0	mg/kg	1	12/12/14 09:30	JF	SW846 3060A/7196A
Chromium, Trivalent <sup>a</sup>	12.4	2.2	mg/kg	1	12/12/14 09:30	JF	SW846 3060A/7196A M
Redox Potential Vs H2	208		mv	1	12/12/14	AK	ASTM D1498-76M
pH	8.68		su	1	12/10/14 09:00	TB	SW846 9045D

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

## Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1A	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Project:	Summit 1 Reclaim, San Migual County		

## SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	326	2.0	mg/l	1	12/11/14	12/12/14 JB	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Magnesium	85.4	1.0	mg/l	1	12/11/14	12/12/14 JB	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Sodium	448	2.0	mg/l	1	12/11/14	12/12/14 JB	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>

(1) Instrument QC Batch: MA5582

(2) Prep QC Batch: MP14749

RL = Reporting Limit



Report of Analysis

Client Sample ID:	1 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-1A	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	86.1
Project:	Summit 1 Reclaim, San Migual County		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio <sup>a</sup>	5.71		ratio	1	12/12/14 12:37	JB	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8260B SW846 5030A		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	Y17504.D	1	12/10/14	AFL	12/10/14 14:32	n/a	F:VY768
Run #2							

Run #	Initial Weight
Run #1	3.90 g
Run #2	

## Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.0	1.4	ug/kg	
108-88-3	Toluene	ND	7.0	1.4	ug/kg	
100-41-4	Ethylbenzene	ND	7.0	1.4	ug/kg	
1330-20-7	Xylene (total)	ND	21	3.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		75-124%
2037-26-5	Toluene-D8	108%		75-126%
460-00-4	4-Bromofluorobenzene	104%		71-133%
17060-07-0	1,2-Dichloroethane-D4	106%		72-135%

(a) Sample was prepared from a bulk container. Analysis performed at Accutest Laboratories, Orlando FL.

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8270D BY SIM SW846 3550C		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 <sup>a</sup>	W084290.D	1	12/12/14	AFL	12/11/14	F:OP54208	F:SW3902
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

## COGCC Table 910-1 PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	36	14	ug/kg	
120-12-7	Anthracene	ND	36	9.1	ug/kg	
56-55-3	Benzo(a)anthracene	ND	7.2	1.8	ug/kg	
50-32-8	Benzo(a)pyrene	ND	7.2	1.8	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	7.2	1.8	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	7.2	1.8	ug/kg	
218-01-9	Chrysene	ND	7.2	1.8	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	7.2	1.8	ug/kg	
206-44-0	Fluoranthene	ND	36	9.1	ug/kg	
86-73-7	Fluorene	ND	36	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	7.2	1.8	ug/kg	
91-20-3	Naphthalene	ND	36	14	ug/kg	
129-00-0	Pyrene	ND	36	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		40-105%
321-60-8	2-Fluorobiphenyl	84%		43-107%
1718-51-0	Terphenyl-d14	104%		45-119%

(a) Analysis performed at Accutest Laboratories, Orlando FL.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846 8015B		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GB27960.D	1	12/11/14	EP	n/a	n/a	GGB1507
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.0 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	12	5.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
120-82-1	1,2,4-Trichlorobenzene	99%		60-140%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Method:	SW846-8015B SW846 3546		
Project:	Summit 1 Reclaim, San Migual County		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	FI20164.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	109	7.3	5.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	82%		20-130%		

ND = Not detected      MDL = Method Detection Limit  
 RL = Reporting Limit  
 E = Indicates value exceeds calibration range

J = Indicates an estimated value  
 B = Indicates analyte found in associated method blank  
 N = Indicates presumptive evidence of a compound

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Project:	Summit 1 Reclaim, San Miguel County		

## Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	6.7	0.11	mg/kg	5	12/10/14	12/11/14 KV	SW846 6020A <sup>1</sup>	SW846 3050B <sup>6</sup>
Barium	172	1.1	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Cadmium	< 1.1	1.1	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Chromium	8.6	1.1	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Copper	10.9	1.1	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Lead	12.1	5.5	mg/kg	1	12/10/14	12/12/14 JB	SW846 6010C <sup>4</sup>	SW846 3050B <sup>5</sup>
Mercury	< 0.091	0.091	mg/kg	1	12/12/14	12/12/14 JB	SW846 7471B <sup>3</sup>	SW846 7471B <sup>7</sup>
Nickel	10.1	3.3	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Selenium	< 5.5	5.5	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Silver	< 3.3	3.3	mg/kg	1	12/10/14	12/11/14 JB	SW846 6010C <sup>2</sup>	SW846 3050B <sup>5</sup>
Zinc	22.6	3.3	mg/kg	1	12/10/14	12/12/14 JB	SW846 6010C <sup>4</sup>	SW846 3050B <sup>5</sup>

(1) Instrument QC Batch: MA5572

(2) Instrument QC Batch: MA5576

(3) Instrument QC Batch: MA5581

(4) Instrument QC Batch: MA5582

(5) Prep QC Batch: MP14734

(6) Prep QC Batch: MP14735

(7) Prep QC Batch: MP14751

RL = Reporting Limit

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Project:	Summit 1 Reclaim, San Migual County		

## General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
%solids							
Solids, Percent	91.7		%	1	12/10/14	SWT	SM2540G-2011 M
prep: DEPT.OF AG, BOOK N9							
Specific Conductivity	5450	1.0	umhos/cm	1	12/11/14	JD	SM 2510B-2011 MOD
Chromium, Hexavalent	< 1.0	1.0	mg/kg	1	12/12/14 09:30	JF	SW846 3060A/7196A
Chromium, Trivalent <sup>a</sup>	8.0	2.1	mg/kg	1	12/12/14 09:30	JF	SW846 3060A/7196A M
Redox Potential Vs H2	231		mv	1	12/12/14	AK	ASTM D1498-76M
pH	8.50		su	1	12/10/14 09:00	TB	SW846 9045D

(a) Calculated as: (Chromium) - (Chromium, Hexavalent)

RL = Reporting Limit

## Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2A	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Project:	Summit 1 Reclaim, San Migual County		

## SAR Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Calcium	373	2.0	mg/l	1	12/11/14	12/12/14 JB	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Magnesium	91.0	1.0	mg/l	1	12/11/14	12/12/14 JB	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>
Sodium	586	2.0	mg/l	1	12/11/14	12/12/14 JB	SW846 6010C <sup>1</sup>	SW846 3010A/M <sup>2</sup>

(1) Instrument QC Batch: MA5582

(2) Prep QC Batch: MP14749

RL = Reporting Limit



Report of Analysis

Client Sample ID:	2 DRILL RIG	Date Sampled:	12/05/14
Lab Sample ID:	D65431-2A	Date Received:	12/09/14
Matrix:	SO - Soil	Percent Solids:	91.7
Project:	Summit 1 Reclaim, San Migual County		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sodium Adsorption Ratio <sup>a</sup>	7.05		ratio	1	12/12/14 12:45	JB	USDA HANDBOOK 60

(a) Calculated as: (Na meq/L) / sqrt [(Ca meq/L)+ (Mg meq/L)/2]

RL = Reporting Limit

## Misc. Forms

5

### Custody Documents and Other Forms

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**Includes the following where applicable:**

- Chain of Custody

## CHAIN OF CUSTODY

Accutest Laboratories Mountain States  
4036 Youngfield Street Wheat Ridge, Co 80033  
TEL. 303-425-6021 877-737-4521  
FAX 303-425-6021

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## D65431: Chain of Custody

Page 1 of 2

## Accutest Laboratories Sample Receipt Summary

**Accutest Job Number:** D65431      **Client:** CCI PARODOX UPSTREAM      **Project:** SUMMIT 1 RECLAIM SAN MIGUAL COUNTY  
**Date / Time Received:** 12/9/2014 10:17:00 AM      **Delivery Method:** \_\_\_\_\_      **Airbill #'s:** UPS  
**Cooler Temps (Initial/Adjusted):** 0

**Cooler Security**
**Y or N**

- |  |  |
|--|--|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/>       |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/>  | 4. Smpl Dates/Time OK <input checked="" type="checkbox"/> <input type="checkbox"/> |

**Cooler Temperature**
**Y or N**

- |   |           |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> |           |
| 2. Cooler temp verification: _____ ; _____  |           |
| 3. Cooler media: _____  | Ice (Bag) |
| 4. No. Coolers: _____   | 1         |

**Quality Control Preservation**
**Y or N**
**N/A**

- |  |  |
|--|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>           |  |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>              |  |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |  |
| 4. VOCs headspace free: <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>                   |  |

Comments

**Sample Integrity - Documentation**
**Y or N**

- |   |  |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/>   |  |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/>        |  |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> |  |

**Sample Integrity - Condition**
**Y or N**

- |   |        |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/>       |        |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> |        |
| 3. Condition of sample: _____   | Intact |

**Sample Integrity - Instructions**
**Y or N**
**N/A**

- |   |                                     |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/>            |                                     |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> |                                     |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/>   |                                     |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/>                    | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/>                      | <input checked="" type="checkbox"/> |

## GC Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: D65431  
Account: POAGCORV CCI  
Project: Summit 1 Reclaim, San Migual County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1507-MB	GB27949.D	1	12/11/14	EP	n/a	n/a	GGB1507

The QC reported here applies to the following samples:

Method: SW846 8015B

D65431-1, D65431-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	9.9	4.9	mg/kg	

CAS No.	Surrogate Recoveries	Limits
120-82-1	1,2,4-Trichlorobenzene	98% 60-140%

## Blank Spike Summary

Page 1 of 1

Job Number: D65431  
Account: POAGCORV CCI  
Project: Summit 1 Reclaim, San Migual County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGB1507-BS	GB27950.D	1	12/11/14	EP	n/a	n/a	GGB1507

The QC reported here applies to the following samples:

Method: SW846 8015B

D65431-1, D65431-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	109	107	99	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
120-82-1	1,2,4-Trichlorobenzene	101%	60-140%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D65431  
Account: POAGCORV CCI  
Project: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D65486-1MS	GB27952.D	1	12/11/14	EP	n/a	n/a	GGB1507
D65486-1MSD	GB27953.D	1	12/11/14	EP	n/a	n/a	GGB1507
D65486-1	GB27951.D	1	12/11/14	EP	n/a	n/a	GGB1507

The QC reported here applies to the following samples:

Method: SW846 8015B

D65431-1, D65431-2

CAS No.	Compound	D65486-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		144	140	97	144	140	97	0	70-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D65486-1	Limits
120-82-1	1,2,4-Trichlorobenzene	100%	97%	97%	60-140%

\* = Outside of Control Limits.



## GC Semi-volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: D65431  
Account: POAGCORV CCI  
Project: Summit 1 Reclaim, San Migual County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11056-MB	FI20154.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077

The QC reported here applies to the following samples:

Method: SW846-8015B

D65431-1, D65431-2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	6.7	5.0	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	87% 20-130%

## Blank Spike Summary

Page 1 of 1

Job Number: D65431  
Account: POAGCORV CCI  
Project: Summit 1 Reclaim, San Migual County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11056-BS	FI20155.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077

The QC reported here applies to the following samples:

Method: SW846-8015B

D65431-1, D65431-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-DRO (C10-C28)	167	120	72	42-130

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	92%	20-130%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D65431  
Account: POAGCORV CCI  
Project: Summit 1 Reclaim, San Migual County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP11056-MS	FI20156.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077
OP11056-MSD	FI20157.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077
D65477-2	FI20158.D	1	12/11/14	JJ	12/10/14	OP11056	GFI1077

The QC reported here applies to the following samples:

Method: SW846-8015B

D65431-1, D65431-2

CAS No.	Compound	D65477-2 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	ND		175	125	71	175	127	72	2	20-150/30

CAS No.	Surrogate Recoveries	MS	MSD	D65477-2	Limits
84-15-1	o-Terphenyl	93%	94%	87%	20-130%

\* = Outside of Control Limits.

## Metals Analysis

### QC Data Summaries

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**Includes the following where applicable:**

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14734  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 12/10/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	10	1.1	1.8		
Antimony	3.0	.21	.5		
Arsenic	2.5	.38	.63		
Barium	1.0	.02	.36	0.040	<1.0
Beryllium	1.0	.09	.06		
Boron	5.0	.08	.16		
Cadmium	1.0	.02	.28	0.050	<1.0
Calcium	40	.24	6.8		
Chromium	1.0	.03	.03	0.10	<1.0
Cobalt	0.50	.05	.039		
Copper	1.0	.08	.13	0.14	<1.0
Iron	7.0	.15	1.8		
Lead	5.0	.21	.25	0.11	<5.0
Lithium	0.50	.04	.13		
Magnesium	20	.68	1.8		
Manganese	0.50	.05	.038		
Molybdenum	1.0	.04	.13		
Nickel	3.0	.05	.07	-0.040	<3.0
Phosphorus	10	1.5	1.2		
Potassium	200	9.9	12		
Selenium	5.0	.71	1.1	-0.12	<5.0
Silicon	5.0	.47	1.1		
Silver	3.0	.03	.05	0.040	<3.0
Sodium	40	.73	3.7		
Strontium	5.0	.001	.022		
Thallium	1.0	.18	.46		
Tin	5.0	1.2	2.3		
Titanium	1.0	.01	.46		
Uranium	5.0	.29	.31		
Vanadium	1.0	.04	.043		
Zinc	3.0	.04	.16	0.16	<3.0

Associated samples MP14734: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

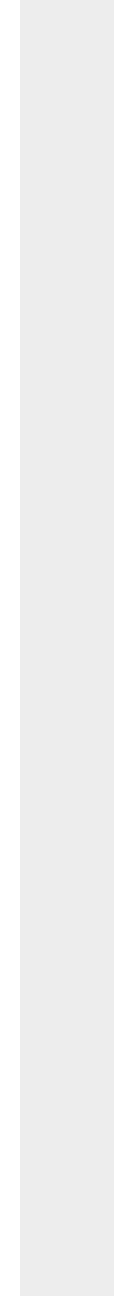
QC Batch ID: MP14734  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 12/10/14

Metal	RL	IDL	MDL	MB raw	final
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(anr) Analyte not requested



8.1.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 12/10/14

	D65477-2		Spikelot		QC
Metal	Original MS		ICPALL2	% Rec	Limits
Aluminum	anr				
Antimony	anr				
Arsenic	anr				
Barium	23.2	221	213	92.7	75-125
Beryllium	anr				
Boron					
Cadmium	0.043	53.5	53.3	100.2	75-125
Calcium					
Chromium	1.7	56.3	53.3	102.4	75-125
Cobalt					
Copper	0.93	52.6	53.3	96.9	75-125
Iron	anr				
Lead	2.5	110	107	100.8	75-125
Lithium					
Magnesium					
Manganese	anr				
Molybdenum	anr				
Nickel	1.1	52.6	53.3	96.6	75-125
Phosphorus					
Potassium					
Selenium	0.0	107	107	100.3	75-125
Silicon					
Silver	0.0	19.9	21.3	93.3	75-125
Sodium	anr				
Strontium	anr				
Thallium	anr				
Tin					
Titanium					
Uranium					
Vanadium	anr				
Zinc	4.7	56.7	53.3	97.5	75-125

Associated samples MP14734: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

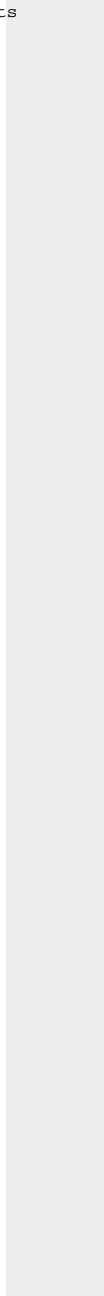
QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 12/10/14

Metal	D65477-2 Original MS	Spikelot ICPALL2	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



8.1.2  
8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 12/10/14

Metal	D65477-2 Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	23.2	227	213	95.5	2.7	20
Beryllium	anr					
Boron						
Cadmium	0.043	53.7	53.3	100.6	0.4	20
Calcium						
Chromium	1.7	56.9	53.3	103.5	1.1	20
Cobalt						
Copper	0.93	52.9	53.3	97.4	0.6	20
Iron	anr					
Lead	2.5	111	107	101.7	0.9	20
Lithium						
Magnesium						
Manganese	anr					
Molybdenum	anr					
Nickel	1.1	53.2	53.3	97.7	1.1	20
Phosphorus						
Potassium						
Selenium	0.0	109	107	102.2	1.9	20
Silicon						
Silver	0.0	20.2	21.3	94.7	1.5	20
Sodium	anr					
Strontium	anr					
Thallium	anr					
Tin						
Titanium						
Uranium						
Vanadium	anr					
Zinc	4.7	57.1	53.3	98.3	0.7	20

Associated samples MP14734: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

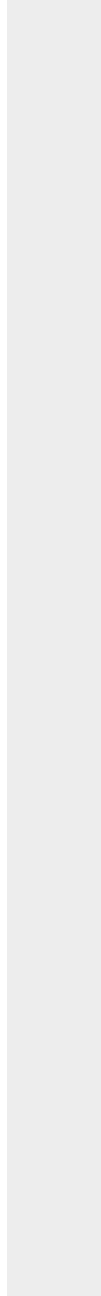
QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 12/10/14

Metal	D65477-2 Original MSD	Spikelet ICPALL2 % Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



8.1.2

8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: mg/kg

Prep Date: 12/10/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	201	200	100.5	80-120
Beryllium	anr			
Boron				
Cadmium	53.1	50	106.2	80-120
Calcium				
Chromium	54.2	50	108.4	80-120
Cobalt				
Copper	50.8	50	101.6	80-120
Iron	anr			
Lead	108	100	108.0	80-120
Lithium				
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	51.3	50	102.6	80-120
Phosphorus				
Potassium				
Selenium	107	100	107.0	80-120
Silicon				
Silver	20.1	20	100.5	80-120
Sodium	anr			
Strontium	anr			
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	51.2	50	102.4	80-120

Associated samples MP14734: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

8.1.3  
8

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

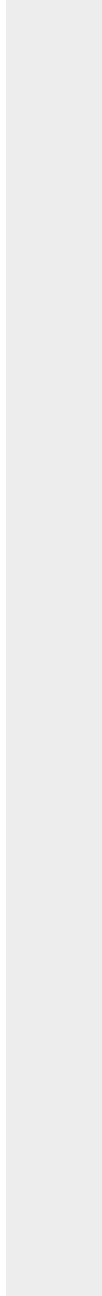
QC Batch ID: MP14734  
Matrix Type: SOLID

Methods: SW846 6010C  
Units: mg/kg

Prep Date: 12/10/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
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(anr) Analyte not requested



8.1.3

8

SERIAL DILUTION RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 12/10/14

Metal	D65477-2 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	218	230	5.7	0-10
Beryllium	anr			
Boron				
Cadmium	0.400	0.00	100.0(a)	0-10
Calcium				
Chromium	15.7	15.5	1.3	0-10
Cobalt				
Copper	8.70	11.5	32.2 (a)	0-10
Iron	anr			
Lead	23.0	27.5	19.6 (a)	0-10
Lithium				
Magnesium				
Manganese	anr			
Molybdenum	anr			
Nickel	10.6	13.0	22.6 (a)	0-10
Phosphorus				
Potassium				
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	anr			
Strontium	anr			
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	44.0	48.5	10.2*(b)	0-10

Associated samples MP14734: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

SERIAL DILUTION RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14734  
 Matrix Type: SOLID

Methods: SW846 6010C  
 Units: ug/l

Prep Date: 12/10/14

	D65477-2		QC
Metal	Original SDL 1:5	%DIF	Limits

- (anr) Analyte not requested  
 (a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).  
 (b) Serial dilution indicates possible matrix interference.

8.1.4

8

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14735  
Matrix Type: SOLID

Methods: SW846 6020A  
Units: mg/kg

Prep Date: 12/10/14

Metal	RL	IDL	MDL	MB raw	final
Arsenic	0.10	.0085	.024	0.0086	<0.10

Associated samples MP14735: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14735  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 12/10/14

Metal	D65477-2		Spikelot		QC
	Original	MS	ICPALL2	% Rec	Limits
Arsenic	0.46	112	107	104.6	75-125

Associated samples MP14735: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14735  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 12/10/14

Metal	D65477-2 Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Arsenic	0.46	109	107	101.8	2.7	20

Associated samples MP14735: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14735  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: mg/kg

Prep Date: 12/10/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Arsenic	101	100	101.0	80-120

Associated samples MP14735: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14735  
 Matrix Type: SOLID

Methods: SW846 6020A  
 Units: ug/l

Prep Date: 12/10/14

Metal	D65477-2			QC Limits
	Original	SDL 5:25	%DIF	

Arsenic	4.28	3.36	21.6*(a)	0-10
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Associated samples MP14735: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested  
 (a) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14749  
Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
Units: ug/l

Prep Date: 12/11/14

Metal	RL	IDL	MDL	MB raw	final
Aluminum	500	55	210		
Antimony	150	11	95		
Arsenic	130	19	28		
Barium	50	1	7		
Beryllium	50	4.5	6		
Boron	250	4	33		
Cadmium	50	1	1.8		
Calcium	2000	12	210	-82	<2000
Chromium	50	1.5	2		
Cobalt	25	2.5	2.9		
Copper	50	4	9.5		
Iron	350	7.5	48		
Lead	250	11	110		
Lithium	25	2	14		
Magnesium	1000	34	95	27.5	<1000
Manganese	25	2.5	2.3		
Molybdenum	50	2	4.2		
Nickel	150	2.5	4.4		
Phosphorus	500	75	100		
Potassium	5000	500	1400		
Selenium	250	36	55		
Silicon	250	24	26		
Silver	150	1.5	3		
Sodium	2000	37	850	60.5	<2000
Strontium	25	.05	.6		
Thallium	50	9	20		
Tin	250	60	80		
Titanium	50	.5	11		
Uranium	250	15	28		
Vanadium	50	2	2		
Zinc	150	2	16		

Associated samples MP14749: D65431-1A, D65431-2A

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

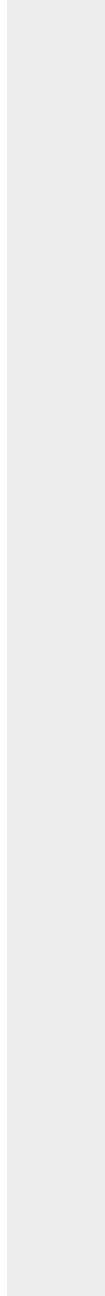
QC Batch ID: MP14749  
Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
Units: ug/l

Prep Date: 12/11/14

Metal	RL	IDL	MDL	MB raw	final
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(anr) Analyte not requested



8.3.1

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14749  
 Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
 Units: ug/l

Prep Date: 12/11/14

Metal	D65436-1A Original MS		Spikelot ICPAL2	% Rec	QC Limits
Aluminum					
Antimony					
Arsenic					
Barium					
Beryllium					
Boron					
Cadmium					
Calcium	56300	191000	125000	107.8	75-125
Chromium					
Cobalt					
Copper					
Iron					
Lead					
Lithium					
Magnesium	8120	141000	125000	106.3	75-125
Manganese					
Molybdenum					
Nickel					
Phosphorus					
Potassium					
Selenium					
Silicon					
Silver					
Sodium	85500	217000	125000	105.2	75-125
Strontium					
Thallium					
Tin					
Titanium					
Uranium					
Vanadium					
Zinc					

Associated samples MP14749: D65431-1A, D65431-2A

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

8.3.2

8

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

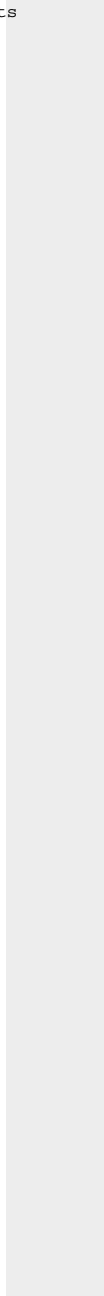
QC Batch ID: MP14749  
 Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
 Units: ug/l

Prep Date: 12/11/14

Metal	D65436-1A Original MS	Spikelot ICPALL2	% Rec	QC Limits
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(N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



8.3.2

8



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Miguel County

QC Batch ID: MP14749  
 Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
 Units: ug/l

Prep Date: 12/11/14

Metal	D65436-1A Original MSD		Spikelot ICPALL2 % Rec		MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium						
Calcium	56300	191000	125000	107.8	0.0	20
Chromium						
Cobalt						
Copper						
Iron						
Lead						
Lithium						
Magnesium	8120	143000	125000	107.9	1.4	20
Manganese						
Molybdenum						
Nickel						
Phosphorus						
Potassium						
Selenium						
Silicon						
Silver						
Sodium	85500	223000	125000	110.0	2.7	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc						

Associated samples MP14749: D65431-1A, D65431-2A

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

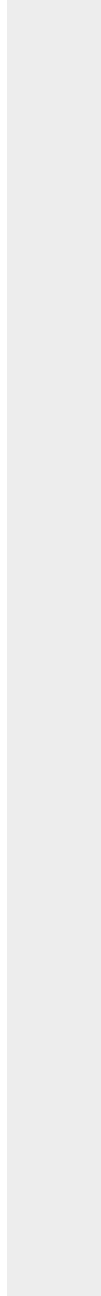
QC Batch ID: MP14749  
 Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
 Units: ug/l

Prep Date: 12/11/14

Metal	D65436-1A Original MSD	Spikelet ICPALL2 % Rec	MSD RPD	QC Limit
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(N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



8.3.2

8

## SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14749  
Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
Units: ug/l

Prep Date: 12/11/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	135000	125000	108.0	80-120
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	134000	125000	107.2	80-120
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	134000	125000	107.2	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP14749: D65431-1A, D65431-2A

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

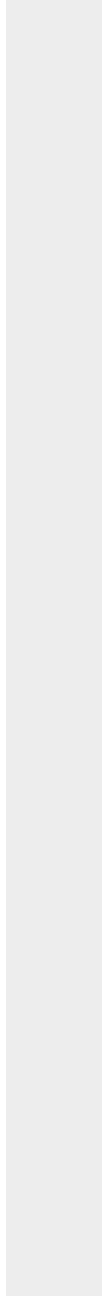
QC Batch ID: MP14749  
Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
Units: ug/l

Prep Date: 12/11/14

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
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(anr) Analyte not requested



# SERIAL DILUTION RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14749  
 Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
 Units: ug/l

Prep Date: 12/11/14

Metal	D65436-1A		QC	
	Original	SDL 1:5	%DIF	Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium				
Calcium	11800	11100	1.8	0-10
Chromium				
Cobalt				
Copper				
Iron				
Lead				
Lithium				
Magnesium	1620	1640	1.1	0-10
Manganese				
Molybdenum				
Nickel				
Phosphorus				
Potassium				
Selenium				
Silicon				
Silver				
Sodium	17100	17700	3.4	0-10
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc				

Associated samples MP14749: D65431-1A, D65431-2A

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits

8.3.4  
8

SERIAL DILUTION RESULTS SUMMARY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

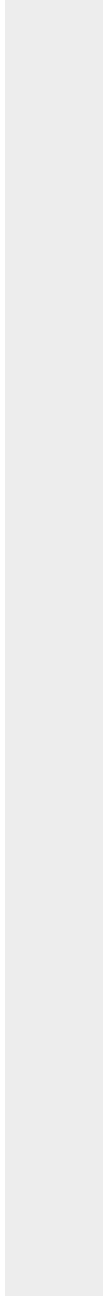
QC Batch ID: MP14749  
Matrix Type: AQUEOUS

Methods: SW846 6010C, USDA HANDBOOK 60  
Units: ug/l

Prep Date: 12/11/14

	D65436-1A		QC
Metal	Original SDL 1:5	%DIF	Limits

(anr) Analyte not requested



8.3.4

8

BLANK RESULTS SUMMARY  
Part 2 - Method Blanks

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14751  
Matrix Type: SOLID

Methods: SW846 7471B  
Units: mg/kg

Prep Date: 12/12/14

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.083	.00088	.0067	0.0022	<0.083

Associated samples MP14751: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
(\*) Outside of QC limits  
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14751  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 12/12/14

Metal	D65477-2		Spikelot		QC
	Original	MS	HGWSR1	% Rec	Limits
Mercury	0.0	0.34	0.341	99.8	75-125

Associated samples MP14751: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested



MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14751  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 12/12/14

Metal	D65477-2 Original	MSD	Spikelot HGWSR1	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.34	0.341	99.8	0.0	20

Associated samples MP14751: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (N) Matrix Spike Rec. outside of QC limits  
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D65431  
 Account: POAGCORV - CCI  
 Project: Summit 1 Reclaim, San Migual County

QC Batch ID: MP14751  
 Matrix Type: SOLID

Methods: SW846 7471B  
 Units: mg/kg

Prep Date: 12/12/14

Metal	BSP Result	Spikelot HGWSR1	% Rec	QC Limits
Mercury	0.33	0.333	99.0	80-120

Associated samples MP14751: D65431-1, D65431-2

Results < IDL are shown as zero for calculation purposes  
 (\*) Outside of QC limits  
 (anr) Analyte not requested

84.3

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## General Chemistry

### QC Data Summaries

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**Includes the following where applicable:**

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chromium, Hexavalent	GP14228/GN27848	1.0	0.42	mg/kg	205	186	90.7	80-120%
Specific Conductivity	GP14211/GN27819			umhos/cm	9990	10000	100.1	90-110%
pH	GN27792			su	8.00	7.98	99.8	99.1-100.9%

Associated Samples:

Batch GN27792: D65431-1, D65431-2

Batch GP14211: D65431-1, D65431-2

Batch GP14228: D65431-1, D65431-2

(\*) Outside of QC limits

9.1

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DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chromium, Hexavalent	GP14228/GN27848	D65477-2	mg/kg	0.46	1.0	73.4(a)	0-20%
Redox Potential Vs H2	GN27847	D65431-1	mv	208	212	1.9	0-20%

Associated Samples:

Batch GN27847: D65431-1, D65431-2

Batch GP14228: D65431-1, D65431-2

(\*) Outside of QC limits

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chromium, Hexavalent	GP14228/GN27848	D65477-2	mg/kg	0.46	40	35.8	90.0	75-125%

Associated Samples:

Batch GP14228: D65431-1, D65431-2

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY  
GENERAL CHEMISTRY

Login Number: D65431  
Account: POAGCORV - CCI  
Project: Summit 1 Reclaim, San Miguel County

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chromium, Hexavalent	GP14228/GN27848	D65477-2	mg/kg	0.46	40	35.9	0.0	20%

Associated Samples:

Batch GP14228: D65431-1, D65431-2

(\*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

## Misc. Forms

### Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Chain of Custody





# ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: D65431 CLIENT: AMS PROJECT: D65431  
 DATE/TIME RECEIVED: 12/10/14 1030 (MM/DD/YY 24:00) NUMBER OF COOLERS RECEIVED: 1  
 METHOD OF DELIVERY: FEDEX UPS ACCUTEST COURIER DELIVERY OTHER: \_\_\_\_\_  
 AIRBILL NUMBERS: 5810 2761 9259

## COOLER INFORMATION

- ☐ CUSTODY SEAL NOT PRESENT OR NOT INTACT
- ☐ CHAIN OF CUSTODY NOT RECEIVED (COC)
- ☐ ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- ☐ SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- ☐ TEMPERATURE CRITERIA NOT MET

## TRIP BLANK INFORMATION

- ☐ TRIP BLANK PROVIDED
- ☒ TRIP BLANK NOT PROVIDED
- ☒ TRIP BLANK NOT ON COC
- ☐ TRIP BLANK INTACT
- ☐ TRIP BLANK NOT INTACT
- ☐ RECEIVED WATER TRIP BLANK
- ☐ RECEIVED SOIL TRIP BLANK

## MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM \_\_\_\_\_ 5-GRAM \_\_\_\_\_  
 NUMBER OF 5035 FIELD KITS ? \_\_\_\_\_  
 NUMBER OF LAB FILTERED METALS ? \_\_\_\_\_

pH PAPER LOT#s WIDE RANGE A036122

NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS: \_\_\_\_\_

## TEMPERATURE INFORMATION

- ☐ IR THERM ID 1 CORR. FACTOR +0.4
- ☐ OBSERVED TEMPS: 3.0
- ☐ CORRECTED TEMPS: 3.4

## SAMPLE INFORMATION

- ☐ INCORRECT NUMBER OF CONTAINERS USED
- ☐ SAMPLE RECEIVED IMPROPERLY PRESERVED
- ☐ INSUFFICIENT VOLUME FOR ANALYSIS
- ☐ DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- ☐ ID'S ON COC DO NOT MATCH LABEL
- ☐ VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- ☐ BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- ☐ NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- ☐ UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- ☐ SAMPLE CONTAINER(S) RECEIVED BROKEN
- ☐ 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- ☒ BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- ☐ % SOLIDS JAR NOT RECEIVED
- ☐ RESIDUAL CHLORINE PRESENT LOT# \_\_\_\_\_

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

TECHNICIAN SIGNATURE/DATE

NF 10/14

REVIEWER SIGNATURE/DATE

receipt confirmation 102914.xls

D65431: Chain of Custody

Page 2 of 3

ORIGIN ID: 4449 (303) 425-6021  
SAMPLE SHIPPING  
ACCUTEST MOUNTAIN STATES  
40261 COUNFIELD STREET  
JEWETT RIDGE, CO 80033-3882  
UNITED STATES US  
10  
BILL SENDER

ACCUTEST FLORIDA  
4405 VINELAND ROAD

ORLANDO FL 32811

INV: SUB OUT



FedEx

WED - 10 DEC AA  
STANDARD OVERNIGHT

0201 5810 2761 9259

XH TIXA

32811  
PLUS  
MCO



098919 99DEC14 4449 522C/DC/5/6500

34

D65431: Chain of Custody  
Page 3 of 3

## GC/MS Volatiles

### QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: D65431  
Account: ALMS Accutest Mountain States  
Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY768-MB	Y17492.D	1	12/10/14	AD	n/a	n/a	VY768

The QC reported here applies to the following samples:

Method: SW846 8260B

D65431-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	102% 75-124%
2037-26-5	Toluene-D8	103% 75-126%
460-00-4	4-Bromofluorobenzene	113% 71-133%
17060-07-0	1,2-Dichloroethane-D4	104% 72-135%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile <sup>a</sup>		0	ug/kg	

(a) No TICs detected.

## Method Blank Summary

Page 1 of 1

Job Number: D65431  
Account: ALMS Accutest Mountain States  
Project: POAGCORV: Summit 1 Reclaim, San Migual County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY769-MB	Y17519.D	1	12/11/14	AD	n/a	n/a	VY769

The QC reported here applies to the following samples:

Method: SW846 8260B

D65431-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	1.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	1.0	ug/kg	
108-88-3	Toluene	ND	5.0	1.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	2.7	ug/kg	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	101% 75-124%
2037-26-5	Toluene-D8	104% 75-126%
460-00-4	4-Bromofluorobenzene	108% 71-133%
17060-07-0	1,2-Dichloroethane-D4	105% 72-135%

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## Blank Spike Summary

Page 1 of 1

Job Number: D65431

Account: ALMS Accutest Mountain States

Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY768-BS	Y17491.D	1	12/10/14	AD	n/a	n/a	VY768

The QC reported here applies to the following samples:

Method: SW846 8260B

D65431-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	55.7	111	76-126
100-41-4	Ethylbenzene	50	57.8	116	77-123
108-88-3	Toluene	50	55.3	111	76-124
1330-20-7	Xylene (total)	150	183	122	80-129

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	75-124%
2037-26-5	Toluene-D8	106%	75-126%
460-00-4	4-Bromofluorobenzene	103%	71-133%
17060-07-0	1,2-Dichloroethane-D4	102%	72-135%

\* = Outside of Control Limits.

## Blank Spike Summary

Page 1 of 1

Job Number: D65431

Account: ALMS Accutest Mountain States

Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY769-BS	Y17518.D	1	12/11/14	AD	n/a	n/a	VY769

The QC reported here applies to the following samples:

Method: SW846 8260B

D65431-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	55.4	111	76-126
100-41-4	Ethylbenzene	50	56.7	113	77-123
108-88-3	Toluene	50	54.9	110	76-124
1330-20-7	Xylene (total)	150	179	119	80-129

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	75-124%
2037-26-5	Toluene-D8	107%	75-126%
460-00-4	4-Bromofluorobenzene	102%	71-133%
17060-07-0	1,2-Dichloroethane-D4	99%	72-135%

\* = Outside of Control Limits.



# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D65431  
Account: ALMS Accutest Mountain States  
Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA20546-1MS	Y17497.D	1	12/10/14	AD	n/a	n/a	VY768
FA20546-1MSD	Y17498.D	1	12/10/14	AD	n/a	n/a	VY768
FA20546-1	Y17496.D	1	12/10/14	AD	n/a	n/a	VY768
FA20546-1 <sup>a</sup>	Y17501.D	1	12/10/14	AD	n/a	n/a	VY768

The QC reported here applies to the following samples:

Method: SW846 8260B

D65431-2

CAS No.	Compound	FA20546-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	6.6 U	66	63.0	95	67.1	51.5	77	20	76-126/26
100-41-4	Ethylbenzene	6.6 U	66	64.0	97	67.1	40.3	60*	45*	77-123/31
108-88-3	Toluene	6.6 U	66	66.0	100	67.1	46.6	69*	34*	76-124/30
1330-20-7	Xylene (total)	20 U	198	198	100	201	124	62*	46*	80-129/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20546-1	FA20546-1	Limits
1868-53-7	Dibromofluoromethane	101%	105%	104%	107%	75-124%
2037-26-5	Toluene-D8	113%	104%	116%	116%	75-126%
460-00-4	4-Bromofluorobenzene	123%	108%	147%* <sup>b</sup>	140%* <sup>b</sup>	71-133%
17060-07-0	1,2-Dichloroethane-D4	104%	109%	109%	106%	72-135%

(a) Confirmation run.

(b) Outside control limits; however, sample is ND.

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D65431

Account: ALMS Accutest Mountain States

Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA20591-1MS	Y17526.D	1	12/11/14	AD	n/a	n/a	VY769
FA20591-1MSD	Y17527.D	1	12/11/14	AD	n/a	n/a	VY769
FA20591-1	Y17523.D	1	12/11/14	AD	n/a	n/a	VY769

The QC reported here applies to the following samples:

Method: SW846 8260B

D65431-1

CAS No.	Compound	FA20591-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	5.2 U	72	73.5	102	72	69.9	97	5	76-126/26
100-41-4	Ethylbenzene	5.2 U	72	76.1	106	72	71.5	99	6	77-123/31
108-88-3	Toluene	5.2 U	72	73.5	102	72	69.6	97	5	76-124/30
1330-20-7	Xylene (total)	16 U	216	239	111	216	225	104	6	80-129/30

CAS No.	Surrogate Recoveries	MS	MSD	FA20591-1	Limits
1868-53-7	Dibromofluoromethane	105%	103%	105%	75-124%
2037-26-5	Toluene-D8	106%	104%	105%	75-126%
460-00-4	4-Bromofluorobenzene	103%	105%	111%	71-133%
17060-07-0	1,2-Dichloroethane-D4	106%	102%	107%	72-135%

\* = Outside of Control Limits.

## GC/MS Semi-volatiles

### QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

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Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

## Method Blank Summary

Page 1 of 1

Job Number: D65431  
Account: ALMS Accutest Mountain States  
Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54208-MB	W084288.D	1	12/12/14	MG	12/11/14	OP54208	SW3902

The QC reported here applies to the following samples:

Method: SW846 8270D BY SIM

D65431-1, D65431-2

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	33	13	ug/kg	
120-12-7	Anthracene	ND	33	8.3	ug/kg	
56-55-3	Benzo(a)anthracene	ND	6.7	1.7	ug/kg	
50-32-8	Benzo(a)pyrene	ND	6.7	1.7	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	6.7	1.7	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	6.7	1.7	ug/kg	
218-01-9	Chrysene	ND	6.7	1.7	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	6.7	1.7	ug/kg	
206-44-0	Fluoranthene	ND	33	8.3	ug/kg	
86-73-7	Fluorene	ND	33	13	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	6.7	1.7	ug/kg	
91-20-3	Naphthalene	ND	33	13	ug/kg	
129-00-0	Pyrene	ND	33	8.3	ug/kg	

CAS No.	Surrogate Recoveries	Limits
4165-60-0	Nitrobenzene-d5	89% 40-105%
321-60-8	2-Fluorobiphenyl	78% 43-107%
1718-51-0	Terphenyl-d14	99% 45-119%

## Blank Spike Summary

Page 1 of 1

Job Number: D65431

Account: ALMS Accutest Mountain States

Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54208-BS	W084287.D	1	12/12/14	MG	12/11/14	OP54208	SW3902

The QC reported here applies to the following samples:

Method: SW846 8270D BY SIM

D65431-1, D65431-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
83-32-9	Acenaphthene	333	312	94	53-100
120-12-7	Anthracene	167	157	94	60-102
56-55-3	Benzo(a)anthracene	167	171	103	60-106
50-32-8	Benzo(a)pyrene	167	167	100	58-105
205-99-2	Benzo(b)fluoranthene	167	183	110	59-112
207-08-9	Benzo(k)fluoranthene	167	160	96	58-109
218-01-9	Chrysene	167	166	100	62-104
53-70-3	Dibenzo(a,h)anthracene	167	159	95	55-110
206-44-0	Fluoranthene	333	347	104	59-109
86-73-7	Fluorene	333	317	95	56-104
193-39-5	Indeno(1,2,3-cd)pyrene	167	159	95	54-110
91-20-3	Naphthalene	333	303	91	49-101
129-00-0	Pyrene	333	324	97	58-106

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	98%	40-105%
321-60-8	2-Fluorobiphenyl	94%	43-107%
1718-51-0	Terphenyl-d14	102%	45-119%

\* = Outside of Control Limits.

# Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D65431  
Account: ALMS Accutest Mountain States  
Project: POAGCORV: Summit 1 Reclaim, San Miguel County

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP54208-MS	W084298.D	1	12/12/14	MG	12/11/14	OP54208	SW3902
OP54208-MSD	W084299.D	1	12/12/14	MG	12/11/14	OP54208	SW3902
D65436-1	W084291.D	1	12/12/14	MG	12/11/14	OP54208	SW3902

The QC reported here applies to the following samples:

Method: SW846 8270D BY SIM

D65431-1, D65431-2

CAS No.	Compound	D65436-1 ug/kg	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
83-32-9	Acenaphthene	ND	361	339	94	360	296	82	14	53-100/28
120-12-7	Anthracene	ND	180	155	86	180	136	76	13	60-102/29
56-55-3	Benzo(a)anthracene	ND	180	170	94	180	163	91	4	60-106/30
50-32-8	Benzo(a)pyrene	ND	180	170	94	180	155	86	9	58-105/30
205-99-2	Benzo(b)fluoranthene	ND	180	174	96	180	156	87	11	59-112/33
207-08-9	Benzo(k)fluoranthene	ND	180	168	93	180	152	85	10	58-109/33
218-01-9	Chrysene	ND	180	182	101	180	159	88	13	62-104/30
53-70-3	Dibenzo(a,h)anthracene	ND	180	165	91	180	152	85	8	55-110/31
206-44-0	Fluoranthene	ND	361	352	98	360	310	86	13	59-109/29
86-73-7	Fluorene	ND	361	337	93	360	287	80	16	56-104/27
193-39-5	Indeno(1,2,3-cd)pyrene	ND	180	171	95	180	159	88	7	54-110/32
91-20-3	Naphthalene	ND	361	313	87	360	261	73	18	49-101/28
129-00-0	Pyrene	ND	361	340	94	360	297	83	14	58-106/29

CAS No.	Surrogate Recoveries	MS	MSD	D65436-1	Limits
4165-60-0	Nitrobenzene-d5	92%	73%	92%	40-105%
321-60-8	2-Fluorobiphenyl	85%	72%	85%	43-107%
1718-51-0	Terphenyl-d14	97%	83%	103%	45-119%

\* = Outside of Control Limits.